

Adrienne Attorp's research examines the challenges in continuing to collaboratively manage trans-boundary water catchments on the island of Ireland after Brexit.

Brexit is likely to trigger significant changes in the agri-food sector between the Republic of Ireland, Northern Ireland and Great Britain, including shifts in market conditions, industrial organisation, and policy. The island of Ireland may be disproportionately impacted due to its highly integrated agri-food sector and shared ecosystems. Resultant challenges, if not properly addressed, could negatively impact current provision of ecosystem services (ES) in agriculture and undermine the sustainability of the industry.

## Trans-boundary ecosystem services post Brexit

Many ecosystem services on the island are trans-boundary in nature, meaning that changes to the provisioning of these in the north can exhibit positive or negative externalities in the south, and vice versa. New regulatory regimes may also result in different standards across a single ecosystem, such as water catchment areas. For example, while the management of shared waterways on the island of Ireland has, until now, been governed by EU regulations such as the Water Framework Directive, post Brexit there may be divergence in regulations, which could have a significant impact on agricultural practices and the environment on both sides of the border. Adrienne's research considers challenges that farmers, practitioners and policymakers face in continuing to collaboratively manage shared, trans-boundary water catchments on the island of Ireland, post Brexit. It explores the potential impacts of diverging agrienvironmental policy between north and south, including possible interactions and trade-offs between economic and environmental outcomes.

A key challenge for policymakers and farmers alike will be to determine how to weather upheavals in agriculture policy, practice and trade, so that farmers on both sides of the border can collaboratively continue to survive and thrive. Further, current efforts to support the agriculture sector's provision of ES should not only be sustained but improved.

# Managing land and waterways: not just about economics

To achieve these aims, there must be greater consideration of the social and cultural factors that impact farmers' decisions around land use management.

Contrary to the prevailing neoclassical theory of land use, farmers are driven not only by market factors and economic incentives, but by a complex mix of social and political factors, household and individual profile characteristics, and concern for the natural environment. Understanding these is critical in understanding how farmers adapt to changes in agricultural policy.

Through providing a better understanding of the policymaking process and of farmers' roles in and response to it, the aim of this research is to aid in developing policy that fosters cross-border collaboration, and better supports farmers to farm in ways that are not only economically viable, but also limit agriculture's impact on the island's shared waterways.

### Acknowledgements

PhD supervisors: Ruth McAreavey, Newcastle University; Erin Sherry, AFBINI; Trevor Donnellan, Teagasc; and, Sally Shortall, Newcastle University.

#### Author

#### Adrienne Attorp

Teagasc Walsh Scholar, Newcastle University Correspondence: a.a.attorp2@newcastle.ac.uk

