

FOREST Stakeholder Forum

8th September 2022, Trinity College Dublin

The FOREST Stakeholder Forum brought together 34 stakeholders interested in the future of Irish forestry. Attendees represented a broad range of expertise, spanning forestry, forest ecology, planning, finance, policy, energy, climate, social enterprise and culture. This aim of the Forum was to address the different needs, interests, challenges, conflicts, and aspirations that influence the future success of Irish Forestry.



The Forum was organised as part of the Trinity E3 FOREST research project. This project brings together academics and students from Botany, Economics, Engineering, Finance, Geography and Statistics to use forestry in Ireland as a model system to explore the complex and multi-layered challenges associated with addressing climate and biodiversity issues. Through this process, the project aims to inform innovative and integrated approaches to future forestry in Ireland, that are ecologically sound, societally just and economically viable.

The Forum aimed to capture a range of perspectives and insights from stakeholders to inform the research undertaken during the FOREST project, as well as to provide an opportunity for transdisciplinary connection and networking. An overview of the research being undertaken by the project participants was presented, followed by break-out group discussion of four key questions, chaired by one of the project team and rapporteured to the whole Forum group.

This paper summarises the discussions at the Forum.

Summary of FOREST project research

The research project will be delivered via five interdisciplinary, connected PhD projects.

- 1. Climate justice through restorative development This project will explore if and how Ireland's afforestation efforts can lead to restorative development practices. It will involve 1. policy analysis to determine the dominant development paradigm informing Irish Forestry Policy and how consistent this is with rural regeneration objectives; and 2. community engagement to ask why farmers and communities indicate resistance to current afforestation incentives and exploration of the alternatives. PhD student Paddy Gaynor, supervised by Prof Susan Murphy (Geography)
- 2. **Developing Statistical Models to Aid with Afforestation** This project will develop statistical models to assess how the diversity and spatial arrangement of different tree species in plantations influence growth and ecological interactions, and how multifunctionality in plantations can be enhanced. It will involve analysis of existing datasets and meta-analysis of published data. *PhD student Tasbiul Islam Nibir, supervised by Profs Caroline Brophy (Statistics) and Jane Stout (Botany)*
- 3. **Ecological value of new forests** Through field-surveys of >30 young native woodlands (<20 years old) across Leinster, this project will establish indicators for ecological value and how they change through time and between different woodland types, determine the environmental and management factors that most influence biodiversity, the ecological functions/processes these indicators support, and the ecosystem services that are provided. *PhD student Kate Harrington, supervised by Profs Fraser Mitchell and Jane Stout (Botany)*
- 4. Perspectives on value and financial incentives with the increasing gap between afforestation targets and planting, this project will analyse current behavioural and financial incentives, and explore potential inclusion of environmental and social benefits. It will also investigate how to bring the private sector into afforestation and whether carbon credits are a good option for Ireland. PhD student Laqiqige Zhu, supervised by Profs Martha O'Hagan-Luff (Business) and Eleanor Denny (Economics)
- 5. Blending nature-based & technology solutions this project will take a broad perspective on tackling biodiversity and climate challenges and explore blended solutions, involving both nature and technology. It will explore whether a nature-based design approach can be incorporated into technological solutions and different types of solutions on various spatial / temporal scales. PhD student Roisin Gowan, supervised by Profs Sarah McCormack (Engineering) and Jane Stout (Botany)



Summary of Stakeholder Forum discussions



Q1 What does 'Good' look like from your perspective?

As expected, there was no single view on what characterises a 'good' forest. Several participants envisaged 'good' forestry as that managed for **diversity** (both of planted trees, plantation types and associated wildlife), delivering multiple functions, and **multiple benefits**. This means benefits beyond harvestable timber and carbon, but also for biodiversity and the delivery of other ecosystem services, as well as societal benefits. 'Good' was envisaged as **economically viable** and sustainable, competitive and **integrated with alternative land-uses**, scalable (with measurable benefits that could be reported using international standards), with a strong regulatory system, and leading to long-term uses for timber. Another commonly expressed characteristic of 'good' was **healthy and resilient** forests, with specific reference to forest cover that would be suitable for the changing climates and pathogen pressures of the future.

Attendees emphasized that in order to achieve these types of forests, there is a need for more attractive incentives through the model of financing mechanisms and regulated benefits that would encourage people to plant forests, and that there needs to be trust in terms of the longevity of policy and financial instruments. There was strong support for Continuous Cover Forestry, and for urgency to plant in order to reach afforestation targets, both to ensure a viable industry in 30 years time, but also to meet national climate action targets.

It was concluded that a 'good' forest delivers a balance of ecological, economic and societal benefits, is multifunctional and integrated into the landscape. However, it was noted that we should identify priorities and objectives for each forest, and consider new approaches.

Q2 What do you consider to be the challenges to get to good?

To achieve 'good' forestry, participants highlighted that there is good understanding of *what* to get to but not *how* to do it. Key challenges related to both time and space: forests take a long **time** to develop and are thus long-term enterprises and semi-permanent features in the landscape. Thus considerations of **where to plant** are crucial.

One of the most common challenges to forestry in Ireland that was discussed was the current **licencing** system. The current system is perceived to place a huge administrative burden on applicants, as it is complex and time-consuming, which can deter people from applying. In addition to this, there are various levels of uncertainty associated with **policy and financial incentives**, and apprehension that a lack of long-term political vision, and policy changes during the life of the forest, is deterring people from planting. The current **lack of an integrated land use strategy**, the complexity of existing systems, which are not necessarily coherent, places additional concerns.

Knowledge gaps were also considered a challenge, included understanding and experience in managing alternative forest types (e.g. agroforestry, mixed plantations), uncertainty about future climatic and plant health issues, and the need for more interdisciplinary skill sets (e.g. people with forestry <u>and</u> ecological skills). Participants voiced that lack of opportunities for education and upskilling presented a challenge. In addition, identification and recognition of the factors that contributed to previous successful afforestation (where forestry has gone from 1% land cover to 11% over the last century), as well as acknowledging unsuccessful afforestation (including planting on peatlands), remains a challenge.

However, one of the greatest challenges posed to forestry, was thought to be **social and cultural perceptions**. The need for better communication amongst all stakeholders (including farmers, policy-makers, conservationists, local communities and the general public) was highlighted. One of the main barriers to afforestation is the negative views of people: a culture-shift is needed, and forestry needs to be seen as more admirable, and a legitimate use of land. In addition, the perceptions of who benefits from forestry need to be informed by education, and multiple positive benefits of forestry need promoting. At the same time, it should be recognised that not every forest will deliver every conceivable benefit – there will be trade-offs, and there is a challenge in determining where afforestation will fit into the landscape – what will society be willing to give up?

Q3 What do you consider to be the key conflicts in achieving good?

One of the key conflicts is that the diversity of viewpoints of stakeholders and the wider public can be simplified into **polarised opinions**. Thus, people with different priorities become pitched against one another, e.g. conservationists versus foresters, or farmers versus foresters. Farming is deeply rooted in the Ireland's heritage and history. Trying to encourage the switch from agriculture to forestry is, therefore, often met with hesitation, disagreement, and sometimes even conflict.

This **social and cultural opposition** was agreed to also be a result of the lack of admirable economic incentives compared to the alternatives to forestry. Due to an absence of regulatory standards, such as carbon credits, and investment in afforestation, the true potential benefits of forestry cannot be obtained. This is further complicated by the range of **conflicting policies** that have resulted in a lack of integrative plans for short-, medium-, and long-term forestry.

Other potential conflicts included trying to deliver multifunctionality everywhere: there could be conflicts in managing forests for biodiversity and ecosystem function, carbon capture and storage, water, recreation and return on investment. This requires careful consideration of **trade-offs** and an integrated land-use approach.

Q4 What do you consider to be the key knowledge gaps in achieving good?

One of the key knowledge gaps identified by participants was integration of knowledge across disciplines. There is sometimes a simple knowledge of nature by foresters, a lack of understanding of forestry from conservationists, a lack of knowledge of financial implications of long-term grants versus annual turnover from agriculture. Forests are complex, long-term systems, and those managing them require **education and lifelong learning**, as well as development of interdisciplinary practical skills.

In addition, discipline specific gaps were identified such as determining what constitutes "good biodiversity", what the costs of afforestation are, and how should broadleaf forests be best managed - it was noted that broadleaf silviculture **skills and infrastructure have been lost**. There is a risk that other expertise is held by a generation coming up to retirement, and without promoting education in a new generation, knowledge will be lost.

Furthermore, greater knowledge of the balance of environmental, social, and economic benefits that can be provided by different types of forests in Ireland could aid the production of greater frameworks for **financial incentives**. This, in turn, would produce greater encouragement for people to engage in afforestation in Ireland.

However, one of the key knowledge gaps is how to effectively **communicate**, and address the social and cultural barriers towards afforestation in Ireland. There is poor public knowledge, and there needs to be a way to reconcile afforestation and public acceptance of forestry.



Conclusions

Going forward, some of the key recommendations from the Forum are the need for:

- Dynamic short- and long-term integrated strategic planning at national and local level
- Coherent policy
- **Urgency** to implement plans, and to do so with good governance
- **Communication** at all levels, particularly to reconcile the negative image of forestry in some sectors and perception of risk associated with afforestation
- Interdisciplinary, life-long **education** and training to maintain skills
- Sustainable **financial investment models** that are attractive to investors and land-owners

- Integration of knowledge from different disciplines to implement best practice, and to identify and manage trade-offs in functionality.

Acknowledgements

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The FOREST project is an interdisciplinary challenge-based project, funded through <u>philanthropic</u> <u>donations</u> to Trinity College Dublin. For more information, please see the project <u>website</u>.