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Fields of possibility

rural environmental governance in Northern Ireland after Brexit

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Fields of Possibility: Rural Environmental Governance in Northern Ireland after Brexit

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Abstract

Brexit offered an opportunity to completely re-evaluate the governance of the countryside across the UK for the first time in 50 years as the UK left the European Union, in particular the constraints of the Common Agriculture Policy. This opportunity occurred across each of the four nations of the UK with both agricultural and environmental policy devolved powers. Northern Ireland is a part of the UK that is uniquely at the centre of the Brexit debate as it has the only land border with an EU nation, is a post-conflict society after a conflict about its position within the UK, spent much of the Brexit process without an executive government and has a rural environment which is more like the Republic of Ireland than any GB nation.

As the Brexit process created this field of opportunity for re-organising Northern Ireland's rural environmental governance it is important to consider how and why environmental governance has changed since the Brexit process began in 2016. This thesis shows that alongside the asymmetrical relationship with the UK Government, the focus of Chapter 2, a key driver of policy was a discourse which existed prior to Brexit in a rudimentary form in Northern Ireland's agri-food sector dominated policy networks: Sustainable Productivism.

With the repatriation of a wide range of powers, Sustainable Productivism was able to take a fuller form and solidify its hegemony through the production of a wide array of policies, strategies and frameworks which (re?)formed rural environmental governance in Northern Ireland. In Chapter 3 this thesis builds a novel political discourse theory approach to governance to capture this hegemonic discourse and its practical ramifications for policy by first testing it in an analysis of England's Environmental Land Management Scheme in Chapter 4. In Chapter 5 and 6 it identifies and describes this hegemonic discourse as it becomes a cohesive set of demands during the Brexit process, and it identifies the logics through which it governs, and the actors which articulate/sustain it. Finally, in Chapter 7, this thesis identifies and analyses the immediate and future challenges to the hegemony of Sustainable Productivism. It concludes, in Chapter 8, that Brexit, and the post-Brexit crises of Climate Change and Covid-19, have been a missed opportunity for Northern Ireland to envision the future.

Dedication

For Sarah.

Acknowledgements

This PhD journey has been a long one. Although I officially started in 2018 the real beginning was during my MA at Queens, and I'd like to acknowledge everyone who taught on that course as they guided me towards this point. Above all, I'd like to thank Dr Viviane Gravey for inspiring me during my masters to pursue a PhD, supporting me through the application and all the way to this point as my supervisor. I'd also like to thank Professor Lee McGowan who as a supervisor has challenged me along the way, infinitely improving my work while helping me keep up to date with all of the developments in UK and Northern Ireland politics. I'd like to thank everyone I interviewed and those with who I discussed the ideas in this thesis, it would have been impossible without you. Finally, I would like to thank Professor Jason Glynos at the University of Essex who has supported the development of my education in discourse theory, and my own efforts at moving the theory forward.

I would also like to extend my solidarity to all of the UCU members who have been engaged in a campaign for fair working conditions, wages and pensions throughout PhD. Up the workers.

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Table of Contents

List of figures

List of tables

Glossary

25YEP	25 Year Environment Plan
AFBI	Agri-food and Biosciences Institute
ASSIs	Area of Scientific Significance
BCC	Brexit Consultative Committee
CAFRE	College of Agriculture, Food and Rural Enterprise
CAP	Common Agriculture Policy
CCC	Climate Chance Committee
CJEU	Court of Justice of the European Union
DAERA	Department of agriculture, environment and rural affairs
DARD	Department of agriculture and rural development
Defra	Department for environment, food and rural affairs
DfE	Department for the Economy
DOE	Department of Environment
DUP	Democratic Unionist Party
EIP	Environmental Improvement Programme
ELM	Environmental Land Management
ENGOs	Environmental Non-governmental Organisation
ESG	Environmental Stakeholders Group
EU	European Union
GB	Great Britain
GfG	Going for Growth
GHG	Greenhouse Gas
IEPA	Independent Environmental Protection Agency
IGR	Intergovernmental Relations
IMA	Internal Markets Act
MLA	Member of the Legislative Assembly
MLV	Multi-level Governance
MOU	Memorandum of Understanding
NDNA	New Decade New Approach Agreement
NFFN	Nature Friendly Farmers Network
NFU	National Farmers Union
NI	Northern Ireland

NIAPA	Northern Ireland Agricultural Producers Association
NICS	Northern Ireland Civil Service
NICVA	Northern Ireland Community and Voluntary Agency
NIEA	Northern Ireland Environment Agency
NIEL	Northern Ireland Environment Link
NIFDA	Northern Ireland Food and Drink Association
NIMEA	Northern Ireland Meat Exporters Association
OEP	Office for Environmental Protection
ONS	Office of National Statistics
PDT	Political Discourse Theory
PFG	Programme for Government
PMB	Private Members Bill
QUB	Queen's University Belfast
RCN	Rural Community Network
RHI	Renewable Heat Incentive
SACs	Special Areas of Conservation
SALMS	Sustainable Agriculture and Land Management Strategy
SDLP	Social and Democratic Labour Party
SNP	Scottish National Party
SoS	Secretary of State
TAC	Trade and Agriculture Committee
TCA	Trade and Co-operation Agreement
UFU	Ulster Farmers Union
UK	United Kingdom
UKG	United Kingdom Government
WTO	World Trade Organisation

Chapter 1 – Introduction

Brexit meant that for the first time in 50 years, the fate of Northern Ireland's (NI) rural environment could be determined by policies for the most part written in NI (Attorp and Hubbard, 2023, pp. 79, 85 & 91; Heron, 2023, pp. 34 & 42). The policies which had shaped rural communities across the United Kingdom (UK) had been disproportionately the reserve of the European Union (EU), and the repatriation of power to Belfast and London offered the opportunity to transform rural environmental governance in NI (Heron, 2023. The fields of possibility, are restricted only by the political, and this thesis analyses the political to determine what is possible for the fields of NI.

In beginning this analysis this chapter, in section 1.1, sets out the context in which this research takes place; NI's unique place in the UK, the domestic instability of the post-Brexit period, and increasing international political instability. After establishing the research context I introduce, in section 1.2, Political Discourse Theory (PDT) as an ontological and analytical theory, setting out the argument for its use in providing an insight into this case, as well as putting forward this case as an opportunity to develop PDT as a theory of governance.

These two propositions, the future of rural environmental governance in NI after Brexit, and the role of PDT in researching governance, constitute the overarching aims of this thesis, which the next section, 1.3, lays out in greater detail.

With the context, theoretical framework, and aims of the thesis laid out, sections 1.4 and 1.5 set out the literature this thesis primarily engages with. Section 1.4 offers a review of the literature on environmental governance and agriculture policy demonstrating the link between the two, and current failures to offer an overarching framework for the rural environment which this thesis aims to contribute towards.

Section 1.5 continues this thread by looking at the particular literature on the case of rural environmental governance in NI drawing out useful insights.

With the thesis now situated within the context of the academic literature, the research environment and the theoretical environment, I turn to practical issues of research strategy and lay out how the research was conducted in section 1.6. Finally, in section 1.7, I detail the thesis layout and the main findings of the research.

1.1 Context

On the 23rd June 2016 the UK voted to leave the EU by 51.9% to 48.1% (BBC News, 2016c). This decision dominated the politics of the UK[1] with the process of "Getting Brexit Done" seemingly never complete, nor satisfying for anyone (Kirk, 2019; Lazowski, 2019; Usherwood, 2019; Gaskell, Stoker and Jennings, 2020; Ryder, 2020). In the seven years since the vote the UK has had five Conservative Prime Ministers and two general elections, as well as two leaders of the Labour Party (Stewart, Mason and Syal, 2016; BBC News, 2019c; Shaw, 2020; Allegretti, 2022). The psychodrama of the Brexit process for the first four years was whether the UK could agree a new relationship with the EU, and what this relationship would look like (Dhingra, Ottaviano and Sampson, 2017; Usherwood, 2021; Wolff and Piquet, 2022). Once the EU-UK Trade and Co-operation Agreement was signed, attention moved onto the deficiencies of the agreement, and how to "Get Brexit Done" domestically, i.e. take advantage of the newly acquired freedoms (Winn, 2021; Biedermann, 2022; Lucas, 2022).

1.1.1 "Brexit means Brexit"

For the purposes of this, and many other research projects on UK politics post Brexit, Brexit is merely the process of the UK leaving the EU. During the referendum this

[1] To such an extent that the Conservative Party released a "lo fi boriswave" music video to "get Brexit done to" https://www.youtube.com/watch?v=cre0in5n-1E

seemed to be the case for many of the Leave Campaign's leading proponents with Owen Paterson MP stating, "Only a madman would actually leave the [Single] Market" (Allegretti, 2016). The most prominent Eurosceptic in the UK, Nigel Farage, argued that the UK should be like Norway and Switzerland, as did the heads of the two largest organised Leave campaigns, Vote Leave and Leave.EU (Allagretti, 2016). If the UK had followed this route they would still be in the single market in what has been termed a soft Brexit (Burns, Jordan and Gravey, 2016; Menon and Fowler, 2016; Dhingra, Ottaviano and Sampson, 2017). However, shortly after winning the vote previously soft-Brexiteers turned hard decrying that "Brexit means no single market"(Stromme, 2016).

The new Prime Minister, formerly Remainer, Theresa May delivered the line "Brexit means Brexit" which encapsulates the essence of Brexit (The Associated Press, 2019). It is the epitome of Lacan's *objet petit a,* it is the unattainable object of desire (Kirshner, 2005, p. 84). Since the Brexit vote each barrier to Brexit has been decried, and each solution produced to overcome it has eventually been denounced (Khan, Barker and Hughes, 2019; UK in a Changing Europe, 2020; BBC News, 2022; Campbell, 2022). Having achieved the hard task of negotiating an agreement with the EU Theresa May was cast aside, her replacement Boris Johnson fared better winning a landslide majority in Parliament and passing his deal (Ryder, 2020). However, his solution to the NI border, the "NI Protocol" was soon after denounced by its erstwhile supporters as breaking the Union, and failing to deliver Brexit for NI (BBC News, 2021, 2022; Pow, 2021). As Johnson was forced out by the Conservative Party his message to his successor was to "finish the Brexit job"(Brown, 2022). Faced by a cost of living crisis, border infrastructure failures and a potential recession, each of which Brexit was partially responsible for, the response was that there has not been enough Brexit (Dhingra *et al.*, 2022). Therefore, Brexit is the *objet petit a,* in the minds of the Brexiteer Brexit is positive, and therefore, any Brexit which does not

have positive results is not Brexit, but a false Brexit, one which must be denounced and cleared away. Brexit delivers promises like the perfect empty signifier.

In the early stages after the referendum, yet not before, the promise of a Green Brexit became a defining concept, although there was significant discussion about the future of the environment and agri-food sector prior to the referendum (Gravey, 2019c; Moore *et al.*, 2019). Michael Gove, used the idea of a Green Brexit to tempt or at least sedate remain supporters, as well as bringing tangible benefits and positive legislation to the Brexit process (Gove, 2019). As the Department for the Environment, Farming and Rural Affairs (Defra) Secretary of State, he crooned that Brexit offered a "once in a lifetime opportunity" to transform how we managed the environment, he even referred to it as the "great progressive prize of Brexit" (Gove, 2017, 2018b). It is no exaggeration to state that the promise of a Green Brexit was the government's proverbial carrot to the many sticks Brexit threatened. The question arises then, was Brexit really this opportunity? If so, what were the dynamics that shaped the outcome of a Green Brexit or might have prevented one from emerging? Finally, how did the complicated nature of devolution in the UK affect this opportunity? NI presents the ideal case for addressing these questions as it has been at the center of the Brexit debate and has been unable to fully develop its own post-Brexit policy.

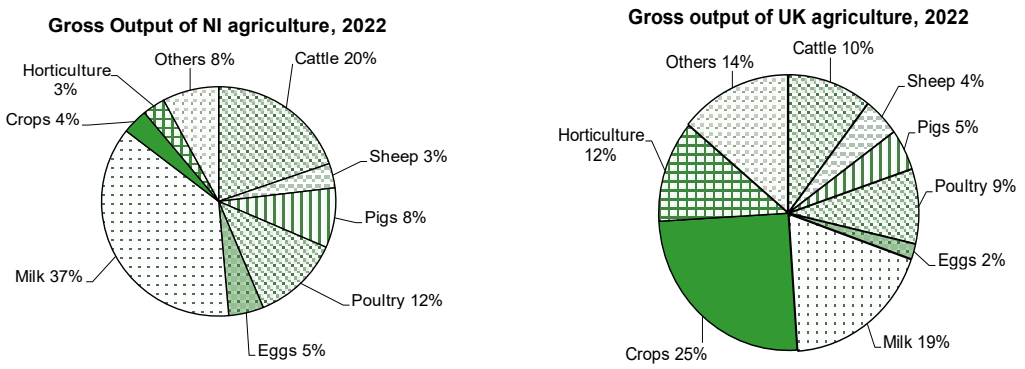
1.1.2 Northern Ireland Context

The policy arena and economic sector which has determined how the environment has been managed across the UK, and Europe, is agriculture. Reform of agriculture policy and the transformation of farming was the goal of a Green Brexit. However, each region of the UK has a distinct approach to land use resulting in different political and economic strengths for the farming sector. The structure of the sector in NI is unlike any other in the UK, which was recognised by the Climate Change Committee (CCC) who aimed for a "fair" distribution of climate change mitigation measures as actions taken in other parts of the UK would impact NI in particular

ways due to the size of the agriculture sector (CCC, 2019). With that in mind, a breakdown of the sector is crucial context as this where the political contestation takes place.

In June 2022 26,089 farms worked across 1,043,270 hectares in NI accounting for 74% of NI's land mass (Kendall, 2022). Over 20,000 of these farms are classified as very small with 6,749 farms under 10 hectares, 5,930 between 10 and 20 hectares, and only 1,541 over 100 hectares (DAERA, 2022f). As shown in Figure 1.1 livestock is the most common form of farming with 79% of farms raising some cattle, 38% raising some sheep and 3% with poultry. Figure 1.1 also shows the drastic difference in farming output in NI compared to the UK with crop and horticulture accounting for only 7% of NI farming when compared with 37% of farming in the UK. Interestingly while sheep only account for 3% of total output in June 2022 2,100,886 sheep were farming in NI.

Figure 1.1 A comparison of agriculture gross output in NI and UK

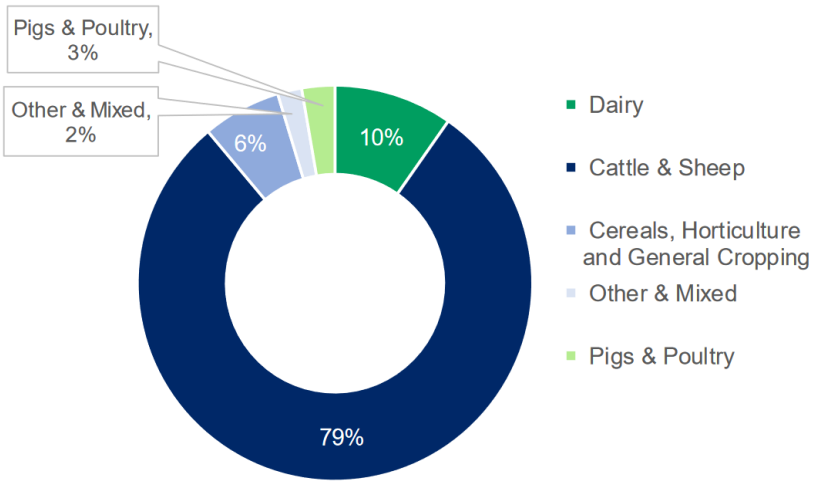


Source: (DAERA, 2022f)

Indeed, as shown in Figure 1.2 while the poultry and pig sectors have significant output they are concentrated in a small number of farms which have seen significant growth since the Going for Growth Strategy was launched. The economics of the sector are subject to significant scrutiny given the historic dependency of sheep and cattle farmers with the average lowland sheep farm income in 2016-2017 at £7,812 in 2016-17. Much of this is due to the nature of the land in NI with 69% of NI farms in

Less Favoured Areas, an EU designation for areas with relatively poor agriculture conditions, a number which rises to 100% for cattle & sheep farming.

Figure 1. Error! No text of specified style in document.Error! No text of specified style in document.Error! No text of specified style



Source: (DAERA, 2022e)

The political strength of the agriculture sector comes in part due to this structure and dependency. A 2015 social survey found that family farm households consisted of 107, 000, or 5% of the population (Magee, 2015). This only accounts for this distinct type of farm, when this is expanded out to other farm businesses and the wider agri-food industry this number will grow considerably. Culturally the idea that even if you don't live on a farm or as a part of a farm family you likely have a farmer as a close relative is one that resonates in NI (Anonymous, 2019). Beyond their cultural importance the political strength of the sector derives from its economic contribution, particularly when compared to the UK. The agri-food sector (farming and food processing) contributed £1.7bn value added to the economy, this is 3.5% of the economies total gross value added compared to the UK's 2% (Kendall, 2022). Food and drink processing contributes to 37% of manufacturing industry sales, 86% of processers are based outside of Belfast, and 2022 report estimated an almost £11.5bn gross output from the sector (Kendall, 2022). The sector is one that has been

marked for growth due to this potential, and is underpinned by a series of economic strategies, while being protected by environmental ambitions as seen with the CCC.

The challenge facing agriculture in NI, particularly in attempting a Green Brexit, is that the sector is deeply unsustainable. Responsible for 27% of NI's carbon emissions the sector faces considerable challenges to decarbonise without major structural changes. In addition the sector faces considerable scrutiny for its ammonia emissions, as well as contributions to degrading water quality and biodiversity. Yet has been largely sheltered from political action to tackle these issues.

NI Political Context

During the period between 2016-2022 NI experienced it's own specific form of political instability, one common in NI, with the collapse of the scandal ridden NI Executive in 2017. A failure to reform the executive until January 2020 when the TCA had been signed, UK intra-government relationships had been re-shaped and the UK Government had legislated to reform England and NI's rural environmental governance is the immediate context for this thesis and will be discussed at length in both chapters 2, 4 and 5.

1.1.3 International Political Instability

I would be remiss not to mention the additional context of increasing international political instability during this period. Both Brexit and the coronavirus pandemic have contributed to international political instability, however, there are two additional contributors which merit inclusion, the Russian invasion of Ukraine, and Climate Change (Heron, McAreavey and Attorp, 2023). On the 24th of February Russian military forces initiated a large-scale invasion. This has had consequences far beyond Ukraine, although they are incomparable to the war crimes and atrocities committed by the Russians, they are worth mentioning as they influenced the politics of the rural environment towards the end of this research period (Heron, McAreavey and Attorp, 2023). Ukraine and Russia are both important sources of

natural resources, wheat for the prior, energy and fertiliser for the latter (Heron, McAreavey and Attorp, 2023). This has had a knock-on effect on prices, energy strategies, and agricultural discourses across Europe and is likely to continue to do so (Heron, McAreavey and Attorp, 2023). On the other hand, the impacts of Climate Change have been more closely felt than before with England declaring its first red emergency for heat during the summer of 2022 (Heron, McAreavey and Attorp, 2023). The issue of Climate Change is prominent throughout this thesis as intergovernmental commitments to address it, and climate protestors, have prompted increased salience for the issue and a push for government action, not least in NI which saw its first Climate Change legislation pass the assembly in March 2022 (McCormack, 2022). These two additional contexts have an interplay which is shown in this thesis, and they bear strongly on the core of the thesis.

1.2 PDT, Ontology and Epistemology

As the opening to this chapter demonstrated, Lacanian ideas can be used to understand complex political situations and concepts. PDT, a marriage of Lacanian psychoanalysis, linguistic theory from Saussure and Marxist political theory from Gramsci, has been at the forefront of explaining these interesting times. Through its particular focus on populist movements and hegemony, PDT has been used to help us understand why issues such as Brexit have occurred, how they have proceeded, and can help us explore how political movements engage with the Covid-19 pandemic and Climate Change (Fairbairn and McGowan, 2020; Hawkins, 2021; Atkins, 2022; Forchtner and Özvatan, 2022; Marquardt and Lederer, 2022; Szabó and Szabó, 2022). At its root PDT is a method of critical explanation which arises from its distinct theoretical and ontological basis. The basis of this is the conception of our understanding of reality as socially constructed through discourse. PDT adopts a thick definition of the term discourse which goes beyond texts and talk to include social actions, political practices, and regimes. The meaning of all practices and objects is dependent on their "articulation within socially constructed systems of

rules and differences", therefore they are discursive (Griggs and Howarth, 2013, p. 8).

In addition to the study of populism and political strategy PDT is perfectly suited to policy analysis and providing understandings of governance. Griggs and Howarth (2013 p. 42) argued "Policy analysis … privileges the general concern with policy change … on the one hand, and … policy sedimentation on the other". This naturally leads to questions regarding the conditions under which certain policy discourses become hegemonic, and how we explain how certain policy discourses become embedded in a subjects identity, or "grip" them (Howarth, 2018). As it is through discourse that meaning is given to phenomenon, and how policy is produced and the use, or their lack thereof, of policy competences analysis of the descent and emergence of discourses is essential. As Hajer and Versteeg (2005) note, it is through discourse that phenomena are represented, allowing citizens to address questions of who is to blame for a problem, and who is responsible for fixing it. As with all theoretical frameworks PDT is an evolving framework as researchers build upon its foundations and test new ways in which it can be applied. This thesis contributes toward this as it builds upon the tenets of PDT and the uses it has been put, particularly in the Nodal Framework developed by Glynos et al (2012) in critical policy analysis, and advances a PDT conception of governance and a framework for analysing it. This is the central task of Chapter 3, and this framework is then used throughout the thesis, particularly in Chapter 4, 6 and 7.

1.3 Research questions and aims

Beyond the theoretical contributions outlined in the previous section which contribute to this research's originality this thesis is motivated by one central question– will Brexit indeed materialise as a "once in a lifetime opportunity" to profoundly change environmental governance in the NI, or will it offer more of the same (Gove, 2017)? Amid the twin biodiversity and climate emergencies the

repatriation of powers over agriculture policy, among key drivers of these emergencies, presents a moment in time in which significant change is in the hands of those closer to the problem. With 75% of NI's land use accounted for by agriculture, biodiversity in NI in continuing decline, and a history of failed environmental governance held in check by the Court of Justice of the EU (CJEU), the rural environmental governance component of Brexit is an important one for NI (Brennan, Purdy and Hjerp, 2017; Dobbs, 2022).

The aims of this thesis are:

To develop a framework for discourse theory research on governance

To identify the dominant drivers of agricultural policy development in NI after Brexit

To identify and describe the hegemonic discourse in rural environmental governance

To identify challenges to this discourse, and weaknesses in its construction

In addition to the theoretical contributions this thesis's originality derives from the analysis of the de-europeanisation of environmental policy making across scales with the particular context of NI contributing to the originality of the thesis. There are other minor contributions to originality such as the advancements of understanding policy exceptionalism, an analysis of policy-making in NI without an Executive, and the use of PDT in environmental and agricultural politics which to this point has been minimal in the literature.

1.4 Literature Review

This thesis has been inspired by, engages with, contributes to, and borrows from a wide and varied literature, including multi-level governance, agriculture policy analysis, environmental governance, Europeanisation, devolution, Brexit and rural sociology. The task of this literature review is to situate this thesis into these literatures in three moves. The first move is to consider the general problem identified in the literature that this thesis addresses, that is the development of a framework for the analysis of rural environmental governance. The second move is to identify where this thesis fits into this problem, how it will be addressed by the chosen case and theoretical framework. Finally, the third move is to begin to contextualise the existing literature on NI's governance with this task in mind.

1.4.1 Rural Environmental Governance - Productivism

Until the 1980s the rural environment in the UK was synonymous with agricultural land with "environmental" policy in the UK designed to restrict the spread of "urban sprawl" into productive farmland (Gallent, 2008; Heron, 2023). Gallent (2008), amongst others, have outlined this history of rural environmental governance developing from concerns around food security during and after the Second World War to the food gluts of the 1980s. This "productivist" focus had consequences for how the rural environment, through agriculture policy, was governed. Grant (1995) introduced the concept of policy exceptionalism in agriculture policy, writing in the context of the World Trade Organisations (WTO) attempts to liberalise agricultural markets. It has since become an important part of understanding European agricultural governance comprising of four dimensions; ideas, institutions, interests, and policy which result in a highly compartmentalised policy-making process (see Table 1.1.)

Table 1.1 Agricultural Policy Exceptionalism

Ideas	Agriculture is a unique sector which cannot be governed by market forces; High levels of unpredictable natural risk – weather, climate, disease, and market price Chronically low farm incomes due to "growing economy" Contribution to the national interest – food security or special position in rural communities, or environment.
Institutions	Specific agricultural ministries or departments. Minister for agriculture rather than of agriculture. Special administrative bodies working closely with farming associations Closed networks of agricultural civil servants and farm-group officials working in corporatist style Satellite institutions such as extension services, agricultural colleges, and semi-state chambers of agriculture.
Interests	Ideas and institutions shape the formation of interests. Benefits of policy to specific groups, costs to broad groups. Needs to benefit wider – agri-food industry and financial institutions, landowners etc.
Policy	Specific policies regulate agriculture through intervention buying, farm subsidies, production linked payments and price agreements.

Source Authors own created from Daugbjerg and Feindt (2017)

The policy exceptionalism outlined in Table 1.1 has become prominent in the literature, however definitions of policy exceptionalism are not as simple as the above. Attorp and Hubbard (2023) include agri-food actors in their understanding of policy exceptionalism, this is important for future consideration. Particularly apt for this thesis is Greer's (1996) work on policy networks in NI in which he identifies a corporatist relationship between the agriculture department and the UFU from the

province's foundation. Each of these dimensions was identified, with NI presenting as the ideal case for policy exceptionalism.

A parallel tradition in agricultural policy analysis has developed with the analysis of CAP discourses as the policy exceptionalist diagnoses bear remarkable similarity to the productivist or neomercantilist discourse (Wilson, 2001; Potter and Tilzey, 2005).

1.4.2 Rural Environmental Governance – Neoliberalism

As noted earlier, Grant's (1995) diagnosis came at a time of tension for the CAP as pressure was being applied by the WTO to liberalise (Potter and Tilzey, 2007). The food gluts and market distortions emerging in the 1970s, and a general trend towards neoliberalism led to calls for removal of state payments to farmers, export subsidies, import tariffs and regulation of industry. This prompted Potter and Goodwin (1998) to analyse the potential environmental impacts of neo-liberalism in agriculture policy stating that the political will necessary to fund agri-environment schemes is an important determining factor. The impact of neoliberalism on the CAP has been relatively limited by comparison to countries like New Zealand who have fully embraced it (Joseph, Chalmers and Smithers, 2013). Instead, the big victory for neoliberals is de-coupling of payments from production; however, that was also motivated by environmental arguments such as multifunctionalism.

1.4.3 Rural Environmental Governance – Multifunctionalism

As the WTO was putting pressure on the EU to reform the CAP pressure was also building from an alternate direction, from environmentalists who were concerned about the detrimental effects of the CAP on the environment. The 1987 Brundtland report on this issue was followed by the 1992 MacSharry reforms which recognised that European agriculture was multifunctional and sustainability should be balanced across three pillars, social, economic and environmental (Heron, 2023).

Outwith agriculture policy the Bern Convention in 1979, the first international treaty to protect both species and habitats was a turning point for environmental governance in Europe. This alongside the EU Birds Directive (1979) and the Habitats Directive (1992) saw growing political will to address environmental degradation through increasing designated protected areas for nature. Integrating these ideas into agricultural policy began in the mid-1980s as the extent to which agriculture was the source of environmental degradation was recognised (Hodge, 2001). Following the MacSharry reforms and the extension of agri-environment schemes, of the "greening of the CAP", the CAP became the main mechanism for rural environmental governance in the EU, particularly biodiversity governance.

This extension of agricultural policy into a wider rural environmental governance framework through the prism of multifunctionality saw an increasing variety of actors engaging in the policy process such as environmental non-governmental organisations (ENGOs), and continuing reforming and greening processes, although these often fell short of the expectations of the environmental actors. Multifunctionalism is wrapped up in this expansion, however, it is important to note that there is a subtle difference between saying agriculture is multifunctional and this justifies public spending on it, and agriculture is multifunctional, and this must be harnessed to solve wider policy concerns. The former does not require significant changes, while the latter promises a transformation in policies, institutions, and synergies between other policy solutions such as designated sites.

It is important to note that the two major pressures on the CAP, neoliberalism, and environmentalism, which had built for years culminated in the 1990s. As Glynos and Howarth (2007) not that it paradigms are often unveiled when they are under challenge, and it was during this time that both discourse and agricultural policy scholars analysing this period of challenge identified policy exceptionalism. This explains why the literature has had difficulty in characterizing post-exceptionalism/productivism's replacement.

1.4.3 Rural Environmental Governance – Post Exceptionalism

At this point the CAP is neither strictly "productivist", multifunctional or neoliberal with elements of all three featured strongly in the policy. This stuttering evolution from policy exceptionalism has led Daugbjerg and Feindt (2017) to develop post policy exceptionalism as a diagnostic tool with the intention that it could be used across policy areas. They argue that the current CAP can be characterized as post exceptionalist in that it marks "a partial departure from compartmentalized, exclusive and exceptionalist policies and politics which, however, preserves some exceptionalist features" (Daugbjerg and Feindt, 2017, p. 1567).

This has involved an "interlinking of agricultural policy with policy fields such as food policy, rural development, energy policy, environmental policy amongst others"(Daugbjerg and Feindt, 2017, p. 1567). The focus for those interested in post policy exceptionalism is the identification of changes across the four dimensions of policy exceptionalism, however, for Greer and Hind the clearest indicator is the involvement of actors who have "fundamental value disagreement about the purposes and nature of agricultural policy" (Greer & Hind, 2012, p. 333). Daugbjerg and Feindt (2018, p. 6) have admitted that the sector is "still in transition and has not reached an end state that can be accurately characterized". Post-exceptionalism is indeed a useful tool for considering this interplay and allows for deeper understanding of how agriculture policies have shifted, however, as Attorp and McAreavey (Attorp and McAreavey, 2020, p. 303) note, "there is no consensus in the literature on exactly what it is".

While both post-exceptionalists and discourse analysts have identified a rise in tension in agricultural policy, they have both failed to offer an overarching view of agricultural governance; however, in that they are not alone. The integration of agriculture with environmental policy, or delivery of environmental policy via

agricultural policy led to a determination to develop a framework for rural environmental governance that encapsulated this.

1.4.4 A post-agricultural view

A number of alternative frames for rural environmental governance have emerged since the multifunctional turn. Hodge (2001) put forward a public goods perspective in which rather than just farmers receiving money for productive land all land managers would be supported for the provision of public goods. The English approach to environmental land management after Brexit reflects this (Lyon, Little and Tsouvalis, 2023). Rather than focussing on land management exclusively others have sought to develop frameworks which start from different perspectives such as biodiversity governance or food system governance (Lockwood *et al.*, 2014; Marsden, Hebinck and Mathijs, 2018; Velten *et al.*, 2018; Attorp and Hubbard, 2023). Others instead have focused more on the scale with Primdahl et al (2018) viewing the issue as a case of landscape governance. Each of these approaches have made distinct and positive contributions to our understanding of multifunctionalism or post-exceptionalism. However, as Velten et al (2018) noted, they have failed to identify a real alternative, partially due to the lack of a framework which can encapsulate governance more fully beyond the policy and towards the institutional architecture of governance.

Recognising this limit as powers become more widely dispersed through processes of devolution and de-centralisation Velten et al (2018) sought to develop alternative scenarios for who may hold power including individuals such as farmers, and institutions such as state governments. They recognised the shift towards administrative de-centralisation and the incorporation of a range of actors into decision-making processes, in turn recognising that the analysis of these processes is central to understandings of governance. This increases the complexity of rural environmental governance, yet it more closely reflects the existing arrangements

than the previous frameworks by including the roles of individuals and institutions, and different centres of decision-making.

The literature on both multi-level governance theory and poly centric governance theory offer useful insights here in understanding how power is distributed between and across scales (Ostrom, 1990; Liesbet and Gary, 2003; Lockwood *et al.*, 2009; Gillard *et al.*, 2017; Wurzel, Liefferink and Torney, 2019). Finally, the work of Forney et al (2018) in introducing assemblage theory into agri-environmental governance has proven fruitful in providing the global context in which agri-environmental governance interactions occur, and bringing in a further range of actors to consider such as the agri-food industry, trade actors and assurance schemes. In some ways the repatriation of power after Brexit has brought these interactions to the fore as scholars have grappled with the future of rural governance through the interaction of agriculture policy, environmental policy and the institutional architecture of the EU (Heron, 2023).

The integration of these approaches is a necessity which has been recognised by the post-exceptionalist literature through the dimension focussing on institutions and the disclaimer that the move "towards post-exceptionalism" occurs at different rates in different countries (Daugbjerg and Feindt, 2017). The notion of post-exceptionalism works within the context of the EU due to processes of Europeanisation, and the development of common policy. Without the forced compromise at the EU level between radically different agricultural systems agriculture policies are represented much more distinctly at the national level. In their analysis of CAP reform at the national level Rutz et al (2013) concluded that the CAP overall is discursively represented as a hybrid between EU and national with a mixture of the three discourses. Building upon this research Alons and Zwaan (2016) argued that CAP reform is sold at the national level by aligning with domestic policy paradigms rather than the dominant discourses of the CAP at the European level. They concluded that multifunctional discourse was combined with neoliberal

discourse in justificatory argumentation, particularly the concept of public goods, to sell the CAP in the domestic sphere in the UK (Alons and Zwaan, 2016). Discourse defined in the literature is broadly understood to be justificatory with the EU using different discourses to represent different ideological desires and contexts (Erjavec and Erjavec, 2020) This view of discourse is flawed as it sees discourse as separate from the policy it represents, rather the policy is constitutive of discourse. However, it highlights an important point, that within the EU there were potentially 28 different approaches to agricultural policy (Greer, 2005). With Brexit an opportunity arises to analyse and identify an approach that is distinct and can be characterized in a way that post-exceptionalism cannot due to its European focus.

1.4.5 Rural Environmental Governance in this thesis

This is all to say that the conception of rural environmental governance has evolved significantly, and yet it is still searching for a framework which is able to offer a full analysis. This thesis puts forward a conception of rural environmental governance, and a framework for analysing it, both of which are developed in Chapter 3 while engaging with the literature on agricultural discourses and post-exceptionalism in greater detail. Building upon PDT ideas of governance, and engaging with both assemblage theory and governmentality, the framework developed in this thesis incorporates policy across a range of areas including agriculture, biodiversity, Climate Change, trade etc and institutional developments, such as those necessary to close the governance gap after Brexit (Burns, Jordan and Gravey, 2017; Heron, 2023; Heron, McAreavey and Attorp, 2023). The focus throughout this thesis is on the particularities of the case, however, the framework and conception of rural environmental governance will make a broader critical engagement with the literature. To provide more understanding of the particularities of the case it is important to engage with the literature on rural environmental governance in NI.

1.4.6 Rural Environmental Governance in NI

Environmental governance in NI has been mostly subject to scrutiny in the field of environmental law (Turner, 2006a, 2006b, 2012; Turner and Brennan, 2012). In the decade after the devolved assembly was established, environmental governance became a live political issue as environmental groups challenged the government to establish an independent environmental agency (Turner, 2009a). Little, however, happened on the environmental front as the theme emerged as an additional source of tension and conflict between the main political actors. Accordingly, this salient area received scant attention in the academic literature until Brexit. Brennan et al (2017) brought this up to date in the shadow of Brexit. As they considered how to improve governance in NI, they suggested establishing an independent NIEA and creating an enforcement department. Drawing a sharp contrast between their proposals and the current approach of the NIEA which is very lenient towards low level infractions they emphasised that this could worsen if Brexit means NI leaves the jurisdiction of the CJEU (2017, p. 153).

Dobbs (2022) expanded upon this by situating pre-Brexit environmental governance in NI within a system of multi-level governance in which the EU provided the foundations including minimum standards, as well as support for governance functions as in the formulation and evaluation of policy, enforcement of law, and accountability. Dobbs, amongst others highlights the risk of Brexit in creating a "patchy legal system" with significant governance gaps. (Farstad, 2017a; Gravey, 2017a, 2017b). Therefore, government level environmental governance, particularly compliance, has begun to become more prominent in the literature. This has seen a parallel expansion in one of the largest dimensions of rural environmental governance, agricultural policy (Gravey, 2018; House of Commons, 2018)

Agriculture policy has been represented as a specific challenge for NI after Brexit due to both the absence of government in NI for much of the process, and the

intergovernmental conflict within the UK (Dobbs, 2022). Dobbs (2022) noted that in the absence of a government DAERA developed an agricultural strategy alongside the agriculture stakeholder group which was established by the Minister prior to the assembly's collapse(Greer and Grant, 2023). The strategy focused on four objectives, one of them being productivity which Dobbs labelled as excessive. However, for those who have studied NI agricultural politics this is not surprising. Greer(1996) noted the ideological unity between the UFU and the ruling Unionist Party from 1921 to 1993, while others have offered examples of continuing influence by the farmers union on NI politicians (Barry, 2009; Turner, 2009; Brennan, 2016; McAreavey, 2023).

The focus of the new literature on NI's agricultural industry is the Going for Growth Strategy (GfG) developed by the agri-food sector. GfG was developed in 2012 by the Agri-Food Strategy Board, a temporary organisation put together by the industry and the government to develop a strategy for the sector in NI. Attorp and McAreavey (2020) note that the membership of the board was dominated by the agri-food sector with no membership from the environmental, animal welfare or rural development sectors, although they responded to the consultation. GfG resulted in an export orientated strategy to massively increase the productivity of the livestock sector in NI, in particular this saw significant increases in pig and poultry sectors – which increased environmental issues particularly ammonia emissions (Gladkova, 2020). However, the strategy did include a focus on addressing the sustainability of the sector with a focus on Climate Change and "sustainable land management" (Attorp and McAreavey, 2020). Attorp and McAreavey (2020) argued that the GfG represented a shift towards tense post-exceptionalism as there are "more actors in the policy making process" but also "significant tension as "the constellation of ideas, institutions, interests, and policy "co-exists in an unbalanced way, which undermines its political viability". They highlight that an increase in policy actors should draw attention to the varying power distribution amongst

actors within the sector. Attorp (2022) highlights this by raising the case of power distribution between powerful dairy farms and ignored dry stock farms. She argued that this has had particular effects on agriculture policy in NI, and the dry stock farmers position ensures that they are simultaneously supported to stay on the land, yet side-lined in political discussion. This has played into more general debates around sustainability as NI's favourable attitude towards the farming community resulted in a diluted Climate Change Bill (McAreavey, 2023).

The literature also highlights those areas of the rural environment that were not governed by the EU, and are not directly related to Brexit, yet are still useful for this thesis. Barry (2009) stands out in his exploration of planning policy for housing demonstrating the influence of the UFU in this area. McAreavey (2022) also speaks to planning and housing in NI, although more in relation to distribution of populations, this is an important point as considerations of rural development and citizen participation must consider NI's "ribbon development". Cirefice et al (2023) illustrate how the environment versus employment paradigm plays out in other sectors such as mining, drawing attention to the idea that these arguments often play out at the expense of the people living there. Indeed, the concept of lawscaping, the removal of land from contextual and local understandings, used in the mining and public sectors, stands in direct counterpoint to multifunctional arguments around agriculture and the role of small farmers. This highlights that it is important not to be complacent or universalise from the experience of one or an assemblage of industries as some industries/practices are treated differently, indeed there may be an argument for policy exceptionalism for mining.

The case of rural environmental governance in NI after Brexit offers an opportunity to consider the interaction of distinct policy processes between scales at a time of change. The process of de-europeanisation, because of the UK's devolved system, is complicated due to the different destinations for the repatriated powers. This has resulted in distinct policy processes for both agriculture and institutional

environmental governance (Greer and Grant, 2023). However, as NI were without a government during three years of the Brexit process, they were more deeply implicated by policy processes elsewhere. This demanded an analysis of the interaction between governments during the process of de-europeanisation. A further element to this is that it allowed for consideration of what may happen should the CAP become less common, a process that appears to be ongoing. Further to this I build upon the literature in a number of ways, the first was by bringing Dobb's post-Brexit work up to 2022 in providing a descriptive analysis of the policy developments in both agriculture and environmental governance. The work on GfG is particularly relevant as it provides an analytical basis for which this thesis can use as the foundation of analysis, the same can be said for Greer's earlier work which provides useful insights into the structure of agricultural politics at its most exceptionalist. This thesis will go deeper than either of these works by focussing on the wider context and looking past the designation of post-exceptionalism to assess the character of rural environmental governance more accurately in NI as an innovative form of productivism identified as Sustainable Productivism. Of particular use will be both Attorp's (2022) and Gladkova's(2020) analyses of power relations in the sector, as this will form the basis for de-essentialising agricultural politics in Chapter 3.

1.5 Discourse Theory and Research Strategy

1.5.1 Methods of Data Collection

There are three primary sources of data used in this thesis: policy documents, interviews, and ethnographic data.

The first of these have been collected in abundance with government proposals, legislation, consultations, and policy documents alongside political actors' responses to government consultations, their own proposals. In addition to this there is an important role for inquiries run by both the NI Assembly committees and the

Westminster select committees, the latter is important as the NI Affairs Committee were particularly active during the NI Executive's hiatus. The process of collecting these documents, sifting through which documents were relevant, and when to stop collecting documents was informed by several considerations. I identified key documents such as the UKG's 25 Year Plan for the Environment and analysed it to isolate the key sections which were targeted at the rural environment. Once this was complete I was able to identify and construct a network of documents which formed the UKGs plan for rural environmental governance post-Brexit, partly using documents identified by the UKG, and identifying documents which held resemblances to these, this formed the analysis for both Chapters 2 and 4. I performed a similar task for NI using the Environment Strategy, however, due to the coronavirus pandemic and during a period of extended leave when I was seconded to the Department for the Economy's Energy Division, the returned NI Executive released a series of relevant documents which created a broader picture. This led to an extension of the data collection period until the May 2022 NI Assembly election, and a necessary reduction in data collection elsewhere, therefore, the process of data collection and analysis has been an iterative one.

Semi-structured interviews formed the second component of my data collection process as it provided an opportunity for a deeper exploration into the motivations and ideas of political actors than consultations or policy proposals allow, particularly more long-term considerations outside of a policy cycle. The eighteen interviews were conducted from December 2019-February 2020 with a range of actors within DAERA's post-Brexit policy network as shown in Table 1.2 and were cut off at this date for the reasons stated previously. The data from the interviews was integrated into the analysis of the above documents to provide a deeper understanding of the logic behind policy, in a similar manner to consultant and committee responses.

Interviews

Table 1.2 Interviews conducted between December 2019-February 2020

Type of actor	Number of interviewees
Farmers representative[2]	Four
ENGO	Four
Agri-Food Sector	Two
DAERA Official	One
NIEA Official	One
CAFRE	Five
Rural Development Organisation	One

They were semi-structured as this method gives greater insight into the construction of meaning, and allowed active identification with a discourse, and contradictory identities (Halperin and Heath, 2012, p. 254). The interviews were face to face as this is optimal for data collection for open-ended questions (Halperin and Heath, 2012). I initiated the interviews presenting the interviewee with different questions regarding rural environmental governance in NI.

Finally, ethnography, in a limited sense, formed a small yet vital aspect of this research as the opportunity arose to attend several events through government, ENGOs, farming organisations, and civil society organisations to discuss the future of the rural environment after Brexit. As noted by Ball (2016) when researching policy networks it is important to attend the events organised to understand how policy, or discourses, are "moved and fixed", it is at these events where stories are told and policies are pitched. A final component of these events is important, it is where the less formal components of discourses are at their most prominent, where assumptions, fears and desires are most clear. This data collection has formed an important component of my research with the emotion felt and displayed by

[2] Two interviews are referenced as anonymous throughout this thesis. Anonymous, 2019, is a former executive in the UFU, Anonymous, 2020, is a current officer in the UFU.

participants, this has played a crucial aspect in understanding discourse from a PDT perspective.

1.5.2 Methods of Data Analysis

The first step of data analysis is problematisation. It is necessary to problematize rural environmental governance in NI, engaging with both the academic questions as well as the social and political issues concerning this issue. This practice of problematisation is a form of critical analysis in which one tries to see how solutions to a particular problem, or set of problems have been constructed, focusing on how these different solutions present a specific form of the problem (Griggs and Howarth, 2013, p. 21). As Griggs and Howarth argued "This means that a range of disparate empirical facts, events and trends have to be constituted as a problem, and the problem has to be located at the appropriate level of abstraction and complexity" (2013, p. 32)

Practically this required repeated readings of texts collected, engaging in "manual processing" beginning with an analysis of the "historico-social context and the specific genre of documents" (Keller, 2013, p. 97). This initially focused on the way different problematisations of rural environmental governance "structured the terrain of argumentation, along with the construction of demands and how these were articulated together (or not) through the logics of equivalence and difference" (Howarth and Griggs, 2013 p. 22). Following Howarth and Griggs I used Foucault's criteria for identifying a statement to "isolate and describe the core statements that emerge or disappear in different contexts, while also charting their repetition and transformation in the critical conjunctures were examined" (Howarth and Griggs, 2013 p. 20). Thus, enabling me to "discern, construct and chart the competing policy discourses that have structured the shifting terrains of argumentation" in rural environmental politics in NI (Howarth and Griggs, 2013, p.22).

It is worth noting to avoid confusion that while discourse is the foundation of discourse theory, it is not the 'unit of measurement'. PDT understands that discourse as meaning making activity underpins the social, and therefore political, world. However, this means that the concept is incredibly broad. To address this Glynos and Howarth (2007) developed a toolkit of concepts which when applied can render this phenomenon intelligible, these are the Logics of Critical Explanation.

The first are those logics which represent the sedimented values and dominant norms, social logics. As Laclau notes administrative systems, or networks of governance are in our terms sedimented systems of discourse (2017, p. 19). The second set of logics are political logics, these are the way a social practice or regime is being contested or was instituted. By identifying and analysing political logics it is possible to identify social logics as it is through the process of contestation that emerging practices are instituted and become sedimented. Political logics can be further abstracted into two logics, that of equivalence and difference. The logic of equivalence is the linkage between different political requests into an incomplete demand which challenges the sedimented practices. A logic of difference is the breaking down of the logic of equivalence as the dominant regime attempts to meet individual requests without transformation.

Lastly, there are fantasmatic logics, these are the stories that 'grip' subjects of a discourse, "structuring their desires, providing them with forms of identification and promising the enjoyment of a 'fullness-to-come'"(Glynos and Howarth, 2007, p.20) These can be broken down into two, that of the beatific fantasy of success and the horrific fantasy of victimisation. Beatific logics are those that promise fullness and utopia, i.e positive outcomes. In contrast, horrific logics warn of apocalypse and collapse, i.e., negative outcomes (Glynos and Howarth, 2007, p.20). While social logics are those which are unquestioned, embedded in regimes, and political logics are those that seek to institute new regimes, or actively defend existing regimes, fantasmatic logics are representations of the tools of these logics. It is the successful

application of fantasmatic logics which may determine the success or failure of a political logic, how this applies to governance is central to this thesis. These are the tools I will utilise to analyse the emergence, sedimentation, descent, and dislocation of the discourses that construct rural environmental governance policy.

The final component of data analysis for this thesis was the application of the nodal framework for governance analysis developed in Chapter 3. Utilising insights from the above PDT analysis I was able to identify logics across the four nodes making up the framework, and describe rural environmental governance in NI, identify why it takes the form it does, and offer a critique of Sustainable Productivism as a system of governance.

The use of post-structuralism theories such as PDT often faces questions concerning its validity and what it offers in comparison to other theoretical approaches such as Marxist political economy. For post-structuralists answering these questions is relatively simple in that we choose post-structuralism as opposed to other theoretical positions due to ontological and epistemological commitments. In essence, I have chosen to PDT as my theoretical framework because I believe that it offers the most compelling explanation for how society is constructed, communities are organised, and reality is to be interpreted. Given the context in NI, the strength of the agri-food sector economically and politically, the integration of the industry into government policy-making and the domination of particular sectors and organisations, which will be discussed at more length in the literature review, a Marxist political economy analysis would offer an effective basis for understanding distributions of power and influence within policy-making.

Marxist analysis privileges economic relations above all and fails to offer any real explanation of why subjects not only fail to resist oppression but are often participants with false consciousness offering a weak cursory attempt. Gramsci sought to expand upon this with his notion of hegemony expanding beyond the

economic to embrace cultural politics. However, this too embraced an essentialist notion of the subject that fails to offer a credible explanation why an individual or group of individuals can take seemingly contradictory positions, or understand their position in a way that differs from the analysts understanding. PDT embraces the concept that individuals experience multiple subjectivities, and explains that change occurs because these are naturally incomplete, contradiction is inherent. PDT is a theory in development, and must adapt for each case which is the purpose of chapter 3.

1.6 Thesis Layout and main findings

To address the difficult challenge of analysing rural environmental governance in NI during the Brexit process this thesis is laid out in three sequences. The first, Chapter 2, brings to the fore the nature of the UK's devolution system and the relationship between the UKG and NI. This begins with a theorisation of the asymmetrical relationship between governments, and how power is exercised within it. It continues by considering the formalisation of Brexit which includes the new relationship with the EU, resolving relations between the devolved nations, and the passing of legislation to close the governance gap. This chapter ends by properly situating NI within this process and highlighting the ways this process has and will affect rural environmental governance in NI.

The second sequence, Chapters 3 and 4, focusses on the work of developing a PDT conception of governance, a framework for analysing it, and applying this conception and framework to the task of understanding rural environmental governance. It will do this by engaging with the mainstream approaches to governance as well as the post-structuralist critiques to elaborate on what a theory of governance is required to do. It will then carry these insights over to building a PDT conception of governance as hegemony which will involve drawing out discourse theory concepts and re-articulating them to reflect an approach focused on

maintenance of arrangements rather than challenges to a hegemonic order. Finally, it will engage with the literatures on agriculture discourse and policy exceptionalism to construct a framework for the analysis of rural environmental governance highlighting its advantages. The second chapter in this sequence, Chapter 4, tests the theoretical framework and utilises the analysis of the UK devolution system from Chapter 2 to analyse the English approach to rural environmental governance after Brexit. As shown in Chapter 2 the UKG exercises power discursively and financially, therefore, the approach taken in England is of paramount importance to NI as there are both influences and potential consequences for the region.

The third sequence, Chapters 5, 6 and 7, analyses the post-Brexit policy development process in NI. The first chapter, Chapter 5, analyses the political development of the new rural environmental governance regime after Brexit, the emergence of Sustainable Productivism. This chapter will analyse the policy development process to identify the competing discourses that have attempted to shape NI's rural environmental governance and the struggle for meaning that takes place between actors. It will focus on the effect of the NI Executive's absence and return on policy development processes and lay the groundwork for a critique of rural environmental governance in NI. Chapter 6 provides an analysis of Sustainable Productivism using the nodal framework developed in Chapter 3. This will reveal how NI is governed post-Brexit, the logics driving governance, and the demands which the regime is attempting to meet. The final empirical chapter, Chapter 7, draws attention to the first challenge faced by Sustainable Productivism, the passing of Climate Change legislation in NI in 2022. Through an analysis of the Climate Change debate in NI, the new Climate Change legislation, and consideration of how these interact with Sustainable Productivism, this chapter will consider critiques and defences of Sustainable Productivism

Finally, the thesis will conclude with Chapter 8 which will present the main findings of the research that the confluence of Brexit, Stormont's collapse and the climate

crisis has dramatically altered NI's rural environmental governance. There have been many, and are likely to continue to be many, missed opportunities. However, the thesis has offered a descriptive analysis of the appearance of rural environmental governance in NI, and this offers opportunities for identifying points of transformation. Connected to this are findings related to the processes of Europeanisation and de-europeanisation. Sustainable Productivism was present in NI prior to Brexit and de-europeanisation offered the opportunity for it to become hegemonic. As Alons and Swaan (2016) identified, the CAP is underpinned by different discourses across Europe and as the CAP becomes less common it is these discourses that researchers should be focusing on. Lastly, the advances in the conception of both rural environmental governance and discourse analysis in agriculture raise international implications for this research. This research has developed a framework that allows for more specific consideration of practices, and variance between practices, to better describe and identify systems of governance which may be dismissed as Green Growth or a form of post-exceptionalism. It has shown that these differences have real consequences in terms of practice and effect, and analysts need to be cognisant of these consequences.

Chapter 2 - The UK and Brexit

2.1 Introduction

Brexit, the process of repatriating power from the EU to the UK was always going to be, and was, a complicated one. The Brexit process, how it was conducted, who was involved, and what it resulted in is central to NI's rural environmental governance as it shaped the field of possibilities for domestic decision-making, placing limitations originating from both the UK and the continuing relationship with the EU (Dobbs, 2022; Dobbs and Petetin, 2022). This chapter focuses on the relationship between the UKG and NI throughout the Brexit process, since the vote on June 23rd, 2016, up until the elections to the NI Assembly on 5th May 2022.

This chapter begins by providing important contextual information on the different approaches and attitudes towards Brexit across the UK with a particular focus on Northern Ireland's peculiar political circumstances. It continues with a theoretical description of the UK as an asymmetrical state and considers the implications of this for the distribution of power within the Brexit process considering institutional, discursive, financial and executive power (Curtice, 2006; Palmer, 2008; Willett, 2021). There is an introduction to NI's peculiar political circumstances amid the Brexit process, and consideration of how this may alter the operation of these exercises in power. Following on from this it identifies a distinct process within the overall Brexit process which is affected by these uses of power between the UK and NI, that is the formalisation of Brexit which takes shape in three ways: the new relationship with the EU, the re-ordering of the Intergovernmental Relations (IGR) within the UK, and the creation of new institutions and legislation.

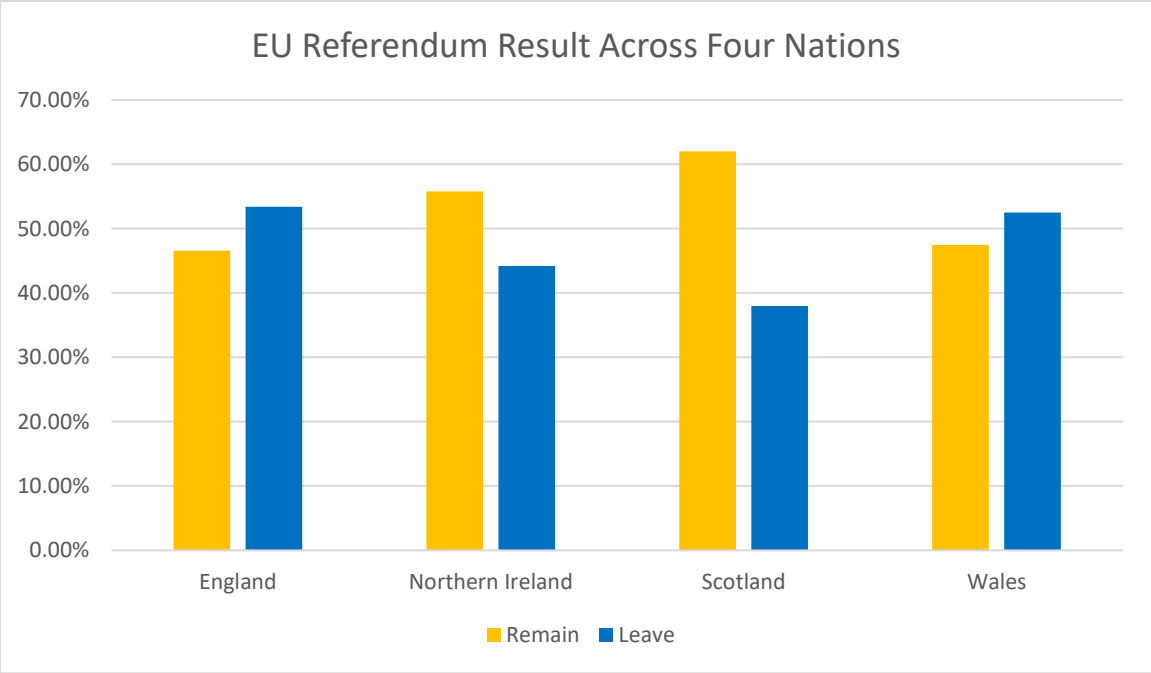
2.2 The UK Government and the Devolved Nations

Figure 2.1 demonstrates a key reason for the difficulties faced by the UK Government (UKG) as the devolved nations acted as an impediment to the UK

Government approach to Brexit process, rather than the opposition party which performed in lacklustre fashion (McHarg, 2018; Keating, 2022b).

While the UK voted to leave the EU as a whole, both NI and Scotland voted to remain within the EU, and proponents of Remain in those nations perceived the Brexit process as dragging them out of the EU against their will (Keating, 2022b). Amidst this crisis both Wales and Scotland were governed by Westminster opposition pro-Remain parties, with the prior negotiating the difficult waters ensuring the future of the UK and Wales, the latter using Brexit as an opportunity to attempt to wrench the UK apart (Birrell and Gray, 2017; McEwen, 2021). In the meantime NI's ongoing political instability had been made worse by Brexit with Nationalists seeing an opportunity to push for a United Ireland and Unionists that feel they have been cast aside by their English compatriots (Murphy, 2018; Rice, 2021b).

Figure 2.1 EU Referendum Results Across Four Nations



Source: Authors' own, data from (BBC News, 2016c)

2.2.1 NI: the special case

The uniqueness of NI's position in the UK during the post-Brexit period cannot be understated. NI was at the centre of the negotiations between the UK and the EU due to sharing the only land border with the EU and is a post-conflict society with that border being a key component of the conflict (Murphy, 2018). Further to that, NI's government collapsed on 9th January 2017 until 16th January 2020 due to exits from the Executive without which the power-sharing agreement underpinning devolution could not continue (McCormack, 2020). This is the context in which NI saw out the majority of the Brexit process. However, the Executive returned in 2020 with a new agreement in place and continued until 3rd February 2022 when the DUP left the Executive and has remained collapsed up until the NI Assembly election on 5th May 2022, where the data collection for this thesis ends (Edgar and Flanagan, 2022).

As noted in Figure 2.1 NI voted to remain within the EU, however, NI's two largest parties the Democratic Unionist Party (DUP), and Sinn Féin, chose opposing sides in the referendum setting the stage for increasing acrimony at the top of NI politics. Prior to the referendum the spectre of a hard border was a powerful image in the minds of NI voters (BBC News, 2016a; Irish News, 2016; McCormack, 2019). After the result the Deputy First Minister, Sinn Féin's Martin McGuinness, called for a referendum on Irish unification in response to NI being dragged out of the Europe (BBC News, 2016b). This was rejected by the UKG, and unionists in NI, however, it set the tone for the post-Brexit period.

The EU, in support of the Republic of Ireland, mandated that prior to the negotiation of a future trade agreement the UK had to commit to ensuring that there was no hard border on the island of Ireland (Murphy, 2018). There are several reasons for this which were recognised by the UK Government in the immediate aftermath of the referendum as they too committed to ensuring there was no hard border on the

island of Ireland (Murphy, 2018). The most prominent reason was that membership of the EU was the context in which the peace process occurred, and the introduction of border infrastructure and increased barriers would be both a security and economic risk to peace in NI (Murphy, 2018). The DUP's Arlene Foster and McGuinness sent a joint letter to the Prime Minister Theresa May laying out NI's concerns about the future of Brexit which included the need for free movement across the border, the replacement of EU funds of which NI was a significant beneficiary, and special concerns of the agri-food industry with the potential for tariff and non-tariff barriers (Foster and McGuinness, 2016). This was the last time NI's interests would be represented by politicians from a cross-community perspective regarding Brexit as the Executive collapsed in 2017 and parties situated themselves on opposite sides of the debate.

With the fall of the NI Executive the Secretary of State (SoS) for NI was tasked with determining who was to govern NI. The collapse of power-sharing and the failure of an election to resolve the deadlock should have resulted in a return to direct rule where NI was run from the NI Office of the UKG, as had happened on previous occasions. However, the UKG was reluctant to take responsibility for NI and instead continually extended the deadline for when talks had officially failed. This left NI in a limbo where the UKG only chose to govern in the most limited of circumstances, and the NI Civil Service were responsible for managing the Brexit process without political support (Maguire, 2018; Heenan and Birrell, 2022).

2.2.2 The Brexit Process

The negotiation of the new UK-EU relationship has been seen as the central process in relation to Brexit and has resulted in a deal which fell considerably short of what some desired or projected (McGowan, 2017; Frennhoff Larsén and Khorana, 2020). Further it involved a specific solution for NI which is hotly contested and limits the actions of any NI Government (Murphy, 2018; Murray and Rice, 2020; Weatherill, 2020; Duparc-Portier and Figus, 2021). The conflict over devolved power escalated to

the court rooms as devolved governments felt excluded by the UKG in negotiations, governments sought conflicting policies and legislation as the UKG rewrote the internal market to ensure they had their own way (Helm, 2017; Hubbard *et al.*, 2018; Keating, 2018; Burns *et al.*, 2019; McEwen, 2021). There were also failures to adopt common frameworks, or agree which policy areas should have them, and devolved policies were heavily impacted by those that are reserved such as international trade deals (Burns *et al.*, 2018; Gravey, 2019b). The final component of the Brexit process was the need to fill the governance gap left by the UK's decision to leave the European Single Market, and particularly the jurisdiction of the Court of Justice of the EU (Burns, Jordan and Gravey, 2017). In environmental governance this saw significant policy development through the Environment Act 2021, the creation of new institutions such as the Office for Environmental Protection (OEP), and the changing meaning, implementation and an increase in the number of principles used in policy making (Lee and Scotford, 2019; Cooper and Steenmans, 2021; Macrory, 2021).

During most of this process because the NI Executive was absent NI lacked a voice and found itself considered as a voluntary addendum to these policies and structures, or an involuntary one when considering the Ireland/NI Protocol. Each of these processes are going to have, and have had, significant effects on NI's rural environmental governance. While this will be considered throughout, the latter half of this chapter will focus specifically on the effect of these processes at the UK level on NI, and the interaction between them and NI's own political history and sphere.

2.3 Hegemonic Governance and an Asymmetric UK

The UK as it is currently constituted is an asymmetrical multi-nation state in which power is unevenly divided between the governments of different nations or regions due to two separate political devolution processes occurring in the late 1990s (Swenden and McEwen, 2014; Kenny, 2015; McEwen, 2017). Two of the devolved

governments, Scotland and Wales, exist based on the concept of popular sovereignty as a result of referenda intended to strengthen the UK. However, parliamentary sovereignty resides in Westminster which passed the legislation to institute them and has the ability to (and has) expanded their power, and is capable of rescinding that power (McHarg and Mitchell, 2017; Keating, 2018). NI is different as the devolution occurred because of the peace process and the basis of their power is also related to an international peace agreement which comes with additional difficulties for all parties. However, Westminster retains the right to make laws on NI's behalf in both devolved and reserved areas (Fenton, 2018; Haughey, 2019; McGarry and O'Leary, 2019).

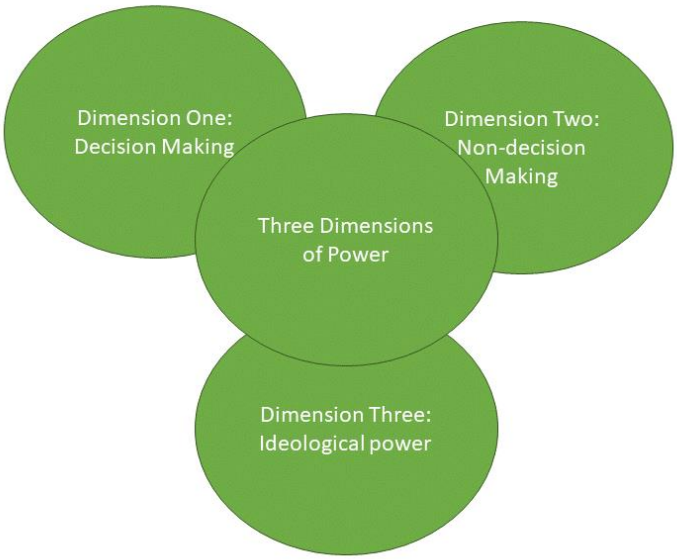
The missing piece of the puzzle here is England. England is represented by the UKG, legislated for by the UK Parliament, and holds over four times as many MPs as the devolved nations combined, in addition many UK Government departments such as Defra to a large extent only cover England. This means that the UKG and Parliament will often address issues nationally which are only representative of the action being taken in England, or that English interests override the interests of devolved nations (Swenden and McEwen, 2014; Keating, 2022a). It is also an issue for the English as it can be argued that they are inadequately represented in matters where the devolved nations are closer to constituents (Wincott, 2021; Wincott, Davies and Wager, 2021; Kenny, 2022). Answering the West Lothian Question, whether NI, Scottish and Welsh MPs should be able to vote on matters that only affect England was supposed to address this lack of an English Parliament, essentially trying to create one within Westminster (Gover and Kenny, 2018). However, due to the way that the UK functions as a state this may have only exacerbated the imbalances. At the centre of this question is power, what it is and where it lies, and the answer to this is more complicated than it may appear.

2.4 An Interlude on Power

The concept of power is central to politics, and the study of power has a long history (Newman, 2005). Power is a central focus of PDT with the illustration of power using PDT being historical and context dependent. The way power operates in the UK is extremely important for this thesis, however, a full study of power in the UK using PDT is outwith the scope of this thesis. In that case the thesis will use an established model of power developed by Steven Lukes, building on the work of Dahl (1957), with the three-dimensional model (Figure 2.2) and adapt it to understand power in the UK, who holds it and how is it wielded and relate this to PDT (Lukes, 1974). The first dimension of power Lukes describes is the ability to modify the behaviour of others within a decision-making process. The UKG can exercise this dimension of government in two critical ways, the first is through legal competence and the second is through financial control. The first dimension of power closely resembles the powers of actors embedded within a hegemonic regime, as outlined in Chapter 1, and explored further in Chapter 3. Dimensions two and three, explored in more detail below, are dimensions of power that are deeply interconnected with the theoretical developments throughout this thesis, particularly the discursive form in which this power is exercised.

Lukes three-dimensional model of power

Figure 2. 2 Luke's three-dimensional model of power



Source; Authors own

2.3.1 Power: Dimension One

The UKG is the government for each nation within the UK, Westminster, the UK's Parliament, is sovereign within the UK and any powers devolved from it are so at the behest of the UK (Torrance, 2018b). The government acts as representatives for the whole of the UK, any treaties that are signed are signed by the UK and thus are targets and commitments for the UK which the devolved nations are required to contribute to (Torrance, 2018a). A prominent example of this is the Climate Change agreements signed by the UK and in response to which the UK committed to meeting net-zero by 2050 (Turner, 2013; Royles and McEwen, 2015; Pye *et al.*, 2017). In order to achieve this, significant action is going to be required at the devolved level, with NI in particular required to make significant changes in several devolved policy areas (Muinzer, 2016; CCC, 2019). When the UK was in the EU this sovereignty was partially shared with the EU, although the UKG was the representative for the UK in both the Council of the European Union and the

European Council. This allowed, in agreed upon areas, for the EU to exercise power in this way, however, with Brexit this has changed.

The UKG's role as a trade actor post-Brexit has brought this dimension of power to the fore. It is the UKG which negotiated and signed the Trade and Co-operation Agreement with the EU, including the Ireland/NI Protocol, and they are likely to continue to exercise this power as they expand the number of trade agreements with countries such as Australia who farm to different environmental standards(Marshall, 2021).

The second form through which the UKG exercises power over decision making is through financial control. The devolved budget is largely a reflection of the UK budget in the form of grants, although there is some leeway as governments gained a small measure of control on different taxes. This means that devolved ambitions are necessarily limited by whoever is in government in the UK as their approach to public spending determines the public spending levels in each devolved nation (Mellett, 2012; Birrell and Heenan, 2020; Eiser, 2020). Traditionally the devolved budgets have been decided by the Barnett formula which considers public spending from Westminster, the population size of each nation and the powers that are devolved to them and distributes the grants accordingly. The formula has come under criticism as an unfair way to distribute the grants as public spending per head is larger in NI and Scotland than it is in Wales (Birrell and Heenan, 2020). However, this formula is not set in stone and indeed has undergone significant changes as a result of Brexit (Bew, 2019).

Money was a dominant issue in the Brexit campaign, and the repatriation of power to the UK may have significant effects on public spending. Primarily in the area of agricultural spending which, as of 2021 accounted for one third of the EU budget (European Commission, 2022). It was recognised that spending on agriculture could not be distributed in the same way as other public spending, and it was also

recognised that there may be an opportunity to distribute spending differently than the way funds were shared under the EU (Bew, 2019). With an aim of creating a fair distribution of agricultural spending Lord Bew set out to consider the Intra-allocation of agricultural funding. In doing so he set out a time-limited per hectare system which saw increases in spending for Scottish and Welsh farmers and would have seen decreases for NI and English farmers. However, he set out that it would also have been unfair for these farmers to see a decrease in income and secured treasury funding to pay for this uplift. This was only a temporary solution with Lord Bew declaring it unsustainable. Thus this will be required to be reviewed in the future and it is clear from other public spending that the priorities of the UKG will be influential in the size of the grant to be distributed, and the approach taken by Westminster is scrutinised in chapter 4 to consider the direction of travel and the potential concerns this might have for the future of rural environmental governance in NI.

2.3.2 Power: Dimension Two

The second dimension of power is the ability to shape the agenda of the decision-making process (Lukes, 1974). Through both legal competence and financial control Westminster shapes the agenda of the devolved decision-making process by creating the context in which decisions are made with both legal limitations and financial boundaries placed around the possible actions. The former is perhaps best observed within the EU for policies such as the CAP which provided a framework which both determined what governments could do and could not do. An example of this was the focus on recipients of subsidy maintaining farms in "Good Agricultural and Environmental Condition" restricting the possibility for using the CAP payments to promote alternative land uses, or alternative approaches to farming. The latter of these is dictated by the Barnett Formula which sees devolved governments receive a block grant from UKG using the formula to determine the amount based on UKG spending.

However, as discussed earlier it is the third form through which power is exercised which makes its appearance here, that is discursive power. Discursive power is at the centre of this thesis articulated as hegemony and allows for the exercise of the first two forms. As described in Chapter 1 and 3 a project has achieved hegemony when it is able to credibly represent the particular as the universal, within the context of the UK this could be used for example to say that Brexit is for the good of the UK, rather than a minority of its constituent components. Brexit has not been articulated in this way by the devolved governments rather they have seen Brexit as a process which requires mitigation or opposition. This is discussed in greater detail in section 3.4.2; however, it effectively demonstrates that the third form of power, discursive power, is more evenly distributed with devolved nations, and other political actors, capable of contesting the UKG, achieving hegemony and placing limitations on the action of the UKG, taking policies off of the agenda, and placing their own on it.

2.3.3 Power: Dimension Three

This dimension, again relating to the power of hegemony, is the creation of ideology to prevent the identification of one's interests. This, of all the dimensions, most closely correlates to the aims of PDT as an attempt to understand the power of ideology, and it is through this attempt to create an ideology, or achievement of hegemony, that conflict is most visible. The most obvious relevance this has within the IGR of the UK relates to the conflict around unionism, however, this dimension of power is less directly relevant in this chapter than the previous two dimensions. It is, however, important to be aware of this dimension throughout this thesis as the exercise of hegemony is ideological, and the UK's ideological decisions will have an impact upon NI.

An example of this is within the policy development process, the prioritisation of certain research projects. The UK research budget is much higher than in NI and

Greer found that NI agricultural actors not only pursued similar research projects to their UK counterparts but in part were indebted to UK actors, and through this embedded in UK policy networks. Through their ability to fund research and policy development the UK policy network influenced the NI sphere (Greer, 1996). Further, the ideological exercise of power is further felt in the distribution of funding, for example, in relation to funding of enforcement organisations. If the UK takes a lighter touch, this will be reflected in the devolved budget (through the application of the Barnett formula, as discussed above). Lastly, discursively, the production of a hegemonic discourse within the UK system places pressures upon the devolved nations as any deviation requires explanation and justification and must acquiesce to the driving logics of the UK system. Each of these three faces of power were at the forefront during the Brexit process, and the UK and devolved governments each exercised power in different ways throughout.

2.5 Brexit: Never stop never stopping

The previous two sections have laid the groundwork necessary for understanding Brexit as a process in providing an understanding of the UK as a state, how power is exercised, and who by, within the UK. The central aim of this thesis is to identify how and why NI's rural environmental governance changed because of Brexit. As identified, the UKG, along with to a lesser extent, the devolved governments wielded considerable power in shaping the environmental governance framework for the UK as a whole, and due to the difficulties around NI in particular. In order to address this aim this chapter will proceed with two sections. The first is to consider the formalisation of Brexit through the negotiation of the UK-EU Trade and Co-operation Agreement, the reconfiguration of IGR in the UK, and the institutionalisation process undertaken by the UKG to address the governance gap after leaving the EU. The second section follows this same formula with NI as the focus, that is it considers the effect of each of these processes on NI.

2.4.1 UK-EU Trade and Cooperation Agreement

As laid out earlier the UKG exercises its power as an actor in international trade in the first dimension of power. Prior to Brexit this power was shared with the other members of the EU, however, a fundamental part of the Brexit position of the UKG was to reclaim the ability to negotiate free trade agreements themselves (UK Government, 2022). As the largest trading partner of the UK, and to minimise potential disruption of Brexit the most important trading agreement for the UK was with the EU. Agreed on 24th December 2020, 7 days before a "no deal" exit, the Trade and Co-operation between the UK and the EU fell short of what many environmentalists hoped, leaving the UK outside of several of the EU's environmental safeguards (Gravey, 2019c; European Union and United Kingdom, 2020; Gravey, 2021; Northumberland Wildlife Trust, 2021).

Within the agreement, the UK and the EU committed to maintaining a "level playing field" with regards to environmental and climate legislation. This means that the UK should apply the same level of environmental protection as the EU, and that they should not attempt to undo existing protections or targets via legislation or lack of enforcement. This is non-regression rather than dynamic alignment which would have seen the UK progress in the same ways as the EU. Now any changes in governance or legislation are not held to the standards of EU policy but may be subject to a dispute resolution mechanism if either party feels there is an unlevel playing field (Reid, 2021). This provides more significant leeway than if the UK remained within the Customs Union or the Single Market as the CJEU acted as a deterrent with a clear mechanism for resolving infractions including significant fines. This is compared to potential "rebalancing measures" which may occur after discussion in the various special committees established as part of the EU-UK TCA architecture. NI's particular circumstances in relation to the power-sharing agreement and the land border with the Republic of Ireland means that its relationship with the EU differs from the rest of the UK, although the TCA acts as a

minimum, this is explored in greater detail in section 3.5.1 (Murphy, 2018; Harvey, 2020). Beyond the speculation over NI's place in the Union the Brexit process unleashed a conflict between the governments of the UK about the governments' competencies and the location of power.

2.4.2 Where is Power in the Union?

The Brexit process has seen an explosion of intra-governmental conflict in the UK, and although NI's situation was at the centre of the negotiations they were largely unrepresented at both the UK-EU level and UK-devolved level (McEwen, 2017, 2021; Keating, 2018; Torrance, 2020). Conflict within the UK arose at the juncture of two issues which are not wholly separate. The first is that the Scottish public voted to remain in the EU and were represented by the pro-independence and pro-EU SNP in Government. The SNP has since characterised the Brexit vote as one in which the Scottish people were being dragged out of the EU by the English voters and a Brexit supporting UKG (Reid, 2017). The second issue was the repatriation of Europeanised legislative powers such as agriculture and environment to the devolved nations and the potential for serious divergence in policy. The UKG argued that policy should be repatriated to the Westminster and they should choose carefully which powers to transfer to the devolved nations, while both Scotland and Wales argued that they were already within their legislative power and were transferred directly from the EU as a result of Brexit (Torrance, 2020).

2.4.2.1 Common frameworks by hook or by crook

A way to resolve this conflict, particularly around the issue of policy divergence, was the development of common frameworks which sought to positively integrate policy by harmonising rules. The issue of common frameworks in a post-Brexit Britain is negotiated and recognised as necessary by all governments. However, the process of extrapolating where common frameworks would be necessary is scattered, and the logic of decisions is not always clear. For example, there is no plan for a common framework to co-ordinate water quality, which may be a sign that

they are happy with the current co-operative arrangements, or that policy divergence is not seen as a risk to the fundamental principles guiding the common framework discussions (UKG, 2019). The four administrations agreed in October 2017 the six principles which would establish where a common framework was necessary:

- Enable the functioning of the UK Internal Market, whilst acknowledging policy divergence
- Ensure compliance with international obligations
- Ensure the UK can negotiate, enter into and implement new trade agreements and international treaties
- Enable the management of common resources
- Administer and provide access to justice in cases with a cross-border element
- Safeguard the security of the UK

Through application of these principles by November 2021 32 common frameworks were agreed, three of which had new primary legislation underpinning them. This left 120 policy areas where it was determined no common frameworks were needed as the UKG and devolved administrations continued to co-operate, or they adhered to these principles. It is stressed that policy areas may move from not requiring a common framework to requiring a common framework and also the reverse is true as policy teams decide the existing relationships are sufficient (Antoniw, 2021).

2.4.2.2 By crook: The UK Internal Market

The principle that has proven most contentious is that concerned with the functioning of the UK Internal Market. The concept of the internal market is one that has dominated in the UKG's view of its role post-Brexit as the one responsible for ensuring an "efficient and prosperous internal market." This is an ideological

position based on a more restrictive form of unionism that existed prior to Brexit and recentralisation of the UK state post-Brexit which positions the UKG as both the agenda setter and the decision maker (Gillespie, 2020; Keating, 2022a). This can be seen again as Theresa May outlined the UKG's negotiated strategy:

> *"Our guiding principle must be to ensure that – as we leave the EU – no new barriers to living and doing business within our own Union are created, that means maintaining the necessary common standards and frameworks for our own domestic market, empowering the UK as an open, trading nation to strike the best trade deals around the world, and protecting the common resources of our islands." (Theresa May, 2017)*

However, for the Scottish Government this is not a simple formulation. They have expressed concern that the "UK internal market" has no agreed legal definition and suggest that it may be "deployed to adjust devolved competence without the consent of the Scottish Parliament" (Russell, 2019). This is interesting as they recognised that one of the main sources of UKG power, legal competence, was missing, and exercised discursive power to attempt set the agenda while attempting to alter the conception of the UK as a unitary state. The UKG have since used the concept of the internal market in opposition to Scottish plans such as the Continuity Bill attempting to legally underpin their position in power dimension one. This placement of the UKG as the ultimate arbitrator of an undefined empty signifier such as the internal market is an attempt at re-imposing a hierarchal relationship between governments. Further, the Scottish government argues that devolution case law has allowed for devolved divergence with a market impact such as the smoking ban, and these powers are properly held by the devolved administrations (Russel, 2019). Disputing this, the UK asserts itself as the replacement for the supranational EU:

"The UKG is responsible for ensuring that the internal market within the UK operates freely and openly … The powers currently held by the EU that provide that guarantee on the internal market are not, and never have been, within the competence of the devolved administrations" (UKG, 2017).

This conflict culminated in December 2020 as the UK Parliament passed the UK Internal Market Act 2020 which established two market access principles as law: the mutual recognition principle for goods and the non-discrimination principle for goods. The UK Internal Market Act is a re-assertion by the UKG which utilised its power of legal competence to dominate dimension one, and make some devolved powers redundant, impacting heavily on their power in dimension two (Gravey, 2020). The legislation protects pre-existing rules; however, it is likely to prevent upward divergence, situations where an administration tries to increase standards as they would be required to accept lower standards and would merely be penalising domestic producers.. This is likely to have a particular effect on the devolved nations as they are far smaller with fewer producers and tend to be environmentally more ambitious. The bill's own impact assessment stated that it is likely to limit the effect of local measures (Gravey, 2020). However, it is a useful illustration of the balance of power with dimension one, primarily through the form of legal competence, overriding dimension two, primarily discursive power as defined in this chapter, in the UK as it is now law, despite all three devolved legislatures refusing to consent. On the other hand, discursive power may be exercised in different directions with an increase in support, or cementing of power, in parties who opposed the Internal Market Act in the devolved legislatures (McEwen *et al.*, 2022).

2.4.2.3 Power Between the Governments

The Brexit process, and the wrangling between Governments has exposed a flaw in the UK's IGR which the UKG has tried to address through both positive and negative integration. However, it is not only about the legislation or framework but about the structures that foster these relations. Brexit brought to the fore concerns

around IGR mechanisms in the UK with a growing consensus that they were not fit for purpose (Greer, 2018; Torrance, 2022). The devolved administrations argued that within the existing mechanisms the UKG both set the agenda and made the decisions, exercising strong demonstrations of power in both dimensions one and two. The problems of IGR in the UK surrounding the EU are not new, Tatham (2011) found that where governments were in agreement the devolved nations were well represented within the EU, however, Minto et al (2016) and Greer (2018) have noted growing disagreements between administrations which has resulted in growing discontent over representation and agenda setting.

By making their voices heard and utilising discursive power through dimension two the devolved governments managed to set the agenda leading to an IGR Review which concluded in January 2022 and set out a new IGR structure. The new structure includes three tiers with the top tier, the Council, constituting the Heads of Government, the middle tier an Inter-ministerial Standing Committee acting at the strategic level, and the lowest tier focussing on specific policy areas. Importantly each of these tiers is to meet on a regular basis, something that was missing from previous arrangements, and will be supported by a Secretariat responsible to the Council and funded/staffed by each government. These new arrangements have been welcomed by all, but cautiously welcomed by the devolved governments as it still depended on a culture of respect and commitment to treating all governments "equally and fairly", something that had been missing under the previous structure. It remains to be seen what effect these new structures will have on governance in NI; however, they are a far cry from the previous structure, which was in place during the Brexit process, which saw dissent between administrations as EU powers were repatriated and Brexit was institutionalised (Torrance, 2022).

2.4.3 The Institutionalisation of Brexit

The third process in the formalisation of Brexit was to address the governance gap in the environment which emerged upon leaving the EU. In the end Brexit, and the trade agreement negotiated, meant that Great Britain operated outside of the jurisdiction of the Court of Justice for the EU and no longer had to apply European environmental law in the same way it once had. This meant also that there was an absence at the heart of British environmental governance for an institution which held the government and other public authorities to account for environmental wrong-doing (Burns, Jordan and Gravey, 2017). This section focusses on the UKG's attempts to bridge the governance gap focussing, the governance architecture they put in place, and the interplay which meant NI was either included, or the minister had the option to extend the rules to NI should the Executive return.

The legislation intended to fill the environmental governance gap was the Environment Act 2021 which included new legally binding targets, reporting and planning mechanisms, the basis for new legal principles, and the establishment of the Office for Environmental Protection to provide Government oversight. Throughout the UKG's consultation for the Environment Bill it was stressed that the geographic scope was restricted to England, other than those areas which are reserved, which covered the UK as a whole. NI was included as a possibility to expand if there was no NI Executive in place, and it was stressed that UKG were open to co-designing a common framework for the UK as a whole with the devolved governments. The UKG stressed their case for joint working by arguing that the environment inherently cuts across boundaries and argue that Brexit is an opportunity to strengthen environmental protections (DoE, 2018). However, due to the difficulties in IGR during the Brexit process the devolved administrations did not pursue this approach, instead presenting alternatives to the UKGs approach to environmental governance. This demonstrates limits on the UKGs ability to exercise decision-making power, and is perhaps a result of the inability of devolved

governments to exercise power in either dimension one or two in earlier engagements with the UK.

2.4.3.1 These are my principles. If you don't like them, I can change them

A central concern surrounding the consequences of leaving the EU on environmental governance was the legal standing of the principle. Legal principles, such as the precautionary principle, were embedded within the EU's treaties giving them a very clear and authoritative position, if principles were placed into UK legislations by comparison they are much easier to change (Lee and Scotford, 2019). There were also questions over which principles would be carried through as the precautionary principle for example had been targeted by supporters of Brexit as a contributor to unnecessary red tape. The government's proposal suggested that there would be more principles enshrined in law than in the EU, however, these principles were reduced in legal status. Rather the principles within legislation and the act itself the Secretary of State must prepare a policy statement on environmental principles explaining how they should be interpreted and proportionately applied. The Environment Act (Eustice and Lord Goldsmith of Richmond Park, 2021) states that these principles are:

(a)the principle that environmental protection should be integrated into the making of policies,

(b)the principle of preventative action to avert environmental damage,

(c)the precautionary principle, so far as relating to the environment,

(d)the principle that environmental damage should as a priority be rectified at source, and

(e)the polluter pays principle.

If one of the reasons for considering this a downgrade is that it is harder to change EU treaties than UK law, then it must be considered even more of one as all the

minister must do is change the policy statement on their interpretation, an even lower barrier still. Another is that the legal status of principles in UK legislation is lower than in the EU with status being that ministers must "have due regard to the statement on environmental principles currently in effect" (Lee and Scotford, 2019; Eustice and Lord Goldsmith of Richmond Park, 2021; Scotford, 2021). Schedule 2 of the Environment Act 2021 extended the provision to NI with DAERA required to prepare a policy statement on environmental principles themselves (Scotford, 2021). The effect of the policy statement is that departments must give the policy statement due regard, however, they would not be required to do anything if doing it did not have "significant environmental benefit" or if it "would be in any other way disproportionate to the environmental benefits" (Scotford, 2021). Therefore, this inclusion of NI in the UK's wider environmental governance framework has meant that it has followed a similar method. However, what the effect of this, or the intentions of the department are remains to be seen and will be considered in chapters 5, 6 and 7 of this thesis.

2.4.3.2 Office for Environmental Protection

The Office for Environmental Protection is a new non-governmental body established by the UKG to address the governance gap after Brexit. Lee (2019, p. 4) identified three key environmental roles for the OEP from the government proposals; "monitoring, reporting and advising; enforcement; and handling complaints against other public bodies". However, the OEP's powers are limited in comparison to the EU's previous oversight with the inability to issue fines to the government, and its oversight is limited to issues of "environmental law" (Lee, 2019). The Act defines environmental law as "any provision that is mainly concerned with environmental protection" and "is not concerned with an excluded matter"(Eustice and Lord Goldsmith of Richmond Park, 2021). Excluded matters, outwith the OEP remit, are disclosure or access to information, the armed forces or national security and taxation, spending or the allocation of resources within

government. The inability of the OEP to provide oversight into the allocation of resources within government establishes a barrier to its work, where the EU were able to respond if implementation of EU directives were poorly resourced (Sargent, 2019). This, alongside the establishment of UK environmental improvement plans, means the objects under OEP scrutiny are determined by the UKG, this is the government exercising and enjoying the repatriation and extension of both agenda setting and decision-making power.

Lee pointed out that environmental matters are framed around the natural environment defined to mean "(a) wild animals, plants and other living organisms, (b) their habitats, (c) land, water and air (except buildings or other structures and water or air inside them), and the natural systems, cycles and processes through which they interact" (Lee, 2019, p. 4). Further to that there is a carve out that although the Secretary of State through regulation to specify that a legislative provision is or is not within the definition of "environmental law." There is also a requirement on the OEP to avoid duplication with the Climate Change Committee and to agree a memorandum of understanding between the two.

Other than the ability to issue significant fines to governments who break EU law the main difference between the OEP and the CJEU are issues of independence. The CJEU as a European body is naturally disconnected from any one national government. As compared to that the OEP's governing body is largely appointed by the Secretary of State, and those that are not directly appointed are appointed by the government appointed members. The Secretary of State must have regard to the appointee's experience in environmental law, environmental science, environmental policy, and enforcement. However, there are still vastly different approaches to these things meaning the OEP could operate as an effectively ideologically driven vehicle as outlined in dimension three of power. Secondly, funding for the OEP is at the behest of the Secretary of State meaning that it could be underfunded to the extent it is no longer effective as has occurred with other non-governmental bodies. Thirdly,

the Secretary of State can issue guidance to the OEP regarding its enforcement policy and the OEP must have regard to this (Eustice and Lord Goldsmith of Richmond Park, 2021). Therefore, by comparison between the two the OEP is certainly a weaker less independent organisation than the CJEU, and it covers only England and NI.

That is not to say that it is a body without use, an example of this has been seen with the government's environmental principles statement which the OEP responded to with numerous recommendations intended to strengthen the principles (Office for Environmental Protection, 2021). This statement, along with the vast majority of the consultation responses resulted in an improved statement which will lead to an integration of environmental governance principles across the UKG. However, that does not make up for the inadequacies to the approach taken by the UKG, in regard to environmental principles in the prior section, although it demonstrates the OEP's willingness to take on the UKG.

2.4.3.3 Environmental Improvement Plans

The final component intended to improve environmental governance in the UK is the development of Environmental Improvement Plans. These plans are intended to improve policy making with regards to the environment by putting in place targets and strategies for improvement over timescales not shorter than 15 years, thus trying to eliminate the short-termism in politics which has been blamed for poor environmental policymaking. The first of these for the UK is "A Green Future: Our 25 year plan to improve environment"(UKG, 2018a) and will be considered in greater detail in Chapter 4, however, the introduction of these plans and the targets alongside them are significant changes resulting from the Brexit process, and may have effects beyond England as the contents of the plan sets an agenda for the UKG, potentially influencing those in other jurisdictions, such as NI.

2.6 The Quiet Devolved Nation

Throughout most of the Brexit process NI was without a government due to the collapse of power-sharing. This meant that official representation of NI's interests at UK-wide discussions was left to the civil service without political support. The civil service was also responsible for attempting to close the governance gap without NI legislation and developing post-Brexit policy without political direction. The UKG was reluctant to legislate for NI only doing so to keep the lights on, resolve contentious issues, or, as shown above, include NI in UK post-Brexit legislation (should a future Executive wish to do so) (Evans, 2021). The last of these demonstrates that during this period the power of Westminster in relation to NI was particularly strong in dimension two: shaping the agenda of decision making through legal competence and discursive construction. This section will consider how the formalisation of Brexit affected NI, in following the order developed above, first considering NI's relationship with the EU, NI's relationship with the rest of the UK, and the institutionalisation of post-Brexit governance.

2.5.1 The NI Protocol

The Protocol on Ireland/NI to the UK-EU Trade and Cooperation Agreement, more commonly known as the "NI Protocol" was the Conservative Party's solution to the impasse in negotiations with the EU, and their own impasse within their party. It removed the obligation of the rest of the UK to remain within the customs union freeing them to negotiate free trade agreements with nations across the world, while allowing them to progress to the next stage of negotiation with the EU (The Union and the United Kingdom, 2019). The NI Protocol maintained an EU presence in NI as NI must adhere to some aspects of EU law, and any new legislation from the EU that is "within scope" of the protocol if agreed by the special committee. The Protocol set out the position of NI as an integral part of the UK customs area and internal market,

the rights of individuals as according to the 1998 Belfast Agreement and the EU laws which will apply to NI (The Union and the United Kingdom, 2019).

Regarding rural environmental governance the most important articles in the NI Protocol are Article 10 State Aid and Annex 2 of Article 7 which detail the list of technical regulations which NI must adhere to. Firstly, the state aid provisions of the protocol place restrictions on the ability of NI to provide state aid to support the "production of and trade in agricultural products". This refers to Annex 5 of the protocol which includes the EU's guidelines on state for environmental protection. The second provision of Article 10 applies a limit to the maximum overall annual level of support NI can use to support "production of and trade in agricultural products". This is set at the level provided by the WTO Agreement on Agriculture and ensures that NI's agricultural support is in-line with EU CAP levels. This means that even if the NI Executive wanted to raise funds to provide funding over and above what they would normally provide they would be unable to do so, restricting their policy options in future agricultural policy development, placing restrictions on devolved power in both dimensions one and two.

The second important component of the NI protocol in relation to the rural environment are the technical regulations included in Annex 2. These are extensive and focus on the agri-food industry, movement, health and welfare of animals and plant products, the energy efficiency and environmental effects of chemicals, the use of pesticides and the control of disease and invasive species. Importantly what is not included in the NI protocol are two major components of environmental governance in NI, and the UK, adherence to the Birds and Habitats Directives. Rather NI falls under the general UK TCA provisions which are relatively weak compared to membership of the EU which falls under the CJEU jurisprudence.

The NI Protocol is not an apolitical construct, indeed the Democratic Unionist Party have fiercely opposed it both before and after its final agreement (Rice, 2021a,

2021b). Implementation of the Protocol has not been smooth with extra paperwork for trading within the UK, unpreparedness on the part of Government, and extensions sought on the implementation of numerous components (Murray and Rice, 2020). This has been made worse by the Covid-19 pandemic, although that offered a convenient excuse for a lack of political will or preparedness to enact it (Curtis, 2022). The politics of the Protocol may have considerable influence on NI's rural environment as some of the components where reluctance exists around enacting it concern the agri-food industry. The full effects of the Protocol on NI's agri-food industry remain to be seen, and indeed are unlikely to be seen as both UKG and NI have refused to implement it as agreed (RTÉ, 2021; Curtis, 2022).

The initial impacts of the protocol focus on the GB to NI trade, particularly in the beef sector as Poots identified a differentiated impact with wins in the dairy sector and losses elsewhere ('Protocol on Ireland/Northern Ireland: Agri-food Impact,' 2022). Therefore, what the Protocol means for NI in the long term remains to be seen, but the above offers an overview of the effect of the Protocol on NI's rural environmental governance while they remain under its aegis, and the powers of the NI Government. Importantly one of the most important forms of power, discursive, often depends on the ability of the devolved governments to put forward a common position, the ideological disunity in dimension three in NI means that in some ways they lack this ability and are more likely to have decisions and agendas made for them, than harnessing agenda setting power themselves.

2.5.2 The UK Internal Market and the NI Protocol

This inability is particularly stark in the debates around IGR in the UK after Brexit. NI remained the quietest devolved nation throughout these negotiations as politically the focus fell on the solution to preventing a hard border with the Republic of Ireland, and any solution may affect NI's position within a common framework requiring a bespoke solution. Negotiations involved the NI civil service

permanent secretary and occurred behind closed doors, however, they, along with the Welsh Government supported the Scottish Government in their litigation against the UKG over the UK Withdrawal from the EU (Legal Continuity) (Scotland) Bill.

Addressing concerns around the operation of the NI Protocol and its effects on the Union was a central component of the Internal Market Act 2020. During the development of the Internal Market Bill, in January 2020, the NI Executive returned meaning that they were able to re-engage with the Brexit process at an official level. However, they were unable to do so in the way that Wales and Scotland were due to the divide at the heart of NI politics about Brexit and the NI Protocol (Morrow, 2018; Fealty, 2019). The Internal Market Act 2020 was refused consent by the NI Assembly despite support for it from all three unionist parties (McClements, 2020). This is related to an additional piece of context, that the EU-UK Trade and Co-operation Agreement was not signed until 30th December 2020 mere days before the end of the implementation period. From the unionist perspective the Internal Market Act would also have provided security for the operation of the UK markets in the context of a no deal Brexit, as well as addressing some of their concerns around the protocol. However, opposition to the act succeeded in refusing consent because of the effect it would have on devolved powers, although, as pointed out earlier this was unsuccessful in preventing it from becoming law McClements, 2020).

The Internal Market Act 2020 included specific provisions to address the NI Protocol (Stennet, Regan and Dellow Perry, 2021). The aim of these provisions was to ensure a "free flow of goods from Great Britain to NI" and "unfettered access to the UK Internal Market for NI goods." It is interesting that there is a difference in treatment depending on the direction of the goods. For goods from Great Britain to NI the provisions related to the streamlining of trade placing a responsibility on authorities to have "special regard" to NI's place in the UK Internal Market and Customs Union, and to facilitate the free flow goods from Great Britain to NI. On the other hand, the facilitation of unfettered access requires more prescriptive activity with a

definition of a qualifying NI good for which mutual recognition and non-discrimination principles apply as "goods that are either present in NI, and not subject to customs procedures, or goods that have undergone processing in NI, and which are made up of components that are not subject to customs procedures, or which have successfully completed customs procedures" (Stennet, Regan and Dellow Perry, 2021).

To reinforce this market access Section 47 prohibited "the introduction of new checks, or the use of existing checks for a new purpose, on qualifying NI goods moving from NI to GB"(Newson, 2020). There are limited exceptions to this, however, and it was made clear by the Government that this was a short-term solution, or a "bridge to a longer-lasting regime" (Newson, 2020). This integration of the NI Protocol and the UK Internal Markets Act makes governing in NI more complicated, with the potential restrictions to devolved power implicit in the IMA added to the restrictions of the Protocol. However, what it does do is facilitates trade between GB and NI which is important for the agri-food sector and underwrites the current approach to rural environmental governance in NI. If trade had been seriously impacted there would likely have been severe changes to NI's agricultural sector which would have forced rural environmental governance changes, rather than approaching them in a planned manner.

2.5.3 Environmental governance on the domestic agenda

The institutionalisation of Brexit by the UKG in attempting to address governance gaps is an area that is likely to highly impact upon NI's rural environmental governance due to the inclusion of NI in these institutions, in particular the Office for Environmental Protection (McMahon, 2019). Additionally, the inclusion of NI within the scope of Schedule 2 of the Environment Act required NI to put forward an Environmental Improvement Plan. Finally, this schedule places obligations on DAERA and gives the assembly opportunities to scrutinise the department's plans.

The new architecture arising around Brexit then has a significant effect on how the rural is governed, the rural environment in particular. Before analysing the impact that this may have on NI it is important to first expand upon the consideration of NI's troubled past in relation to environmental governance presented in chapter 1, and the role of the EU in addressing NI's governance failings.

Environmental governance was a significant component of the New Decade, New Approach deal (Sinn Féin *et al.*, 2020) including a commitment to the establishment of "an Independent Environmental Protection Agency (IEPA) to oversee this work (Climate Change) and ensure targets are met". As discussed in Chapter 1 the wording of this commitment reflects a decades-long campaign to establish an at-arms-length organisation as a champion for the environment that could hold state, public and private organisations to account.

Criticism of NI's approach to environmental governance goes back to the 1990s with the IEPA presented as a solution in the mid-2000s, particularly by the MacRory Report (Turner, 2006a, 2006b; Turner and Brennan, 2012). The MacRory Report was a result of a campaign led by nine of NI's Environmental NGOs and all the political parties bar the DUP (Turner and Brennan, 2012). This campaign prompted the UK Environment Minister, Lord Jeff Rooker, as it was a period of direct rule, to commission a report which found that NI's environmental failings could be at least partially improved by the presence of an IEPA (Burke, Turner and Bell, 2007). When power-sharing returned in 2007 the DUP held the DOE and swept aside the report, refusing to implement it, supported by the UFU, whose president at the time was later charged with environmental crimes. The campaign did not go away wholly. In 2013 SDLP Environment Minister Alex Attwood described the structures of NIEA as not fit for purpose, while the SDLP Environment Minister in 2015, Mark Durkan, called for a review of environmental governance in NI. Unable to institute this change prior to the 2016 election it was then on the back burner after the election as the minister for the newly combined DAERA was taken by the DUP. Ironically this

combination of departments made the call for an IEPA all the more urgent as the largest single group of regulated persons are farmers prompting calls of regulatory capture, or gamekeeper and poacher (Brennan, Purdy and Hjerp, 2017).

The major source of criticism of the NIEA is directed towards the enforcement regime. The key issues highlighted by Brennan et al (2017, p. 134) are the "fragmented internal structure, the lack of an internal legal team, problems with prosecution of environmental crime and the sentences imposed in environmental prosecutions", as well as the overall tendency to focus primarily on the scientific function of the institution, with the enforcement function coming secondary. The internal structure of NIEA enforcement has come under scrutiny due to the clear role this has played in the failure to tackle high profile environmental crimes such as Mobuoy "superdump". Lacking a central enforcement division, the illegal waste disposal operation was interacting with several separate units within NIEA which failed to link them until it the scale of the operation grew to such an extent that it moved into the serious crime unit in 2012, essentially allowing the problem to escalate until the cost of rectifying it sat in the hundreds of millions.

The second major failing and related closely to the issue of land management is the importance given to the enforcement function. Brennan et al noticed this in that while NIEA's strategic priorities included reference to environmental crime, none of its strategic goals mentioned this function. This is related to the potential reason for opposition to NIEA as the DUP focus aggressively on economic development with a large part of the party's base, including farmers who might benefit from "light-touch" regulation (Barry, 2009). Indeed, the UFU already criticises the level of regulation and weight of enforcement placed on farmers. In 2018 the UFU and NIEA signed an Memorandum of Understanding which sought to ensure farmers who were responsible for low pollution incidences would be given advice on how to avoid this rather than sanctioned (NIEA and UFU, 2017). This is even though

multiple low pollution incidents add up and given NI's small farm structure there is the possibility of high pollution in one area from multiple low pollution incidents.

2.5.3.1 NI Environmental Governance and the EU

The major impact of Brexit on the architecture of environmental governance is the removal of the commission and the CJEU which has played an important role to improve the environment despite the failing NIEA. The threat of EU infractions via the EU's enforcement proceedings spurred a flurry of activity in the mid-2000s to properly implement a range of EU directives such as the Waste Directive (Turner, 2006b, 2006a). Importantly the EU can bring infractions for failure to implement correctly, not just failure to transpose. Ireland were taken to court by the Commission for failing to implement the Waste Directive properly as evidenced by the continuing operation of illegal waste disposal sites (Friends of the Irish Environment, 2012). NI has similar issues with waste disposal sites and with this potential threat removed there is one less incentive to change. With regards to the specific application of environmental governance rules in the rural environment - cross compliance for the single farm payment - it is the NIEA's role to enforce these. This has been subject to criticism for being too strict, and as soon as the option was present after Brexit, the department changed the rules to ensure that a more lenient approach was taken, demonstrating that Brexit has had an immediate impact on rural environmental governance structures (DAERA, 2021e).

2.5.3.2 The OEP and NI

The role of the Office for Environmental Protection in NI is like the CJEU, it is to oversee the work of the government and other public bodies issuing notices to those that fail to comply with environmental law. Although lacking the ability to give fines as noted earlier, the removal of the OEP from the NI Government, being at the UK level and appointed/funded by the UKG gives it a greater independence than it does from the UKG, and the NIEA does from the NI Government. The other role of the OEP is entirely new to NI, which is the monitoring and reporting of DAERA's

environmental improvement plans. This is an additional level of scrutiny with previous failures to meet targets such as biodiversity targets been remarked upon by the relevant committee or the department themselves. The OEP role is to ensure that targets are met, provide advice on how to meet targets, and require that plans be reviewed if they fail to meet the targets set. One limitation of this approach is that the OEP are merely checking whether the NI government have done the homework they have set themselves, it does nothing for the ambitions of the plans.

In addition to this limitation, the OEP's introduction may also have consequences for the IEPA. In response to accusations of delay and dithering DAERA Minister Edwin Poots stated that his preferred outcome for the New Decade, New Approach commitment to an IEPA was that OEP would take that role (AgendaNI, 2021). However, the OEP is a necessary institution to plug the gaps left in the UK's environmental governance because of Brexit, its powers and role reflect this. The issue of an IEPA in NI pre-dates Brexit by over a decade and the two organisations fulfil completely different roles with the NIEA holding the public to account, and the OEP holding the state to account. This obfuscates the issue by confusing the two and weakening potential enforcement.

A further issue that will be particularly prominent in NI is the relationship between the two environmental non-governmental bodies, the OEP and the Climate Change Committee (CCC). At the UK level the OEP is to agree a memorandum of understanding with the CCC and are prohibited from engaging in areas covered by the CCC. The same is true in NI with the OEP prohibited from "monitoring the implementation of, or report on, a matter within the remit of the CCC"(Eustice and Lord Goldsmith of Richmond Park, 2021). However, given how interlinked the issue of Climate Change is with agriculture in NI, and the link between environmental degradation such as biodiversity loss, water quality, and air pollution and agriculture in NI, this division is likely to blur. It will also be difficult for either

organisation to offer advice on a subject within their remit without considering the implications upon the other.

2.7 Conclusion

This chapter has shown how the UKG formalised Brexit in relation to the environment through the negotiation of a new trade agreement with the EU, a re-negotiation of the relationships between the governments of the UK, and through the establishment of legislation and institutions to fill the governance gap brought about by Brexit. It has shown how the government successfully established a hierarchal approach to post-Brexit governance encompassing both dimensions of power one and two.

This power was most effectively exercised in NI due to the absence of the NI Executive meaning that NI's environmental governance changed considerably to reflect the UKG's approach. However, it also demonstrated that this power was limited by the need to negotiate a new relationship with the EU keeping NI within the EU's sphere of influence. Additionally, and importantly going forward in this thesis each aspect of this process interacted with the particularities of NI politics, including traditional and emerging approaches to environmental governance allowing NI to continue shaping the agenda and making decisions locally, although this may also be because of the UKG's reluctance to become embroiled in governing NI.

The response locally to these developments is at the centre of this thesis and will be the subject of chapters 5, 6 and 7, particularly the development of NI's environmental improvement plan. This chapter was concerned with the Brexit process at the UK level and how this affected NI in a situation where NI lacked the power to pursue alternatives. As discussed in the earlier interlude on power and throughout the UKG have exercised discursive power extensively throughout this process, particularly the power to make decisions and shape the agenda. In doing

this they have restricted NI's scope in making decisions, and shaping its own agenda, and the ideological split in NI means that they are less likely than other devolved governments to adequately contest this.

As the most well-resourced government in the UK the UKG exerts ideological influence upon the devolved regions, particularly NI with both government and political actors lacking institutional resources. Chapter 4 will focus on the development of England's new rural environmental governance, identifying the logics at play, and consider how these may influence NI, now and in the future through Lukes second and third dimensions of power, while in Chapter 3 I develop the framework that allows for this analysis.

Chapter 3 - Discourse Theory and Governance

3. 1 Introduction

PDT is a social theory rooted in an ontological understanding of society which is anti-essentialist. This means that there is no essential reality with a fixed and stable social structure, but instead identities and human-nature relationships are determined in a relational system. PDT was conceptualised by Laclau and Mouffe (1985) to develop a theory of post-Marxist politics which took seriously the critiques of post-modernism and post-structuralism and built upon the work of Gramsci. As a social theory PDT has developed a theoretical conception of the very foundations of human interaction, and researchers have recognised this having applied PDT to a range of situations and problems. This has occurred in a piecemeal fashion with academics applying PDT to a particular problem.

PDT has contributed to the study of governance in three key areas. The first, which required the least amount of adaptation, is understanding how political projects win power, and how they govern once they have won power (Norval, Stavrakakis and Howarth, 2000). This is an essential contribution to governance research as the state performs a critical role as an agenda setter and steerer in decision making, performing the task of meta-governance (Sørensen and Torfing, 2009; Howarth, 2013).

The second contribution PDT makes to the governance literature is an understanding of how subjects are transformed by governance, and providing a theoretical framework for understanding how subjects are gripped, or not gripped by discourse explaining their participation within governance networks (Griggs, Norval and Wagenaar, 2014; Glynos, Speed and West, 2015). This gets us to intensity and durability of these agendas: how they are adopted by populations in ways that allow them to become sedimented even as they are reworked, resisted, etc.

The third, and most extensive direct contribution to governance literature, is to the study of governance networks. Howarth and Griggs (Griggs and Howarth, 2016, 2017; Griggs *et al.*, 2017; Griggs, Howarth and Feandeiro, 2018) have been at the forefront of this contribution with both theoretical and empirical contributions to the literature. They have offered an intervention into the governance network literature de-essentialising the network and translating them into an object which discourse theory can focus upon.

This is where PDT's contributions to the governance literature hits an issue, one identified by Howarth and Griggs (2016). They have intervened in the literature focussing on Governance Networks as that was a literature focussing on processes of inclusion/exclusion, organising around signifiers, and transformation of subjects, areas in which PDT concepts are rich. However, the focus on governance networks as a concept has been naturally limiting (Griggs and Howarth, 2016). In the conclusion of their chapter Howarth and Griggs task future studies to the ''opening up' of discourse theory studies' to the interplay between and beyond networks, the operation of governance at different scales, and the 'craft of network management' (2016, p. 319).

This task is set prematurely as PDT's conception of governance is somewhat lacking and what this thesis will enrich with three contributions. The first advances the existing literature from PDT on governance which has focused on existing governance networks formed around a designated unit, such as the city (Griggs *et al.*, 2017; Griggs, Howarth and Feandeiro, 2018). Governance is rarely this neat and never involves the frictionless exercise of power through state agendas. To expand the scope of PDT it is necessary to consider the operation of hegemony across scales, different networks, and the articulation of space in a study. The example this chapter, and thesis, focuses on is developing an analysis of agri-environment governance in NI. Unlike governance of the city, which is often necessarily set

around city limits, the rural environment is constructed within a political process, one that stretches across networks and policy areas[3].

This chapter, and thesis, will offer a foundation for future research to identify a form of governance which goes beyond the network and binary distinctions between the constitutive insides and outsides of governance. Engaging with this allows us to answer questions around the role of hegemony, or more appropriately, hegemonies, the role of those political actors which are excluded from the network yet still govern, and the operationalisation of hegemony within a network in which antagonisms or even just opposition exists. Or as Howarth and Griggs put it, 'the 'messy' practices of governance, such as prioritisation (Griggs and Howarth, 2016, p. 319).

This chapter takes as it's starting point the mainstream approaches to governance to offer an understanding of what is meant by governance using the work of Kooiman (2003), Rhodes (2007) and Bevir (2013). There is a particular focus on how these approaches relate to the NI case building upon the work of Greer's (1996) study of policy networks and considering this in relation to Blanco et al's (2011) comparison of the policy network and governance network. This then needs to be related to the articulations of governance highlighted in the literature review, particularly post-exceptionalism. The second move within the chapter is to consider how the subject of governance, and these components, can be, and have been, de-centred by the post-Structuralist literature. This begins with a de-centring of the governance network by Howarth and Griggs (2016), and followed by an intervention by Dean (2007) which puts the issue of governance on its head, re-centring the state. Griggs et al (2014), and Tully (2008) are brought into the chapter to complicate the concept of governance by introducing interactions between governor and governed. The concept of ontological security is introduced here to build understanding in how

[3] The establishment of city limits, the exclusion or inclusion therein, is also a political process, but a far deeper one.

identities are constructed and re-iterated by governance relationships. Finally, the insights of Deleuze and Guattari (1994) are sought to bring the concepts of assemblage and multiplicity to the fore. After this critique, these insights are brought into discussion with PDT to develop a discourse theoretical conception of governance as hegemony. This involves drawing out general discourse theory concepts, and re-articulating them to reflect an approach focused on the maintenance of governance, rather than the challenge to the system. Lastly, I engage with the critical policy studies literature to elaborate on the research strategy for governance analysis which will form a central part of this thesis within the discourse theory tradition. By the end of this chapter I will have offered a PDT conception of governance as well as framework for researching governance which can be readily applied to the NI rural environmental governance regime.

3.2 Governance in the mainstream

The concept of governance is a notoriously slippery term and has multiple meanings and analytical uses in academic literature. Kooiman (2003, p. 4) states, "Governing can be considered as the totality of interactions, in which public as well as private actors participate, aimed at solving societal problems or creating societal opportunities; attending to the institutions as contexts for these governing interactions; and establishing a normative foundation for all those activities" and thus defines governance as "the totality of theoretical conceptions on governing."

Governance gained prominence as political scientists identified a diffusion of power beyond the state, in particular the inclusion of non-state actors in networks. The increasing governing demands placed on government has resulted in the distribution of governing activity at all levels vertically, expanding to include various expertise horizontally. Bevir (2013) roots these networks in institutionalist writing in which people make decisions based on the rules and norms of the institution they belong to. This form of governance theory is limited by its

explanatory potential of change, as change is impossible if everyone in the governance network follows the rules and norms of the network. Network theorists usually locate the source of change to external events. Further, it accepts the existence of these networks as they are constituted, reifying them in their analysis. However, that is not to say that these concepts cannot be used if suitably deconstructed.

First, there is a distinction to be made between policy networks and governance networks as Alan Greer's (1996) study of rural politics in NI argued that it was largely a corporatist relationship with the agricultural lobby groups through a policy network. Rhodes (2008, p. 425) defines policy networks as "sets of formal institutional and informal linkages between governmental and other actors structured around shared if endlessly negotiated beliefs and interests in public policy making". This chimes with Kooiman's definition of governance and makes clear that policy networks may form a central part of governing a particular sector, yet they are still distinct from governance networks. The key distinction from these definitions is that governance networks implies shared decision making and implementation, while policy networks bring together different actors creating an arena of contestation (Blanco, Lowndes, and Pratchett, 2011).

As a way of de-centring this approach Glynos et al (2009, p. 8) have argued that institutions like networks "can be conceptualized as more or less sedimented systems of discourse, that is, partially fixed systems of rules, norms, resources, practices and subjectivities that are linked together in particular ways."

The literature on agricultural discourses hints at this concept, as Erjavec and Erjavec (2009) argued that policy networks expanded bringing the identification of different problems, and the introduction of different solutions. More recently, Erjavec and Lovec (2017) argued that farmers' compete with environmentalists, alternative rural

voices, developers and other NGOs who seek to expand the scope of agriculture policy to recognise the rural environment's wider needs.

The policy exceptionalist/post-exceptionalist diagnosis goes one step further with a description of exceptionalism which more closely resembles a governance network as each institution shares responsibility in implementing the shared vision (Daugbjerg and Feindt, 2017). Therefore, the move from exceptionalism to post-exceptionalism can be characterised as the destabilisation of this governance network through the inclusion of different actors creating a "tense post-exceptionalism", or a period of dislocation and contestation without shared responsibility (Attorp and McAreavey, 2020). However, post-exceptionalism also implies a stability to farmer interests, and a non-existent ideal farmer. In reality farmers like all identities, are varied depending on the work they engage with, the scale, the land, and indeed, non-farming aspects of their life, they are contingent (Attorp, 2022). It is also true that even the farmer aspect of the identity changes with a transformation occurring throughout the productivist period that saw a "good farmer" become synonymous with a "tidy farm"(Lyon, Little and Tsouvalis, 2023).

The post exceptionalist diagnosis claims there is a move away from preferential policies, however, public payments for public goods still involves a large-scale movement of public funds towards private individuals in a way that other industries do not benefit from. In addition to this, the majority of farmers do not make a lot of money, therefore, it is difficult to see how this can be characterised as a "preferential policy" for farmers, rather than the state in providing cheap food for urban dwellers for example (Erjavec and Erjavec, 2009). This complicates the picture somewhat, allowing us to build an understanding of governance that embraces this diffusion.

Although these criticisms are valid, post-exceptionalism has highlighted a disruption of governance network at the supranational level. However, as demonstrated above alternatives can exist at national/subnational or local level, or diffused across these

scales, in the literature this is often articulated as either multi-level governance, or polycentric governance. Both agricultural and environmental policies were characterized as deeply Europeanised policy areas and examples of multi-level governance in the EU. Bulkeley (2005, p. 876) argues that due to both the expansion of environmental decision making vertically, as well as horizontally, environmental decisions are "created, constructed, regulated and contested between, across and among" these centres of power. Similarly, agricultural policy was developed at the supranational level and in the UK implemented at the devolved level.

3.3 Post-Structuralist Approaches to Governance

Thus far I have reflected briefly on the critiques of the mainstream governance approaches. This section will now turn to the post-structuralist literature to draw critical insights into building an effective discourse theoretical approach to governance.

Mitchell Dean (2007) argued that the governance literature directs too much attention away from the role of the state. Governments are still powerful institutions which shape governance arrangements within their territory, including the composition of policy networks and governance network. Here is the dualism that Griggs, Norval and Wagenaar (2014) term the logic of control and the logic of collaboration. An example of this is provided by the emergence of the networks view of governance in the UK. It emerged in response to New Labour reforms and the so-called hollowing out of the state (Bevir and Rhodes, 2003). However, the actions of the independent bodies established are carried out within the parameters set by the state.

In the hopes of articulating a post-structuralist view of governance which recognised the role of the state and the diffusion of power beyond the state, Tully (2008) conceived governance as a relationship between governor and the governed. Conceptualised as 'Practices of Governance and Practices of Freedom' Tully

understands that governance as a form of societal organisation is a relationship. The first practices of governance are the language games through which governed and governor co-ordinate action, define problems and develop solutions, negotiating modes of government (Tully, 2007, p.21). The second practice of governance is the web of relations of power, the strategies and diverse technologies that groups use to use to directly or indirectly "govern the conduct of others" (Tully, 2007, p.23). Or as Tully says, "actions that aim to structure the field of the possible actions of others" (2007, p. 23).

Each of these practices of governance is naturally accompanied by practices of freedom. The first is co-operation; individuals and groups can follow the rules of existing practices, however, through reproduction they modify practices. The second is contestation in which the governed may contest the rules but within the existing language games, and institutions. The third is transformation, when governance is deemed to have failed individuals and groups can exit the relations of domination, or contest them through struggles of transformation (Tully, 2007 p.24).

Finally, Tully emphasises the "practical identity" of a form of government embedded over time. This happens as governed and governor acquire a "habitual way of thinking and acting within the assignment relations and languages of reciprocal recognition" (Tully, 2007, p.24). The concept of the "practical identity" has been theorised more fully in the field of International Political Sociology as ontological security which is a useful addition here.

Ontological security is the security of identity. We form identities through ritualised practices, a sense of belonging to place and in relation to others (Rosher, 2022). This sort of identification with productive practices can be observed in the work of Gallent (2008) who described the discussion and comparison of yields in the pub and Soini and Aakula (2007) who described farmers identification of skill with tidiness. It is also very clear in the stewardship of the countryside fantasy as farmers connect

with the landscapes they create, and ritualised practices cannot be more embodied than in farming which for many is seen more as a lifestyle than a business (Sutherland, Barlagne and Barnes, 2019; Knook and Turner, 2020).

This concept allows for an understanding of how identities are shaped by practices, and conversely, how identities are challenged by changes to practice, providing a basis for analysing the relationship between governor, governed and practices. These concepts would be usefully integrated into any framework for rural environmental governance as they include a central component which post-exceptionalism does not, the way subjects are changed by and change identities, and their interactions with ideas. Lyon et al (2023) speak on this regarding the cultural changes in farming, however, there is little consideration of how this impacts exceptionalism or post-exceptionalism. Multi-functionalism provides a more complex view by embracing the multiple roles of farmers, however, there is a need to investigate the multiple identities of farmers and integrate this into larger frameworks. Indeed, attempts at multi-functionalist approach to CAP through its insistence on preventing land abandonment suggest that farmer identities have altered to include their role as environmental stewards.

The approaches presented offer a framework for a post-structuralist view of governance placing at their centre the attempts to govern and resist governance. However, they appear remarkably uncomplicated with the picture of a government identifying a problem, choosing a target subject, and then acting to govern that subject's behaviour, and altering the subject through this. What is clear from the mainstream literature, particularly polycentric governance and governance networks, is that governments are not the only institutions or mechanisms through which behaviour is governed. This is an important reflection as it means that analysis of governance spatially cannot only consider government policy. It must consider government policy as a determining factor, in the role of change, however, there is a "multiplicity" of instruments and institutions that govern our lives.

This was recognised by Deleuze and Guattari (Deleuze, Guattari and Massumi, 1987; Deleuze *et al.*, 1994) who developed the concept of the "assemblage". An assemblage constitutes a mixture of heterogenous elements that share conditions, elements and agents. The condition shared is the "network of specific external relations that holds the elements together" (Nail, 2017, p. 24). The elements are those parts that make up and assemblage, and the agents are those that conduct themselves within the assemblage bringing the different elements into contact with one another. A way of explaining this is further is offered by Welz (2018, p. 80) when she states "a policy assemblage emerges when different categories of: social actors, technical devices, legal regulations, measurements, calculations and standards as well as substances, organisms and physical matter are brought into interaction within the framework of a policy". This allows us to conceptualise the whole of a policy, and the role of each agent and element in it, however, it lacks the ability to tell us why certain policies change wholesale.

When considering rural environmental governance as a multiplicity what is meant is that each assemblage is neither the whole nor the part of the thing. This has helped Wynne-Jones (2018) rethink the role of neoliberalism beyond a meta-narrative which is totalizing and always dominant. By viewing rural environmental governance as a multiplicity it is possible to consider the separation and interaction of a variety of discourses where are hegemonic in different assemblages. For example, multi-functionalism tends to be the dominant frame for understanding agriculture policy, however, agri-food policy and trade policy tend to be dominated by neoliberalism. This interaction of different elements and agents has consequences for rural environmental governance both discursively and materially. This allows us to understand the differing, and occasionally competing, but important roles that the state, corporate entities, concepts such as land ownership, and individuals make to the governance of an arena as a whole, something which Marxist political economy is incapable of.

3.3.1 Political Discourse Theory

PDT is predominantly a theory of hegemony. The term hegemony within the field of governance has largely been used in international relations when attempting to depict both US and corporate influence in global politics (Anderson, 2017). There are some similarities here in that the hegemon shapes the field of the possibly, however, within this the field the hegemon is a position of leadership that can be vacated, rather than a struggle for meaning. The use of the term hegemony in cultural studies as developed by Stuart Hall comes closer to our understanding of hegemonic governance. Originating from Gramsci, Hall's conception of hegemony wove together a series of intellectual ideas and concepts in demonstrating the emergence of a political project that would construct the new common sense in politics, Thatcherism (Hall, 1983, 2017).

Building on this, Laclau and Mouffe developed a theory of hegemony rooted in the post-structuralist turn based on discourse (Laclau and Mouffe, 1985). Hegemony is the central concept of the discourse theory approach developed by Laclau and Mouffee, and later advanced by Laclau and those of the Essex School (Laclau, 1990; Butler, Laclau and Žižek, 2000; Ernesto Laclau, 2005; Howarth, 2013). A political project is hegemonic when it can represent its' agenda as in the interests of the universal. At the root of this is the ontological position of dislocation in which no identity, or discourse, is complete, there is always a constitutive outside which the identity is formed by exclusion (Laclau and Mouffe, 1985, chap. 3). Therefore, hegemony is always contested, constitutive and dynamic. The hegemonic project produces the new common sense, it creates a moral, cultural and symbolic order in which the governed operate.

As noted in Chapter 1 one of the approaches developed for researchers using PDT is the logics approach. It is necessary to consider these logics afresh to consider other core concepts which may apply to an application of PDT for researching governance.

The first set of logics, social logics are connected strings of meaning making activity which tie together to create embedded rules of society, they are the rules of the game. It is critical to note that as with all discourse social logics are relational and contextual, they are immediately related to the historical context in which they are identified by the analyst. They cannot be simply taken from one context and supplanted on another unproblematically they are explanations of the particular. That is not to say that they cannot support understanding of generalities, or extra-contextual trends. The norms and values that are identified in the case of rural environmental governance in NI may be present in other locations, or they may be dominated politically by norms and values of wider contexts, for example the EU, UK, or global neoliberal capitalism.

The second set of logics, political logics, are the ways a social practice or regime is being contested or was instituted. To fully understand political logics, it is important to consider the role of the empty signifier in establishing the chain of equivalence. An empty signifier acts to partially fix the meaning of other signifiers in relation to it and represents a myriad of demands through the articulation of a single signifier. Thus, the empty signifier and the logic of equivalence involve the simplification of signifying space. Conversely, logics of difference involve the expansion and complication of that space, highlighting differences between demands and breaking the chain of equivalence. A final note to make in this is the role of the floating signifier. A floating signifier may move between different logics and derives its meaning from them, an example of this is sustainability as it moves between social, economic, and environmental. It is the role of the empty signifier to fix the meaning of sustainability.

Lastly, there are fantasmatic logics, these are the stories that 'grip' subjects of a discourse and closely relate to the concept of ontological security as the projection of these logics interact with practices and alter ones' conception of ones' identity, making identities more or less secure, meaning more or less open to change. The

elaboration of these logics in PDT allows for further complication and comprehension when considering PDT as a theory of governance.

3.4 Political Discourse Theory and Hegemonic Governance

During this period of Gramscian development, hegemony was put forward as a core concept for its potential to understand the rise and fall of political movements, rather than the governance of different policy areas, although of course this is linked. In advancing this notion of hegemony the Essex School widened its scope with analyses of sectoral political movements such as airport expansion and policy reform. It is these twin movements that must be brought together. In *Post-Structuralism and After*, Howarth (2013) briefly presented hegemony as a form of governance. He stated,

> *"Hegemony as a form of rule speaks in general to the way in which subjects accept and conform to a particular regime, practice, or policy, even though they may have previously resisted or opposed them. Yet the achievement of acceptance, conformity, and compliance is a complicated process (2013, p. 204)."*

In the process of becoming hegemonic a political project must construct a chain of equivalence between a series of different demands, making them more than the sum of their parts through the creation of an empty signifier which stands for all of them (Howarth, 2013, pp. 197–204). The centrality of political demands here is crucial as Stoker argues, "politics matters because there are conflicts and differences of perspective in society about what to do, what resources to collect for public use and how those resources should be spent" (Stoker, 2006, p. 5). This is the process of policy reform, and the institution of a new hegemonic order by a successful political movement. However, governance must consider more than the installation of a hegemonic project, just because a discourse becomes hegemonic and takes power, this does not necessarily mean that governance or policy will reflect this.

A successful hegemonic project must be "installed and reproduced." The key here is reproduced, the hegemonic discourse which successfully won power must be replicated throughout the governing structures, and in an exercise of power those excluded from the hegemonic project must be repressed and excluded. This process is continuous and involves the constitution and maintenance of the hegemonic order, and this requires a degree of acceptance "by those who are subject to it" (Howarth, 2013, p. 203). This process of acceptance and denial takes place at the level of fantasy where beatific or horrific logics grip subjects, altering identities and crystallising common sense. In the practical sense this can occur using technologies that can transform identities as argued by Lyon et al (2023). Similarly, Dwiartama (2018, p. 100) sees the transition from the logics of discipline to logics of control through the use of "spatially-based agricultural information systems that monitor, record and overlap real-time farm data".

This notion of hegemony as governance therefore resembles other post-structuralist theories of governance such as Tully's practices of governance and practices of freedom. The practices of governance can be understood in discourse theory terms as the process of building and instituting a hegemonic political project with the practices and language associated with that project. The "practices of freedom", by the governed, are thus the act of reproducing the hegemonic order, and to some extent acquiescing to it, resisting it, or challenging and transforming it, in which case it was a failed hegemonic order. Therefore, discourse theory is already equipped with the basics of an understanding of governance as an ongoing contested relationship with different practices and language associated with different projects which is advanced here.

3.4.1 The appearance of governance

If one accepts the central role of hegemony in governance, the question is still asked, what does governance look like and how should it be conceptualised? This section

will outline the concept of hegemonic governance as a sedimented regime of practices characterized by a network of social logics. Social logics here can be understood as the "rules of the game" which enable the researcher to "distil their purpose, form and content" (Glynos and Howarth, 2007, p. 134). Social logics allow for the characterisation of these practices, or regime, through the identification of grammars with "family resemblances" (Glynos and Howarth, 2007, p. 134). The logic is constructed and named by the analyst to explain a phenomenon, be that the emergence, sedimentation, or maintenance of a certain regime of practices. The analyst therefore selects these heterogeneous practices which they then argue have such "family resemblances" and offers them as "plausible explanation".

An example here can be taken from the literature on agricultural policy discourse. From the 1940s until the 1990s the literature argues that productivist discourse was dominant within agricultural policy offering signifiers such as "food security". Re-articulating this discourse as a social logic, the logic of productivism, it is possible to group together a range of practices such as the destruction of hedgerows, headage payments, concentration and amalgamation of farm businesses, investment in technologies and research, and reduction in food prices, as practices which constituted productivism, rather than seeing productivist discourse as a justification for these practices.

What the above example highlights is that social logics are not just an abstract "rule of practice" but allows for the linking together of particular subject positions of (farmers and consumers), objects (agricultural goods), and "a system of relation and meanings connecting subjects and objects as well as certain sorts of institutional parameters" (the food supply chain) (Glynos and Howarth, 2007, p. 136). Importantly here is the role that actors themselves take on in interpreting their own subject positions and activities. Howarth and Glynos (2007 p. 137) point out that "social practices always exceed any particular system of rules because they contain possibilities and a contextual richness that cannot be captured by any expression of

them". The hegemonic order offers structure to the identity; however, identities are radically contingent, meaning that subjects may "act otherwise" and face moments when other identities are possible. Therefore, while hegemonic governance can be conceptualised as a network of social logics which shape the field of possibilities, they are also subject to challenge which can be understood with the use of political logics of both equivalence and difference.

3.4.2 A multiplicity of hegemonies

The concept of social logics is central; however, it is important to consider some caveats as highlighted by the literature on assemblages. Social logics are not totalizing, all behaviour is not governed by the dominance of one particular social logic. There are two reasons for this, one within the realm of PDT and the other within Assemblage theory. The first is that social logics do not cover every possible area of action, indeed, it is built into the concept that social logics will be resisted and challenged. Secondly, while the concept of social logics usefully links together different elements in a similar way to assemblage theory, it is the concept of multiplicity that is missing.

In previous research where PDT has been limited to policy change in a very restricted way this was not an issue, however, governance requires analysis of a variety of policy areas and the interaction between different actors. Every governance story will include a different assemblage of actors and policy instruments which will construct governance differently, it is necessary to analyse this and identify dominant themes, and themes conspicuous by their absence. For example, the role of international trade in domestic food standards and environmental conditions has become increasingly recognised post-Brexit, yet the Government will not place maintenance of food standards in imports under law, this is a potentially interesting conflict between neoliberalism on the one hand against productivism, multifunctionalism and environmentalism on the other.

Articulated through other theories MLV governance recognises conflicts between scales, while polycentricity recognises potential conflicts, or just alternative modes of governing arising between different decision-making centres. Indeed, it is relevant to the view of tense post-exceptionalism as while this is articulated as tension within an existing governance system, it might be better recognised as the coming together, or conflict, between increasingly interlinked governing systems. As an example, supermarkets set their own standards, above the legal minimum, influenced by consumer patterns, which changes the behaviour of farmers through demand, rather than government policy.

Therefore, while the core of PDT offers explanatory power for why governance regimes change, these developments help us encapsulate what governance is and identify when it has changed in at first seemingly minor ways. Discussing social logics as a multiplicity enriches our understanding of PDT as a tool for analysing governance, and indeed our understanding of hegemony as a form of governance.

3.4.3 Social Logics and projected social logics

Thus far this chapter has highlighted the role of political logics in challenging dominant regimes, social logics in the structuring and defence of those regimes, and fantasmatic logics in attaching affect to the two. However, in areas of policy change often there are routinised ways of interacting, and institutionalised actors which do not only have demands, but views of how an entire regime should operate. It is necessary to distinguish between political logics, and this other type of proposal. Glynos et al (Glynos and Speed, 2012; Glynos, Klimecki and Willmott, 2015; Glynos, Speed and West, 2015) have identified it as a projected social logic which is focused on imagined alternative practices. As Remling (2018, p. 7) stated "*projected* social logics describe alternative practices that a reform process might aim to introduce but which have not materialized yet."

Glynos et al (2015) developed projected social logics to draw a distinction between social logics and projected social logics. They argued that social logics attempt to capture the norms and self-interpretations of subjects engaged in concrete practice, whereas in healthcare policy reform they did not seek to analyse health practices, but instead "imagined alternative practices", i.e the proposed reforms. This concept has proven useful as different actors may present alternative visions for a specific policy area, which although bound up in political logics can be somewhat separated from them therefore, projected social logics offers a neat conceptualisation.

Glynos, Speed and West (2015, p. 5) argue that this distinction helps the analyst understand "the political and ideological significance of instances of contestation and non-contestation in the reform process, in particular the projected social logics allow for clarification of what is at stake." The earlier concept of multiplicity and assemblage also helps with this as one element in an assemblage may be missing from the project social logic, which highlights where the contestation is, on the other hand, this may exclude an entire area of the multiplicity. The use of this concept is clear as it is possible to characterise multi-functionalism, or variants of it as a projected social logic without the establishment of hegemony. Indeed, this approach may benefit from the difficulties that post-exceptionalism experiences in identification, as by isolating and linking together different demands to identify systems of governance this will tell us more about the future and the direction of travel.

3.5 Framework for hegemonic governance analysis

These changes and conceptualisations of governance as hegemonic governance are theoretically important; however, it raises practical questions around research strategy. The primary question being how to systematically analysis governance across the multiplicity and spatial territory. Discourse Theory has of course been used to analysis governance in different settings, primarily by Howarth and Grigg's

(Griggs *et al.*, 2017; Griggs, Howarth and Feandeiro, 2018) in their analysis of urban governance. Howarth and Grigg's analyse of urban governance in different contexts have worked for two reasons. The first is that the case has always been clearly spatially demarcated in that it has taken place within the context of a particular city. The second is that the case has either been motivated by the concerns of a particular signifier, or a particular formation such as a network. For the latter, the contested meaning of different signifiers is central to discourse theory and thus lends itself well to any project. For the prior, networks can be understood as more or less sedimented systems of discourses, i.e social logics. These two reasons make the analysis of governance in these cases a simpler process, however, most policy areas that are governed, or areas/issues that are governed by multiple policies require a more systematic research strategy.

This question of what is at stake regarding different projected social logics was also the cause of a further development in this integration, the nodal framework. Glynos et al (Glynos, Klimecki and Willmott, 2015; Glynos, Speed and West, 2015) sought to understand the marginalisation of "alternative economic imaginaries" in financial sector reform, and later to understand the logic of healthcare reforms in the UK. Both policy areas are wide-ranging and are rather unwieldy for analysis, for example projected social logics may focus heavily on transparency while neglecting how the purpose of the service is articulated. Alternative projected social logics may focus on an altogether different area, it is therefore difficult to articulate why each proposal has a different focus, without providing a systematic framework for the policy area. Glynos, Klimecki and Willmott (2015) thus developed a nodal framework suited to the public services approach they were taking, in healthcare, but also in banking as the alternative imaginaries reconceptualised banking as a public service (Glynos, Speed and West, 2015).

3.5.1 Adapting the Nodal Framework for Critical Governance Studies

As has been shown, discourse theory has been successfully used to study governance within urban areas focussing on either governance networks, or signifiers. This success also highlights the limitations of the practical research strategy in that it works well within restricted areas, or areas demarcated prior to the research project.

On the other hand, the Nodal Framework has demonstrated success within wide policy areas which operate across geographic regions, and operate differently across these geographies, with concern over hegemonic social logics which can interact with local demands. Importantly the nodal framework through its isolation of each aspect of the chain inserts the concept of motion into its characterisations of a logic, the implication of action. While the exceptionalist and multifunctionalist frameworks may adequately describe a system of governance, they appear stagnant. An example here is the important role that institutions play, in the nodal framework this can be isolated to a particular part of the chain, describing what it is they do, and the effect that this has. It deconstructs the exceptionalist model to understand the mechanisms at play, and how they affect the whole, possibly transforming a system, or entrenching it. Bringing the nodal framework into hegemonic governance analysis has clear advantages in that it offers a systematic framework, it breaks down the process into different nodes allowing for closer analysis within a broad area, restricting analysis to a sub-section of a governance regime.

3.6 Adapting the Nodal Framework for Rural Environmental Governance

The nodal framework breaks the service down into four different nodes which allows a more precise analysis in the role of particular social logics at parts of the service chain. The four nodes; the node of provision which concerns which services need to be provided, and under which conditions provision can be instituted, the node of distribution which is about how users find and access services, the node of

delivery considers the "norms that shape the relationship between health professionals and users", and finally the node of governance that is about how the norms characterising these practices are evaluated, maintained, or transformed. It is possible to re-articulate these nodes to provide a framework for environmental governance, and in doing so I will consider each node and imagine it's appearance as if it was a part of a projected social logic, i.e ideologically coherent. However, it is important to remember that within dislocated systems the final system of governance is likely to be an amalgamation of competing views such as tense post-exceptionalism or multifunctionalism.

The main difference between environmental governance and both healthcare and financial services is that the relationship between a provider and a user, which was central to Glynos et als (2012, 2015) studies, must be reconceptualised. Much of the discussion of the various nodes concerns this relationship, how the service is delivered to users, how users find out about the service, how they access the service. With regards to rural environmental governance there is a policy and system of governance which aims to shape practices of individuals, businesses, and organisations to have an effect which is felt by other people, but the natural environment is deemed as the primary beneficiary. The relationship is a *doing to* relationship, not necessarily a *doing with* or *doing for* relationship.[4] With this in mind, it is important to consider each of the nodes and how to adapt them to consider this new relationship.

3.6.1 Node of Provision

The first node in the service chain is the Node of Provision which concerns logics of appearance. In the analysis of projected social norms in the financial sector Glynos et al (2015, p. 397) state that the NEF node of provision concerns "stipulating key

[4] Although this view does not consider the role of non-human agency as non-humans are often treated as objects rather than subjects within governance systems.

services that need to be provided such as universal banking." From this it can be taken that one aspect of the node of provision is in deciding what the services are. Within environmental governance this may reflect the relative aims of each of the actors for example ENGOs concerned with biodiversity and farmers unions concerned about productivity; these are both related to the environment, however, in different ways with distinct policies.

Further, the analysis of the health service discusses how services are made available i.e "an ideal character of eligible providers" or aligning/co-ordinating different providers. For environmental governance this may be related to who is eligible for incentives and schemes, the bringing together of different actors across and beyond the food supply chain, these are processes of inclusion and exclusion. It is important to highlight that the focus is on the "ideal character" that is not to say that there aren't other providers, but one is preferred, and this is reflected in policy. This is related to the creation or transformation of identities while the rest of the chain seeks to reproduce this identity, the key example of this is the productivist farmer. In addition to this an environmental governance system is wider than that of others as remarked upon by the exceptionalist literature, agricultural institutions for example play a key role. Lastly, it concerns how this service provision is instituted, for example, aiming to change land ownership patterns through processes of amalgamation and reform.

Table 3. 1 Environmental Governance Node of Provision

Aspects of Node of Provision	Environmental governance
Which service needs to be provided	Creating policy aims which reflect the benefits you want the service providers to produce, placing legal requirements on them not producing adverse effects.
Promotion of ideal character of eligible providers	Changing eligibility requirements for incentives and subsidies.
Aligning or co-ordinating providers	Building a policy or governance network of different partners to build common purposes. Encouraging the development of co-operatives and partnerships across sectors.
How is this service provision instituted	Managing patterns of ownership through processes of amalgamation encouragement and land tenure law change. Site designation for environmental purposes therefore changing the nature of the relationship the provider has with the land.

Source: Authors own

3.6.2 Node of Distribution

The second node is that of distribution – how services are distributed – given a service exists how do users connect to it and what conditions shape their access. With the health services this is interpreted as to how users are linked to the service, an example here is that of giving users an informed choice on their care options, allowing them then to choose from a variety of options. The analysis of financial services paints an altogether different picture with two opposing concepts of distribution, one which sees the services as a commodity and the other that sees it as a public good. This is then reflected in the connection between users and services, the first through advertising the other through increasing the availability of public information. This is useful as it allows for a wide variety of considerations to come under this category.

If the land is conceptualised as the "user" and the land manager, the "service" the question comes to be how the land and the land manager are connected. One answer would be through commodification of the produce from the land such as through forestry or farming. An alternative could be through the production of natural beauty, as a form of commodification. A third approach is the provision of environmental public goods. These all have different mechanisms for this connection, such as selling on the marketplace, encouraging the tourist industry and the receipt of public monies respectively. This node must therefore consider the supply chain, wider economic strategies, and incentives or government subsidies, and the vision of different actors for these things. Further, if it is in fact environmental benefits that are being produced it may be worthwhile to conceptualise which of these is deemed worthwhile, how these are targeted, which actors are linked to these and why? The node of distribution is closely related to the node of provision, and indeed it is often through this node that the appearance of a service becomes clear. For example, if one environmental component is targeted via direct public subsidy that the majority of farmers currently depend on, while another is connected via a lesser way such as a voluntary scheme with a lower participation rate, this reveals a component of the node of provision, that the service is more about one component than another.

Table 3. 2 Environmental Governance Node of Distribution

Aspects of Node of Distribution	Environmental Governance
How services are distributed	Environmental services may be distributed for a variety of reasons. The first is based on historic patterns of land ownership and use, and the policies that have shaped them. Secondly the use of scientific data to locate and designate "scientifically significant areas". Third, the use of economic data to decide which areas are worthy of investment. There are several other options, or a combination of choices. The importance of this node is the relative consideration given to the balance of these options.
How to connect services to beneficiary	The second aspect of this node is seeking to understand the connection between the service provider and the beneficiary. There are a variety of ways that the land manager, user, owner could be connected to the production of environmental goods. Everything they do on the land; therefore, the question of distribution is related to how policy shapes these practices and how much of each balance it seeks.

Source: Authors own

3.6.3 Node of Delivery

The third node, the node of delivery: how is the service delivered, what norms shape the delivery of the relationship, what mechanisms are in place to ensure delivery of the service. The focus is on the norms that shape the relationship between finance professionals and users (e.g., concerning the advice process, the exchange of knowledge, the role of technology, etc.). Translating this into the topic of environmental governance the question must be, how is positive environmental governance delivered as a service. This can relate to several things, of course the first is land management practices and the divergent practices that are envisioned by different actors. The aspect of this node that translate more directly over are

concerned with norms and mechanisms that shape and ensure delivery, and how delivery is improved. These are linked to the focus of research, knowledge exchange, advice delivery and the role of technology.

Table 3. 3 Environmental Governance Node of Delivery

Aspects of Node of Delivery	Environmental Governance
How is the service delivered	The service of environmental governance, or public goods, or positive land management is delivered through management practices.
What norms shape the delivery	Knowledge exchange, research, funding based on research and aims.
What mechanisms are in place to ensure delivery	Advice and knowledge exchange.
How can delivery be improved?	Increasing role of technology, changing, and increasing availability of advice etc.

Source: Authors own

3.6.4 Node of Management

The final node for Glynos et al (2015) is the node of governance. If this nodal framework is to be brought into critical governance studies successfully it is perhaps useful to change the name of this mode for ease of understanding, this then will be the node of management. More importantly this node concerns how the practices are evaluated, maintained, and transformed, how decisions about the service are made. This is the simplest to translate from other policy areas in that it concerns how a service is evaluated, and how decisions about the service are made. This concerns things such as metrics/measurements of success and failure as government technologies, inspections, evaluations, policy networks, penalties, regulations.

Table 3. 4 Environmental Governance Node of Management

Aspects of Node of Management	Environmental Governance
How practices are evaluated	Environmental governance often uses logics of measurement. In measuring the diversity of wildlife as compared to historic measurements, measuring soil health, water quality etc. There are alternative measurements at stake including measuring productivity of land, GDP, gross value added. Measuring the lives of people living in rural areas. Tourist numbers and satisfaction. These are all measurements used to evaluate the land and nature, some of which directly compete for relevance; thus the use and invention of metrics is an important meaning making activity and technology of government. It is also important, who is evaluating the services, in this case it is various agencies of government including the Environment Agency, or those contracted by the public sector such as consultancies and universities.
How practices are maintained	Enforcement, incentives, subsidies, regulation
How practices are transformed	Policy change, market change etc stability seeking
How decisions about the services are made	Changes in policy affected by quite open policy network, but corporatist relationships in past, suggestions of collaboration between industry and regulator

Source: Authors own

3.7 Conclusion

In this chapter I have developed a discourse theory view of governance in which an area, such as the rural environment, is governed by a multiplicity of hegemonies across a range of decision-making sites distributed both vertically and horizontally.

Inherent within this is the potential for conflict between these sites, in different policy arenas and between different policy actors. The nodal framework developed brings analysis of this conception to life as it highlights practices of inclusion and exclusion, the effects of these practices, and how these are reproduced. Similarly, the framework embraces the role that different policies and technologies have in the production of subjectivities, thus the changing of identities over time. Finally, a particular benefit of the nodal framework is the diversity of actors and practices included from farmers to government agencies.

A crucial component of the test case for the framework, and whether it is indeed an improvement, is how it deals with the realities of the politics of governance rather than simply the projected social logics of the various actors. This thesis focuses on the development of the post-Brexit rural environmental governance regime in NI. Involved in this is a devolution system complicated by an unstable government in NI, and a contested repatriation of power in intergovernmental relations. It is out of this conflict that NI's post-Brexit regime has grown, meaning that it involves a range of institutions and policies from different levels of government, as well as a complicated devolution story. To capture a part of this story the nodal framework is used to characterize the ideal type, or projected social logics, of the UKG's rural environmental governance regime in England in Chapter 4. In Chapter 6 the framework describes the projected social logics, and in many cases actual social logics of Sustainable Productivism in NI. This is juxtaposed with the challenge presented by the demands for climate action, and the mobilisation of political logics in NI's first climate bill where an alternative approach is mapped in the nodal framework. Finally, in the conclusion to this thesis the messy reality of NI's post-Brexit rural environmental governance regime is described demonstrating the effectiveness of this framework.

Chapter 4 – Brexit and the Production of Natural Capital in the UK

4.1 Introduction

Proponents of Brexit, particularly advocates of a Green Brexit, argued that a central benefit of leaving the EU would be to replace the CAP with both a new agriculture and environmental policy, as well as ensuring synergy between policies (Gove, 2018b; Gravey, 2019a). What this policy should entail was deeply contested with farmers seeking a new agricultural policy distinct from environmental issues, while ENGOs sought a new environmental policy which encapsulated agriculture (Gravey, 2019a). The institutional changes analysed in Chapter 2 of this thesis laid the groundwork for a new rural environmental governance with the CAP's replacement in England, Environmental Land Management (ELM), its main source of funding. Unlike the OEP and Environmental Improvement Plans (EIP), the replacement agricultural scheme applies only to England with different approaches in Wales and Scotland (Greer and Grant, 2023). However, both the policy development and the continuing operation of the policy will exert influence on NI's own schemes for two key reasons addressed in chapter 2: discursive power and financial control.

This chapter focuses on understanding the UKG's approach to rural environmental governance in England, using the nodal framework approach developed in Chapter 3. This will allow for direct comparisons between the approach taken in England, and in NI to provide further insight into the discourses prevalent in NI, and the ideological strength of those discourses. By using the framework this chapter will break down the new approach to understand the underlying logics and consider the potential effects these will have on the future and in NI. It will start, in section 4.2, by outlining the data used in a network of documents, policies and institutions identified as producing and implementing England's rural environmental governance. Section 4.3 will set out the problematisation of the CAP, focusing on

Logics of Productivism and Logics of Principle which the UKG characterised as problems. The bulk of the chapter is focused on a descriptive analysis of the new system of governance intended to address these problems in section 4.5 which is driven by Logics of Value.

The final section of this chapter, section 4.6, identifies the presence of alternative logics, Logics of Place and Logics of Planning, as well as resistance to Logics of Value through a resurgent Logics of Productivism. The differences between the three emerging logics are rooted in which actor is shaping the decision making. In Logics of Value the market, or the government in the hopes of the market, is intended as the decision maker. Logics of Place has at its heart the people who live and work in communities as the decision makers. Logics of Planning considers both other logics to have at their heart a chaotic nature and places the responsibility at the national level on government and experts, while trying to harness the drivers of the other two. These can and will use similar techniques throughout the different nodes with a variety of combinations and technologies at their disposal, however, it is important to consider who the decision maker is or is intended to be. As these Logics have emerged, the war in Ukraine, the Covid-19 Pandemic and the cost-of-living crisis have supported the resurgence of Logics of Productivism.

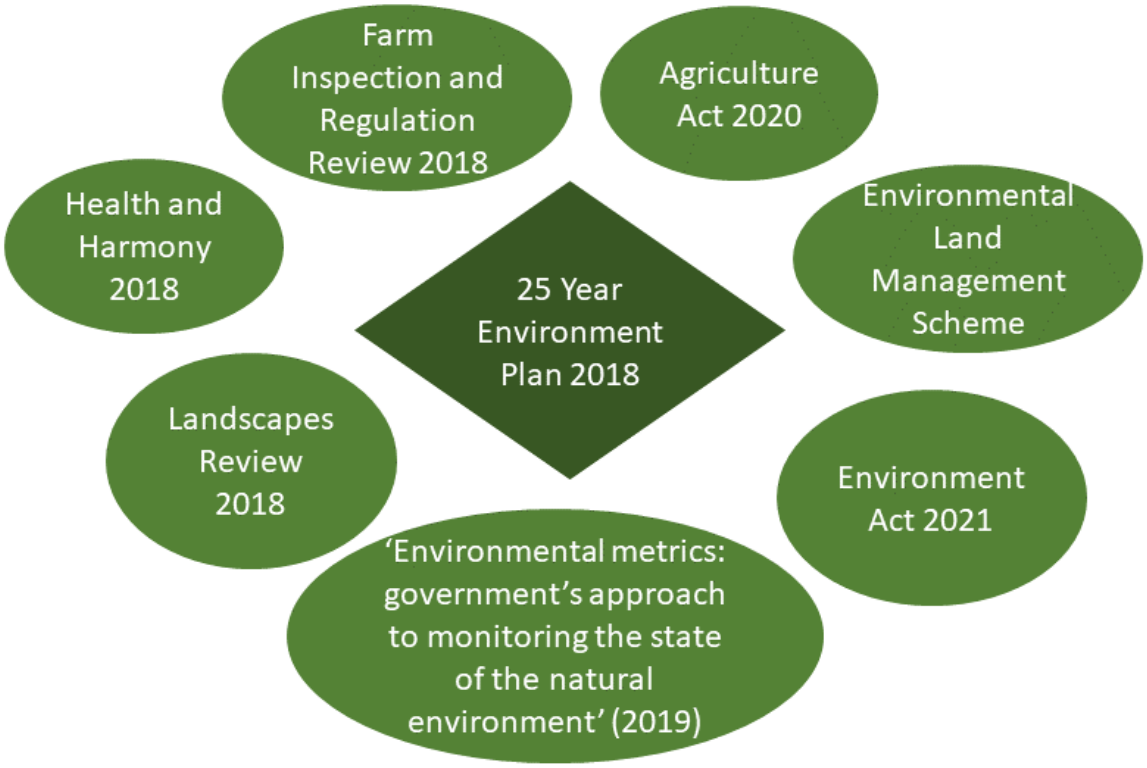
4.2 Rural Environmental Governance Document Network

The UKG's flagship environmental policy in the post-Brexit period is the development of the 25 Year Environment Plan (25YEP) (Villiers, 2019). Figure 4.1 is the result of an analysis of the 25YEP which identified the UKG's conceptualisation of the rural environment as synonymous with land use and site designation. The 25YEP forms the centre point of a network of policies, institutions, and reports that both feed into it, and act as delivery agents for it (see Figure 4.1) The data sources identified in the network illustrated in Figure 4.1 will be used to develop a

systematic view of the UKG's projected social logics for the rural environment, and therefore a frontier of the possible for this network.

England Rural Environmental Governance Document Network

Figure 4. 1 The document network informing England's Rural Environmental Governance



Source: Authors own

The construction and illustration of this frontier will act as a path by which to measure NI's approach against throughout the rest of the thesis and offer insight into post-Brexit multi-level governance. Therefore, this chapter will proceed with an analysis of the environment plan, teasing out the social logics that underpin the network, while utilising the subsequent publications, strategies, and schemes to allow for a fuller development of the social logics and their proposed practices. In particular, the analysis draws on reiterative readings of the UKG's Agricultural Policy Statements, Health and Harmony, the Farm Inspection and Regulation Review and developing ELM Schemes. Using Foucault's(1972) method of analysis of the statement this chapter will also focus on speeches given to the Oxford Farming

Conference by the Secretary of State for the Department of Environment, Food and Rural Affairs in 2017, 2018 and 2019 . These speeches as statements are a result of the accumulation of discourse and are imbued with the power and authority of the position of Secretary of State, additionally they take place within the relational network of scientific analysis and policy development outlined in Figure 4.1. Indeed it is the culmination of that network, and the speeches take part at the primary farming industry event setting the agenda for the year (Griggs and Howarth, 2017). The final section, 4.5, utilises a slightly different data set as it considers the documents and institutions at the margins of the 25YEP, the work of the National Food Strategy and the CCC.

4.3 Problematising the CAP

4.3.1 Logics of Productivism

As demonstrated in Chapter 1, Logics of Productivism dominated the governance of the rural environment for much of the post-war era. They committed primarily to increasing the production of food in terms of overall yield, and this issue dominated rural policy. The practices within this logic resulted in environmental harms which once identified were constructed as challenges to this logic in form of both chains of equivalence and chains of difference and saw the rise in prominence of alternative logics. As discussed in Chapter 1, this has been articulated as both multi-functionalism and post-exceptionalism, however, the commonality between the two positions is that of tension. Multi-functionalism as articulated by the CAP exists as an uneasy coalition between productivist, neoliberal and environmental demands. Problematisations of the CAP by the UKG, NFU and environmentalists have focused upon the remaining productivist components. For the UKG and NFU this has focused on a neoliberal critique that the CAP distorts the market while environmentalists have focused on environmental degradation (Lyon, Little and Tsouvalis, 2023, p. 56). In addition, politicians from the left and right along with the

treasury itself have long criticised the CAP as too expensive, and argued that the UK contributes too much for what it receives in return (Gravey, 2017c).

As agriculture policy has partially moved from an exceptionalist policy area to a post-exceptionalist policy area the driving logics should reflect this. Productivism is a hangover from this exceptionalist era, therefore, it is specific to agriculture. However, logics in the post-exceptionalist era should be more generally applicable such as those driving neoliberalism across a range of policy areas. Although problematisation of Logics of Productivism was common across the political spectrum, it is not the driving force shaping the structure of the new rural environmental governance regime, in fact that is the problematisation of the CAPs Logics of Principle.

4.3.2 Logics of Principle

Logics of Principle are articulated as a critique of the CAP's uneasy coalition of multifunctionalism, an implementation of the CAP that cannot curb the excesses of productivism, nor allow for innovative solutions to these problems. The failure of CAP to improve the environment is articulated because of its rigidity, that regulation is based on the strict application of principles, rather than seeking the best outcomes. The UKG, along with farmers representatives, argued that it does not consider place-based diversity, the possible diversity of practice, the freedom of individuals, as well as highlighting the inability of this social logic to transform the subject. Particular attention is paid to the latter:

> *"Regulation is really all about getting people to act in ways they would not otherwise choose, for the best. Modern-day regulators start by making sure those who need to change know that, understand why, and are motivated and able to do it. We are a far cry from that now, in the way we regulate farming" (Stacey, 2018, p. iii)*

Stacey (2018) here articulates a commonly held view across the documents, that the CAP is too rigid and dictatorial, too focused on enforcement, punishment and

"compliance" rather than reaching positive outcomes. The use of the term compliance across the literature highlights this fact as farmers are to be made to comply, rather than collaborate or create for example. The solution presented by Stacey (2018) and by the UKG generally is to support farmers with a regulation that allows them to work with the government. This problematisation of the CAP identifies the need to transform farmers as a subject into environmentally friendly farmers working in partnership with the government.

This problematisation of the CAP, that focusses on Logics of Principles, thus embraces the coalition of multifunctionalism but offers an alternative solution driven by alternative logics. Logics of Principle identified here are focused on adherence to particular principles through which action is derived. All subjects must act and make decisions in a particular way based on these principles. An example of this is cross compliance, and its enforcement. As discussed in Chapter 2 the UKG sought greater fluidity and flexibility throughout the environmental governance regime as the nature of the legal principle was altered during the Brexit process (Lee, 2018). This works within the political logic which sees the EU principle as rigid, while not necessarily disputing its aims. Again, the regulation and inspection review highlighted this with its analysis of the polluter pays principle which stressed that it should be considered "in abstract", or would not be fair or even achievable to apply it purely (Stacey, 2018).

The discussion of multi-functionalism from Chapter 1 is relevant here, Logics of Principle accept that farmers are multifunctional and merely attempt to maintain this multifunctionality while discouraging damaging behaviour it does not seek to transform subjectivity, instead restricting the excesses of productivism. This represents the stasis of post-exceptionalism the inability to move from one state to the next. Logics of Principle identified actions that were regarded as environmentally sustainable, and prescribed these, it was focused on how something was done, rather than the outcome, which is the focus of Logics of Value.

4.4 Replacing the CAP

"This Plan is a living blueprint for the environment covering the next quarter of a century. It is an ambitious project, made even more so by our use of a natural capital approach, a world first" (UK Government, 2018a, p. 11)

The dominant social logic identified within the UKGs rural environment transition is what this thesis is calling Logics of Value. This logic focuses on the reduction of the environment into individual components or "assets" which can be assigned economic values, and thus decision making can take them into account. This mode of governance is based on what Robert Fletcher (2013) terms virtualism in which that reality has a particular appearance and the problem is that policy has not understood that reality. By providing valuations of the environment individuals and businesses can consider these in their economic calculations. As Dieter Helm (2016, p. 79), head of the Natural Capital Committee argued "What is measured tends to be what matters". The central component of this logic is the signifier "Natural Capital". The transformation of environment into natural capital fits well within the framework established by multi-functionality as it centres on the production of services by agricultural land, this expands that formulation.

The move towards natural capital was possible due to the deployment of the signifier public goods articulated in the slogan "public money for public goods". This has been used in campaigns against the CAP by numerous sources, most prominently ENGOs, however, it has formed a central focus of the UKG's approach to replacing the CAP (Martin, 2020). Put simply, the definition of a public good is a service that is provided for which the producer receives no renumeration from the market. For example, the contribution of farmers towards an "attractive landscape"

is deemed a public good, whereas the production of food is not as they sell that product on the market, that is deemed a private good (Martin, 2020). The role of the public good does not fit very snugly into a natural capital approach. All goods and services should be redeemable on the market, however, there is no natural capital market. Rather the use of "public money for public goods" provides justification for the creation of a market, as well a discrimination between which goods and services the government should pay for. It is important to note that this logic transforms the node of provision altering the appearance of the services as it were.

4.4.1 Node of Provision

4.4.1.1 The service provided

Through the identification of the environment as natural capital the government strategy and various demands and targets become equivalent under the term "environmental enhancement," which is the service to be provided under the node of provision. The plan makes a series of demands through the appearance of aims, these are; clean air, clean and plentiful water, thriving plants and wildlife, a reduced risk of harm from environmental hazards, using resources from nature more sustainably and efficiently, mitigation and adaptation to Climate Change, minimising waste, managing exposure to chemicals and the enhancement of bio-security (UK Government, 2018a, p. 24). These demands all have various discursive possibilities, however, with natural capital acting as an organising node it is possible to interpret them all in a particular way. Indeed, all these demands are organised by the empty signifier of a variance of environmental, or natural capital, enhancement.

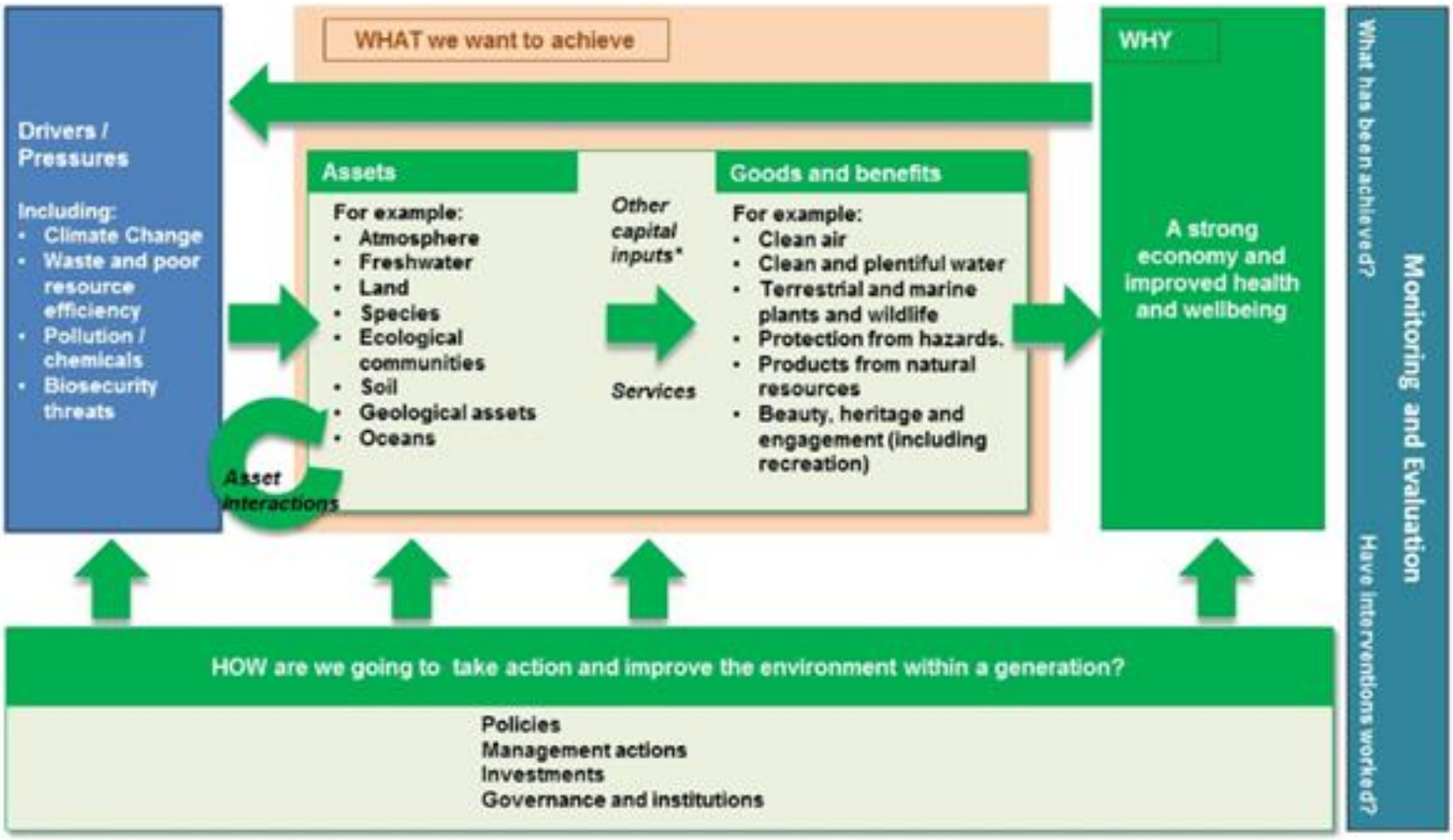
Figure 4.2 found in the Annex of the 25YEP sets out the UKG's conception of the environment as natural capital, placing natural capital into a "framework for improvement" which is the Government framework for the environment (UK Government, 2018a). The environment is transformed into a set of assets which underpin the economy, thus the empty signifier of enhanced natural capital is an economic one, and is linked in an equivalential chain with jobs, livelihoods, health

care, services and indeed everyday life. The identification of natural capital enhancement as the organising force is one which involves a particular problematisation of the environment as a phenomenon in decline, which has consequences for economy and wellbeing.

Natural Capital Enhancement Framework

Figure 4.2 UKG Natural Capital Enhancement Framework

Source: (UK Government, 2018b, p. 7)



An important component of this logic, and in contrast to Logics of Principle is that it is treated as a positive sum game, a win-win scenario. Whereas Logics of Principle were problematised as a restriction on activity and a drag on economic growth, and therefore health and wellbeing, Logics of Value articulate environmental demands as

a win for the economy (UK Government, 2018a; UK Government, 2018b, p. 4,16,18, 2018c, p. 4,5,10, 24–28, 2020, p. 5,19-24).

This is common in neoliberal discourses and is the main frame within "green growth" and its variants (Chaigneau and Brown, 2016; Coffey, 2016; Fletcher *et al.*, 2019). Within the agri-environment a variant of this discourse is 'sustainable intensification' which has become reasonably well known and dominant in the UK in recent years (Tomlinson, 2013; Loos *et al.*, 2014; Pecher *et al.*, 2018). Sustainable intensification involves producing more for less, ensuring food security while mitigating harm of the environment. Issues such as soil health are articulated as a win-win arguing that no till approaches are "both economically more efficient and environmentally progressive"(Gove, 2018a). This results in a subtle shift in the food security discourse that productivist logics rested upon as it becomes about "feeding the nation", tying food security into "healthy domestic food production and of course global trading links"(Gove, 2019). This shift of focus in food security looking at the environmental foundations of food security is a discursive strategy which ENGOs have adopted since at least the last round of CAP reform (Heron, 2018). Environmental sustainability then underpins food security, rather than increased productivity underpinning environmental gains, this is a shift in the problematisation of food security, altering the logics required to solve the issue.

4.4.1.2 The ideal service provider

The neo-liberalisation of the rural environment under this system then alters another component of the node of provision, the identification of the ideal service provider, and the emergence of new subjectivities. It is clearly set out in each of the documents, and prominent speeches by ministers that the structure of the farming sector needs to change. In a speech to industry at the Oxford Farming Conference Secretary of State Michael Gove(2018a) stated that

"If we want to preserve that which we cherish - a thriving agriculture sector, a healthy rural economy, beautiful landscapes, rich habitats for wildlife, a just society and a fair economy - then we need to be able to shape change rather than seeking to resist it."

This need for change is identified in both discourses, productivity, and environment. In each document analysed the government offered background on the sector, or those involved in service delivery. Repeatedly it is stressed that "35% of farms produce 80% of output", that many farms are unprofitable, that the CAP subsidies had perverse outcomes in locking land into unproductive use (Stacey, 2018; UK Government, 2018a, 2018b). Further, they identified that most farmers see farming as a way of life rather than a business (UK Government, 2018a). These issues are blamed for much of the lack of sustainability, with the mobilisation of sustainability linked to increases in challenging a perceived social logic of neo-productivism which links unproductive farmers and the state into un-virtuous practices.

To reflect this chain of equivalence, the UKG's major change with regards to practices is a re-conceptualisation of the environment as "natural capital", and a raft of imagined practices. The major practice, and how this service is instituted, both financially and politically, is the new method of agricultural payments, payments for public goods, principally environmental goods. The new "Environmental Land Management" (ELM) schemes is the primary method through which the government seeks to enhance natural capital (UK Government, 2018a; UK Government, 2018c). Thus, the ideal character of the service provider is that of a business, seeking to make profit via food, fibre or natural capital. Logics of Value assume that subjects act as rational individuals which aim to maximise utility and can be manipulated by incentives, thus homo economicus (Boillat, Gerber and Funes-Monzote, 2012). The reality of the policy roll-out either demonstrates a flaw in this thinking, or a failure in implementation. The entry level ELM scheme, Sustainable Farming Incentive (SFI) set out an aim of covering 70% of England's farmland with inclusion of 70% of farmers with the initial pilot expecting a response

of between 5,000 and 10,000 farmers. Instead, they received expressions of interest from only 2,178 farmers and the final number of pilot participants closer to 1,000. The potential reasons for this are varied, however, the lack of monetary return has been highlighted by critiques meaning, within this logic, the government have failed to adequately value the natural capital (Lyon, Little and Tsouvalis, 2023). This demonstrates the risk of the Logics of Value approach in that without adequate uptake farmers may turn to intensification to make up the financial difference as they can extract more value through the production of private goods resulting in greater environmental harm.

4.4.2 Node of Distribution

Natural capital enhancement is dependent upon the existence of natural capital, thus the process involves a process of data collection and scientific location and designation of targeted sites with high natural value. This has been carried out already as can be seen from the range of Sites of Special Scientific Interest across the UK. This combined with the distribution of farming data will be used to identify target sites for enhancement, and therefore specific providers.

How service providers will be connected with natural capital involves their land management practices. What is interesting here is how these practices are targeting for change and what will be done to change them. For service providers beyond farmers and land managers there are organisations such as AONB Partnerships, Conservation Boards, National Park Authorities *inter alia*. These bodies which have a responsibility to ensure natural capital enhancement are connected to natural capital/the environment via land owners/managers/users. These bodies are connected to the environment via a series of mechanisms such as MOUs, new Environmental Covenants, working agreements, collaborations and co-operatives in land management agreements (UK Government, 2018a). The most important mechanisms for connecting land managers to these services is the Agriculture and

Environment Acts which provide the legal framework for development of the ELM schemes, amongst other things (Lyon, Little and Tsouvalis, 2023).

The first scheme, discussed already, is the SFI which is focused on the individual farm offering the farmer the opportunity to choose a standard based on the "natural assets" on their land. As discussed, this is the entry level scheme with an aim to cover 70% of England's farmland demonstrating that there is an ambition to apply the new method more widely than previous schemes. However, the scheme has been criticised by ENGOs accusing Defra of paying farmers for actions that are close to the regulatory minimum (Lyon, Little and Tsouvalis, 2023). The accusations are correct, however, this approach is consistent with the wider regulatory focus which emphasises flexibility and partnerships. Rather the new approach derives from problematisations of Logics of Principle, and the inability of farmers to achieve compliance, rather than on shifting the baseline. Therefore, this criticism may miss the mark as although it lacks ambition it addresses a critical problem in a way that is coherent with the wider approach.

The recognition of the diversity of "natural assets" sets up a collection of data on farmland which more ambitious schemes should benefit from, which as Lyon et al (2023) point out, is the purpose as schemes are designed to be complementary. The two additional schemes, the Local Nature Recovery Scheme and Landscape Recovery Scheme both seek to increase the scale of delivery and encourage collaboration between farmers, land managers, land-owners and organisations to tackle more critical long term issues. A particularly important component of these is that they move away from the identity of the farmer, particularly in the latter which is focused on land use change. This hints at the ideal service provider being someone who can produce public or private goods. Indeed, the UKG problematised the CAP as distorting the land market and encouraging inefficient farmers to stay on the land (UK Government, 2018c). The natural capital approach then allows for farmers who produce food inefficiently to produce natural capital or encourage changing patterns

of landownership/management. This draws the node of distribution into contention as there are hints at a potential redistribution and consolidation within the neoliberal process of the emergence of natural capital, and efficiency.

Finally, the government is given an important role through the development of metrics, definitional work, and increasing collection of data:

> *"making the vision of a healthier environment a reality requires solid foundations: comprehensive, reliable data; strong governance and accountability; a robust delivery framework, and everyone to play a role"(UK Government, 2018a, p. 11).*

This presents a peculiarity of the natural capital approach in that with regards the node of provision the very appearance and acceptance of the problem is a practice which constitutes the delivery of enhanced natural capital. Therefore, in order to identify service providers the government will gather data, and the existence of such data will then change the behaviour of those managing the land in that area[5]. This at its root helps us understand the basis of the natural capital approach to neoliberalism. It relies on a rational choice understanding of the individual in which an individual that perceives declining natural capital (as linked to their economic health) will thus change practices. Therefore, the node of provision is even more important as its roots in neoliberalism map out a clear journey, and constitute its practices.

4.4.3 Node of Delivery

The node of delivery within this system offers a diverse range of mechanisms and practices through which natural capital enhancement can take place. These are centred around the construction of a natural capital market, and a rebalancing of roles between the government, businesses and citizens. However, land managers must be split into two different subjects. The first are those who cannot make a profit

[5] This practice has begun via the Agriculture Act 2020.

from the land from production and the second, those who can. As was suggested earlier, the second are not seen as the main concern, it is those who cannot that are seen as having both the most potential in the enhancement of natural capital, and needing the largest change.

As Gove (2018a) stated:

> *"that means asking how we can support those farmers, for example upland sheep farmers, whose profit margins are more likely to be small but whose contribution to rural life and the maintenance of iconic landscapes is immense."*

The above quote makes clear that the aim of the ELM schemes is to target the less productive farmers, perhaps, normally in less favoured area schemes, to ensure they can stay on the land and produce "environmental goods". However, it does something more. The traditional CAP payment kept farmers on the land without incentive to change practice, whereas the 'natural capital thinking' encourages 'enhancement' of the environment. This then creates a competitive marketplace for the production of environmental public goods. This is articulated through statements like "The principal public good we will invest in is of course environmental enhancement" (Gove, 2018a). Further, Gove argued that natural capital "should be seen as an additional crop" as the farmer enters a contract with the Government to "increase the provision of environmental services" (Gove, 2019).

Neoliberalism is remarkable due to its diversity. Dempsey and Suarez (2016) have shown that very little market exchange has taken place in most forms of neoliberal conservation. The ELM schemes may not have the appearance of a marketplace as it is traditionally described, however, due to several factors it may perform the function of one, or offer a proto-market (Dunleavy, 1994). The first is the consequences of valuation, and the value of 'ecosystem services' as produced by natural capital. Previously the global "natural capital stocks" were valued at between US$16-54 trillion ($10^{12}$) per year, while global gross national product was

US$18 trillion per year (Costanza *et al.*, 1997; Islam *et al.*, 2019). Thus, with previous valuations the value of natural capital was higher than the value of the economy itself.

The point is that natural capital valuations tend to be high and complex, it is therefore likely that the government will both underpay for them, and within the governments limited budget, not fund the entirety of natural capital enhancement across the countryside. This will therefore encourage areas which can deliver a lot of natural capital, for a lower cost, to take part in the schemes and increase their provision of public goods, whereas other areas which will not as effectively deliver public goods, or the costs will be prohibitive, will no longer receive any subsidy, or significant subsidy.

This thus creates a competitive marketplace as land managers, or collaborations of land managers seek to sell their production of natural capital to the government through the ELMS three tier system. Turning upland farmers into producers of natural capital, or profitable natural capital businesses also increases the potential for the financialisation of this system with greater investment from the financial sector and potentially changes in land ownership. This distribution of service delivery corresponds with Ricardo's classical economic theory of comparative advantage in which different areas have natural advantages in the production of different goods (Ricardo, 1817). His example is that of wine, countries which can grow grapes more efficiently are more likely to have successful wine industries. The same can be said of natural capital, which one could argue means that the geographical distribution offers the appearance of a place-based logic which is concerned with needs, it is instead a neoliberal one which is concerned with value.

Natural capital transforms this phenomenon into a marketable product the production of which is guided by market logics. The UKG has a long-standing commitment to neoliberal agriculture policy, which for them is exemplified by the

focus on efficiency, reducing the "regulatory burden" and the ending of subsidies with New Zealand used to exemplify this approach. This is typical of neoliberalism in other sectors of the economy (Potter and Tilzey, 2005, 2007; Marsden and Sonnino, 2008; Dibden, Potter and Cocklin, 2009; Medina and Potter, 2017). There are consistent signals in the neoliberalisation of nature literature which identifies characteristics of: financialization, marketization, privatization, deregulation, and reregulation (Castree, 2008a, 2008b; Arsel and Büscher, 2012; Böhm, Misoczky and Moog, 2012; Sullivan, 2012, 2013). Although not a market proper with the government the main buyer, it may still have market effects, which may be the intention, and once this system has been set up it is possible that others may purchase natural capital. For example, to offset environmental destruction, and treat the environment as aggregate as has been done in Indonesia (Fletcher, 2013; Sullivan, 2017; Fletcher *et al.*, 2019).

For farmers who are productively, and profitably, producing food and can survive, the Logics of Value aims to simply increase their value through the improved production of natural capital by improving the environmental components of their existing practices. The primary mechanisms for this are the provision of advice, investment in research, and the provision of incentives to encourage technological take-up (Stacey, 2018; UK Government, 2018a, 2018b, 2018c). With Logics of Value as in most neoliberal discourses of green growth, environment and food production develop win-win scenarios. As outlined by Gove (2018a):

"I have seen for myself how many of our best farmers – our most productive and progressive farmers – place thoughtful environmental practice and careful husbanding of resources at the heart of their businesses."

Further Gove (2018) states that the government will also be paying for productivity increases that double as provisions of environmental goods:

"For example, the adoption of minimum tillage techniques can not only decrease costs and improve productivity but it also reduces run-off and erosion. That is a public good which contributes to improving water quality and for which farmers could be paid"

This logic of difference separates previous concerns with funding that they are not market based, or bad value for the taxpayer by creating a competitive marketplace in which the environment is valued.

A long standing approach from the UK which resulted in friction within the EU is over the "regulatory burden" placed on businesses operating in the rural environment (Burns, Jordan and Gravey, 2016). The two directives which have been specifically targeted for culling are the birds and habitats directives. Reducing and minimising the "regulatory burden" is a typical theme within neo-liberalism, while the focus on outcomes as opposed to processes also buys into the production of a product, rather than the idea of a particular style of practice. This is no surprise as neoliberalism has long been the strongest discourse in agricultural policy in the UK, however, with leaving the EU its form is now coalescing around natural capital. The prominence of Green Growth discourse within the 25YEP is unsurprising given how deliberately it is linked in with both the Industrial Strategy and the Clean Growth Plan (UK Government, 2018a). In particular, the first Grand challenge "putting the UK at the forefront of the artificial intelligence and data revolution" (UK Government, 2018a, p. 18). This can be seen throughout the 25YEP and plays to a promethean concept that humanity will not need to grapple with limits to growth, and will innovate its way out of it. In fact, the environment here is seen as an opportunity to

"boost the productivity by enhancing our natural capital – the air, water, soil and ecosystems that support all forms of life – since this is an essential basis for economic growth and productivity over the long term"(UK Government, 2018a, p. 18).

Therefore, the environment does some justificatory work, while underpinning a new economic system and artificial market as natural capital.

This element of the node of delivery becomes clearer in ministerial statements as much as made of the "fourth agricultural revolution", which was imbued by a notion of inevitability, promises to transform our agricultural system technologically (Gove, 2018a). This imaginary conjured beatific logics of plenty and harmony as the revolution takes humanity one step forward towards our first dreams as a species. Technologies such as gene-editing are directly connected to this beatific logic in Gove's "Farming for the Next Generation" speech (2018a):

"Gene editing technology could help us to remove vulnerabilities to illness, develop higher yielding crops or more valuable livestock, indeed potentially even allow mankind to conquer the diseases to which we are vulnerable."

The above makes clear that while this appeals to productivist tendencies, and thus neoliberal productivity, it also appeals to wider fantasies of human civilisation. Below these revolutionary technologies there are appeals to harness individual technologies to meet more limited goals for example, the provision of export health certificates improved through upgraded IT systems and data analytics. These technologies are still imbued with revolutionary potential as

"Developments in big data, artificial intelligence and machine learning mean that processes which would have required the intellect and effort of thousands of humans over many hours in the past can be accomplished automatically by digital means in seconds" (Gove, 2018a)

This is then articulated as a possibility to move beyond "cheap labour" and labour-intensive production towards greater automation and machine learning, "moving from the hands-free hectare to the hands-free farm with drilling, harvesting, picking and packaging all automated". These changes are interwoven into an epistemological and political community tying Harper Adams University, the new

National Food Strategy, 25YEP, Food and Drink Sector Council's Agricultural Productivity Working Group and the Transform Food Production Fund.

4.4.3.1 Rationalities of Control

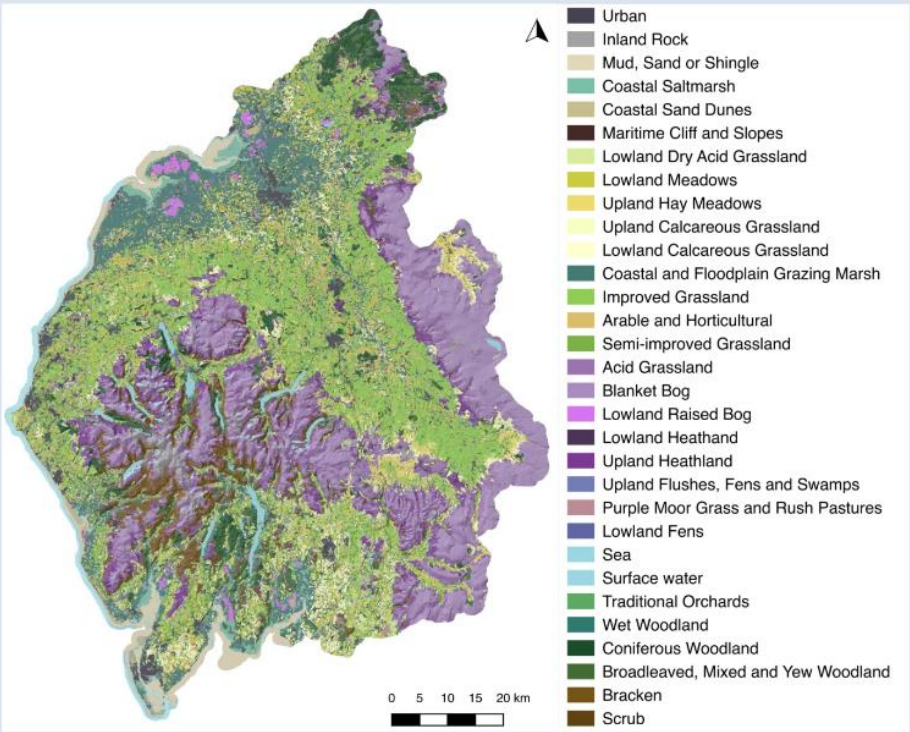
This focus on technology has a particularly interesting focus on data. There has been significant emphasis on the development of new metrics, and a massive increase of measuring of existing and new metrics across the UK. This can be seen from Defra work with the Office of National Statistics on "natural capital accounts." These accounts are developing standard approaches to measuring the state of our natural capital and the services we receive from the environment, and track any changes over time. The accounts have flexibility to be compiled in both physical and monetary terms because it is not possible to place a monetary value on all the services or to reflect all changes in condition of assets in monetary values. In principle, accounts can be compiled at any geographical and economic scale, from UK level down to parcels of land owned by individual companies, and a wide range of businesses and other organisations such as Forest Enterprise are already incorporating natural capital values into their accounting and reporting systems.

Technological advances have improved the display and use of data as well as the production of data, for example the Living Nature Map in Figure 4.3 and the rise of precision agriculture. These data imply a movement towards the rationalities of control which Agrawal (2005) has conceptualised. In this rationality the gathering and appearance of said data becomes a delivery mechanism if coupled with the appearance of targets which are to be met.

"Importantly, we will continue to assess our progress by drawing on established datasets to monitor environmental change. Designed well, metrics encourage new behaviour by helping government and private actors assess what they must do to restore the vital natural capital on which prosperity and economic health depend (Gove, 2018a)."

It is important then to re-iterate that the appearance of this data is also a delivery mechanism. This presents a peculiarity of the natural capital approach in that, with regards the node of provision, the very appearance and acceptance of the problem is a practice which constitutes the delivery of enhanced natural capital. An example of this is the fundamental role in delivery placed on geospatial visualisations of landscape such as in Figure 4.3. Therefore, in order to identify service providers the government gathers data, and the existence of such data will then change the behaviour of those managing the land in that area.

Figure 4.3 Living Nature Map as a rationality of control



A living nature map of Cumbria

Source: Natural England

Source:(UK Government, 2018b)

4.4.4 Node of Management

The focus on increasing the spread and volume of data received by government, and particularly the development of new metrics is important. As Braun (2014)

demonstrated new metrics and new data must be produced to fit within the model of the system undergoing transformation. Therefore, data being produced is focused as "natural accounts" for different ecosystems. The body who is responsible for this are the Natural Capital Committee, alongside other scientists, economists, and environmentalists. Accountability on this will come from Parliament and the watchdog through the production of annual progress checks; however some of the targets will be legally binding while others won't, some come from the EU while others go beyond. The availability of data is just as important as the collection of data and the government have made a commitment to make data available for scrutiny to anyone. This scrutiny in line with the development of natural capital-based metrics should ensure an easy and understandable way of knowing if the government is achieving its goals. However, there are two issues to consider here. The first is that publication of data in form of natural capital accounts, while potentially useful for transparency, will also normalise natural capital and prepare for greater market orientation. Secondly, while the data may be available natural capital accounting is complex and political, thus the data may obscure interactions of power.

Central to the 25YEP is flexibility and adaptability. Described as a living blueprint, the plan and policies resulting from it will change in response to changes in the natural capital accounts, or the context in which the plan is in operation. The plan then is constantly under evaluation as seen in the knowledge framework for environmental change outlined in Figure 4.2. This thus means that the evidence base will be in a constant flux of change as new priorities and uncertainties emerge. This implies that the plan is relatively unstable and open to challenge, however, the underlying hegemonic discourse of natural capital is never questioned, just the individual metrics and policies which aim to enhance it. This places boundaries on the government strategy, while providing flexibility on the exact enactment of this strategy, success will be evaluated based on these metrics.

Metrics are a powerful technology of governance, thus it is no surprise that there is scope for the development of new metrics imbued with revolutionary potential, and held up in the British nostalgic imaginary as the "new gold-standard". This is reflected in the development of "new approaches to food labelling" which will combine the recognition of the Red Tractor scheme and the Leaf mark assurance schemes with a "single, scaled, measure of how a farmer or food producer performs against a sensible basket of indicators, many environmental" (Gove, 2018a). It is interesting that they have used the word sensible here. This is key as it demonstrates that those beyond the government have an important role in evaluating and transforming environmental governance, and with the expansion of market values this is likely to increase.

4.4.4.1 Fantasmatic Technology

The lineage of this discursive shift from simplicity to complexity can be found in the *Land Use Futures: Making the Most of Land in the 21st Century* report, which asserted that the land system is complex and requires a system of evaluation and intervention to address market failures (Government Office For Science, 2010). The issue of institutional failure was also raised as the complexity of the system was realised with the need to work with a "large number of stakeholders at varying spatial levels and with specific interests" (Government Office for Science, 2010). While the natural capital approach, and its subsequent massive increase in data and metrics is supposed to meet this complexity, this is only possible because of perceived technological dividend. The large volume of data collected, which they have suggested is inadequate, can be improved by technological advances such as "earth observation, mobile applications, DNA analysis and data sharing" (Government, 2018). An example of this control used for management of this system is the living map discussed earlier in the node of delivery. This may be applied to the national scale as people are transformed into "volunteer citizens".

These technological changes are also implied when considering the workings of the market. The Node of Management is closely linked to developments in the governmentality literature which observe a move from the disciplinary society to the society of control (Argrawal, 2005; Leibenath, 2017). However, this is ultimately interlinked with neoliberal logics. A fundamental method of management in the rural environment sector is that of the marketplace in the purchasing of food from primary producers. For a considerable period both policy and market prices have been blamed for the increasing intensification of the extraction in the countryside, see for example the common refrain, 'we can't be green when we are in the red'. The government has appealed to Brexit as an opportunity to change the fundamentals of the market. In addition, the government has sought to harness technology, again, to improve position of farmers as the government aims to meet a long term aim of farming policy, improving fairness in the supply chain. The method of achieving this is transparency, however the delivery element of this is the use of data, the increasing collection and availability of data (Gove, 2018a; UK Government, 2018c). This market led element is just the predominant method of management of the rural environment governance present in the post-Brexit period.

4.5 Crises, Resistance and Change

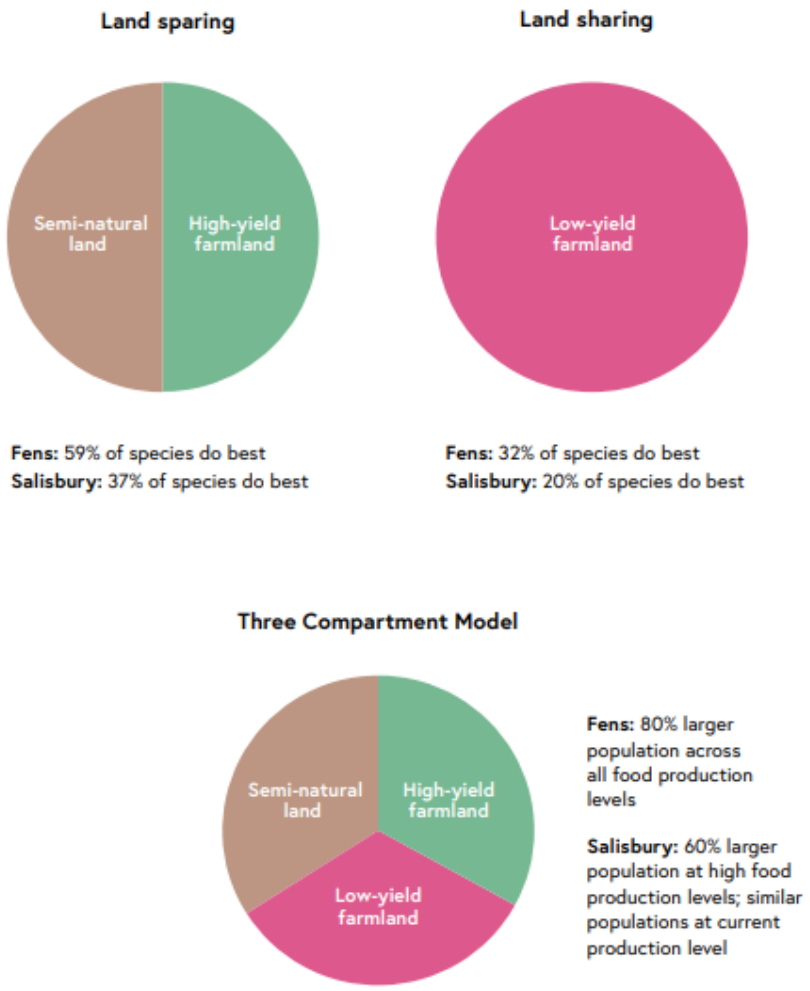
The dislocation of rural environmental governance in the UK post-Brexit has seen the mobilisation of a range of logics in an era replete with crises. The context in which Brexit occurred changed drastically in the post 2016 period with increasing salience of the climate crisis and commitments to climate action, the Covid-19 pandemic, and the Russian invasion of Ukraine. Although these crises are not the reasons for the increased relevance of alternative logics, they offer the opportunity to consider them as they were highlighted as a response. These are Logics of Planning, Place and Productivism respectively.

4.5.1 Logics of Planning

Logics of Planning became prominent amongst advisory bodies, but not government, in the latter stages of the Brexit process, particularly due to the UKGs net-zero commitments. This was highlighted in the National Food Strategy by Henry Dimbleby (2021) as he concluded that meeting the net-zero commitments of the government will require large scale changes to land use, and this, as well as the Climate Change Committee (CCC) plans, constitutes, effectively, a land use strategy. Recommendation 9 of the National Food Strategy report recommended that the government should create a "Rural Land Use Framework" and that it should set out which area of land should be used for which purpose using a "three compartment model" (Caffyn, 2021; Coleman, 2021).

National Food Strategy Three Compartment Model

Figure 4.4 Three Compartment Model



Source: (Dimbleby, 2021)

The three compartment model attempts to break down divides such as land sparing and land sharing, or sustainable intensification and agro-ecology, by using them together. To achieve this level of planning they re-iterate what is common throughout, a required increase in data collection and availability. As part of a "food system data programme" recommendation 12 of the report seeks the production of a rural land map which would provide data and recommendations for land use across the country (Dimbleby, 2021). Combining this with either an integration or

compilation of government incentives and regulations, the Logics of Planning believe that this could provide local land managers with the information to make appropriate decisions. By taking a food frame on the issue, rather than a food production or nature production frame, the Logics of Planning manages to integrate a series of demands from human health, biodiversity, climate action, an end to poverty, and can simultaneously consider these concerns in global and local perspectives. It need not worry about "carbon leakage" because it is addressing food consumption as well as food production.

The Logics of Planning focuses on government activity, or at least attempting to turn government activity into a vision which is discernible, integrated, and achievable. It places the government at the top of a hierarchy of governance across scales allowing them to lead, and shape the actions of local decision makers, while giving the local decision makers the freedom of knowledge of the larger plan. Individuals and collectives will be contributing to the national concern, although in a way that is individual to the place they live, through incentivisation or regulation. This implies the government will have more control, and the market will not choose the direction but will inform the method.

4.5.2 Logics of Place

The Covid-19 Pandemic saw an explosion of discussion about the food supply chain, agri-food networks and the environmental consequences of the current system with a 'return to nature' narrative spreading as both humans and animals "returned" to the countryside (Gralak *et al.*, 2020; Jackson and Cameron, 2020; Natural England, 2020; Shanks, Schalkwyk and McKee, 2020; Shute, 2020). Adjacent to the ongoing rural environmental governance changes brought about by Brexit the Covid-19 Pandemic caused a review of the UK's "broken food system", resulting in the National Food Strategy report. There was a move towards local food distribution, greater connection between urban and rural, the establishment of food networks and

calls to support farmers in a much-needed transition (Garget, 2020; Hird, 2020; Matei, 2020; Sustain, 2020; Welsh Government, 2020). While a wider food-focused approach to rural environmental governance emerged, it was quickly de-emphasised as the UKG moved past the pandemic, doubling down on their existing approach.

This focus on place-based solutions has been evident through the adoption of site designations with ASSIs, the NATURA 2000 Network, and national parks. The relative effectiveness of these designations has been called into question, and in many cases these merely place potential restrictions on activity (Selman, 2009; Bell and Stockdale, 2015; Deguignet *et al.*, 2017). However, across the EU and in the UK, some of these places have taken further steps. These steps include local management plans which are a collaborative effort of local landowners, users, NGOs and local authorities (Wragg, 2000; Selman, 2002; Royal Society for the Protection of Birds, 2011; Fermanagh and Omagh Council and Monaghan County Council, 2018). Or, designations that focus on embedding the environment in local economic activities, and attempts to build local sustainable communities, such as national parks (Illsley and Richardson, 2004; Blackstock *et al.*, 2011; Arts, Fischer and Wal, 2012; Bell and Stockdale, 2015).

Upon the Brexit vote environmentalists, academics and the UN expressed concern that the UK may want to scrap the birds and habitats directives, and it may still, however, in the 25YEP place-based approaches are still clearly evidenced through the "Nature Recovery Network" (Neslen, 2016; Government, 2018; Agyepong-Parsons, 2020). Building on previous reviews such as the Lawton Review (2010) this approach justifies the extension of existing designations connecting them, and bringing in "more habitat". This approach also takes steps towards an approach that embraces more of the social aspects of place as they aim to "give individuals the chance to deliver lasting conservation." This could potentially amount to the individualisation of conservation, or bring communities together. It appears that this

is more on the extensive side with a proposal of 25 new catchment/landscape scale designations. The role of communities and businesses is mobilised alongside the advancement of technology as a democratising mechanism as they utilise data and mapping tools. These changes are envisaged to involve both interest groups such as Environmental NGOs, land users and landowners. However, much of this is considered as strategic ambition and is pushed out to further reviews, such as the Landscape Review which envisages an entirely place based approach with its own regulator and the ELM schemes as the delivery mechanism (Defra, 2018). This offers insight into the potentially dual role, and the radical potential within the ELM schemes. In order to effectively produce natural capital, the scheme encourages collaboration at a landscape scale. There is potential that encouraging this collaboration will embed activity beyond the market, and consider non-marketised needs.

A curious absence from much of the discourse is that of rural people and communities (Heron, McAreavey and Attorp, 2023). There is very little offered to ensure social sustainability, and they are presented largely through the role of small farmers, which again may be subject to changes. This need not be overly surprising as the focus on globalised trade, and capital-intensive production rather than labour appeals less to farming as a social enterprise and more to farming as a globalised business.

There is potentially an alternative here as well as Logics of Place may appeal with community supported agriculture, or alternative food networks. However, it highlights a fundamental lack which Logics of Place aim to fill. Different logics are underpinned by the questions they ask, and Logics of Place are considered with how to make a particular space sustainable, at the centre of that is the communities with in it, offering an analysis of what both social and ecological systems need. Logics of Value offer a view of the countryside with abundant technology, but not necessarily people. On the other hand Logics of Place use people as their starting point. Logics

of Place are likely to act at the local level, and potentially resist changes brought about by Logics of Value or Logics of Productivism, and ensure rural communities are re-embedded in overarching changes. The presence of these logics are both grassroots and top-down as the regulation report draws out the potential for management based regulations, alongside rule based and outcome based, with each benefitting a particular logic.

4.5.3 Logics of Productivism

On the other hand the invasion of Ukraine on 24th February 2022 raised completely different challenges due to Ukraine's critical role in food supply, Russia's role in energy production, and the general anxiety around all types of security.

The price of gas from 24th February until 4th March increased fourfold, and while the UK only imports 4% of its gas directly from Russia, the knock-on effects from Europe where it sources the majority of its gas imports have been severe (Davies, 2022; Knox, 2022; Lonsdale, 2022). Europe sources 40% of its gas from Russia and has been unable to switch its supply chains in the face of calls for greater sanctions (Davies, 2022). This increase has had an impact on the economics of running a business, however, it is also likely to impact farmers more directly. Natural gas is a major component of nitrogen fertilisers and any knock-on effects in terms of price is likely to ensure farmers cannot purchase fertiliser in the quantity they had planned. This may not necessarily be a poor outcome for the rural environment as overuse of fertiliser is a concern, however, it places greater strain on already struggling land managers, and potentially changes the calculations through which land use planning is conducted.

In January 2020 Emerging Europe called Ukraine the "breadbasket of Europe" as the "third largest supplier of agricultural produce to the EU" between 2018 and 2019 behind only Brazil and the US (Emerging Europe, 2020). The country exported 31.1 million tonnes of grain between July 2019-2020 and is the world's leading producer

of sunflower oil and seed, as well as producing significant quantities of soybeans and potatoes (Emerging Europe, 2020). In response to this, the UKG argued that the "UK has a highly resilient food supply chain" and that "food import dependence on the Eastern European region is very low, so Defra does not expect any significant direct impact… on UK food supply"(Defra, 2022) . The key term here is direct, if the harvest is disrupted in Ukraine, as seems likely, this is going to have a knock-on effect on the global market and those that do source directly from Ukraine will require produce from elsewhere, increasing the prices of the UK imports and reducing the supply. Similarly, the directness is a red herring as Ukraine is likely to contribute to the industry producing agricultural feed through its grain exports, increases in prices in feed will similarly increase prices for farmers, and consumers (Clarke, 2022; National Farmers Union, 2022). The invasion of Ukraine has precipitated in a cost of living crisis which had been building in the UK for some time, farmers and land managers will not be immune to this, were already struggling prior, and indeed are affected more directly (Heron, McAreavey and Attorp, 2023).

The response to the invasion of Ukraine from influential actors within rural environmental governance across the UK has been a return to productivist discourse focusing on food security. The National Farmers Union Scotland went as far to as call for a moratorium on any schemes that take land out of production (Carruth, 2022). This was re-iterated by the National Farmers Union who stated that the real danger was the farmers decided to "produce less food" due to the both the investment risks and increasing costs (Meierhans, 2022). The focus of the UKG has been on global food security arguing that the invasion has taken "food off the world's table" (Channon, 2022; Woodward, 2022). This has been a difficult ground for productivist discourse in the past, feeling much more at home when reinforcing domestic food security (Murdoch, 1995; Ward and Murdoch, 1997). However, productivist views of food security have not dominated the food security debate.

National governments, as well as the European Commission have instead focused on the crisis of food affordability, rather than availability. Food affordability cannot solved by increases in production supported by the taxpayer, the typical productivist solution (Manning, 2022).

4.6 Conclusion

The four logics identified in this chapter, in particular the hegemonic Logics of Value, are driving the UK Brexit process of transforming rural environmental governance at the UK level, and in England. Given the role that the UKG plays in the UK governance structure and its dominance in terms of policy development, funding decisions, and international presence these logics will have a strong influence on NI rural environmental governance.

However, as shown in Chapter 1 Logics of Productivism are more deeply embedded in NI rural discourse, and the influence of neoliberal discourse has encouraged an increase in yield for export, rather than focussing more narrowly on efficiencies or even adapting to the market, rather they have sought new markets for existing production. Further, NI farmers overall are less profitable than English farmers which increases risks with any profound changes. This may result in a similar discourse emerging regarding the production of natural capital, however, the combination of the two may result in something else entirely. The convergence of Brexit with the twin crises of Covid-19 and the invasion of Ukraine has also provided an opportunity to consider the resilience of the emerging logics and demonstrates that neoliberal discourse remains resilient as hegemonic within the rural environmental governance regime despite valid criticism.

In England the Logics of Value have essentially created the beginnings of, or the development of, a neoliberal system of rural environmental governance. This is a trajectory deeply embedded in the UKG's history, and their approach to rural development and agriculture policy while in the EU as shown in Chapter 1. What is

interesting is that this approach is essentially about the structures put in place, such as regulations and incentives. Much of the delivery mechanisms such as the focus on data, technology, on mapping, are also a function of other logics, therefore, it may be easier to switch between logics with new incentives, new regulations, and new structures, than is easier to transition from productivism to neoliberalism.

Finally, this chapter has offered an outline of the logics and their imagined practices. There is much more research to be done in this area, how these schemes are envisaged to work practically including analysis of the tools used to value natural capital, of which there are many. Of course, further research will include analysis of these schemes as they come into play, and how practices in the field is reflected by these imagined practices. This will also determine the future antagonism between logics as it has been identified that some nodes of delivery overlap with key differences being the form of incentivisation and regulation.

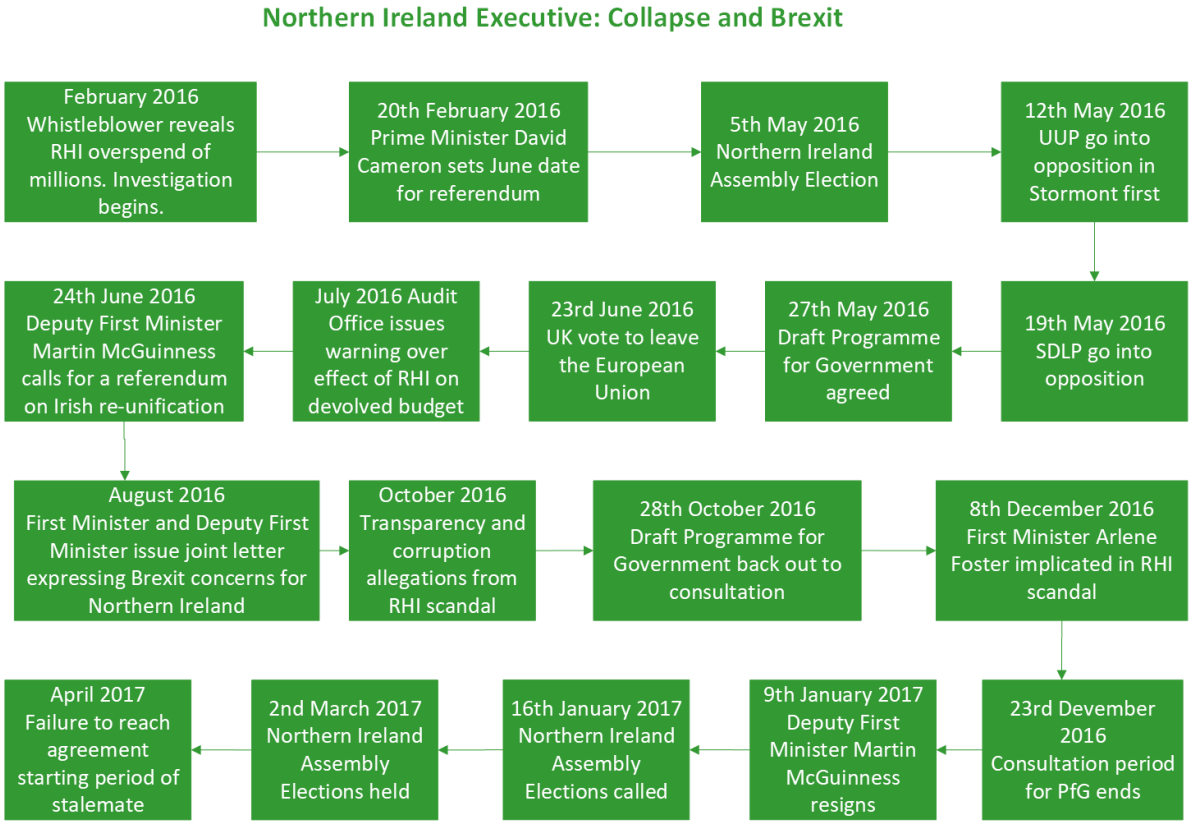
The ELM schemes anticipates a very large increase in uptake, and one that has yet to emerge. Should this scheme fail to meet its targeted membership there could be severe consequences for this approach, and provide opportunities for other logics to come to the fore. If the ELM fails to support the number of farmers it aims to support, that may mean massive reductions in the budget, with knock on effects for devolved governments, as well as land abandonment or poor environmental outcomes. The latter, due to the governments legally binding net-zero targets, may force the government to adopt a new approach, driven by logics of planning, or may inspire local communities, supported by government, to take the lead, driven by logics of place. Or given the pressures placed on the UK food system by the crises of Covid-19 and Ukraine, a return to logics of productivism is possible.

Chapter 5 – Becoming Hegemonic in the Absence of Government

5. 1 Introduction

The context in which NI manoeuvred the Brexit process is extremely important as discussed in Chapter 1 and 2, however, the circumstances and timing of the NI Executives collapse is a critical component of this story.

Figure 5.1 A timeline of Brexit and the collapse of power-sharing in NI



Source: Authors own

Figure 5.1 shows the events preceding and causing the collapse of the power-sharing government in NI in January 2017. These events can be divided into three processes: the Brexit referendum and responses to it, the establishment of a new government after the NI Assembly elections in May 2016, and the RHI scandal implicating senior members of the DUP. After suffering setbacks that saw Sinn Féin and the DUP emerge as clear winners in the election the second placed parties for both unionist

and nationalist designations, the Social Democratic Labour Party (SDLP) and the Ulster Unionist Party (UUP), along with the non-designated Alliance Party, decided to go into opposition, a first for the NI power-sharing system (Miller, 2016; Whyte, 2016).

Sinn Féin and the DUP proceeded to form an Executive without them, importantly this Executive took on a new form. As a part of the Stormont House Agreement to restore devolution in 2015 the NI Executive was reduced from twelve departments to nine (Villiers, 2014). This shift included the formation of the Department of Agriculture, Environment and Rural Affairs (DAERA) from the merging of the Department of Agriculture and Rural Development (DARD) and Department of the Environment (DOE) (DAERA, 2016a). The minister of this new department in 2016 was the DUP's Michelle McIlveen, while the previous DARD Minister, Sinn Féin's, Michelle O'Neill moved to Minister of Health, and former DOE Minister, SLDPs, Mark Durkan moved into opposition (Buckler, 2016; McIlveen, 2017). The move to amalgamate departments was ostensibly about efficiency however, that it was suggested the department be named the "Department of Agriculture" as it "best encompasses its function" hints that the move which saw the NI Environmental Agency (NIEA) sit within the same ministry as agriculture was motivated by more than mere efficiency (BBC News, 2015; Gordon, 2015). Indeed, the new minister immediately began re-igniting talks for a Memorandum of Understanding (MOU) between the NIEA and the Ulster Farmers Union (UFU), which was quashed by Durkan as Minister of the Environment (Brennan, 2016).

The immediate task of this new, slimmed down, NI Executive was the development of a Programme for Government (PfG), a difficult task in a mandatory coalition. The Draft PfG Framework 2016-21 went out to consultation on 27th May with the consultation due to end on 22nd July (NI Executive, 2016). The 2016-2021 PfG differed significantly to earlier iterations due to its outcomes-based approach. Earlier PfGs committed the Executive to specific agreed-upon actions to address agreed priorities

(NI Executive, 2012). The outcomes based PfG on the other hand established fourteen outcomes that the new Executive wanted to achieve, guidance on how this would be achieved and indicators that would be measured to determine success or failure in meeting this outcome.

In the immediate aftermath of the EU referendum the NI Government responded quickly, establishing stakeholder groups to develop post-Brexit policy (Dobbs, 2022). These groups assisted the government in identifying post-Brexit priorities, as shown by the letter to the Prime Minister referenced in Chapter 2. DAERA in particular was quick off the mark, which was important as the repatriation of powers included significant policies for DAERA such as environment, Climate Change and agriculture (McIlveen, 2017).

Alongside the formation of the new Executive, the development of the PfG, and initial Brexit positioning, a slow burn investigation soon developed into a scandal that brought power-sharing crashing down. The details of this scandal have been covered at length by Sam McBride (2019), however, to cover the issue briefly: in February 2016 whistle-blowers called attention to an overspend running to the millions on a supposed "green energy scheme" the renewable heating incentive (RHI) (BBC News, 2019d). By December, the leader of the DUP Arlene Foster was implicated in the scandal which culminated in January when Martin McGuinness resigned as Deputy First Minister and refused to return to government unless Arlene Foster stood down. Foster refused to stand down and Sinn Féin refused to put forward an alternative which resulted in the NI Executive collapsing on 16th January 2017, with elections called for the 2nd March (BBC News, 2019d).

The election on 2nd March 2017 was different to previous elections as due to the Stormont House Agreement the number of MLAs to be elected was reduced from 108 to 90, meaning that parties were chasing fewer seats and that losses in overall seats for Sinn Féin reflected gains in the proportion of seats (Villiers, 2014; Kelly,

2017). The result of this election was much tighter than the 2016 election. With the reduction in the number of seats this meant that the DUP had 28 seats, and Sinn Féin 27, which has been calculated as a notional loss of 5 and increase of 4 respectively (Kelly, 2017). However, while the election was deemed a significant swing it did not change the two largest parties required to create an Executive, meaning that negotiations carried on until the Executive reformed in January 2020.

Following the collapse of the Executive, as stated earlier, the Brexit stakeholder groups continued, however, the lack of minister meant that no final decisions could be made and any policy work, be they stakeholder groups or consultations, were merely there to inform the minister upon the return to government (Kelly, 2020; Webb, 2020).

This then raises the question, what were the powers available to the civil service to provide NI with a governing body? This very question was the subject of a legal ruling in 2018, nearly a year after the Executive collapsed (McCormack, 2018). The Department for Infrastructure were challenged in court for the decision to grant approval for a waste disposal facility in May 2018, as the court stated that "any matter that would normally go before a minister for approval lies beyond the competence of a senior civil servant in the absence of a minister" (McCormack, 2018). The appeal process for this case was fast-tracked due to its importance for providing clarity for the functioning of government in NI. In the appeal the department stated that the Good Friday Agreement allowed for departments to continue without ministers in post. However, the issue presented was one that would have cut across the departmental remit with DAERA and required to go before the Executive, so the objectors argued (McCormack, 2018). The court of appeal sided with the objectors, thus placing a limiter on civil service decision making. With this limitation in place, how then did government function in NI from 2017 to 2020?

As outlined earlier the 2016 Draft PfG was an attempt at outcome-based government, a growing trend for both governments and regulatory regimes (Black, 2010; Walle and Groeneveld, 2011; Hoque, 2021) . This left the civil service with a "clear direction of travel for the NI Executive" and in June 2018 they were able to create the Outcomes Delivery Plan which "became a key strategic document"(The Executive Office, 2020). This outlined the actions that each department would take to meet the aims of the PFG, primarily an overarching aim of "improving wellbeing for all by tackling disadvantage and driving economic growth." It was under these conditions that the NI Civil Service found itself attempting to maintain the delivery of public service and make decisions around the governance of NI to meet these outcomes, judged by these indicators.

After three years of deadlock a breakthrough in negotiations was found and all five main parties of NI agreed to return to the Executive. The basis of this agreement, the New Decade, New Approach Agreement (NDNA), was a range of financial, cultural, social and environmental commitments made between the parties, and with the UK and Irish Governments (Smith and Coveney, 2020). The returning Executive was made up of all five of the parties which had previously been in government as the opposition returned (Table 5.1 shows the new Executive (Moriarty, 2020)).

Table 5.1 NI Executive 2020-2022

Portfolio	Minister	Party
First Minister	Arlene Foster	DUP
Deputy First Minister	Michelle O'Neill	Sinn Féin
Agriculture, Environment and Rural Affairs	Edwin Poots	DUP
Communities	Deidre Hargey	Sinn Féin
Economy	Diane Dodds	DUP
Education	Peter Weir	DUP
Finance	Conor Murphy	Sinn Féin
Health	Robin Swann	UUP
Infrastructure	Nichola Mallon	SDLP
Justice	Naomi Long	Alliance

Source: Authors own

Politics did not "return to normal" however as just two months after the Executive returned the global coronavirus pandemic started to have its first impacts in the UK resulting in a twelve-week lockdown in which most workplaces were closed, most social or outside of workplace interaction was banned, and the machinery of government was focused on providing support and maintaining the function of the health service. During this time, and much of the time since, the majority policy development took place virtually and the gears moved more slowly due to increased pressure. The coronavirus pandemic also challenged expectations and whether we should return to normal at all. Indeed, it was argued by some that the pandemic, and the recovery from it would be an opportunity to reshape the economy to one that was more socially and environmentally focused, to "build back better" or the "green economic recovery"(Addison, 2020; Fairbairn and McGowan, 2020). During the pandemic, the deadline for Brexit preparations were also fast approaching with the UK leaving the EU on 31st December 2021.

During this period politics in NI continued to be tumultuous, particularly for the DUP. The NI Protocol had seen fierce opposition from unionists in NI. Unionists argued that it created a border down the Irish Sea, and it threatened their constitutional identity. There had been frequent protests and refusals to implement the protocol. In April 2021 Arlene Foster was blamed by the party for her role in the NI Protocol, and she was removed from the leadership of the DUP after MLAs and MPs signed a letter of no confidence (Carroll, 2021). This led to a period of unrest which saw the DUP elect then depose Edwin Poots as leader in a matter of months resulting in the DUP electing Sir Jeffrey Donaldson as leader (ITV News, 2021). The Executive continued on with Paul Givan as First Minister and Poots in DAERA until February 2022 when Paul Givan quit as First Minister in protest at the NI Protocol (O'Carroll, 2022). With an election approaching in May the departments continued

to operate in a restricted capacity and all but the First and Deputy First Ministers kept their portfolio.

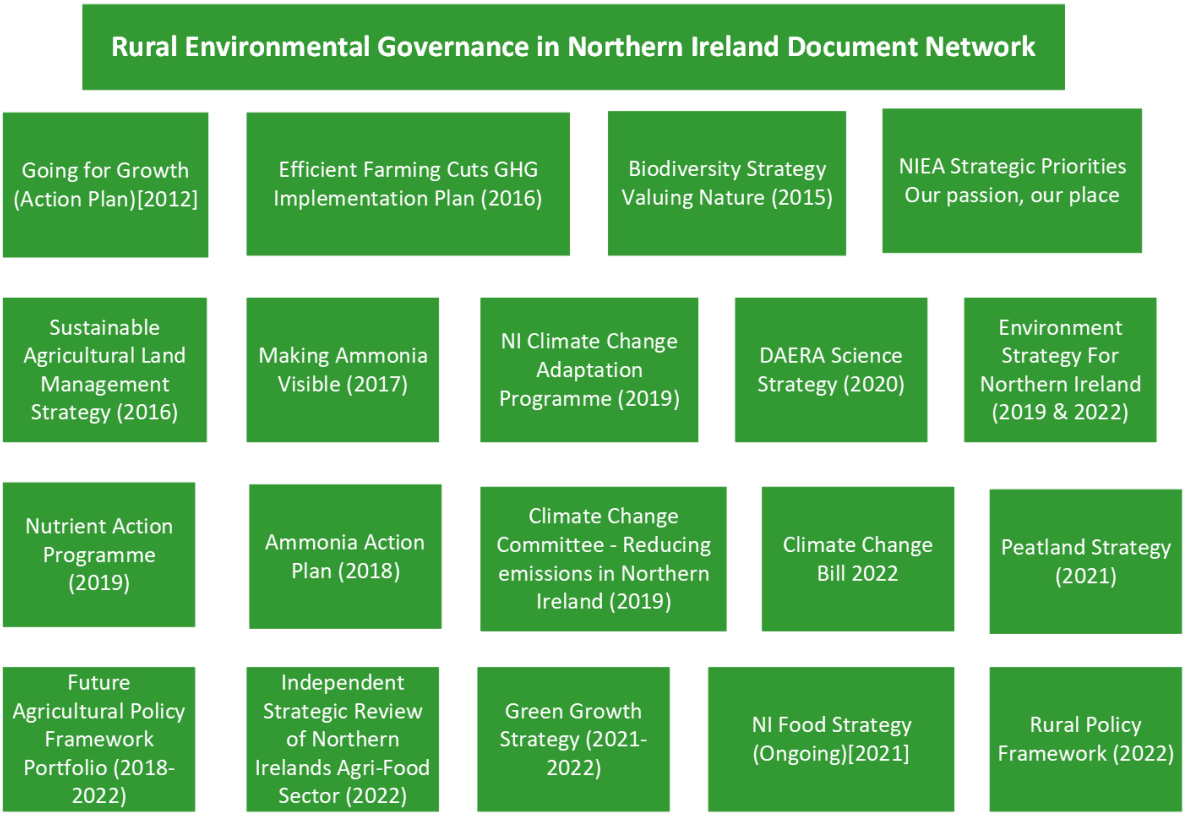
This chapter will begin a sequence of chapters (5, 6 and 7) which will describe, analyse and critique the politics of rural environmental governance during the 2016 to 2022 period in NI. This will build on the previous theoretical and empirical chapters 2 through 4 which situated NI's governance in relation to the UK and will allow a further exploration of the effects of this. This chapter will analyse the policy process during this period, considering the differences between the collapse and post-collapse period, integrating the role of the UK as illustrated in the previous chapters, and identifying competing discourses attempting to shape rural environmental governance in NI.

5.2 A network of Rural Environmental Governance in NI

In order to identify the drivers of rural environmental governance in NI, as well as identify the shape of rural environmental governance in NI post-Brexit amid the complex tapestry of NI devolved government's collapse, absence and return, a wide range of data was collected. This included interviews, government consultations, consultation responses, select/assembly committee reports and evidence sessions, policy briefings and manifestos. The bulk of the analysis has been taken from a network of reports, consultations and strategies illustrated in Figure 5.2 These reports were collected into a network of documents which together form a vision for rural environmental governance in NI, with many of them identified by DAERA in the Environment Strategy Consultation 2018. This mirrors the exercise carried out in in Chapter 4 for England. The data from this network is supplemented by the interviews detailed in Table 1.3 in Chapter 1, evidence to parliamentary committees and additional data, such as ethnographic observations from attendance at events held by political actors, which provide an important insight into the positions of different actors, and allow access to their imagined practices. The role of

parliamentary committees in the post-Brexit process has been an even more crucial where NI is concerned.

Figure 5. 2 NI rural environmental governance document network



Source: (authors own)

Due to the collapse of the Executive NI was significantly under-represented politically in the formalisation of Brexit, and the work of NICS departments in developing policy lacked the scrutiny normally provided by the assembly committees (DAERA Brexit Team, 2017a). Partially filling this role was the NI Affairs Committee in Westminster which carried out inquiries regarding "Brexit and NI", "Agriculture" and "The land border between NI and Ireland" (UK Parliament, 2019). These committees were important opportunities for policy actors to make their views heard with Parliament and Government, and potentially increase pressure on the NICS. Further to these, since the return of the Executive, the Assembly and its Committees have returned and scrutinise the work of the Executive providing useful

data. Finally, data which was not publicly available during the collapse of the Executive has been obtained via freedom of information requests regarding the post-Brexit vote working groups, including internal presentations from DAERA and Terms of Reference for each of the stakeholder groups (environment, rural and trade and agriculture). This access was limited by DAERA in relation to the Trade and Agriculture Committee (TAC) for three reasons: that disclosure could weaken the negotiating position with the EU, that it would damage relations between the devolved governments and the UKG and that policies were still being formulated (Robb, 2021). It was highlighted that the TAC is a place for "frank and open discussions" and disclosure would breach trust with key stakeholders and limit future productive collaboration, as it would "inhibit the debate of live policy issues freely and frankly in private" (Robb, 2021). However, the same "frank" discussion applied to both environment and rural society stakeholder groups, as did discussions about and including other devolved governments and UKG. The first reason in relation to trade negotiations with the EU is fair, however, it is likely that discussions on trade could have been redacted. It is more likely that the policy discussions would be received negatively, or discussions in private did not reflect discussions publicly and that this is an attempt to hide this. This highlights that hierarchal nature of the working groups which will be discussed in section 5.3.2.

5.3 NI Brexit process

As detailed extensively in Chapter 1 the context in which the Brexit process occurred in NI was immensely complicated, and any analysis of the Brexit process must take this context as its starting point. To address this and further develop an analysis of the politics of rural environmental governance during this period this chapter will proceed by mirroring section 1.1.3 in Chapter 1 which established the context of NI's Brexit process; Brexit and Collapse 2016-2017, Governing without an Executive 2017-2020, and The Executive Returns 2020-2022. Finally, it will outline the politics

shaping rural environmental governance during this period, particularly around the key documents as outlined in Figure 5.2.

5.3.1 Brexit and Collapse 2016-2017

This period was marked by two distinct separate processes, the development of the PfG and the development of post-Brexit policy. These are both important as the prior set the policy goals for the NICS after the Executive's collapse, while the latter allowed the minister to initiate an early discussion of policy which the NICS could continue, although in restricted fashion. It is also important that these processes were almost completely separate as the lack of Brexit in the PfG tied the hands of the NICS because without political guidance in the PfG they could not contribute to the process directly.

5.3.1.1 The Brexit Process

After the Brexit vote DAERA began preparations with the formation of the Brexit Consultative Committee (BCC), see Table 5.2, (DAERA, 2016d; Northern Ireland Affairs Select Committee, 2018). The work of the BCC proved crucial in providing the Executive with a position on Brexit issues as shown in Chapter 1 as they provided Foster and McGuinness with the information that informed the joint letter to the Prime Minister Theresa May laying out NI's concerns about the future of NI after Brexit (Foster and McGuinness, 2016).

Table 5. 2 Brexit Consultative Committee

Agri-Food Strategy Board
NI Food & Drink Association
EU Agri-Markets Task Force
NI Meat Exporters Association
Ulster Farmers' Union
Anglo North Irish Fish Producers Organisation
Moy Park
NI Grain Trade Association
Dairy UK (NI)
NI Agricultural Producers Association
NI Environment Link

Source: (DAERA, 2016d)

The BCC formalised a policy network which existed in NI prior to the Brexit vote, the members of which were largely responsible for NI's agriculture policy, and an export orientated industry through production of strategies such as GfG (Agri-Food Strategy Board, 2013). NI Environment Link represented environmental interests as a lonely voice, and NI Agricultural Producers Organisation, largely representing hill farmers, were included even though they were not normally integrated within that policy network (Carmichael, 2020). The BCC provided insight and direction for the de-europeanisation of repatriated policy within DAERAs remit.

The membership of the BCC makes clear the priorities post-Brexit, and the voices that will be most heard, that of the agri-food industry. When looking at Table 5.2 it is important to remember that NIFDA, Agri-Food Strategy Board, and the EU Agri-Markets Task Force are collective bodies made up of agri-food industry organisations with memberships that overlap and include other members of the BCC (Carmichael, 2020). Via this route the agri-food industry was vastly over-represented in comparison to other interests such as the environment which was represented by a single collective body, NIEL. Indeed, farmers have criticised this approach in environmental discussions where they claim the environment is over-represented when any organisation other than NIEL is present (Carmichael, 2020). In addition to this there was a complete absence of any group that represents rural communities in a non-agricultural way, for example RCN and forestry interests are absent, this demonstrates the clear focus of the immediate post-Brexit period, as well as DAERA buying into the UFU claim that they also represent rural life rather than just one form of rural activity (Anonymous, 2019a; Anonymous, 2020).

During this time, the assembly Agriculture, Environment and Rural Affairs committee also formed a crucial component of NI's Brexit preparation by hosting sessions where stakeholder organisations could submit evidence across agriculture,

environmental and rural policy. The committee allowed for a wider of variety of interests to be heard than the BCC in the immediate post-referendum period calling sessions focussing on agriculture, the environment and rural affairs, see Table 5.3.

Table 5. 3 AERA Committee Brexit Evidence Sessions

Agriculture	Environment	Rural Affairs
UFU	NIEL	NI Rural Women's Network
NIAPA	RSPB	RCN
	Ulster Wildlife	Rural Development Council

Source: (Northern Ireland Assembly, 2017)

They also called in department officials to ensure that a robust policy making process was established and that NI would be best placed to take advantage of Brexit (Northern Ireland Assembly, 2017). The collapse of the assembly is particularly important as it may have limited the political access of these alternative voices which may have provided a counterpoint to the agri-food focused policy network.

5.3.1.2 The Programme for Government

As stated in Chapter 1 the 2016-2021 PfG differed significantly to earlier iterations due to its outcomes-based approach. The initial pre-consultation PfG established 14 outcomes (Table 5.4) that the new Executive wanted to achieve.

Table 5. 4 NI's 14 outcomes for the 2016-2021 draft PfG

No.	Outcome	No.	Outcome
O1	We prosper through a strong, competitive, (regionally balanced) economy	O8	We care for others and we help those in need
O2	We live and work sustainably, protecting the environment	O9	We are a shared society that respects diversity
O3	We have a more equal society	O10	We are a confident, welcoming, outward-looking society
O4	We enjoy long, healthy, active lives	O11	We have high quality public services
O5	We are an innovative, creative society where people can fulfil their potential	O12	We have created a place where people want to live and work, to visit and invest
O6	We have more people working in better jobs	O13	We connect people and opportunities through our infrastructure
O7	We have a safe community where we respect the law, and each other	O14	We give our children and young people the best start in life

Source: (Northern Ireland Executive, 2016b)

The 14 outcomes are all articulated at a high level and are generally desires shared by societies across the world so the important component is how the PfG argues this can be achieved, and how a successful outcome is determined. At a lower level of articulation, the outcome is transformed into a series of demands or actions. For example, the most relevant outcome for this thesis, O2, includes the action "Protecting the natural and built environment". To determine the successful application of this action there are a series of indicators which accompany them. The indicator for O2 includes "increasing environmental sustainability" which is then measured at the lowest level of abstraction using measure 29 "Greenhouse Gas Emissions" (Northern Ireland, 2016b)

This approach to measurement was criticised across the board as too simplistic, while GhG Emissions as a lone measurement of environmental sustainability was

specifically picked out for its inability to capture the full range of environmental issues, in particular water quality, biodiversity and natural capital (Northern Ireland Executive, 2016c). The October draft PfG included a new water quality indicator, and a note stating that a biodiversity indicator was being developed as well as a delivery plan for each indicator including commitments to government action and was put out for consultation with a closing date of the 23 December 2016, which due to political turmoil was the end of the road (Northern Ireland Executive, 2016b).

The key differences between the previous form of PfG and the outcome orientated form are the lack of commitments or targets in the latter (Northern Ireland Executive, 2012b, 2016b). Indeed, the lack of commitments in terms of government action and budgeting at the initial Executive formation is part of the attraction as it allows for greater management within the department, increasing the problematic silo approach yet limiting political disagreement or room for controversy. The approach is not wholly different as each of the measures include delivery plans which include government commitments; however, these are determined at the department level rather than negotiated during Executive formation. In addition to this, the removal of targets from the PfG represents a stark difference, particularly with biodiversity acting as an example. In the 2011-2016 PfG there was a commitment to halt biodiversity loss by 2020 (Northern Ireland Executive, 2012b). In this iteration of the PfG biodiversity loss was not mentioned whatsoever, and once it was included an indicator required development as opposed to the existing biodiversity targets which the government had failed to meet previously. This development demonstrated the governments weakening commitment to halting biodiversity loss. This approach to governance has both positive and negative components for the Northern Irish Civil Service (NICS) governing without an Executive: on the one hand, the development of delivery plans and indicators allows for the NICS to continue policies or actions which are in line with these. On the other

hand, previous PfGs included agreed commitments and policies which the NICS may have been able to pursue more fully. Therefore, the PfG approach would allow for governance to continue yet less ambitiously than if a government had been in place.

Crucially for the future of governance in NI, Brexit was mentioned in the updated text in a very limited manner (Northern Ireland Executive, 2016b). This is due to the nature of the PfG in that there was no need to put forward an agreed commitment as each department would deal with the outworkings of Brexit in relation to the agreed outcomes of the PfG. In addition to this, this absence demonstrated the inability of the two Executive parties to agree on the issue of Brexit. It was only mentioned in the introduction with regards to protecting NI's interests and recognising the benefits of North/South cooperation. To have not placed the issue as a central change in context in or to be considered as a special priority is a particularly missed opportunity given the centrality the document would take in the coming years (Northern Ireland Executive, 2016b). The absence of a programme for government that mentioned Brexit beyond the desire to protect NI's interests and recognise the benefits of North/South cooperation demonstrates the limited margins within which the civil service could manoeuvre. With the normal rules of the game no longer in operation, how then did NI continue to be governed without an Executive?

5.3.2 Governing without an Executive - 2017-2020

The period between 2017 and 2020 in which NI was governed without an Executive is marked by three distinct operations, the first is regular governance of NI by the NICS, the second is the development of post-Brexit policy, and the third, connected to the first and second, was the rare intervention of the UKG.

5.3.2.1 NICS Governance

The actions of NICS during this period were directed by the 2016 draft PfG which was developed into the "Outcome Delivery Plan" in 2018 (The Executive Office,

2018). Additionally, Chapter 1 highlighted the limitations placed on NICS action as determined by the courts, that NICS could not act on an issue which would normally be required to go before the Executive, meaning an issue that cut across departments. Due to this limitation the key development during this period was the finalisation of the biodiversity indicator. Biodiversity was to be judged by the percentage of protected areas that were "under favourable management" (Small, 2017). This highlights a limitation of the outcome approach as being "under favourable management," for example, taking part in an agri-environment scheme is not an outcome, it is an action. This limits the scope for scrutiny of government action and the potential for action. In addition to this, the focus on departmental remits was beneficial for NICS as Northern Irish Environment Agency were able so sign a memorandum of understanding (MOU) with the Ulsters Farmers Union (UFU), which as previously noted was struck down by the Minister for the Environment in 2015. With the encouragement of the 2016 DAERA Minister talks restarted between the two despite the original 2015 proposal was found by the commission to breach environmental regulations (Manley, 2015; Brennan, Purdy and Hjerp, 2017). The 2017 MOU caveats the proposals around cross compliance by requiring engagement with the European Commission to seek approval for a new approach. In a post-Brexit landscape this indicates the approach taken to rural environmental governance by the NIEA will be more lenient (Manley, 2015; NIEA and UFU, 2017). Although this approach by the NICS was consistent with both the views of the previous minister the lack of scrutiny via the assembly or ministers demonstrates that this period was also an opportunity.

5.3.3 Delivering Brexit in the absence of an Executive

The actions of the civil service above relate to the normal operation of the government, but Brexit was far from the normal with large swathes of powers being repatriated. While it may have been possible for the civil service to make decisions regarding post-Brexit policy within the framework provided by the PfG, the areas

being repatriated to DAERA included both new policy, which needed to be signed off by a minister, and discussion which cut across departments and required discussion in the Executive.

To work around this, with no end to political stalemate in sight, DAERA wrote potential policies based on the PfG and previous government policy. The civil service was not working in isolation as they developed post-Brexit policy. DAERA identified stakeholders to work with during the absence of the Executive, taking these from existing groups, and groups that did not survive the fall of Stormont such as the BCC (Anonymous, 2019b). The committee stopped meeting after power-sharing collapse and the future role of the group was to be decided by ministers upon their return. Sector specific groups that did not cut across departments, were established to support DAERA in policy development in July 2017 (see Table 5.5).

Table 5. 5 DAERA Stakeholder Group Membership

Trade and Agriculture	Environment	Rural Society
Anglo North Irish Fish Producers Organisation (ANIFPO)	NI Environment Link (NIEL)	Causeway Coast & Glens Council
Dairy UK (NI)	Ulster Wildlife	Fermanagh & Omagh District Council
Moy Park	Royal Society for the Protection of Birds (RSPB)	Mid & East Antrim Borough Council
NI Agricultural Producers Association (NIAPA)	Council for Nature Conservation & the Countryside (CNCC)	Mid Ulster District Council
NI Environment Link (NIEL)	Ulster Farmers Union (UFU)	Newry Mourne and Down District Council
NI Food and Drink Association (NIFDA)	Business in the Community NI	Rural Community Network (RCN)
NI Grain Trade Association (NIGTA)	Queen's University Belfast (QUB)	NI Council for Voluntary Action (NICVA)
NI Meat Exporters Association (NIMEA)	NI Water	
NI Pork and Bacon Forum	The Chartered Institution of Waste Management (CIWM)	
Ulster Farmers' Union (UFU)	National Trust	

Source: (Obtained via FOI)

It is worth remarking again, like the BCC, alternative voices are limited on the topic of Trade and Agriculture with only NIEL representing a non-agri-food voice. Indeed, the importance given to each group varied with the Terms of Reference for the Trade and Agriculture Committee (TAC) giving members the purpose of providing "advice to DAERA in respect of development of future domestic agricultural policy" while the Environment Stakeholder Group [6] was given the role of a "sounding board" and "quality assurance" (DAERA Brexit Team, 2017d, 2017c). While the secrecy with which DAERA have held onto the minutes of the TAC makes certainty impossible, it is likely that the most serious political discussions occurred there. On the other hand the Environment Stakeholder Group (ESG) rarely discussed future agricultural policy in a focused way, and instead were invited into a joint workshop with the TAC where an agenda had already been set (DAERA Brexit Team, 2017b). A clue to this relative importance is that the UFU were quite often absent from the ESG.

NIEL as the lone environmental representatives on the TAC were forced into bilateral discussions with TAC members to improve an agri-food heavy process, with limited success (Kelly, 2020; Martin, 2020). This policymaking system is similar to that for the development of Going for Growth as noted by Attorp and McAreavey (2020) with the domination of the agri-food sector, there is a transformed exceptionalism rather than a tense exceptionalism within the limited remit of the Trade and Agriculture Committee. However, it must be recognised that policy affecting agriculture is not just capital A agriculture policy, and this challenge is explored with relation to climate policy in Chapter 7.

It was these groups which supported the department in writing future policy, however, they grew frustrated with the conservative approach of the NICS with the

[6] Even a comparison of the two names alludes to hierarchy with the TAC being a Committee while the ESG was merely a stakeholder group. This may be an effect of DAERA's Brexit Division sitting within the Food and Farming Group.

UFU revealing the existence of a post-Brexit agriculture policy in the House of Lords in order to pressure the NICS to consult them (Logan, 2018). Indeed, it was remarked at several times that the lack of an assembly or minister was reason to limit the ambition of post-Brexit policy (DAERA Brexit Team, 2017a, 2017b, 2017e). When they eventually did release policy proposals, they could not be called policy consultations, and instead were referred to as discussion documents or for agriculture the "Future Agricultural Policy Framework". They were put out to discussion on the basis that they were advisory and any future policy would be set out by the minister for that department, and the Executive as a whole when they returned (DAERA, 2018; 2019a).

Finally, Defra attempted to influence NI's post-Brexit policy through these groups. A particular example of this is the issue of natural capital and the role of Michael Gove. As shown in Chapter 4 natural capital emerged as the central organising signifier for England's post-Brexit environmental governance. The strongest advocate for this during his time as the Minister at Defra, Michael Gove attempted to spread the concept across the UK taking it so far as to attend stakeholder meetings with copies of Dieter Helm's book Natural Capital (Kelly, 2020). This is evidence of an attempt to influence the discourse of policy in NI, and it was not without its successes. The ENGO sector in NI were advocates of both natural capital and public money for public goods and pushed to have this in post-Brexit policy (Nature Matters NI, 2018; Kelly, 2020; Martin, 2020). Rather than forming the centrepiece of the policy however, natural capital was left at the fringes as a potentially innovative policy whose time had not yet come (DAERA, 2021a, DAERA, 2021d). Gove's overtures, and the influence of ENGOs through the stakeholder groups, meant that Natural Capital accounting would be considered in the future, however, the future of policy in NI required the return of the Executive. The period was marked by significant policy work occurring behind closed doors and an increase in public engagement on policies that were consulted on, however, this was juxtaposed with a lack of

accountability and failing ambition with policies stagnating at the latter stages as the Executive showed no return in sight.

5.3.4 Discursive and legal power at Westminster

As has been shown in Chapters 1 and 2 the UKG were reluctant to make policy for NI and did so to only allow a future NI Executive to extend elements of the Environment Act to NI. This presented a problem as an Executive return was by no means guaranteed and this approach ran the risk of the emergence of a governance gap in NI. However, it also demonstrated the position that these issues were devolved issues and should be determined by the people of NI, and that the UKG should no longer operate unilaterally in NI. That the UKG only exercised its legal power in this limited way demonstrates that the power of the UKG was not within dimension one, leaving only dimensions two and three, the power to not make decisions and agenda setting, i.e. policy production.

This power was limited however, as post-Brexit NI had policy areas where there were already existing strong policy networks or deeply embedded discourses. Two examples are particularly illustrative of both the extent of this power, and the limitations. As stated previously the UK's approach to Brexit left a gap in the governance architecture of the UK, most notably the CJEU. As discussed in chapter 2 in an effort to fill this gap the UK proposed the Office of Environmental Protection with the option that it would cover the whole of the UK (Eustice and Lord Goldsmith of Richmond Park, 2021). This was rejected by Wales and Scotland who had their own post-Brexit plans, and had relatively advanced environmental governance regimes of their own prior to Brexit, particularly Wales (Eustice and Lord Goldsmith of Richmond Park, 2021; Reid, 2021).

NI on the other hand, as noted throughout this thesis, has a history of environmental governance failure. As discussed in chapter 2 the institutional architecture of environmental governance in NI is a contentious subject with the NI Environment

Agency frequently criticised for its lack of independence, and two previous attempts to create an IEPA failing (C. Brennan, Purdy and Hjerp, 2017). It is likely that this history of failure, the contentiousness of the issue, and the importance of filling the governance gap combined with inability to make these important decisions without an Executive to effectively force the hand of the civil service to request inclusion within the remit of the OEP on the basis that a minister could reverse this decision.

The development of a post-Brexit agriculture policy was never considered as a reserved issue, and inclusion with the UKG legislation only went as far so to allow continuing payments at the level of CAP until a transition to post-Brexit policy could be made. This could be because of the very different approaches to a post-CAP policy even expressed in the latter months of 2016 prior to power-sharing's collapse alongside the attitude towards the repatriation of powers taken by Scotland and Wales as shown in Chapter 2. However, it could also be a result of the different policy networks in England and NI with very different problematisations of the CAP drawing from the different histories of the industry, and power held by the industry. NI operated in uncertainty, and the longer Stormont was absent the greater the challenge upon its return, particularly to adapt these solutions to NI.

5.3.5 The Executive Returns

The return of the Executive as part of the NDNA Agreement meant continuity for DAERA as the DUP again held the department with new Minister Edwin Poots. Upon his installation there was a flurry of activity within DAERA as they used the work that was carried out during the previous years to release policy consultations. Figure 5.2 shows these, however, to reiterate consultations and policies were released for the following: an agricultural policy framework portfolio, a draft environment strategy, an approach to environmental governance, a green growth strategy, a NI food strategy, a rural policy framework and a climate bill. This was a significant body of work, and that they were able to produce these so quickly after

the return of the Executive demonstrates how hegemonic existing discourses are, as civil servants can effectively reproduce them without political influence (Griggs and Howarth, 2013; Griggs and Howarth, 2017).

It is simultaneously true that, where there is a hegemonic discourse, policy will resist change despite political influence (Glynos and Howarth, 2007; Howarth, 2013). This can be observed through the agreement to both an independent environmental protection agency and a Climate Change Bill. For both of these commitments in NDNA, the DUP Minister, Edwin Poots, dragged his feet when it came to implementation due to the impact it may have on farmers (AgendaNI, 2021). Indeed, the department failed to create an IEPA prior to the latest collapse of power sharing in February 2022, and the election in May 2022. The commitment to climate legislation was implemented due to the introduction of a competing climate bill to the assembly by Green Party MLA Clare Bailey (Macauley, 2021c; McCormack, 2022). That this forced the hand of the department to produce the climate bill they had committed to is interesting as Bailey's climate bill would have required significant changes to the agricultural sector. This will be detailed and analysed further in Chapter 7, however, it is relevant to this section as it demonstrates that hegemonic discourses can be deployed to resist change by slowing action as well taking decisive action. In addition it demonstrated the role of the assembly as a counterpoint to Government which had been lacking over the last three years.

Up to this point this chapter has sought to illustrate how volatile NI's governance has been since the Brexit vote, explained this, and an presented an analysis of the practical effects this has had on the post-Brexit process. The previous section has highlighted the differences in how NI was governed across three periods which is an important consideration for the second half of this chapter which considers the specific politics of rural environmental governance during these three periods. The next section will analyse the emergence of Sustainable Productivism as a hegemonic discourse during this period and considers the development of rural environmental

governance policy post-Brexit in NI, utilising the data outlined in Figure 5.2 and the data section.

5.4 Discussion

5.4.1 Problematising the CAP

The history of the CAP has been one of problematisation and adaptation. This act of problematisation has occurred at each level of the Europeanised political sphere, including in NI. As in the case of England, Logics of Principle were identified as a failure for NI, an example of this criticism taking centre stage in the NIEA-UFU MOU as the NIEA criticised the way they were required to enforce cross compliance (NIEA and UFU, 2017; DAERA, 2018). The difference between the problematisations in NI and the UKG is the logic driving criticism and the resulting hegemonic logic. As shown in Chapter 4 the UKG argued that the CAP restricted the operation of the marketplace and the ability of businesses to extract the full value of their resources. On the other hand, the problematisation in NI focused on restrictions placed on the freedoms of farmers to produce food and care for the land in a way that they felt was sustainable, this is much closer to Logics of Productivism and relates to the institutionalised exceptionalism in NI agriculture policy networks. That is not to say that the logics of rural environmental governance have not been affected by the engagement with sustainability.

5.4.2 Logic of Productivism

The fundamental demand within productivist logics is food security and the increase of yields whether they are wheat, milk, beef or any other food product (Dibden, Potter and Cocklin, 2009; Erjavec and Erjavec, 2009). This drove a huge increase in the number of livestock on the land. The observed shift from productivism to neo-liberalism transformed "increasing productivity" into an abstract economic concept with the aim to reduce inputs for equal or greater outputs (Dibden, Potter and

Cocklin, 2009) It turned the farm into any other business attempting to achieve economic success rather than contributing towards a wider goal of food security or a wider economic strategy. The Logics of Value in the previous chapter are a part of this shift as it encourages farmers who cannot make a profit from livestock, or other agricultural goods, but could produce environmental public goods to do so. This may result in those farmers reducing their stocking rates in order to maximise profit from environmental goods and reducing costs from unprofitable livestock.

NI on the other hand has an economic strategy which places the agri-food industry at the centre of the region's growth (Agri-Food Strategy Board, 2013; DfE, 2017). The industry is export orientated with a government-endorsed industry strategy aiming to massively increase productivity having been in place since 2012 (Northern Ireland Executive, 2012a; Agri-Food Strategy Board, 2013; DfE, 2017). Productivity here can be seen as both focusing on increases in yields and profitability as Going for Growth laments that the cow herds were still 20% below peak levels in 1990 and breeding ewes have improved by 5% in 2012 after falling by 30% over the last decade (Agri-Food Strategy Board, 2013). This offers an insight into the difference between this strategy and sustainable intensification. Where sustainable intensification allows for land sparing in areas where the land is unproductive, this approach laments removal of any land from productive use. The strategy seeks to improve secure increases in both output and efficiency, and this is still at the root of the government approach with further strategies in reports hoping to replicate the successes of poultry for the livestock industry (Expert Working Group on Sustainable Land Management, 2016; DAERA, 2020b). The Sustainable Land Management report, which was embedded in the agri-food sector, sought to increase productivity through a series of win-wins for the economic and environmental pillars of sustainability. As identified in Chapter 4 this is a common refrain of Green Growth discourse, and as NI has developed a Green Growth Strategy it can be mistaken as just another approach. However, as noted above, and shown in Chapter 6, the approach does not seek growth at any

cost, it is instead restricted to economic growth, coupled with growth or maintenance in production of livestock (mainly), as opposed to the UKG approach.

This differs from a multi-functionalism which focused on emphasising the multiple functions of agriculture land and has morphed into discourses such as agro-ecology, agro-forestry and agro-tourism, essentially diversification of the farm business (Potter and Tilzey, 2005; Dibden, Potter and Cocklin, 2009). This approach focuses on how to ensure increased productivity, both yield and economically, while minimising environmental degradation. At its most environmentally ambitious it aims to undo previous environmental degradation through more sustainable practices, however, these are still conventional agricultural practices, rather than engaging agro-ecology or setting land aside. There is a limitation placed on the potential practices unlike in England where the scope of possibility includes that land may stop being farmed, or farmed purely because of the environmental benefits of extensive grazing for example. It is an attempt to transform Logics of Productivism through engagement with sustainability, one that I identify as Logics of Sustainable Productivism which aims to create a sustainable agricultural system within the parameters of conventional agriculture.

5.4.3 Sustainability

Sustainability is a floating signifier (see p. 46) at the centre of NI's environmental governance. The concept is regularly conceptualised with three components: economic, environmental and social. Several examples of this can be found in the draft environment strategy, formulated first in a simple manner as the management sustainable "for the economic, environmental and social prosperity of present and future generations" (DAERA, 2021a). This relationship is problematised as a potential site of antagonism as a way is required to "reconcile management of the environment with the social and economic challenges of the future" (DAERA, 2021a, p.33). How to avoid this antagonism is presented as "sustainable production" which

"involves the production and use of products and services in a manner that is environmentally benign, socially beneficial and economically viable over their whole life cycle through the mechanism of 'resource efficiency'" (DAERA, 2021a p.52).

Sustainability here acts as the ideal of the floating signifier in that the different contexts in which it is connected to give it additionally meaning helping it become fully realised. However, across these different contexts the concept of sustainability is still a subject of political contestation. It is agreed that all things must be sustainable, and as seen in the above examples this draws together different elements to create a system of the meaning of sustainability. However, what is sustainable is determined by political logics, and the aim of political projects, including of the government, is to fix the meaning of sustainability and establish a stable frontier. Productivism was challenged in the EU because it was "unsustainable" economically, environmentally, and socially, as shown in earlier in the literature review in Chapter 1.

Different problematisations of the CAP from NI interact with sustainability to produce demands. The CAP is criticised from an economic perspective due to the regulatory burden it places on farmers preventing them from being more innovative or wasting potentially profitable time filling out forms (Carmichael, 2020; Anonymous, 2020). Environmental criticisms of the CAP came from two directions. the first is that the CAP encourages levels of production which degrade the countryside and would not exist without the CAP's incentives (Kelly, 2020; Martin, 2020). The second is that what the CAP does to prevent environmental degradation is ineffective in NI due to the specifics of NI's industry, and overly onerous on farmers given the limited gains (DAERA, 2018). Criticisms of the CAP from the perspective of social sustainability are limited, indeed the CAP gains an implicit praise as they seek to replicate the support payments farmers receive ensuring they can stay on the land, and the structural integrity of rural communities is maintained (Billington, 2020; Carmichael, 2020). The post-Brexit project is then to create an

environmental governance regime which can incorporate these demands, fixing the meaning of sustainability across the three contexts with a new agricultural policy at the heart of it.

5.5 Sustainable Productivism

Chapter 6 of this thesis provides an analysis of Sustainable Productivism using the nodal framework. However, prior to that it is necessary to understand its construction through the transformation of productivism because of its engagement with sustainability, the interaction with local conditions, actors and signifiers, primarily profitability, and how these feed into imagined practices. Lastly, it is crucial to consider how this struggle goes beyond agriculture policy as environmentalists seek to widen the field of antagonism to transform rural environmental governance as a whole, undermining the deeply embedded nature of productivism.

5.5.1 Demands of localisation

The first consideration must be the local conditions which any rural environmental governance regime must interact with. Alongside the economic strategy of the region focussing on the agri-food sector, farming in NI is centralised by an imaginary of the small family farmer as the creator of the countryside. The NI countryside is an important figment of the region's imagination, it is used to promote NI as a tourist destination, a beautiful place to live and, increasingly, a source of high quality environmentally sustainable food production (DfI, 2015; DAERA, 2017, 2018). In discussions around agriculture policy farmers representatives, and the government itself, argue that NI's environment, used interchangeably with both countryside and landscape, is one that has been created by farmers, and that farmers are the stewards of the environment (DAERA, 2018). What is meant by this differs depending on the context, however, it is often used within the context of the dramatic landscapes of NIs upland regions, rather than the

farmland used for crops or intensive poultry farming. This fixes the signifier environment in the politics of policy change as essentially farmland and the farmer as the steward of the environment. These myths have been repeated for as long as environmental concerns around the intensification of farming have been recognised, to such an extent that they are not questioned and have become a part of the national imaginary of NI.

Any future policy must also maintain the countryside which explains why Brexit was perceived as an existential threat as well as an opportunity in NI. The threat of no deal and WTO rules was raised throughout the negotiations with the media, and the agriculture policy network, consistently raising the spectre of land abandonment as thousands of farmers were threatened with closure. The stewards of the environment discourse reinforce productivist discourse from both environmental and social sustainability through the spectre of land abandonment. Land abandonment operates as a horrific fantasmatic logic as it threatens any deviation from the existing order with food shortages, environmental degradation due to the lack of grazing, and the collapse of the social fabric of the countryside due to the prevalence of small family farms (Expert Working Group on Sustainable Land Management, 2016).

5.5.2 Demands of globalisation

In addition to the demands of local conditions discourses are also shaped by global demands, in particular food security. Food security was the underpinning driver of the productivist discourse across Europe in response to the experiences of food shortages during World War 2 (Murdoch and Ward, 1997). It returned to prominence European discourse in the early 2010s with global food prices increases and in 2022 with the invasion of Ukraine (Candel *et al.*, 2014; National Farmers Union, 2022; Woodward, 2022). This expansion of concerns around food security from the local to the global is a distinct component of NI's form of productivism.

Due to the export orientation of the NI industry productivist logic incorporates NI as a necessary supplier for a growing global population, and contributor to low carbon, environmentally sustainable food security (DAERA, 2016c; 2020a; Expert Working Group on Sustainable Land Management, 2016). This is assisted by the importance of research centres such as the Institute for Global Food Security at Queen's University Belfast. The approach taken by the farming lobby obscures this possibility, when the global and the local meet.

5.5.3 Localisation meets globalisation

Coupling the countryside creation myth with the argument around food security has required a globalisation of concerns. Food security is now considered on a global scale, as is environmental sustainability. The work of the research institutions, and farmers, has been to ensure that production can be increased or maintained while environmental consequences increase less, stay the same or decrease. This allows farmers to accuse those who would reduce livestock numbers of offshoring NI's environmental problems. The equation is relatively simple, the world needs food which NI farmers can produce within the existing environment, which they created, and by failing to fulfil that duty other farmers who are less environmentally friendly would need to produce more food. Therefore, by increasing livestock numbers in NI deforestation in Brazil is decreased. This chain of equivalence works to an extent and is only fundamentally challenged by the discourse around Climate Change which will be addressed in chapter 7.

This relationship between the global and local is repeated with the goal to feed 9 billion people by 2050 a repeated demand which NI's "national stock" will play an important role in meeting due to the high environmental standards of the quality food produced here. These demands have been central to NI's agricultural policy network, particularly GfG, and remain within the post-Brexit policy process as noted by Dobbs (2022) with the "excessive" emphasis on productivity. However, it is

important to note that this is deeply interlinked with the politics of economic growth. The solution to global food demand presented by the agri-food industry is one of increasing production, however, Tomlinson (2013) in her critique of Sustainable Intensification noted that it may be possible to feed 10 billion people on the food that is produced currently if waste was eliminated. Even more damningly there is little discussion by these actors on the distribution of food and the topic of diets. This relationship between the global and local confirms Nyberg et als' (2018) conclusion that the scaling of political contestation enables the adoption of contradictory positions on Climate Change, and demonstrates that it extends to other issues as well.

The tendency of productivism is to produce more as it is deeply ideologically committed to growth, and this attempts to obscure a possible solution, de-growth. The solutions to these global concerns, and the part that the Global North must play in it is to consume fewer resources. This does not necessarily mean that NI should produce less food.If they are producing food in a way that is the most environmentally friendly way, then indeed they should continue, however, it does mean that this food should be consumed in places other than the UK and Europe. These global demands coupled with the creation myths of the countryside limit the development of any antagonistic frontier seeking to reduce the number of livestock, despite the development of the countryside occurring over hundreds of years under vastly different conditions.

The solution to existing problematisations of agriculture policy is one that sees changes in practices which result in more profitable farming, more productive farming, and more sustainable farming, from the perspective that there is no alternative to farming- this is the character of Sustainable Productivism. An example of this is the demand for soil testing from both the UFU, the wider policy networks and the new agricultural policy (Expert Working Group on Sustainable Land Management, 2016; Anonymous, 2020; DAERA, 2022d). By testing the soil, farmers

can optimise grass growth and reduce inputs resulting in reduced costs and greater returns, this is to achieve a key signifier which has emerged in the politics of the environment, profitability.

5.5.4 Profitability

For both the UFU and the NI Agricultural Producers Association profitability is one of the key challenges for farmers, and the rural environment in general (Carmichael, 2020; Anonymous, 2020). This has been the case for some time and while the UFU argued that increasing productivity and the export orientated economic model would ensure profitability, NIAPA argued that either a fairer supply chain, or a rising cost of food would be necessary to give farmers security. Indeed, they questioned whether increases in productivity were possible in the farmers current position, relying on subsidies to continue and increasingly indebted (Carmichael, 2020). This is the central challenge to sustainability for farmers as they see that the environment is one which was created by agriculture and must be maintained by farmers who act as stewards or custodians. Further than that economic sustainability, or profitability is seen to underpin wider rural society with horizontal structure, part time farmers, and local spending (Billington, 2020).

Profitability acts as an empty signifier in that all the other demands are placed into the demand for profitability. Fantasmatic logics are used to connect the three pillars of sustainability under the central demand of profitability. Logics of beatification paint the environment of NI as both green and Green, as the UFU argues that all farmers are nature friendly, they are the architects of NIs beautiful landscapes, and profitability is required to continue this wonderful stewardship (UFU, 2021). This is particularly effective as there is a natural inverse in which farmers do not achieve profitability which results in the collapse of the environment through land abandonment, the habitats and landscapes farmers have cultivated for centuries fall into ruin and NI's environment is destroyed.

There are several points in this story that are used to obscure facts and emote. The first is the synonym of environment with countryside. The state of the countryside of NI is not necessarily an indicator of environmental well-being, it does not focus on biodiversity rates or water conditions but instead on concepts such as beauty, tidiness and perhaps, tourism statistics. The second of these, and perhaps the most difficult to overcome, is the idea that farmers are the architects of the environment. The point has been made countless times that farmers are the largest driver of environmental degradation, and the most important actor to impact environmental outcomes. However, this is not the point that is intended. Instead, it puts forward the idea of a continuous line of farmers engaging in practices that have created the countryside we have today. Indeed, it constructs the current environment as a natural way of being and we can only look forward to work out how to make more efficient use of it. However, the practices that shape the environment today have existed for less than a century, and Table 5.6 demonstrates the stark differences in farming in NI between 1911 and 2021.

Table 5.6: Agricultural changes between 1911-2021

Type of farming	1911	2021
Sheep	364,462	968,300
Cattle	762,002	1,681,991
Poultry	6.5 million	24.5 million
Pigs	254,928	716,798

Source: Data collected from DAERA Agricultural Census and historical livestock data (DAERA, 2019a; 2021a)

Table 5.6 shows that there have been dramatic differences in how NI's landscapes have been farmed over the last one hundred years with significant increases in the number of livestock. As well as this there have been significant reductions in cereals and crops. As the number of livestock has increased, driven by productivism, so has environmental degradation with livestock numbers culminating in 1998 with 2,986,612 million sheep and 1,767,343 million cattle (DAERA, 2019a). As shown in Table 5.6 this has reduced with a switch to pig and poultry which can be farmed more intensively (DAERA, 2021b). However, by calling to this lineage farming

representatives obscure that the existing practices are a choice, they fit within a wider economic strategy which is a choice, and they have environmental consequences which are a choice.

The concept of ontological security, discussed in Chapter 3, can be used to understand how these fantasmatic logics are shaped and arise from the farming and agri-food sector. The fantasmatic logics projected are rooted in the identity of the farmers, and has shown increasing signs of ontological insecurity. One of the potential symptoms of this is rising mental ill-health in farmers partially as a result of the pressures they feel from threat of environmental inspections among other things (Allen, 2019; Carmichael, 2020). Another is the antagonism between farmers and vegans which they see as a threat to their role as food producers and the countryside as a whole (Carmichael, 2020; Anonymous, 2020). This insecurity can be identified in the inability to admit the wrong choices were made in the rapid intensification in farming for events as much as 50 years ago, a senior officer in the UFU said "they were the correct decisions at the time"(Anonymous, 2020). This is still ongoing as they question the science of the modelling, demand that they receive recognition for what they have achieved, and refuse to accept that NI's environment is massively degraded as a result of both previous and current farming practices (Expert Working Group on Sustainable Land Management, 2016; UFU, 2021). This issue coming down to identity may have even been identified by a senior officer in the UFU who stated that many of the farmers who changed practices are still farming today, and it may be an issue requiring generational renewal (Anonymous, 2020). Therefore, the focus on profitability as an empty signifier for all three sustainability pillars, is routed in farmers understandings of self.

5.5.5 Profitability decoupled from Productivity

Farmers are not the only participants within this policy network as they used to be, this has been widened out considerably with some farming representatives feeling

they are in the minority now, despite owning the land. The other main policy actor, or collection of actors, are the ENGOs through both NI Environment Link and Nature Matters NI. The strength of the profitability signifier and the ontological insecurity of farmers is also demonstrated by the fact that it forms a central plank of the political logics of environmentalists (Kelly, 2020; Martin, 2020). On the latter, and perhaps less significantly than the former, environmentalists emphasise that blame does not lie with farmers but instead policy makers. However, this may fall on deaf ears or be overlooked as identified earlier farming representatives view these policies as the correct decision at the time, and they also form a central component of their identity for over 50 years.

Regarding profitability NIEL, Nature Matters NI and a new organisation, the Nature Friendly Farmer Network are much more forthright in their problematisation of the rural environment in NI. The creation of the NFFN is an attempt at altering the shape of agricultural politics in NI by imbuing the ENGOs with a sense of legitimacy. However, they are side-lined within the policy network as shown in section 5.3.3 and are heavily outnumbered when they are included (Carson and Sandford, 2020).

By emphasizing the environmental basis of farming, and the "natural capital" upon which agriculture is based they attempt to underpin economic sustainability with environmental sustainability, rather than the reverse through operationalising profitability. This strains the UFU (2018a) motto, "you cannot be green when you are in the red" which presents environmental sustainability as a privilege. Here environmental sustainability is a precursor, by taking into account externalities you will always be in the red without the green. This attempts to re-order the concept of sustainable production with profitability at its core rather than productivity, offering a central criticism of the wider economic model for NI. Two particular targets have arisen in the Brexit process. These are the green growth strategy and the productivity grand challenge because of their focus on productivity and growth

rather than economic, social or environmental sustainability(Nature Matters NI, 2018; M. Campbell, 2022).

The environmental demands which have formed central linkages within this political logic are the issue of biodiversity, and water quality. Indicators for both have plummeted over the last few decades, and neither have shown signs of improving within the existing framework. This is particularly true of biodiversity where the Biodiversity Strategy has repeatedly failed to meet the targets of stopping biodiversity loss (M. Campbell, 2022). Finally, there is the issue of Climate Change, which is intimately linked with biodiversity, but occasionally extracted to be dealt with on its own to dissemble any chains of equivalence.

The issue of Climate Change is existential, and operates fantasmatic logics of horrification with predictions of mass death, starvation, migration, global conflict etc. This means, for environmentalists, that business as usual is not possible and only a wholesale change in farming system will stop it, and thus there can be no profitability within the current system as the consequences of the environmental demands failing are too catastrophic. On the other hand, they do re-iterate the importance of the farmer as potential stewards of the countryside, particularly the small farmer, and decry the current economic system which leaves them in penury, which aligns with the view of NIAPA in some ways (Fulton, 2020; MaGreehan, 2020; Kelly, 2021; Northern Ireland Environment Link, 2021). However, it is the identity of farmers here that is the site of transformation.

5.5.6 Transforming Farmer Subjectivities

The UFU has argued that farmers cannot be immediately environmentally friendly and profitable, and while environmentalists disagree, the difference here is what they will be profiting as. The fundamental function of the farmer is food production, it is tied into their identity and has shaped the countryside. The narratives built to defend this relate to the need for food security, nationally and at a global scale as the

population continues to grow and more of the world adopts a late 20th century western diet consuming more red meat and dairy products. Environmentalists in NI would like to decouple this demand from the political logic of profitability arguing that we also need to talk about consumption, changing diets, reducing meat intake and diversify crops (M. Campbell, 2021). To counter this the UFU have stated that by reducing food production locally, environmental problems are offshored which is irresponsible because NI farmers are environmentally friendly. This does not take account of the soy production which destroys the rainforest to feed NI livestock (Anonymous, 2019a; Anonymous, 2020).

The environmental sector in NI wants NI to adopt a public money for public goods model, similar to the model developing in England, although distinct in some ways. They argue that farmers can achieve a path to profitability in a number of ways, which would drastically alter the landscape of NI (Nature Matters NI, 2018). The first through NFFN is the production of environmentally sustainable premium goods which can make a better return in the market (Carson and Sandford, 2020). They have observed the logic of productivisms drive for more outputs which has required more inputs and achieved lower returns, and determined that this is not a path to profitability for the small farmer on marginal land. Second, farmers that reduce their environmental footprint through smaller herd numbers will have lower inputs and potentially similar margins (Martin, 2020). Third, with the land that is freed up, or farmed extensively with an environmentally sustainable herd size, farmers can enter into contracts to deliver environmental goods such as biodiversity, or even flood management within the public and private sector (Kelly, 2020; Martin, 2020).

The pathway to profitability then for farmers in this alternative discourse is one of extensification, land sparing, environmental stewardship, and potentially diversification through tourism (MaGreehan, 2020). This is an alternative that challenges the current identity of farmers, however, it also challenges the narrative

of unchanged practices and stewardship which may resonate with small farmers such as NIAPA. The two potential views of an UFU motto, which made its way into policy, may help illustrate this: the environment needs to be a profit centre not a cost centre (DAERA, 2018). For the UFU that means that there are environmental improvements such as in soil health which will increase profits through lower inputs and greater efficiencies, and these are improvements that farmers can make, rather than the ones that are just costs which should remain a part of EFS. For environmentalists this saying could mean that farmers should be able to farm the environment and profit from that, rather than farming it at a loss, or taking it out of production at an even bigger loss.

5.5.7 Imagined Practices

As illustrated in chapter 3 different discourses are accompanied by different imagined practices, and it is these imagined practices that assist in identifying the dominance of a particular discourse, as well as influence the shape of future discursive antagonisms. The imagined practices within the farmer discourse are easier to make concrete as in many ways they are re-imagined practices from the past. Built into the problematisations of the CAP Brexit is seen as an opportunity for an alternative approach to regulation which is more "proportionate" and "fairer" to the farm so they don't lose "their money" for minor breaches without the opportunity to rectify the breach (Anonymous, 2020; Irvine, 2022). These practices have become more concrete through the memorandum of understanding between the NIEA and the UFU where the NIEA have agreed to not punish minor pollution incidents and instead offer advice and education (NIEA and UFU, 2017).

The focus on the individual farmer, is reflected in the UFU's view on both planning and nutrient pollution. In their view the focus of decision making should consider the single farmer, rather than the system as a whole as the individual should not be punished for consequences outwith their control. However, NI's landownership

pattern favours many small farms whose individual pollution may add up to a significant incident, meaning that a more joined up approach is required. Rather the individualised focus results in policy where the provision of more advice, education and support to rectify breaches of compliance is prioritised. This is something supported by environmental organisations, however, it should go hand in hand with a vigorous enforcement policy (Brennan, Purdy and Hjerp, 2017). Again, the issue of the independent environmental protection agency comes into play here. In response to accusations of delay and dithering DAERA Minister Edwin Poots stated that his preferred outcome for the New Decade, New Approach commitment to an IEPA was that OEP would take that role. As outlined in Chapter 2 the OEP is a necessary institution to plug the gaps left in the UK's environmental governance because of Brexit. The issue of an IEPA in NI pre-dates Brexit by over a decade, and as noted in Chapter 2, the two organisations fulfil completely different roles with the NIEA holding the public to account, and the OEP holding the state to account. This obfuscates the issue by confusing the two and weakening potential enforcement.

There is a further antagonism at the heart of enforcement between farmers representatives and ENGOs, and that is the precautionary principle. Those advocating for Sustainable Productivism have argued that the precautionary principle holds businesses back and prevents productivity growth unnecessarily, while environmentalists see this as necessary, and preventing further environmental degradation. The issue of enforcement has risen to the fore since the return of government as they have been able to action the NIEA commitment to the UFU by reducing the cross-compliance penalties, and instructing the department to consider how to improve it (DAERA, 2021e). Further to this, despite environmentalist opposition, the Minister has removed greening requirements from the basic payment scheme from 2021 (Martin, 2020). This demonstrates that those imagined practices operating within Sustainable Productivism are no longer just imagined, becoming

more tangible in the immediate post-Brexit period, and crystalising with the return of government.

5.5.8 Non-agricultural governance

Hegemony requires the ordering of sustainability through which each pillar can be understood within that discourse's series of demands, and any incompatible demands can be side-lined or addressed sectorally. The farming sector have been attempting to maintain a dominance within the rural environment by tying together the demands of the wider economic model, large industries, small farmers and the wider rural community, and leveraging land ownership and the rights of the private individual. Environmentalists have attempted to re-order the countryside to ensure environmental sustainability that underpins both economic and social sustainability, however, this presents a challenge for the wider economic model rather than assimilating it, and is questioned on its economic possibility.

The difficulty of the post-Brexit period as a discursive exercise is that each of the policies is considered by the department as somewhat independent of the other, while NI Environmental Link want to bring them together. This can be observed using a number of examples, the first being the rural policy framework which does not address any of the environmental or agricultural policies, and struggles to engage with the rural economy at all (DAERA, 2022e).

The Nutrients Action Programme is also of interest as the draft plan aims to address a series of environmental concerns which the UFU are opposed to as they would be impossible to achieve while remaining profitable (UFU, 2018b; DAERA, 2019d). This engagement is not mentioned in either environment strategy or agricultural policy portfolio, despite being quite an admission. The agricultural policy framework, environment strategy and biodiversity strategy engage at only the most superficial level, with the agriculture policy having the most significant budget attached, and biodiversity strategy barely any budget at all. Finally, the sustainable land

management strategy which one might have thought of as an opportunity to consider how best to use land and manage the land in NI to achieve wider environmental goals. Instead, the sustainable land management strategy focused on achieving the productivity aims of going for growth while limiting environmental degradation, it was a strategy focused on an export economy.

As each policy is developed political actors engage to focus on a particular sector in line with their vision, rather than considering them as a whole. This demonstrates that Sustainable Productivism is hegemonic, not just across agriculture policy but across rural environmental governance as a whole. Even separate policy areas such as tourism are subservient to the goals of Sustainable Productivism, which can be observed through the difficulty in establishing a national park in the Mourne Mountains. The establishment of a national park is presented as a risk to the farmers in the area, and therefore, becomes politically contentious. While there are a multiplicity of hegemonies across NI governance, they interact and become prioritised, and that is the case for Sustainable Productivism. Further, rural environmental governance is just one aspect of a broader hegemonic system of meaning and that places restrictions on what is possible. For example, land cannot just be nationalised or collectivised, rather individuals must be incentivised to change patterns of ownership and land use towards amalgamation. Individuals cannot just be instructed to do things in exchange for money, they must make the choice to do those things. The wider economic strategy requires that there are goods for export, they cannot just undo this through a separate policy without considering the whole system.

5.6 A Whole System Approach

An alternative approach to this has been put forward by NI Environment Link who have proposed a land use strategy (Northern Ireland Land Matters Taskforce, 2015; NIEL, 2022). This would bring all the environmental governance aims and

mechanisms together allowing a discussion about both the future of land use and the future of the NI economic model. A central issue is that the three pillars of sustainability are seen by the UFU, and the wider agri-food sector as antagonistic, rather than integrated and synergistic, due to NI's economic model. Individual battles are fought across the policy suite and when potential damage to NI's export economy is threatened the economic pillar is used to justify inaction at the expense of the environment, and rural society. The creation of a land use strategy would raise this antagonism to higher level in which battles are fought over the strategic direction of the land. This would allow for greater consistency between sectors. In a way the Green Growth Strategy does this with an assumed approach to NI's economic model, however, sectoral antagonism is built within this.

A similar approach to this was raised in chapter 4 by the National Food Strategy for England which sought to take a food systems approach to governance. This approach, alongside the CCC report on net-zero suggested that the government should create a "Rural Land Use Framework" (Dimbleby, 2021). However, the most revealing aspect of this is the food systems approach taken by NI's own food strategy in 2021 (M. Campbell, 2021). The approach taken by the draft document is a very limited one with the view of sustainability in production focusing mainly on food waste and packaging, and very little focus on food consumption. While the final report remains outstanding there is a reason to be trepidatious. The English food strategy focused on balancing the localisation and globalisation of demands addressing both food production and consumption to create a system in which environmental consequences were not externalised. The NI food strategy takes as its starting point that agricultural production was being addressed by the Kendall Review and the Green Growth Strategy (DAERA, 2021b; Kendall, 2022). It suggests that it will build on

"connections between agricultural primary production, environment, and food, enhancing collaboration around policy agendas such as future agricultural support, environment,

biodiversity and land use, reduction in food waste, carbon reduction and green growth" (Campbell, 2021)

However, by this point it has already ceded the most important ground to other reports which may be because the food strategy was begun in 2019 during the collapse of the Executive, or more likely because of the hegemony of Sustainable Productivism with the food strategy focusing on the health and tourism aspects of food policy.

The Independent Strategic Review of the NI Agri-Food Sector, the NI Food Strategy's "sister strategy" sets out the most complete vision of Sustainable Productivism to date, building on the Sustainable Land Management Strategy, the Agricultural Policy Portfolio, the Green Growth Strategy and more. It incorporates a series of environmental demands, acknowledges environmental concerns, and attempts to address these alongside a highly productive export orientated agri-food industry. It too recommends a land use strategy, and this demonstrates the significance of how that strategy is framed, by NIEL to address Climate Change, but by the agri-food sector as a way of balancing the social, economic and environmental components of sustainability around a productivist agricultural model.

5.7 Conclusion

This chapter has outlined the politics of rural environmental governance after Brexit in NI, considering both the dramatically different contexts in which the process occurred, and the substance of those politics by identifying the key signifiers which shaped the political arena, as well as the discourse which crystallised its' hegemonic grip with the return of the NI Executive, Sustainable Productivism.

This chapter, along with the genealogy in chapter 1 demonstrated the continuity within the de-capificiation process with existing problemetisations of the CAP central to the process of its replacement emerging. Further, it demonstrated that

hegemony in this case operated regardless of political context with policy emerging with and without political steer throughout the whole process. Indeed, it was possible to identify that hegemony was merely crystalised with imagined practices becoming actual practices as the government returned to provide the legal cover that civil servants lacked. For those considering de-europeanisation as a route to agricultural policy reform, this case may prove a fruitful study as it demonstrated that existing policy networks derive solutions from their criticisms of the CAP, and opportunities for transformation are not always taken, discourses which emerge as hegemonic may have been powerful, and the only limited by the role of the EU.

Although this chapter, in analysing the emerging discursive antagonisms around post-Brexit rural environmental governance in NI touched on the shape and practices of that governance, it was necessarily limited to discussing those things that highlighted the alternative discourses. Chapter 6 will offer a fuller picture of Sustainable Productivism utilising the nodal framework model developed in chapter 3 and used in chapter 4.

Chapter 6 – Sustainable Productivism as Governance

6. 1 Introduction

The immediate post-Brexit period described and analysed at length in Chapter 5 resulted in the hegemony of Sustainable Productivism in NI's Rural Environmental Governance organised around the signifier profitability. Chapter 5 showed how Sustainable Productivism emerged as a discourse prior to Brexit with the fall of productivism and rise of multifunctionalism across the CAP. However, it had yet to be fully realised due to the restrictions of the CAP, and the limited political space prior to Brexit. Brexit provided an opportunity for Sustainable Productivism to create a system of governance which met its demands. Using the nodal framework developed in Chapter 3 this chapter will provide a description and analysis of what Sustainable Productivism looks like as a system of governance, and in doing so will reveal critical components of this discourse. It will focus on the process by which demands are ordered and prioritised, arguing the sustainable component is prioritised where this affect productivity while areas such as biodiversity are de-prioritised.

The first and most pressing is what the demands of Sustainable Productivism are, and significantly what they are not, this is the central focus of the nodes of provision. The second component of this is how these demands interconnect, particularly between global and local demands. The third, component are the imagined, and now in some cases realised, practices of Sustainable Productivism. These will be detailed throughout as they have relevance, however, each of the nodes will contribute different practices and this chapter will highlight how these relate to one another. This analysis will provide insight into what the future holds for rural environmental governance in NI. The most important nodes for this endeavour are the nodes of provision and the nodes of management as these are the most political with the prior a direct result of political contestation, and the latter acting to prevent contestation.

6.2 Utilising the document network

As the purpose of this chapter is to understand and reveal Sustainable Productivism as a system of governance, the data this chapter uses is the document network shown in Figure 5.2 in Chapter 5. This network illustrates the wide-ranging nature of documents that are considered by the government to contribute towards the environmental governance of NI.

6.3 The Nodal Framework of Sustainable Productivism

Having identified Sustainable Productivism in Chapter 5 the task is to determine what Sustainable Productivism is as a system of governance. This will be done through the application of the nodal framework which breaks down the system of governance into four nodes. As laid down in Chapter 3 the first is the Node of Provision which determines appearance of the service, or what environmental governance is attempting to achieve. The second is the node of distribution, this describes how people are connected to this goal, and how the provider of this system of governance is determined. The third, the node of delivery, will characterize how providers deliver the service and what norms or policies shape the delivery. The final node, the node of management concerns how practices are evaluated, maintained and transformed. In Chapter 4 Logics of Value were identified as the discourse shaping the post-Brexit system of governance for the rural environment. This involved an increased transformation of farmers as market ?, the creation of a neoliberal proto-marketplace for environmental services, and the continual disruption of patterns of land ownership and business activity across England.

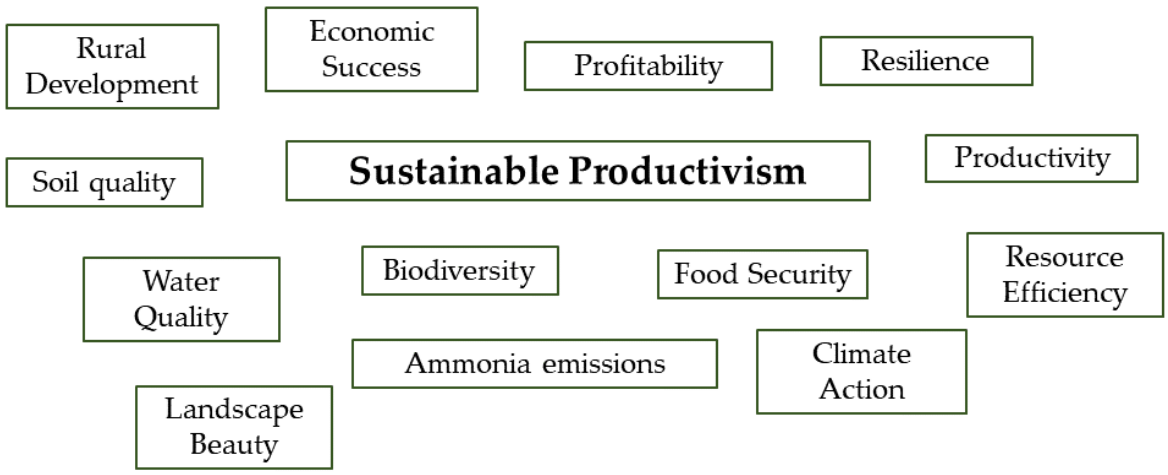
6.3.1 Node of Provision

The first and most political node concerns what the demands of Sustainable Productivism are, and significantly what they are not, this is the central focus of the nodes of provision. The second component is how these demands interconnect,

particularly between global and local demands. The demands of Sustainable Productivism were discussed at length in Chapter 5 and are shown in Figure 6.1 as purposefully unstructured, however, demands are organised and ordered discursively. To describe Sustainable Productivism as a form of governance it will be necessary to organise these demands, this is the purpose of this Chapter.

The Demands of Sustainable Productivism

Figure 6. 1 The demands of Sustainable Productivism



Source: Authors own

The Node of Provision, concerning the appearance of the service or aims of Sustainable Productivism as a system of rural environmental governance is relatively clear due to NI Executive's outcome-based approach to government. Outcome 2 of the draft Programme for Government for the 2016-2021 assembly is "We live and work sustainably – protecting the environment" (NI Executive, 2016). Within that there are three measures which directly relate to the rural environment: Levels of soluble reactive phosphorus in our rivers, levels of dissolved inorganic nitrogen in our marine waters and biodiversity as a % of protected area under favourable management. There is also an indicator which the management of the rural environment will impact upon but has broader scope, and this is the level of

greenhouse gas emissions. These are the environmental concerns that the government has agreed to judge its success by, however, they fit into a wider schema coupled with economic measures such as the employment rate, the regions innovation ranking, external sales, total spend by external visitors and the "national brand index" (NI Executive, 2016).

Just as explicitly in the draft environment strategy a "healthy environment" is tied to economic success through the impact of the tourist industry and the agri-food sector (DAERA, 2019b). The appearance of the term natural capital in NI differs from the UKG counterpart as it is claimed by DAERA that while the value is understated the progress of integrating it into policy making is still in its infancy. While Chapter 4 showed that the UKG sought to place much of its new policy on the idea of natural capital, in NI this was used to reinforce an approach that focused on a healthy environment as underpinning existing economic practices. This approach is reflected in the draft environment strategy which developed outcomes that looked beyond 2021 as they sought to develop a "circular economy" (DAERA, 2019b). Within this strategy production is sustainable, greenhouse gas emissions are reduced, and biodiversity is "halted" while landscapes are "well-managed".

The appearance of the service then was the production of a rural landscape which produces more food, yet in a more sustainable manner, sustainable production, as opposed to the more abstract "environmental improvement" in England. How this is to be accessed, as in the English example, relates to patterns of land ownership and management. To establish this further the NI Government developed the future agricultural policy framework to outline the core of the strategy in a post-Brexit landscape. Within that the core outcomes relate to profitability, resilience, environmental sustainability and the functionality of the wider supply chain (DAERA, 2018). In short, economic sustainability, social sustainability, and environmental sustainability, with each of these aims aiming to replicate throughout the entire supply chain. This is justified as synergy, and an interdependency between

the pillars of sustainability:

> *"it is important to state that these four outcomes are highly synergistic – a healthy and sustainable environment secures long term agricultural productive capacity and underpins resilience; productive agriculture minimises waste and maximises resource efficiency, which underpins environmental performance and reduces exposure to market risk; an integrated and efficient supply chain ensures that agricultural activity is properly focused on delivering market demands, thereby minimising wasted effort, wasted resource and inefficient supply chains and reflecting broader societal demands for sustainable production methods" (DAERA, 2018, p. 20).*

Within the third outcome there is a specific focus given to the role of farmers as stewards of the environment that comes as an addendum to their role as food producers:

> *"although a core objective of farmers is to produce food, they need to do this in a way that is environmentally sustainable and with due regard to their stewardship of habitats and landscapes. Around 70% of land in NI is devoted to agriculture. Agriculture, therefore, has a significant impact on the environment, both positively and negatively (DAERA, 2018, p. 35)."*

Further targets are established for farmers in a way that is less sophisticated than for their UK counterparts but offer clear aims;

"Natural capital and its associated ecosystem services are protected and enhanced;

- The carbon intensity of food production continues to fall;
- Consistent increases in the proportion of priority habitats and species (of UK and European importance) achieving favourable or recovering status, as well as broader gains in biodiversity;
- Soil quality and functions are improved and soil erosion is prevented;
- The proportion of water bodies achieving good status consistently increases in the medium to long term;

- Ammonia emissions are reduced to a point where critical loads are not exceeded across NI; and
- There is increased resource efficiency within farm businesses." (DAERA, 2018, p.39)

These "targets" were not really targets but broadly expressed desires which DAERA hoped would support the four key outcomes the policy aimed to achieve. This lack of sophistication, particularly around environmental outcomes, is a result of under-resourcing, with DAERA having only 30 members of staff to prepare for Brexit in relation to 1,200 for Defra, a lack of ambition identified in Chapter 5, and an "excessive" prioritisation of productivity in both strategy and focus (Northern Ireland Affairs Select Committee, 2018; Dobbs, 2022). Each of the additional environmental outcomes are important, however, they are de-prioritised and under-resourced.

Therefore, the node of provision in NI's rural environmental governance, the services that are to be provided are sustainable production as shown in Table 6.1. Sustainable production within this context is re-ordered to ensure that what is meant is an agri-food regime which can increase production and economic performance while reducing environmental degradation where it is identified and prioritised, demonstrating that the environmental as a whole is de-prioritised.

Table 6.1 The Node of Provision in Sustainable Productivism

Aspects of Node of Provision	Sustainable Productivism
Which service needs to be provided	A working and sustainable environment
Promotion of ideal character of eligible providers	Farmers as stewards of the environment, particularly productive farmers who maintain rural life.
Aligning or co-ordinating providers	Creation of a successful agri-food industry supported by government and institutions
How is this service provision instituted	Through government support, environmental and productivity measures and direction to industry.

Source: Authors own

6.3.1.1 Sustainable Productivism and a healthy environment

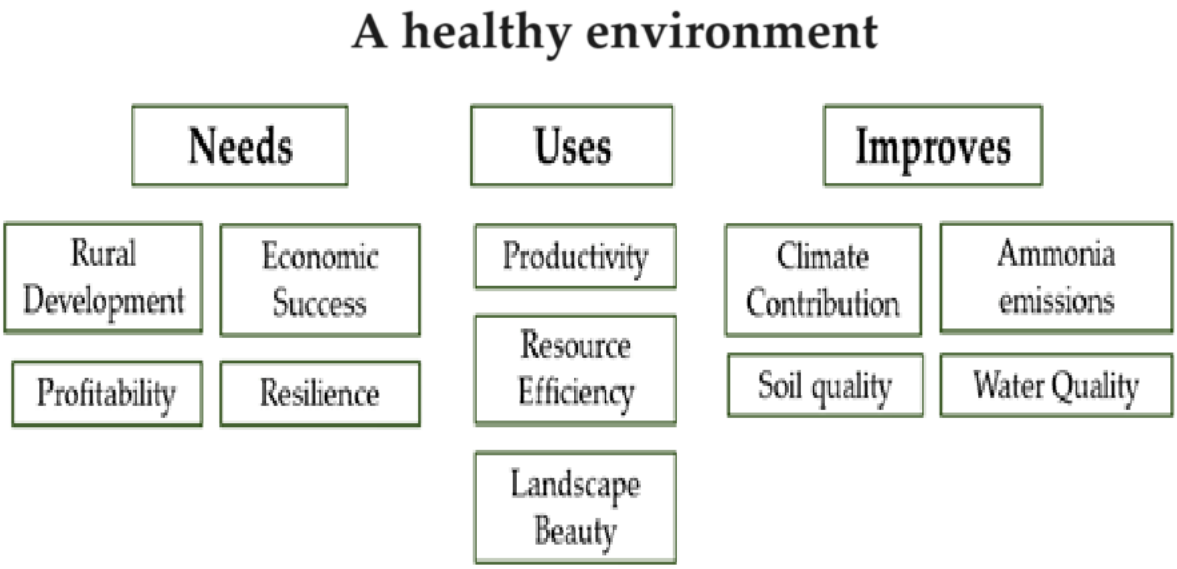
As compared to the Logics of Value approach taken by UKG in England as shown in Chapter 4 there is not the same potential for land sparing or the creation of new habitats to replace those that were destroyed during the years of intensification. There is only an attempt to stabilise the rapid decline. There is no reduction in the level of food production present here, as is made clear in the aim to reduce the "carbon intensity of food production", this is a carbon per unit, not a total reduction across the industry.

To understand the appearance of the service of Sustainable Productivism in terms of environmental health it is important to consider that the different demands operate differently in action. Shown in Figure 6.2 the demands carried over from Figure 6.1 can be categorised in three ways. There is the overall demand for environmental health, this demand needs a successful economic sector in rural communities, the development of rural communities, profitability in the farming sector, and a farming sector that is resilient to shocks. To achieve this the farming sector will use increases in productivity, increased resource efficiency, and the beauty of the natural landscape as a resource for tourism. The effective application of these uses will improve NI's climate contribution, soil quality, water quality and reduce ammonia

emissions.

Sustainable Productivism and a Healthy Environment

Figure 6. 2 Sustainable Productivism's healthy environment narrative



Source: Authors own

Figure 6.2 offers an illustration of the narrative which Sustainable Productivism tells about how it will achieve environmental health. It is also interesting to note that the demand of biodiversity and food security were not added into Figure 6.2. For the latter, that is because this is an additional benefit of Sustainable Productivism not directly correlating to environmental health, for the prior it is because biodiversity is an additional demand which must be brought into the system of governance by external means, not as a core of Sustainable Productivism.

The return of government allowed for greater consistency across all four nodes. An example of this is the consultation which proposed the introduction of a "headage sustainability package" in the future agricultural policy framework (DAERA, 2022c). Previously headage payments were a core of the productivist discourse and resulted in significant over grazing. DAERA recognised this and instead offered a policy that aimed to:

"ensure the future viability of the beef sector, help the sector to keep pace with, or surpass, the productivity growth of its competitors, improve profitability, resilience and environmental sustainability" (DAERA, 2022c p. 34)

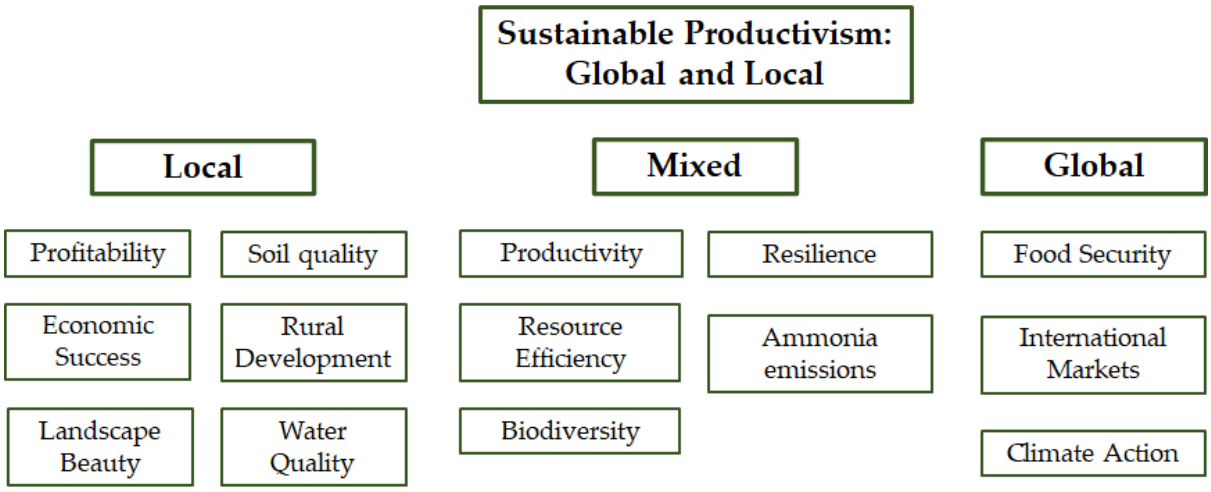
This demonstrates that the current logics are a twisting of the productivist paradigm and is a manifestation of the interaction of demands across scale discussed in Chapter 5.

6.3.1.2 Sustainable Productivism between the global and the local

As shown in Chapter 5 the different demands which Sustainable Productivism is required to address occur at different levels of government and geography. Figure 6.3 shows the different demands of Sustainable Productivism organised between the local and the global, and where these mix. This is an important point as the scale at which the demand is considered influences both the appearance of the demand and the service by which it is addressed.

Sustainable Productivism demands across scale

Figure 6.3 The distribution of Sustainable Productivism's demands across scale



Source: Authors own

The local demands are the most straightforward to consider as their proposed effects match the demands simply. As shown in Chapter 5 there is a demand for local farmers to be profitable, which will support local communities, wider economic success and maintain the beautiful landscapes they have created it. The demands that are mixed are more difficult to judge, for example, the demand for increased productivity is seen in "international terms" and requires local farmers to meet international productivity standards. This is measured against nations such as France, the Netherlands and the USA which first and foremost have greater resources, and importantly environmental degradation is greater (DAERA, 2021d, p. 20; Dobbs, 2022).

The issue of the globalisation of demands reinforces the characteristics of Sustainable Productivism as seen in Chapter 5. Food security as a demand is considered on the global scale, as it was by the EU previously, which is particularly beneficial to NI who produce five times more food than the region requires (DAERA, 2020c). Couple this with a globalisation of climate action, NI's food production becomes an act of climate action due to the lower carbon intensity of NI food. The issue here is that the globalisation of some demands and the localisation of others has an ordering effect in which demands such as increased productivity are prioritised ahead of biodiversity. The ordering of demands within a discourse is often difficult to discern by appearance alone, instead it is necessary to consider nodes of distribution, delivery, and management to consider who is to deliver services, how they are delivered and how they are maintained.

6.3.2 Node of Distribution

6.3.2.1 Practices of Identification and Designation

The node of distribution, concerning who is to deliver the services and how that is to be determined closely relates to those who farm and manage the land. Farmers have been identified as the stewards of the rural environment, however, which farmers are to be prioritised is subject to the prioritisation of Sustainable Productivism as

shown in Table 6.2. In the node of distribution there are two processes which shape Sustainable Productivism, the division of land and policy into sectors as highlighted in Chapter 5, and the reliance on voluntarism for environmental services which prioritises production and economy over environment.

Table 6.2 The Node of Distribution in Sustainable Productivism

Aspects of Node of Distribution	Sustainable Productivism
How services are distributed	The identification and designation of sites of environmental significance. The prioritisation of productively farmed land and higher environmental value land.
How to connect services to beneficiary	The application of stipulations in government support, and the creation of agri-environmental schemes.

Source: (Authors Own)

One of the fundamental tasks of the designation of sites is to determine who is to be targeted as a service provider. In the 2016-2021 PfG it was stated that the process of designation was finished and the focus instead would be on ensuring those sites were "under favourable management"(NI Executive, 2016). This speaks to other nodes of governance, however, the statement that all sites that would be designated are now designated indicates that the government now have a clear idea for who is to deliver the most environmental services. This is in stark contrast to the approach taken by the UKG discussed in Chapter 4 where delivery of services is associated with the production of value, the process in NI is directed more firmly by DAERA and the priorities of DAERA.

The land has been further subdivided depending on its physical characteristics since the Governments return in 2020. Faced with the requirement in the New Decade New Approach deal to develop policies in order to meet NI's climate commitments DAERA developed the NI Peatland Strategy (DAERA, 2021f). DAERA within their consultation raised the twin concerns of Climate Change and biodiversity as reasons for implementing a new peatland strategy. Specifically, the government has chosen

to focus on semi-natural peatland which accounts for 12% of NI's land mass (DAERA, 2021f, p.13). However, this leaves a significant amount of peatland unaccounted for with a further 5% to 12.6% of NI's landmass being peatland (Pike, 2021). This extremely limited approach demonstrates the preference discussed in Chapter 5 to deal with sectors in a piecemeal way, and a reluctance to address concerns around food production, fertiliser use and release of ammonia. It is necessary to critique the strategy within the context as an unambitious addendum to NI's rural environmental governance as it signifies the primacy of food production over both climate and biodiversity.

6.3.2.2 Ordering of Priorities

The return of government saw the development of post-Brexit policy instituting a certain voluntarism within the delivery of environmental services. Two policies are particularly relevant to the node of distribution, although they will be discussed in greater detail in the node of delivery.

The first of these is the Farm Sustainability Payment which is to replace the existing area-based payment (DAERA, 2022c). As a stipulation to receiving the payment farmers must participate in soil testing, a nutrient management plan and take part in a livestock genetics and data programme. These additions mean that those who receive the payment are being targeted as additional deliverers of environmental services, although the priority is on services which focus on productivity. The introduction of a cap on payments may act as a disincentive for the larger producers given the more onerous requirements, additionally, the soil testing itself may prove a disincentive for the most profitable farms who do not wish to reduce production or reveal themselves as polluters as was expressed in the SALMS (Expert Working Group on Sustainable Land Management, 2016). The sustainable land management task force was brought together by the department to consider how best to ensure that NI's agriculture industry used the land sustainably. They did this by tackling issues such as soil health, on farm habitats and other suggestions. However, as the

sustainable land management strategy was established within the context of Going for Growth it had to be coupled with the goals of economic growth(Expert Working Group on Sustainable Land Management, 2016).

The taskforce argued that after soil testing:

> *"many of our most productive and intensive farmers across the pig, poultry, dairy and beef finishing sectors are likely to find a legacy of high phosphorus levels at Index 3 and above throughout their farms. We estimate that this may apply to at least 1200 farms and will be skewed towards those farms with high productivity levels. These farms must be protected as they make a vital contribution to the NI economy in general, and specifically to achievement of the 'Going for Growth' targets" (Expert Working Group on Sustainable Land Management, 2016).*

Similarly in the case of ammonia emissions the priority of the task force is to ensure farm development can continue for productive businesses. This is reflected in their suggestion that emissions are prioritised at the NI scale first, and local second. The issue of ammonia emissions is laid at the door of every farm across NI evenly (Expert Working Group on Sustainable Agricultural Land Management, 2017).

The second policy is the Farming with Nature Package which is NI's new agri-environment scheme (DAERA, 2022c). This scheme allows for individuals and collections of individuals at landscape scale to enter into agreements with the government to produce environmental goods, such as biodiversity. It is of note that the distinction between those services that have been made compulsory, and those that are strictly voluntary lies at the distinction of whether they are beneficial to production.

This demonstrates that within the policy development there is a balancing act which prioritises economic sustainability over environmental sustainability, and indeed asks that public support is given to the most productive businesses to become

environmentally sustainable. There is a strong focus on an increase in data collection which is seen as a method of both delivery and management, but also distribution in determining where problems are most in need of solutions. However, again this is hedged as it is coupled with the requirement to achieve targets set in going for growth. Therefore, the most vital issues must be identified but must not be tackled straight away.

6.3.3 Node of Delivery

6.3.3.1 Imagined and Realised Practices

More than any other node the node of delivery is concerned with imagined practices. As a discourse is constructed and presented as an alternative to a rival; it is through imagined practices that proposals that promise to meet new demands may succeed or fail. Since the Brexit vote the transition to a new governance regime has gone through the proposal of imagined practices, unrelated to Brexit, a suite of proposed practices in relation to Brexit, and the realisation of some of those practices in policy. This section will cover the concepts laid out in Table 6.3 focusing on the changing nature of agricultural support, the changing relationship between service providers and government, the new role of advice and knowledge exchange, and the use of technology and innovation in improving delivery. By doing so this section will reveal the ordering of the demands of Sustainable Productivism, and how these are to be implemented in practice.

Table 6.3 The Node of Delivery in Sustainable Productivism

Aspects of Node of Delivery	Sustainable Productivism
How is the service delivered	Sustainable Productivism is delivered by a combination of farmers and land managers engaging in sustainable practices, and government incentivising and shaping those practices.
What norms shape the delivery	A developing norm for Sustainable Productivism is a partnership approach, and an outcomes-based approach. As well as this, other social logics such as a focus on economic growth operate.
What mechanisms are in place to ensure deliver	As well as mechanisms previously mentioned such as incentivisation and partnership between regulator and sector, provision of advice and knowledge exchange seek to ensure delivery.
How can delivery be improved?	A focus of Sustainable Productivism is improving delivery through an increased role for technology, data and changing the nature of advice.

Source: Authors own

6.3.3.2 Farming for Production and Farming for Nature

The future agricultural policy framework consultation floated the idea of progressively removing the area based payment to divert the funding towards other policy interventions which will "drive productivity" or "environmental sustainability"(DAERA, 2018). However, given the demographics of NI's industry, the dependency on single farm payment, and the make-up of NI's rural communities the social sustainability pillar came to the fore with suggestion of a "basic farm resilience support payment" (Heron, 2018, 2023; Attorp and McAreavey, 2020; Dobbs, 2022).

As discussed in the node of distribution this settled in NI on four key schemes (DAERA, 2022c):

- a Farm Sustainability Payment.

- a Beef Sustainability Package.
- a Farming with Nature Package; and
- a Farming for Carbon Measures.

Each is now considered in turn.

6.3.3.2.1 Farm Sustainability Payment

The Farm Sustainability Payment is to act as a safety net, or a resiliency payment, to give farmers a source of income, but is to be designed as low enough not to discourage innovation or productivity increases. The aim for this payment is that it will be reduced over time as the system as a whole becomes more resilient, and this can be observed by the stipulations within the new scheme. The conditions of the payment include "participation in a Soil Nutrient Health Scheme, development of a nutrient management plan", recording of genetic information for dairy and beef herds, as well as adherence to the new Farm Sustainability Standards which are a simplified replacement of the contentious cross compliance. Within this there is a clear focus on productivity increases driven by data and technology with an emphasis on sustainability measures which impact productivity. Therefore, this is a clear example of a central aspect of the node of delivery which re-orders sustainability to couple social and economic sustainability, with environmental sustainability in a supporting role.

6.3.3.2.2 Beef Sustainability Package

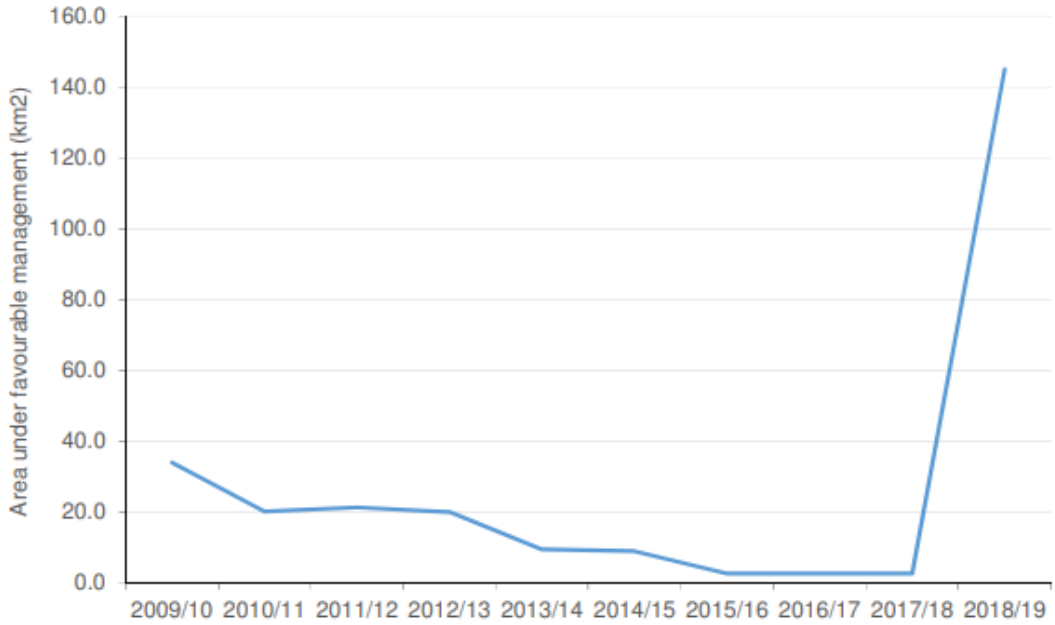
The Beef Sustainability Package is similar in its motivations as it includes an eligibility requirement for receipt of the Farm Sustainability Payment, therefore, including each of the conditions of the payment. This scheme is a step further in terms of its focus on productivity, and environmental benefits delivered via potentially lower inputs. This scheme focuses on increased rates of calving, and slaughtering cattle at a younger age, and improvements regarding the genetics of cattle. There are no restrictions on stocking density as the scheme is directed towards

changing practices in relation to existing livestock. This measure is an interesting one as it clearly prioritises productivity growth, while also supporting farmers who have historically struggled for profitability. This scheme in essence acts a subsidy for the agri-food industry as a whole as it removes the need to change the market relationships which see these farmers struggle, instead ensuring the wider industry does not collapse with the disappearance of a section of the industry it exploits but underpins it.

6.3.3.2.3 Farming with Nature Package

The Farming with Nature Package is a central part of Sustainable Productivism. Environmental farming schemes were the main source of environmental improvement from the CAP, and NI's overall rural environmental governance. This can be observed in the results of the Programme for Government indicator concerning biodiversity, the percentage of protected areas "in favourable management" (DAERA, 2019b). The usage of this indicator and new focus meant that a miniscule percentage of NIs protected areas were considered as under favourable management. However, the delayed launch of the 2016 environmental farming schemes meant that this started to change in 2018 (Figure 6.4).

Figure 6.4 Terrestrial protected sites under favourable management 2009-10 to 2018-19



Source: DAERA, 2020a

This approach is a partnership approach between landowners, occupiers, and the department where a plan will be produced to suggest types of management that would be appropriate to achieve "conservation objectives" and deliver advice. This is stated as an explicit contrast from a "conservation plan" that would "dictate management actions"(DAERA, 2019c). The Farming with Nature package seeks to expand this approach to more land with eligibility to all land managers with over 3 ha, a plan to co-design schemes with an outcome based approach which is discussed further in section 6.3.4. The initial focus of the package is on habitats with the aim to halt biodiversity declines, and creating or restoring habitats. There is the potential for further actions to be added to the package if stakeholders suggest specific "quick wins".

6.3.3.2.4 Farming for Carbon Measures

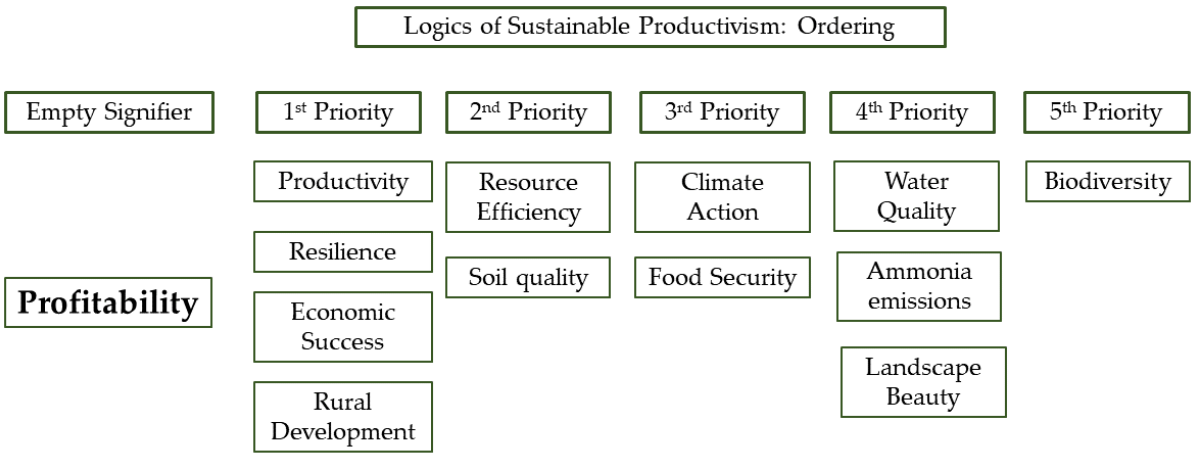
The Farming for Carbon policy within the agricultural policy framework appears to be under-developed as it relies on the work of the other packages, or other policies such as the Peatland Strategy or the Green Growth Strategy. However, an important

part of this is the commitment to the development of a "future land use policy" during the next mandate after the 2022 assembly election. This scheme seems to bring together the Climate Change components of existing schemes, as well as certain imagined practices such as hydrogen production from agricultural waste, to create the beginnings of a sectoral plan for the climate action (DAERA, 2022c).

How a demand is resourced is indicative of the prioritisation of that demand – for example soil management is now a prerequisite of receiving funding. This is directly tied to increases in productivity and potentially linked to Climate Change measures and water quality, and less directly related to biodiversity which is relegated to voluntary schemes and knowledge measures. These schemes highlight an ordering of the demands of Sustainable Productivism and allows for a construction of a chain of equivalence which differentiates the discourse from other discourses which aim to integrate the same demands. It reveals the future intentions of the system of governance which is to achieve a productive industry which is profitable meaning that it does not require as much support, nor is challenged by the need for climate action. Within that as shown in Figure 6.5 there is an intentional gap around biodiversity which will be supported by additional means such as the farming with nature package, or specific management plans for designated areas, meaning that it will not challenge the fabric of the industry.

Sustainable Productivism Ordering of Demands

Figure 6. 5 Sustainable Productivisms Ordering of demands



Source: Authors own

6.3.3.3 Practices of Governance

As noted above a significant aspect of the scheme design is the idea that they will be co-designed between stakeholders and the government, although as shown in England this is not without its challenges (Lyon, Little and Tsouvalis, 2023). The first of these challenges in NI was the rejection of this position by the ENGOs with the relationship between the ENGOS and DAERA eroding to the point of walk-out of governing structures by ENGOs in response to the UFU-NIEA MOU (NIEA and UFU, 2017). The partnership approach was not restricted to the MOU. Since 2012, the NIEA has negotiated prosperity agreements where they agreed with large organisations such as Dale Farm, a series of commitments and targets for environmental improvement in exchange for their support (DAERA, 2016b). This is the NIEA's way of attempting to balance economic development and environmental sustainability, particularly in the agri-food sector. In exchange for UFU promoting environmental issues and assisting the NIEA, the NIEA committed to engaging more with farmers and addressing the concerns of farmers, for example by agreeing to give seven days of notice before an inspection, unless it undermined the inspection. NIEA also agreed to consider less punitive approaches to dealing with

cross-compliance breaches if they could gain the European Commission's approval. This sets the ground work for a future of regulatory regime in NI out of the EU which will be more advisory, less punitive, and focus on partnerships. As noted in Chapter 5 this has potential consequences for NI's waterways in particular as many small pollution incidents can add up to large effect (NIEA and UFU, 2017; DAERA, 2018). This approach is in-line with the UKG approach to principles, however, it is yet to be seen how the OEP will interact with the NIEA, and it is possible that the NIEA will come under scrutiny for their lenient approach and its effect on government targets.

6.3.3.3.1 Delivery through technological innovation

Beyond the resiliency payment the funding saved from the area-based payment removal was suggested to be re-directed towards funding for both productivity improvements and environmental sustainability (DAERA, 2018). Recommendations of the Greenhouse Gas Emissions taskforce, sustainable land management taskforce and ammonia emissions taskforce all focus on the collection and sharing of data and use of technology (Expert Working Group on Sustainable Land Management, 2016). As is like the English case, the appearance and understanding of an issue is deemed to be a part of the delivery of the service as this will alter existing practices. This is particularly clear on the issue of soil health and water pollution with the recommendation of a publicly funded GPS soil sampling and analysis, along with a full aerial LiDAR survey of NI to target water quality interventions (Expert Working Group on Sustainable Land Management, 2016; DAERA, 2022c). The intention is that delivery can be targeted effectively and that with more data alongside adequate advice farmers practices will change behaviour becoming more environmentally sustainable. Environmental sustainability is seen as both the intention of the policy and a by-product as the focus is on increases in economic performance. For example, the soil analysis should lead to better utilisation of grass with larger yields which will provide more feed for livestock, reducing farmer expenses. As it has been noted

this has been incorporated into government policy with the Sustainable Farming Payment and its conditions, demonstrating the interconnectedness of the policy network and government.

6.3.3.3.2 Acceptable Advice

The barrier identified to achieving this approach is the relationship between farmers and the government generally, but NIEA specifically. The SALMS argued that an "advocacy first" approach had to be developed and advice should be separated from enforcement (Expert Working Group on Sustainable Land Management, 2016). Over the last few years, to coincide with CAP reform the College of Agriculture, Food and Rural Enterprise (CAFRE)was re-organised and within that a knowledge advisory service was established that brought together different advisory units from within CAFRE and the Department (Long, 2020). This was envisioned by the department as a bringing together of economic and environmental performance, however, it also allows farmers to get advice from an organisation which is also unable to penalise them.

As well as the provision of advice, a key issue that emerged was whether that advice could be trusted by farmers. Throughout the last decade during both CAP reform and the post-Brexit policy development farmers have been concerned about policy and advice being "science based" (Expert Working Group on Sustainable Land Management, 2016; Expert Working Group on Sustainable Agricultural Land Management, 2017; Anonymous, 2020). This has carried through to recommendations as they stress that it is critical that they are seen by farmers as "credible" and "scientific". There is a common problematisation that environmental regulation, and in particular the CAP was unscientific, although not accepted by those at CAFRE (Galbraith, 2020).

To give credibility to the regulation they recommend both the collection of data, effective communication with farmers and a central database alongside a decision

tool which gives farmers access to the data relating to their land and helps make decisions based on it. Both the ammonia taskforce and Greenhouse Gas Implementation Partnership felt that the current models used for regulation in NI were using inappropriate data, or did not take into account the local industry (Agriculture and Forestry Greenhouse Gas Implementation Partnership, 2016; Expert Working Group on Sustainable Agricultural Land Management, 2017). For example, the issue of stalls with slatted floors as a mitigation measure, which would be common in NI, was not considered in modelling. Therefore, crucial in delivering the service of rural environmental governance is adapting the modelling and data to fit NI to ensure that farmers are confident of the advice. Again, there is evidence of further distrust, and the ungovernable element of farmers as it was recommended that data provided by farmers must be provided on a "no fault" basis ensuring that farmers would not be punished for data demonstrating sub-optimal nutrient levels, instead given support to take reasonable action to rectify the issue,

6.3.4 Node of Management

The node of management concerns how practices are to be evaluated, maintained, transformed and how decisions about the service are made. This formulation misses an element which is important, because it is not just about how practices are to be transformed, but about how entrenched practices resist transformation. For Sustainable Productivism the node of management covers the establishment of new measurements and institutions, a policy framework focused on incentivisation for an at risk industry, and the development of a governance network approach to decision making.

Table 6.4 The Node of Management in Sustainable Productivism

Aspects of Node of Management	Sustainable Productivism
How practices are maintained	Incentives, resiliency payment and the formation of a governance network
How practices are evaluated	The creation of sustainability measures, and a sustainability body.
How practices are transformed/resist transformation	The governance network committed to an agreed ordering of demands will both transform and resist transformation of practices
How decisions about the services are made	Decisions about the services will be made by on a more collaborative basis within the governance network, however, led by government

Source: (Authors own)

6.3.4.1 Maintaining Standards

The Node of Provision is concerned with why practices of a particular service are maintained, the node of distribution who and where they are practiced, and the node of delivery how they are delivered. The node of management then stands out as it also considers these questions but at a wider scale, it focuses on how they are maintained in the way that they are despite forces that may have altered them. For Sustainable Productivism, as with other agricultural discourses depends upon incentives to encourage and maintain practices. The post-Brexit rural environment governance regime in NI has developed two key incentive schemes, the Farm Sustainability Package and the Farming With Nature Package. These have been discussed in greater detail within the other nodes, however, what is important is the context within which they exist. They are ostensibly incentive schemes to encourage certain types of behaviour such as sustainable land management or nature friendly farming respectively, however, the wider conditions of the agricultural sector in NI make these schemes, particularly the former, into more compulsory subsidies with stipulations attached.

Table 6.5 Farm Income Statistics

Farm Business Income Minus Direct Payments (£ per farm) from 2015-2021							
Farm Type/Year	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Cereals	-4,181	-3,086	-13,532	-7,277	28,796	6,113	4,317
General Cropping	1,835	-4,014	9,496	-1,526	86,026	-9,382	-25,014
Pigs	31,799	6,000	44,285	73, 374	45,989	55,826	70, 716
Dairy	23,997	-10,066	-418	42,688	33,106	28,217	30,894
Cattle and Sheep (Less favoured area)	-13,981	-12,256	-10,674	-12,158	-14,509	-12,787	-8,430
Cattle and Sheep (Lowland)	-10,119	-8,992	-7,847	-7,411	-9,296	-8,420	-1,306
Mixed	13,325	-3,280	2,730	16, 873	2,772	-478	18,618

Source: DAERA(2022b)

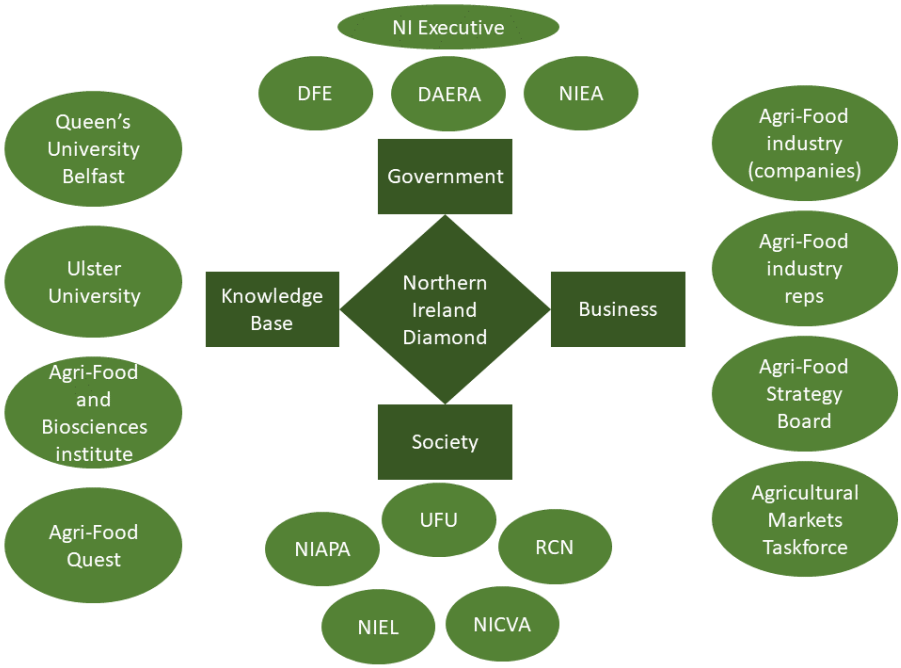
The NI farming community is deeply unprofitable with many farmers losing money when the CAP subsidies were taken out of the equation (see Table 6.5). The consistently negative data on Farm Business Income Minus Direct Payments for Cattle and Sheep farms is particularly stark given that they make up 79% of NI farms and the vast majority of land (DAERA, 2021b). Couple this with the risks associated with new free trade agreements struck by UKG (e.g. with Australia), the potential for added expenditure around the Protocol, and general continuing global uncertainty, for many farmers the resiliency payment is more of a requirement to function than a voluntary incentive. This, coupled with the rules attached such as the Sustainable Farming Standards, and the stipulations of soil management etc, are in effect mechanisms to ensure the practices of Sustainable Productivism are maintained. Once these practices are initiated it is believed that farmers will become more profitable ensuring that these practices are repeated continually. While this view considers the short to medium term effects of the practices, in the longer term Sustainable Productivism also relies upon investments in technology, education, and innovation from a wider network of particularly the epistemic community at the core of NI's agri-food system.

6.3.4.2 From Policy to Governance Network

The Kendall Review sought to formalise this epistemic community into the "NI Diamond" model for agri-food (Kendall, 2022). The NI Diamond, based on the Dutch model, was a proposal between QUB and AFBI to create an "ecosystem in which the four 'partners' of government, business, society, and the knowledge base, work together to pool goals, resources, risks, responsibilities, and competencies in agri-food" (Kendall, 2022, p. 42). This proposes a shift in NI from a policy network which contains a range of contrasting views and occasionally collaboration, to a governance network in which each party works towards a common goal, as defined in Chapter 3. Figure 6.6 is a representation for this potential governance network using the policy network identified in Chapter 5. Indeed, in Chapter 5 an emerging governance network was identified, with the diamond model giving it shape.

Proposed NI Diamond Governance Network

Figure 6.6 The potential NI Diamond Governance Network



Source: Authors own

The components of the network are not set, the model is still merely a proposal, however, it is a proposed formalisation of an already existing network which highlights clear imbalances in representation. The knowledge base components of the diamond are clear as they come from the original proposal with QUB, AFBI, Ulster University and Agri-Food Quest forming this section. Interestingly CAFRE are not included within this which one must assume means they form a part of the Government section given their critical role in delivery. On the business component the agri-food industry is well represented both by industry representative bodies such as NIMEA and NIFDA, but also those large companies such as Moy Park which are heavily influential. Further to that there are the groups such as the Agri-Food Strategy Board and the Agricultural Markets Taskforce which are established when necessary to accomplish tasks, develop strategies or steer the industry through challenges. As seen in the BCC this results in an industry which is over-represented with significant overlap between the membership of each.

The society section of the Diamond is likely to involve further over-representation with the farming component of agri-food represented here. It is within this component that environmental and wider rural concerns are most likely to be included. However, as shown in Chapter 5 membership of the society section is likely to be the most contested through processes of inclusion and exclusion. Each of the organisations represented in Figure 6.6 have been included within the wider policy network, however, NIEL were the only organisation brought into the immediate agriculture policy network. Even this inclusion is tenuous as it relies upon NIEL's willingness to actively contribute. Considering that they have pulled out recently rather than give their seal of approval to approaches they disapprove of it seems unlikely that within Sustainable Productivism this Governance Network will coalesce. The other potential organisations for the society component, NICVA, RCN and the local councils, merited conclusion in the wider Brexit policy network. However, they are likely to be left out given that social sustainability within agri-

food is concerned with the economic success of the industry, while rural policy is meant to counteract the negative effects of this domination.

The Government components are clear with DAERA leading supported by NIEA and DfE, and requiring the backing of the NI Executive. Although this was from an independent review the government offered support for the proposal, although this was limited by budgetary concerns, and they further suggested the review chimed with their own policies such as the x10 economic strategy and the Future Agricultural Policy Framework which stated:

> *"To achieve this vision will take a collaborative effort with industry and stakeholders, using evidence to inform policy decisions, encouraging uptake of innovation, science and technology, encouraging knowledge and education exchange and ensuring these policies are supported by an appropriate level of regulation. It is only by working together to achieve these outcomes that farming and the environment can flourish (DAERA, 2021d, p. 19)".*

This proposed governance network is interesting as there are still central antagonisms within the policy network around for example whether to reduce, maintain or grow livestock numbers. Coming together towards common objectives, particularly pooling resources, presents a significant obstacle considering these disagreements. Further antagonisms between farming groups and environmentalists were detailed in Chapter 5, particularly the relationship with the NIEA. To attempt a governance network within this context suggests a strong consideration that this opposition can be ended, and most actors can continue. This has occurred on the sectoral level with the Agri-Forestry Greenhouse Gases Implementation Partnership, however, membership of this is restricted to government and industry.

The focus on governing as a network does not exclude the role of state as highlighted by Mitchell Dean (2007). The establishment of a governance network, and the terms of reference for that network rest with the government, particularly as

involvement of government may ensure a wider membership desired to end antagonism. Here we can see the relationship between ENGOs and the Government come into play as Brennan et al (2017) noted that ENGOs in NI that depend on government funding, and in some ways act as delivery partners for government, can be relatively timid as campaigners. The government bringing them into the fold could have the desired effect of ensuring they work within the discourse, rather than build an alternative.

In addition to this DAERA in particular have positioned themselves as a powerful actor through the production of the Environment Strategy as NI's Environmental Improvement Plan (DAERA, 2021b). The strategy created by DAERA, with input from other government departments and bodies, is to be the delivery body for environmental improvement in NI with all departments reporting on their progress and having to adapt plans if they are not aligned with the plans. This is a key way in which the UKG's post-Brexit formalisation process has impacted NI. Further to this, the role of the OEP gives DAERA further power. As described in Chapter 3 the OEP's role is to hold the government to account over their progress in meeting targets set within the Environment Strategy. This gives DAERA additional support in directing NI's government beyond the department.

The use of strategies to extend departmental power is also evidenced by the Green Growth Strategy produced by DAERA. With the input of DFE, it produced the "Green Growth Test" to ensure "climate action, the environment, including its natural capital assets and green jobs are considered in the appraisal of all policies, programmes and projects for which there are public funding implications" (DAERA, 2021b, p. 22). This Green Growth test is likely to be used to influence the decision-making process across government, local authorities, the private sector and the voluntary and third sector when they are using public money, which explains the prominent position for DAERA alongside the Executive in Figure 6.6. However, through Schedule 2 of the Act which gives DAERA this role, the NI Assembly is also

given an increased role in scrutiny of the EIP, which is a demonstration of how the collapse of the assembly shaped NI's post-Brexit government system in a way that NI may not have chosen.

6.3.4.3 Measuring and Marketing

As shown in the node of delivery the move from productivism or multifunctionalism to Sustainable Productivism involves a large increase in the collection of data. The node of management however concerns the manipulation of that data into measurements and indicators to evaluate performance, and indicate the need for reform. One of these measurements has already been discussed with the future development of the "Green Growth test". However, Sustainable Productivism is likely to need a range of new measurements particularly as a necessary inclusion in an outcomes-based approach is both a baseline measurement and periodic measurements to measure performance to inform payment and future projects. This has been at foundation of the discourse, recommended by government taskforces, independent reviews and government documents alike.

The approach taken to measurement is informed by different dynamics which shape the discourse, one being the problematisation of the CAP, and other being the demands of the discourse. With regards to the CAP a key concern was its rigidity in eligibility only focussing on "eligible agricultural land". This saw recipients of direct payments maximise the eligible land through management of vegetation in a way that was detrimental to the environment. There was a particular conflict between land eligibility and agri-environment schemes with farmers undoing work carried out under previous agri-environment schemes to maximise direct payments. Changing the measurement of eligibility to include all agricultural land, other than hard features such as buildings and lanes, means that positive practices are more likely to be maintained (DAERA, 2022c).

The demands of the discourse, informed by the node of provision and developed

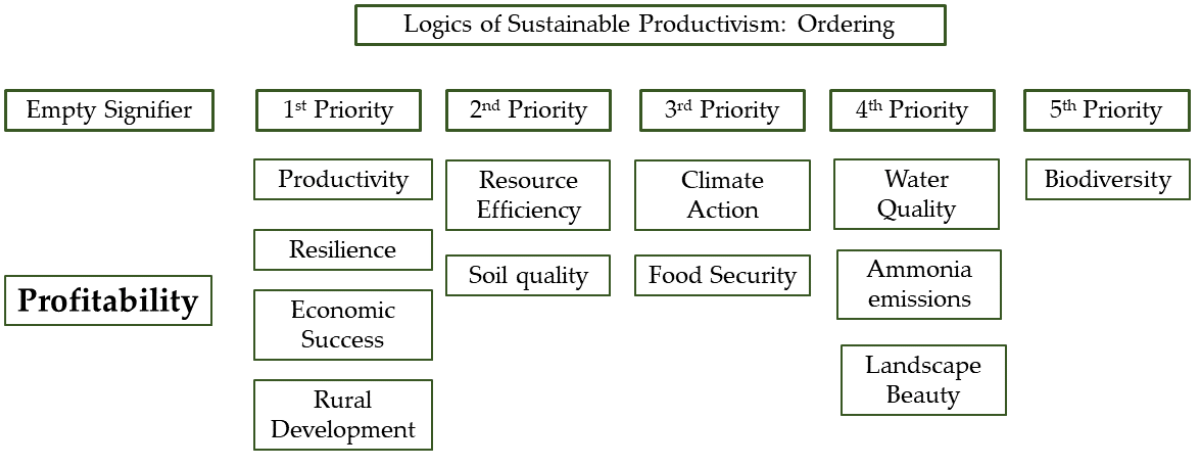
into policy by the policy network, or potential governance network, is at the heart of developing measurements to evaluate Sustainable Productivism. The earlier example of ammonia is illustrative, and the requirement for models to both take into account the specifics of NI and the actions of specific local farmer (Expert Working Group on Sustainable Agricultural Land Management, 2017). Another example of the expansion of data collection is in regards to the existing contributions that trees in woodland and hedgerows make to carbon sequestration which are not included in the existing accounting framework (UFU, 2021). There is a demonstrative move towards a governance network here also as DAERA have expressed the need to have statistics and models which are accepted by farmers beyond peer review (DAERA, 2022c). That is not just scientifically accurate models but politically acceptable models. This means that measurement is not just about evaluation but maintenance of practices, indeed successful measurement ensures practices and policies are reproduced.

As has been seen previously with the arguments around an IEPA who is responsible for oversight is an intensely political topic, and the production, collection, manipulation and evaluation of data is no different. Although it is clear that DAERA will take a lead role a space has been created for an alternative body, that being a Sustainability Body for the agri-food industry (Kendall, 2022). The idea of a sustainability body has been around in the policy network for some time, and is often tied up with the idea of a marketing body for NI Food which was recommended by the Going For Growth strategy (Agri-Food Strategy Board, 2013). Announced in 2015 the NI food marketing body had still not been established by 2020 and has recently come into existence as BuyNIFood.com (BBC, 2015; Buy NI Food, 2022). Both the government and the Kendall Review have proposed a sustainability brand to measure, monitor and market NI food. This has long been an ambition of farmers who look to the Republic of Ireland's Origin Green as an effective marketing tool that they could similarly avail of, particularly given how

similar the industries are. On the other hand, environmentalists have opposed this stating that Origin Green is merely greenwashing an industry which is unsustainable. How this body in NI operates depends on what measurements it will take, but again the focus seems to be on soil and therefore productivity. Thus, the formalisation of the policy network into a governance network is not without potential pitfalls, and this may be a way to bring on board those environmentalists that can stomach it, while side-lining those that cannot. Therefore, with the existing policy network the node of management, how a service is maintained or transformed is very much at the behest of the agri-food industry with potential for measurements which inform national and global environmental policy changing to ensure productivity gains can be made, alongside a reputation for environmental sustainability.

6.4 Conclusion

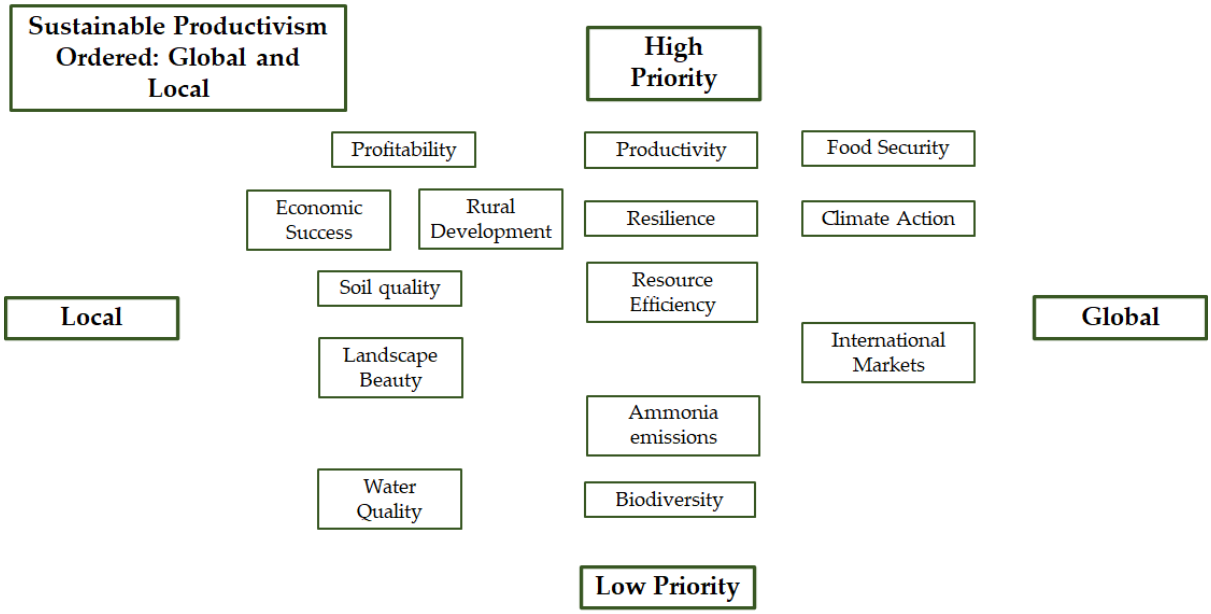
The policy that has been demonstrated in this chapter is not one that compromises between social, economic and environmental pillars of sustainability but one in which a vision of the rural is constructed where all of them are aligned. The construction of a hegemonic social logic does not require compromises or trade-offs but win-wins where each party looks at the proposal and sees victory and the remaining opponents are sufficiently side-lined, which has occurred with ENGOs. What has been presented is a form of land management which focuses on ensuring food is produced locally while meeting global sustainability demands, prioritised over local concerns such as biodiversity and water quality.



As shown in Figure 6.2 – Ordering (repeated above) the logic of Sustainable Productivism re-orders the issue of sustainability by primarily addressing issues of economic and social sustainability, and prioritising environmental sustainability where it can benefit these two such as through soil health. The key for the future is whether this prioritising can indeed achieve profitability to the benefit of the environment while leaving resources and space to focus on biodiversity. Considering the proposals in Going for Growth and the Sustainable Land Management Working Group this direction is not a surprise, indeed in some ways it is rooted in the argumentation of environmentalists as well. After the Brexit vote environmentalists in NI sought to turn the food security argument upon its head by stressing that environmental sustainability was the foundation for food security. A particular focus of this was soil health, as well as reducing inputs meaning an increase in profitability (Martin, 2020; Kelly, 2020).

Sustainable Productivism Demands Order and Priority

Figure 6.7 Sustainable Productivism demands by priority and scale



Source: Authors own

The other critical demand of Sustainable Productivism, that prompted the transition from productivism is that of Climate Change. Interestingly it is both food security and Climate Change where the global demand takes priority, relying upon the NI agri-food industries export orientated nature. Figure 6.7 demonstrates a similar process of prioritisation within these interconnections and with biodiversity being as big an issue, if not more so, globally than locally it falls low on the priority list.

While each of the nodes are important the node of provision and the node of management may be the most important as these are the nodes that firstly give the system it's appearance, and secondly ensure that the system is maintained. To do this effectively it will attempt to institutionalise the system, and the diamond is one example of this. However, the question must be raised, what if they fail? There is a significant reliance on voluntary selection within the process. Although for the Farm Sustainability Payment there is a coercion at the centre of the process, the existence of the payment cap and the voluntary nature of the Farming with Nature payments

makes it possible for the scheme to fail or under-perform. As is the case in the ammonia example the best economically performing farms may not qualify for the resiliency payment or want to participate due to the conditions that comes with it. If these most intensive farms continue to farm in a way that is harmful for the environment the scheme may be undermined even if it makes improvements at the NI wide scale.

This corresponds with Attorp's (2022) analysis that there is an inadequate differentiation of the farming sector in NI. The arguments used in favour of a productivist approach use the livestock sector as the primary beneficiary, the most at risk, and with the most potential to benefit the environment. However, the policies, actors involved, and economic beneficiaries are those involved in dairy, pig, poultry and the wider agri-food sector such as processing. As Attorp (2022) noted the livestock sector is politically leveraged, yet do not drive the process. Indeed, this is the sector that might most benefit from a public goods system with a reduction in herd size and increase in profitability, however, the effects of this would be felt more keenly in the processing and export component of the sector. This demonstrates that in either an exceptionalist or post-exceptionalist tensions exist, and actors are excluded within policy networks.

The topic of Climate Change has come up frequently in this thesis, and addressing the issue within certain parameters is a central component of Sustainable Productivism, however, it is also a potential weakness. The focus of Sustainable Productivism on Climate Change is concerned with the issue at a global level with the priority being a reduction in carbon per unit emissions, not a reduction in emissions total. Between January 2020 and May 2022 the issue of climate action was highly salient in NI politics with a commitment to a climate bill in the New Decade New Approach Agreement, and the introduction to the assembly of two separate climate bills. The Nodal Framework produced in this chapter was developed as the logics of Sustainable Productivism unchanged from the newly passed climate bill in

March 2022. The next chapter will introduce the climate debate in NI, and offer an alternative nodal framework for an alternative to Sustainable Productivism should the more radical alternatives to the climate bill that passed had gone through instead, and conclude with an updated nodal framework for Sustainable Productivism post-climate bill. This approach was indeed inspired by the DAERA Minister Edwin Poots who wanted to focus on "what works" like the above, rather than introducing "meaningless targets".

Chapter 7 – Sustainable Productivism as a Political Logic

7.1 Introduction

In its relatively short time as a hegemonic discourse Sustainable Productivism has been challenged by a potentially existential threat, Climate Change. Indeed, as shown in Chapter 3 social logics are most visible when they are challenged politically. This chapter represents the end in a sequence of chapters which aims to complete analysis of Sustainable Productivism as a hegemonic discourse, particularly how it operates politically to remain hegemonic.

This analysis will begin by providing context on the debate by considering NI's history with Climate Change legislation, the increasing role of the CCC, and the commitments made in NDNA. This is followed by an analysis of the two climate bills introduced, concluding with an analysis of the final legislation. It will then utilise this analysis by outlining a nodal framework which considers the specific climate action aspects of Sustainable Productivism. This offers an analysis of how this changed after the climate bill, and the effect this may have on Sustainable Productivism as a wider system of governance, as well as the transformative potential of the proposals that failed. Following on from this the final section of this chapter will consider the way Sustainable Productivism resisted transformation which will offer a deeper understanding of Sustainable Productivism as a political logic.

7. 2 Climate Change and NI

In March 2022 the NI Assembly passed Climate Change legislation for the first time in its history (McCormack, 2022). NI was the last part of the UK to put in place its own Climate Change legislation as it had instead chosen to operate within the wider UK framework passed in 2008 (McCormack, 2022). Scotland passed its own Climate Change legislation in 2009, revising it in 2019, and Wales included Climate Change

within the 2016 Environment (Wales) Act (Welsh Government, 2016; Scottish Government, 2017; BBC News, 2019a).

The question of whether NI should have its own Climate Change legislation, rather than just the adaptation plans required to contribute towards the UK framework, goes back to the NI Assembly inquiry into Climate Change in 2008 (Turner, 2013). The inquiry determined that regional, non-binding, emissions reduction targets should be set in the future, however, not until a regional baseline was clarified, and the relationship between economic competitiveness and emissions reduction was understood. Indeed, in the earlier days of devolution the Assembly was remarkably non-confrontational with only 2 MLAs calling for legally binding targets during the passing of consent for the Climate Change Act 2008 (Turner, 2013). They were ignored by the DUP Minister for the Environment at the time, Arlene Foster. The DUP later replaced Foster with Sammy Wilson MLA a vocal climate sceptic who argued against the adoption of the Climate Change Act 2008 (Turner, 2013). The installation of Wilson led to the NI Assembly Inquiry, however, it was not until the DUP were replaced in the department that the issue was raised seriously. In 2011 the SDLP Department for the Environment Minister, Alex Attwood wrote to the CCC asking whether a NI specific legislation would be appropriate (Turner, 2011). The CCC responded that providing local targets with legal underpinning would be useful and provide certainty to business and policy makers (Turner, 2011).

In 2015 another SDLP Minister for the Environment, Mark Durkan, approached the subject of Climate Change legislation, issuing a discussion paper, which was supported by the CCC. After the assembly collapsed in 2017,Climate Change legislation was put on the backburner but it was kept alive within the government and assembly as demonstrated by a November 2017 Assembly Research Matters post which put the issue into historical context, considered the current situation, and the framing of the debate (Cave, 2017).

The debate around climate legislation since its first consideration in NI has been one in which voluntary and environmental organisations support the move, while farming and agri-food organisations oppose it (Cave, 2017). This is not a unique framing of the debate as it has occurred in different countries across the world, however, in NI the strength of the agri-food sectors contribution towards the wider economy and their political power has held sway as they oppose actions which will or may limit the growth of farms. However, during the absence of the NI Executive the demand for climate action grew internationally and locally with protests demanding system change and declarations of a climate emergency throughout the UK and Northern Ireland. This meant that any returning Executive would face pressure to act. The returning Executive was not without resources or possible pathways, climate action across the UK have been heavily influenced by the CCC.

7.3 An Interlude on the Climate Change Committee

The CCC is an independent statutory body established under the Climate Change Act 2008 to advise the UK and Devolved Governments on emissions targets, and report on the reduction of GHG Emissions and the preparation for the impacts of Climate Change (CCC no date). More than that they are a powerful political actor whose advice, guidance and reporting is likely to shape the very fabric of the UK in the 21st century, and bodies like the CCC form a central plank of what is considered good climate governance. They have had a minor role in this thesis thus far, primarily concerning their future relationship with the OEP. However, in NI their advice on the issue of Climate Change is used a source of legitimisation, and any action outside of that advice is denounced. They set the boundary on acceptable political activity. With that in mind it is necessary to outline what the advice of the CCC is, and how it is offered, as this is integral to the story of NI's tale of two bills.

The CCC's current advice to each government in the UK is the Sixth Carbon Budget in which they illustrate a pathway to net-zero by 2050 in line with UKG targets. In

order to develop this pathway the CCC created 5 scenarios, 3 of which (Headwinds, Widespread Engagement and Widespread Innovation) are used to inform the recommended scenario (Balanced Net Zero Pathway), and the final which they use to offer an optimistic scenario. Each of the scenarios achieves net-zero by 2050, however, within each there are radical political choices to be made. The Balanced Pathway is the CCC's attempt to offer a solution that they see as politically and scientifically viable, but rather than a purely scientific endeavour it is also a political one. An example of this is section eight on Aviation. Aviation has become an important part of the modern world, particularly socially since the advent of budget flying. However, it is also a major contributor of GHG, and these emissions are unevenly spread with citizens from richer nations flying far more frequently than their poorer counterparts, and even within the richer nations these emissions are distributed unevenly. The CCC analysis does not reflect this, it was informed by its own participatory research which saw a desire to maintain flying as an important social and cultural activity (CCC 2020; Phillipps, 2020). Even with this in mind it is shocking that in the recommended scenario flying actually increases by 25% by 2050, and the biggest reduction they can countenance is 15%. Although the overall issue falls outwith the scope of this thesis it is important to remember that the CCC is not a scientific institution but a political one (Howarth and Painter, 2016; Fankhauser, 2018).

With this in mind, prior to considering the specific recommendations for agriculture and land use, or NI, it is important to reflect on what the key differences are between the five different scenarios (Table 7.1).

Table 7. 1 A summary of CCC scenarios

CCC Scenarios	
Headwinds	Low levels of societal and behavioural change, and innovation. Scenario more heavily reliant on use of large-scale hydrogen and carbon capture storage infrastructure.
Widespread Engagement	High levels of societal and behavioural change. Reduced demand for most high-carbon activities and uptake of climate mitigation measures by people and businesses.
Widespread Innovation	Successes in reducing the costs of lower carbon technologies allows for more widespread electrification, a more resource and energy efficient economy and cost-effective CO2 removal
Balanced Net Zero Pathway	A tailored approach which seeks to keep each of the above pathways open should a breakthrough be achieved.
Tailwinds	A more ambitious scenario in which both engagement and innovation are successful achieving net-zero before 2050.

Source: (authors own from information in (CCC, 2019))

As shown in Tables 7.1 and 7.2 below the two determining variables for the CCC pathways to net zero are engagement and innovation. Even in the scenario which involves low levels of innovation, Headwinds, there is a reliance on scaling up technologies which are either fledgling or currently theoretical. What is important to note is that there is no scenario in which net-zero is met by technological innovation alone with a low carbon society simply taking the place of a fossil fuel society. The recommendations for Agriculture and Land Use make that clear in Table 7.2.

Table 7. 2 Agriculture and Land Use CCC Pathways

Balanced Pathway	Headwinds	Widespread Engagement	Widespread Innovation	Tailwinds
25% shift away from red meat and dairy by 2030: 35% by 2050 (meat only)	20% shift away from red meat and dairy.	High level of diet change (50% by 2050) and food waste reduction (70%)	50% diet change with 30% of this from lab grown meat.	50% diet change with 30% of this from lab grown meat.
Tree-planting rates of 30,000 hectares per year to 2025, then 50,000 hectares/year after 2035	Annual tree-planting rates of 30,000 hectares /year by 2035	Tree-planting rates of 70,000 hectares/year by 2035, low yields, greater mix towards broadleaf	Annual tree-planting rates of 50,000 hectares/year by 2030. High yields, high mix of conifers	Annual tree-planting rates of 70, 000 hectares/year by 2035, high yields

Source: (CCC, 2019)

If one takes Headwinds as the starting point there is a need to reduce consumption of red meat and dairy by 20% by 2030. This coincides with a 20% reduction in production of these products which frees up land for carbon sequestration, including more than doubling the rate of tree planting per year by 2035. However, this scenario relies upon the use of expensive technologies currently in development and represents the minimum change necessary. The balanced pathway increases the number of trees required, and the reduction of red meat and dairy consumed meaning more land taken out of production. The final three scenarios all see a 50% reduction in red meat and dairy and between 350% and 500% increase in tree planting by 2030 for the prior and 2035 for the latter.

These are very significant numbers with the dietary change in the Balanced Pathway accounting for 3 million hectares out of food production by 2035, a fall of 17%. However, this does not account for the necessary replacement of meat and dairy products in our diets, these too will need to be produced meaning the fall in livestock and dairy farming may be even further in this balanced scenario. These are only projections, and indeed we can see above how they may be mixed, however, even the mildest of them promises significant change in how the land is used. It is important to note that we are not currently on track to meet any of these dates, nor is there a plan in place to do so, due to the nature of global warming it is likely that any dates missed will need to be followed by even deeper cuts, which is important to bear in mind for NI.

As a part of the Sixth Carbon Budget the CCC adopted different approaches to each of the devolved nations to reflect their differences, however, the objective of the CCC is for the UK as a whole to reach net-zero (Lord Deben, 2020). For NI this meant that rather than reaching net-zero they would make a "fair contribution" of a reduction of 80% of GHG by 2050 to help the UK overall. There are two reasons given for this, the first is that 50% of agri-food productions are consumed in the rest of the UK, and the second, is that it is simply not necessary for NI to achieve net-zero for the UK to

meet it (CCC, 2019). Given the importance of the agri-food sector, and the over-contribution NI makes to UK food production they determined that the excess methane emissions (the main source of consternation) should be offset by carbon sinks elsewhere in the UK. The alternative they offer to this approach is a substantial reduction in livestock, more than in other scenarios, or a greater than equitable share of UK GHG removal technologies based in NI, although they argue there is no adequate location for them. Therefore, they conclude that following the Balanced Pathway NI would reach 82% GHG and net zero CO2 by 2050 (CCC, 2019).

It is important to re-iterate that the CCC approach is indeed just one of many possible approaches, although it is imbued with significant political authority. The scenarios put forward are determined by what they think is politically possible, and the use of the term "fair contribution" must be taken with a pinch of salt as there are no fair contributions here. Historically the UK has contributed to Climate Change vastly more than almost any other nation, particularly for the size of its population, and that is without taking into account its actions in other states as an imperial power as each of those nations contributions are counted as their own (Friedrich and Damassa, 2014; Sealey-Huggins, 2017; Richie, 2019). To this day the UK's contribution to Climate Change outweighs its population number, and attempts to decarbonise have been significantly helped by wealth, pre-existing infrastructure and having burned many tonnes of fossil fuels to fuel development in the past three hundred years, something other countries will not be able to do (Bhambra and Newell, 2022; Dorn, 2022). Further, it is those other countries who are likely to feel the effects of Climate Change most, and currently are feeling them (Sealey-Huggins, 2017). Finally, for many of the solutions to Climate Change it is these countries that will feel the burden of it because a low carbon society is likely to be a metal intense society. An example here is the focus on EVs and batteries a solution to Climate Change, one which sees minimal disruption in the global north, but is dependent on access to affordable lithium (Dorn, 2022; Zografos, 2022). Most of the world's

accessible lithium is in Chile, Bolivia and Argentina and that the solutions to Climate Change for the global north should be found in the veins of Latin America is a great irony, and one which heightens the opportunity for conflict and exploitation of people over these resources (Zografos, 2022). No, these are not fair contributions, increasing flights by only 25% is not a fair contribution, the net-zero target is an inequitable one. The conflict over the climate bill in NI was one over a "fair contribution" and the beginnings of a just contribution.

7. 4 New Decade New Approach

The NDNA Agreement saw for the first time all the major parties agree to "bring forward a Climate Change act" and give emissions reduction targets a legal underpinning. Reasons for the inclusion of this provision in the agreement, include the growth in salience of the issue of Climate Change and the importance of the Paris Climate Change Accord which was expressly mentioned (Sinn Féin *et al.*, 2020). A further reason for Climate Changes inclusion is likely to be that the issue has been one that has been put forward multiple times in the past. A final point to consider is the wording of the agreement as it states that they must address the "immediate and longer-term impacts of Climate Change in a fair and just way". The focus here is on the framing of NI's actions as "fair and just" and how this will be interpreted or utilised politically.

As noted previously upon the devolved governments return DUP MLA Edwin Poots took the lead role in the Executive for Climate Change action as the DAERA Minister. However, it was action outside of the Executive that prompted the introduction of Climate Change legislation into the assembly. Only a month after its return, the NI Assembly declared a Climate Emergency, following Belfast City Council who declared one in 2019, calling on the Executive to "fulfil the climate action and environmental commitments agreed in the New Decade, New Approach agreement" (BBC News, 2019b; Northern Ireland Assembly, 2020b). DAERA did not

respond to this declaration with a flurry of activity around a Climate Change act instead focusing on the Green Growth Strategy and work around the future agricultural policy. This is consistent with the approach taken by the DUP which has been to ignore or defer the issue, in favour of agri-food interests.

In July 2020 the assembly again passed a motion calling for action, this time specifically demanding "the urgent introduction of a Climate Change act", calling for the introduction of the Act to the Assembly within three months (Northern Ireland Assembly, 2020a). In response to this Poots appeared on BBC's Talkback to explain that he did not believe there was a climate emergency, and nor did the officials in his department (BBC News, 2020). With regards future Climate Change legislation he referred to it as "aspirational" and preferred that his department focused "things which are actually actionable", referring to Climate Change act as "waste of time regulations" (Morris, 2020; Poots, 2020). In response to the political fallout around these statements DAERA's permanent secretary apologised for mistakes made in the briefing to the minister around the use of the terms climate emergency and climate crisis, however, this episode illustrates the existing tensions within this area and acted to raise tensions as the assembly term proceeded (McClafferty, 2020).

7. 5 A tale of two bills

As discussed in Chapter 5 a private member Climate Change Bill was introduced by Clare Bailey on 22nd March 2021. The PMB was drafted by environmentalists and academics and sponsored by parties across the assembly, unionists, nationalist and neither (Macauley, 2021a). The PMB lit a fire under Poots who performed a U-turn and introduced his own Climate Change (No.2) Bill on 5th July 2021(Macauley, 2021b). The main difference between the two bills were the headline GHG emissions targets with a net-zero by 2045 target in the PMB Climate Change Bill, and an 82% by 2050 target in the departments Climate Change legislation (Macauley, 2021b). The

Climate Change debate in NI was then dominated by which of these two bills political actors would support. Poots once again undermined any climate legislation by stating that he would rather no legislation were passed if the alternative was the PMB, due to the projected effect that the bill would have on the agri-food industry, and NI's wider economy (Manley, 2021). This also explains why he introduced his own legislation knowing that as it was backed by the Executive it would progress more quickly through the assembly and prevent the higher target from becoming enshrined in law (Slevin, Fearon and Deb, 2022).

As well as a target of net-zero by 2045 the PMB commits the Executive office to lay a climate action plan before the assembly at regular intervals, and the creation of a NI Climate Commissioner (Bailey, 2021, pp. 2 & 7). The climate action plan is to introduce annual targets for net greenhouse gas emissions, water quality, soil quality and biodiversity, which will be subject to carbon budgets, nitrogen budgets and, sectoral Climate Change adaptation programmes (Bailey, 2021, p. 3). The introduction of both carbon and nitrogen budgets was envisioned to encourage land use change and would undoubtedly require considerable change in the agri-food industry. However, this bill was not just concerned with the transition to net-zero but that it was a just transition with a focus on sectoral plans supporting jobs, reducing inequality, reducing poverty and social deprivation. All plans also should take into account the impact of targets on economic circumstances specific to NI (Bailey, 2021, p. 5). This bill, if it had become law, would have dramatically changed the policy making process in NI - for agriculture in particular - requiring much more integrated policy making. Further, it would have placed the transition to net zero at the centre of all policy. The formal mechanism that would have overseen and reported on the transition is the NI Climate Commissioner from the NI Climate Office (Bailey, 2021, p. 7). This re-emphasises the central role that Climate Change was intended to take, alongside the declaration of a climate emergency, across the

Executive and government departments and was intended to ensure that each department contributes to net-zero targets.

On the other hand, the bill introduced by DAERA was introduced with a more limited scope and a reduced target for emissions of 82% by 2050 which the department and the CCC argued was an equitable contribution for NI given the importance of livestock agriculture (CCC, 2019; Minister for AERA, 2021). In addition the bill allowed for targets to be amended to either earlier or later dates, or a higher or lower percentage in response to scientific advice, technological changes or trends, as opposed to the PMB which specified that the date for net zero could not be changed to later than 2045 (Bailey, 2021, p. 3; Minister for Agriculture, Environment and Rural Affairs, 2021, pp. 2 & 13). Immediately then this bill is not as ambitious as the PMB, however, the department and the minister argued that the PMB was not credible, or based in science, and instead was a political bill which would have destroyed the agriculture sector and rural NI (McCambridge, 2021b).

Each aspect of the department's bill is claimed to be based on the advice from the CCC which recognised that NI is a net exporter "with nearly 50% of all agri-food products produced in NI consumed in the rest of the UK" and that these emissions can be offset by "sinks" elsewhere in the UK (Lord Deben, 2020, p. 1). However, as well as this, targets in the bill are less ambitious due to less developed heating infrastructure, "more limited access to CO2 storage", differences in land use, and the economic needs of people in rural areas (Lord Deben 2020. p.27).

The arguments put forward by the CCC are not necessarily correct. They are based on a future vision of the UK as climate neutral within a particular system, however, the later arguments put forward by the department are set out as if they are unchangeable. The differences in land use and the economic needs of people in rural areas are constructs, the existing limitations of rural areas are a result of policy decisions and can be changed. This refusal to engage with change, or a vision for the

future, becomes obvious when considering inability or refusal to develop a sustainable land strategy, or even when considering the lacklustre nature of existing strategies such as the peatland strategy. The approach to the bill from the explanatory and financial memorandum, and the regulatory impact assessment, is a very sterile approach looking at the current headline figures. Rather than treating the topic as one of the most important issues today, and underpinning many other government policies, this again shows the limited scope of this bill.

Indeed, there is a selectivity and cynicism to the use of the CCC as an authority as this is not reflected across even DAERAs policy portfolio. An example of this is the peatland strategy. The key recommendations for land use from the CCC include a ban on rotational burning on peatlands in 2020, ban peat extraction and sale by 2023, regulations in place to ensure that peat soils are not left bare from 2021 and "mandate all peatland within a SSSI are to be under restoration by 2023" (CCC, 2019). DAERAs draft Peatland Strategy instead involves weak terms such as "seek to phase out" in relation to peat compost, rather than overall extraction, with the target date of 2025. A ban on peat extraction is subject to review by 2022 and only applies to publicly owned land, and they only seek to "encourage the reduction and cessation of peat by all statutory bodies and agencies by the end of 2022"(DAERA, 2021f).

These are clearly insufficient actions and demonstrate a complete lack of leadership from DAERA with the government displaying an inability to meet these deadlines themselves, never mind private individuals. With regards to the prioritisation of peatland restoration it is hard to comment on DAERAs targets as they are simply not stated. Under actions to be completed by 2040 all peatlands in SACs/ASSIs should be undertaking restoration actions as required. Compared to the more specific and immediate target of 2023 set out by the CCC this is very weak. The focus on peatland is essential for NI as recognised by DAERA with 12% of the land mass covered by semi-natural peatland habitats, and 18% peat soils. DAERA's strategy is only

focused on recovery of the prior, however, they recognise that the percentage cover of peatland on the island of Ireland is only exceeded in global terms by Finland, Canada and Indonesia. Therefore, peatland in NI is globally, nationally and locally important, and given the scale of degradation (86%, a figure not mentioned in the peatland strategy) it is likely to make an out weighted contribution to NIs GHG Emissions.

Beyond the targets, the main function of the bill is to allow the department to create carbon budgets and a "carbon units accounting scheme"(Minister for AERA, 2021, pp. 4–6). The oversight of the reporting of this scheme falls with DAERA, and each department will have responsibility to make decisions on their carbon units while the CCC would be asked to provide advice to all departments (Minister for AERA, 2021, pp. 6-8). If a department fails to meet their carbon budget they will be asked to put forward new proposals to make up for this lack in the next period. This places the role of DAERA as both the gamekeeper and the poacher within their own remit, while also acting as gamekeeper for each of the other departments, rather than this being an Executive responsibility, or the responsibility of an outside body. There is the option of giving the CCC reporting duties, and any changes in legislation will require the department to request advice of, and heed the advice of the CCC (Minister for AERA, 2021, pp.10-12). However, given the repeated failure to meet existing targets around the environment such as the biodiversity strategy, and the failure to dedicate any funding or legislation towards these targets, the bill as introduced fell well short of what is required (Bain, 2020; Campbell, 2020).

The crucial difference besides targets between the two bills is the oversight of the bill with the establishment of the Climate Change Office in the PMB, and DAERA overseeing implementation in the department's bill. Putting the bills into law means that citizens and organisations can legally challenge the government when the actions they are taking are insufficient to meet the target. In the PMB, the vision for the Climate Change Office is that they will be either an ally of those challengers, or

at the least a neutral source of information, whereas in the department's bill the department will be the one being challenged, and the one providing oversight.

7.6 Climate Change Act (NI) 2022

Fortunately, the presence and progression of the PMB put pressure on the government bill, and there were substantial changes as it progressed through the assembly stages. As expected, given the headlines of both bills, the stated target of the government bill was the most contested aspect. The bill was amended by Clare Bailey MLA to include a target of net zero by 2050, a compromise between the two bills, however, Poots offered an amendment to disaggregate and prioritise CO2 emissions laying the groundwork for a further amendment in the later stage of consideration (Northern Ireland Assembly, 2022b, pp. 1–2).

During the final stage of amendments the minister, Edwin Poots, put forward two amendments relating to the headline target. The first was the amendment that the net zero commitment does not require methane emissions in 2050 to be more than 46% lower than the baseline for methane, and the second was that agricultural emissions would not be counted towards NIs emissions (Northern Ireland Assembly, 2022a, pp. 1 & 5). The second amendment is clear in its intent and was politically motivated as a stick with which to beat their electoral rivals as not caring about rural communities (Northern Ireland Assembly, 2022c). However, the first amendment offered political opponents a possibility for saving face thus getting the minister what he wanted, a Climate Change Bill that limits the required transformation of the agri-food sector. This massively reduces the ambition, and the consequences of the climate bill, however, other amendments made the bill more ambitious than originally introduced.

A coalition of the Green Party, Sinn Féin, SDLP, Alliance and People Before Profit, put forward amendments to push the bill to do more. As the PMB was co-sponsored by Sinn Féin it should be no surprise that they made significant amendments which

borrowed concepts from the PMB including the introduction of a Climate Change Commissioner. However, their amendments also include the introduction of a just transition commission and public consultation on carbon budgets (Northern Ireland Assembly, 2022b, pp. 10 & 13–15). This increases the scope of what the Climate Change Bill should aim to do, how democratically it does it, and what should be considered. One aspect that Sinn Féin specifically mentioned relevant to this thesis was that carbon budgets should consider the "special economic and social role of agriculture, including with regard to the distinct characteristics of biogenic methane" (Northern Ireland Assembly, 2022b, p. 12). A further consideration was a clause inserted around "carbon leakage" which is considered a potential consequence of sectoral plans where emissions related to the "production of goods (including agricultural goods)" are transferred to other countries whose policies are "less restrictive" (Northern Ireland Assembly, 2022b, p. 12). This is a legalisation of the off-shoring emissions debate and a further globalisation of the agri-food emissions discussion.

To encourage de-carbonisation agriculture was singled out further with the introduction of a provision that the department must establish a "Just Transition Fund for Agriculture"(Northern Ireland Assembly, 2022b, p. 16). This is alongside the requirement for each department to publish sectoral plans (climate action plans), consult on carbon budgets, and all policies and proposals "as far as it practicable" should support nature based projects and enhance biodiversity, and include targets for soil quality and biodiversity (Northern Ireland Assembly, 2022b, pp. 14–17). The Sectoral Plans for agriculture specifically must include proposals for carrying out fully funded carbon audits of farms to assess where performance improvements and savings can be made, as well as calculating the existing carbon sequestration which is not currently accounted for ((Northern Ireland Assembly, 2022b, p. 8). Therefore, through a coalition of those parties that supported the PMB, the departments bill became more wide-ranging, enhancing the architecture of climate governance and its

impact on the agriculture sector. However, it also represents a weaker architecture and less ambitious targets. The bill was designed with the intention of limiting the impact on the livestock sector, and through this the wider agri-food industry. This is made clear in the regulatory impact assessment which stated the new net zero targets exclusion of a significant requirement on methane reduction would prevent a "significant reduction of livestock" in order to meet net zero, although that isn't really meeting net zero within NI (DAERA, 2022a, p. 19).

7.7 Nodal Framework for Sustainable Productivism Post-Climate Bill

The analysis of NI's climate legislation cannot be seen in a vacuum, rather it must relate to the analysis and description of Sustainable Productivism in Chapter 6. This will determine to what extent Sustainable Productivism is altered and challenged by the issue of Climate Change.

7.7.1 Node of Provision

The Node of Provision alters very little as compared to before the climate bill because climate action was a central demand of Sustainable Productivism. What is distinct about the node of provision post-climate bill is how pronounced different demands have become, and slight differences in their appearance. In efforts to limit climate action's impact upon the agricultural community it was stated that any plans take into account the "special economic and social role of agriculture, including with regard to the distinct characteristics of biogenic methane" (Northern Ireland Assembly, 2022b, p. 12). This supposed social role for agriculture is re-emphasised be an amendment from Edwin Poots which called for consideration for the current workforce in any policies (Northern Ireland Assembly, 2022a, p. 14). This can be construed as the classic language of a just transition, however, it could also be considered anti-transition, if one is to protect the existing workforce by resisting change rather than re-training and investment.

As highlighted in Chapters 5 and 6 there is a simultaneous globalisation and localisation of demands, and this was made even clearer in the climate bill debate. A globalisation of action benefits the local demands around the social and economic special case for agriculture as NI's place is not to meet net-zero but instead assist UK in meeting net-zero. Due to 50% of NI's agri-food products being consumed in the UK NI's additional greenhouse gas emissions can be resolved via carbon sinks elsewhere in the UK. This is then coupled with the question of food security at the global level which NI is able to support due to the conditions for the production of grass for livestock (Lord Deben, 2020, p. 1). NI presents itself as a particular part of the solution for both food security and Climate Change within a globalised place-based solution. The dual combination of the concepts of carbon intensity and carbon leakage present a strong case for continuing production levels in NI, however, that is if the vision is limited to business as usual and Climate Change will be addressed through the existing system. This contrasts to the view of the CCC which even in their most conservative scenarios sees significant reductions in meat and dairy consumption and production.

The most distinctive changes to the node of provision surround two components, the just transition and biodiversity. The inclusion of just transition in the climate bill has the potential for radical change in two ways, firstly, it may encourage and identify actions that will support the transition, and secondly, potentially more importantly, it may provide an alternative social and economic base for rural communities acting as a logic of difference and disaggregating Sustainable Productivism's chain of equivalence. However, this depends on how the just transition commission is created, it depends on their aims, and their terms of reference. For example, its focus may be restricted to local economies, the poorest communities and the least-skilled workers, without investment this could be a halt on transitions. Alternatively, it could focus on a just transition in the global meaning which would recommend actions for NI to re-dress ecological injustice. With DAERA in charge of setting the

agenda it is likely that the former will be the case, however, the commission and the fund present points of opportunity for opponents of Sustainable Productivism.

The final addition to the node of provision is less of an addition and more of an increase in priority, that of biodiversity. As shown in Chapter 6, especially Figure 6.5 biodiversity was least prioritised within Sustainable Productivism's ordering of demands with environmental gains focussing on soil health, nutrient management, and Climate Change, those that could deliver clear benefits to productivity and profitability. Within the climate bill there are commitments that policies and proposals should support "nature-based projects and enhance biodiversity" as well as include targets for biodiversity (Northern Ireland Assembly, 2022b, pp. 14–17). This inclusion of biodiversity is relatively minor, however, the inclusion of targets within policies and projects which may be well resourced is an improvement for this demand.

7.7.2 Node of distribution

The node of distribution for Sustainable Productivism is not altered by the climate bill with value placed on ensuring productivity and utilising existing regulation and advice for farmers remaining priority. Instead of altering the node of distribution rather the issue of the distribution of climate action is clarified as described in the node of provision, NI's emissions are to be offset elsewhere.

7.7.3 Node of delivery

The node of delivery is impacted in two specific ways: plans and targets. The reason that the Climate Change legislation was deemed necessary was for the introduction of NI specific legally binding targets with which the government can be held to account. Introducing these targets necessitates the production of plans to determine whether the government is on track to meet those targets. With each department to introduce climate action plans for different sectors of the economy this will provide a

clear path for the direction of travel for businesses to follow, and it will provide the public or interest groups with a guide and legal mechanism by which to hold the government to account.

The other mechanisms which are introduced are carbon budgets, and carbon audits. These will form a central part of the transition to net-zero and will allow government and industry a degree of flexibility in their action, and for the carbon audits, guidance on how to make the transition. Further the introduction of the just transition fund for agriculture, depending on how it looks, should support farmers in moving to net-zero specifically. Again, there is a focus on nature-based projects as a norm that should shape climate action practices.

7.7.4 Node of management

One of the main effects of the Climate Change (no.2) Bill will be to alter the architecture of environmental governance in NI. Firstly, it introduces a legal element to the evaluation of the practices of Sustainable Productivism by introducing legally binding targets. The final bill lessened the impact on these on the agri-food sector by disaggregating emissions and lowering the methane target, however, there is still a significant target that practices will be evaluated against. In addition it changes the evaluation of farms specifically by demanding that carbon audits also calculate existing carbon sequestration which it claims are "not currently accounted for".

Secondly, and potentially the largest role that the Climate Change Bill has on Sustainable Productivism is the additional role the new institutions will have on managing and evaluating practices, this will add to delivery of the role but is primarily a change to governance architecture. There are five additions which will change decision making around Sustainable Productivism. The role of the CCC has changed with the bill giving them reporting duties, and an increased advisory role with the government required to ask their advice should they wish to change the targets, budgets or make new regulations. The regulations have established an

additional oversight role, the climate commissioner, to oversee and report on the obligations of the act with an additional consultation role when the government sets carbon budgets or regulations in relation to targets. The exact powers of the commissioner are still not certain as they will be determined in secondary legislation, however, they will provide oversight and reporting functions. Provision 37 of the Bill states that the department must establish a Just Transition Commission to oversee the just transition aspects of the legislation, and ensure the departments policies, strategies, plans and proposals comply with the just transition principle. Although public participation within the legislation is limited to public consultation this was added by amendment and to allow the public to respond to both climate action plans and carbon budgets may give an opening for change in the direction of government. Finally, the role of DAERA is perhaps the most significant as the legislation gives the department responsibilities which will cut across the Executive, and give them powers to ensure other departments plans will meet the targets. The role of DAERA then is enhanced with increasing responsibility and leverage over the plans of other departments in NI.

7.7.5 Post-Climate Bill Sustainable Productivism

Table 7.3 outlines the changes that the Climate Change Bill has made to Sustainable Productivism as a system of governance. The most substantial differences are in the node of provision and the node of management with an attempt to depoliticise the climate crisis and institutionalise climate action. Resulting changes to the node of delivery and the node of distribution will become clearer overtime because of secondary legislation, sectoral plans and carbon budgets.

Table 7.3 Climate Change Bill Impact on Sustainable Productivism

Node of Provision	
Which service needs to be provided?	A fair contribution to the UK's net zero target, with a special consideration of a just transition and an increased focus on biodiversity
Node of Distribution	
How services are distributed	No change – acceptance of climate action distribution within UK
Node of Delivery	
What norms shale the delivery	An insertion of nature-based practices as the basis for policy
What mechanisms are in place to ensure delivery	Legally binding GHG Emission Targets, new institutional bodies and climate action plans.
Node of Management	
How practices are evaluated	The introduction of legal GHG Emission Targets, and carbon audits for farms.
How practices are transformed/resist transformation	Through the production and oversight of sectoral plans and carbon budgets.
How decisions about the services are made	The evolution of environmental governance architecture with additional roles for CCC, DAERA and the public as well as the creation of a Climate Commissioner and Just Transition Commission.

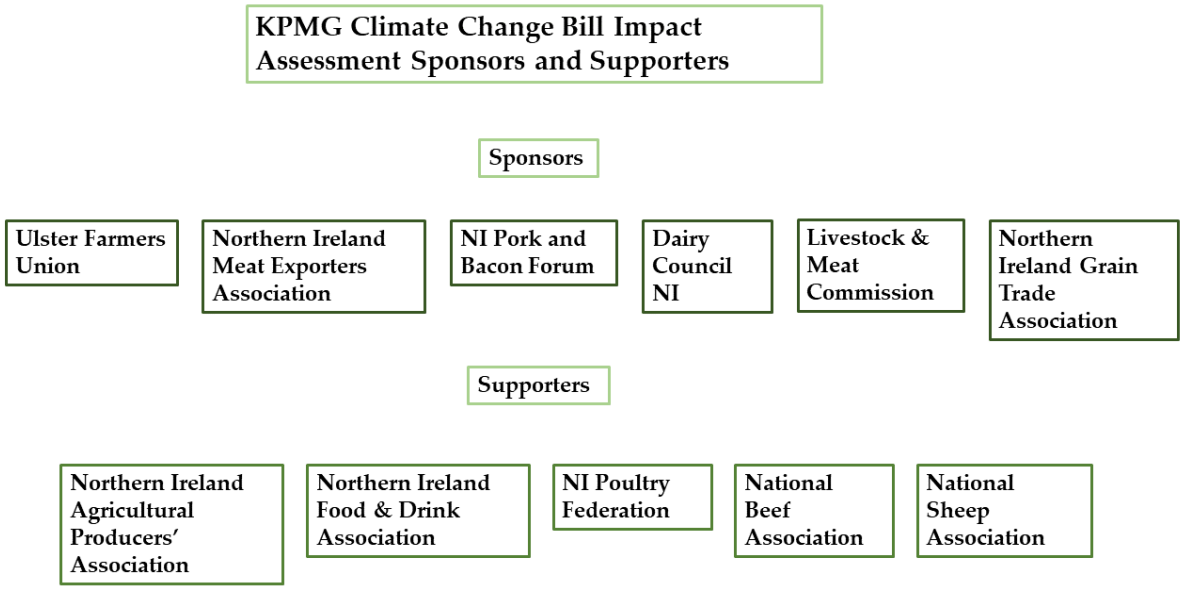
Source: (Authors own)

7.8 Sustainable Productivism as a Political Logic

The politics of the Climate Change legislation debate eventually devolved into a debate between the two bills, with opponents of any legislation accepting the inevitable and focusing their efforts on securing the most acceptable legislation. Although the two bills differed in several ways, less so as amendments to the department's bill were made, the key point of antagonism was the headline net-zero target which the PMB began with, and the departments bill was amended to include, and then subsequently exclude. This section draws out the arguments and logics within this debate in order to identify weaknesses within the political logics, and

present a potential alternative to Sustainable Productivism in the conclusion to this thesis. First it will identify the position within Sustainable Productivism by considering the position of the UFU, and the wider agri-food industry which either sponsored or supported a Climate Change Bill Impact Assessment (Smyth, Stokes and McGreal, 2021). Figure 7.1 details the organisations for which this report was produced, and it is clear there is significant overlap between this group and the policy network seen in Chapter 5 and shown in Tables 5.1 and 5.4. The key omissions to this are the environmental organisations which were members of the policy network, and potential members of a governance network as argued by Chapter 6. This demonstrates the potential of Climate Change to re-open antagonisms between these groups.

Figure 7. 1 Sponsors and supporters of the KPMG Climate Change Bill Impact Assessment



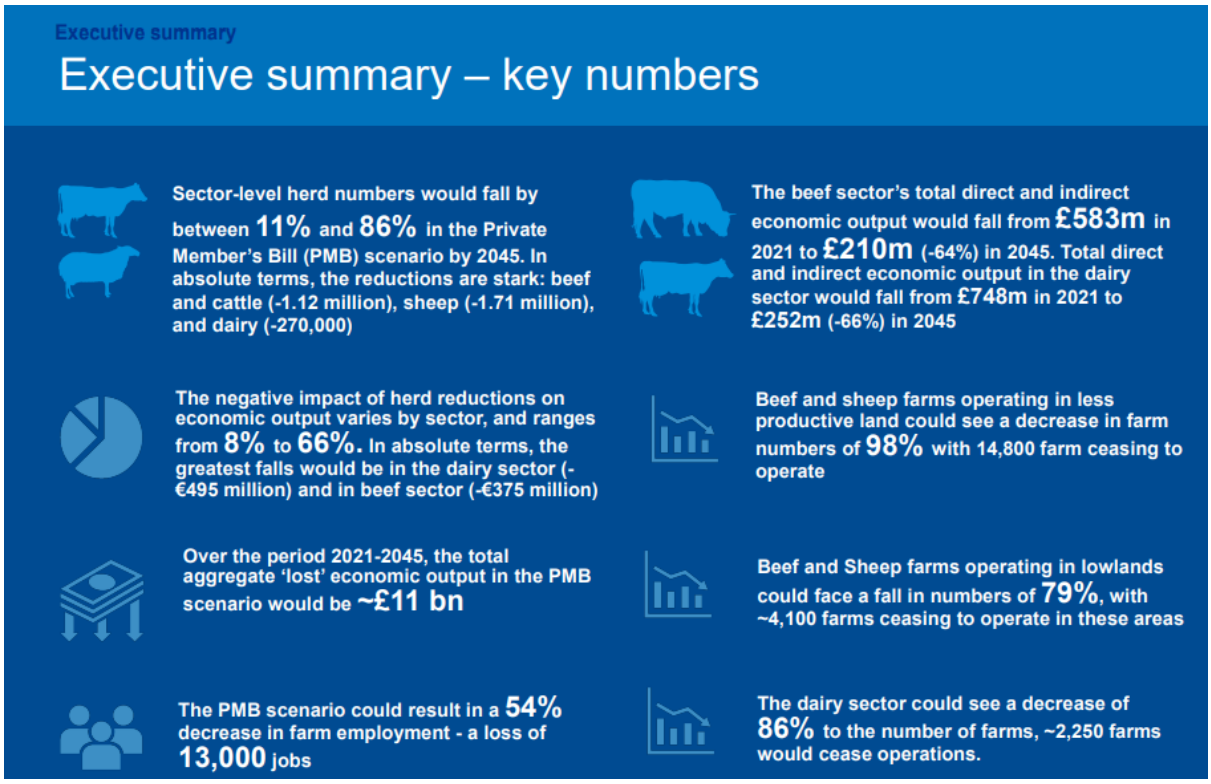
Source: Authors own

The KPMG Report is a masterful work in the operation of fantasmatic logics with threats of 18,900 beef and sheep farms, and 2,250 dairy farms ceasing to operate, an

£11bn cost to the economy, 13,000 job losses, and a potential 86% fall in sector-level herd numbers as represented in Figure 7.2 (Smyth, Stokes and McGreal, 2021, p. 6).

KPMG Impact Assessment Headlines

Figure 7.2 The impact assessments headline figure



Source: (Smyth, Stokes and McGreal, 2021)

Figure 7.2 presents the key numbers of the executive summary. What is interesting, and what makes clear this is an operation of political logics, is that the extrapolated numbers for the consequences are taken by a comparison with a business as usual projection which sees only 3% reductions in GHG emissions from agriculture by 2045 (Smyth, Stokes and McGreal, 2021, p. 20). The business as usual scenario is based on the CCC's projections of carbon emissions for the sector without any additional measures, and is a worst case scenario, this is not nor should it be an option (Cullen, 2022). The need to decarbonise is not driven by the existence of targets but the existence of the climate crisis, if NI justifies inaction due to the threat

to rural communities or carbon leakage this approach can and will be taken elsewhere meaning the worst of all outcomes. An impact assessment of the PMB must ensure it is compared to a scenario in which NI contributes towards de-carbonisation. Net-zero by 2045 may result in the closure of over 20,000 farms, however, the next best alternative might be 18,000 farms. Nor is there a proposal for what would replace these farms. With land one of the most important resources in achieving sustainability, economic, social and environmental, the numbers in this report even if accurate in terms of herd reduction and closure of farms, does not necessarily mean societal collapse, but instead the potential of transformation. Further to this, the lack of imagination is compounded by the lack of engagement with decarbonisation in other sectors, or the potential for NI making a positive contribution to climate action through resources such as peatland. However, it is crucial to take the report at face value and consider the arguments therein.

The first aspect which is important is the framing of the KPMG report which states that it was necessary in the absence of an economic impact or rural needs assessment for the PMB (Smyth, Stokes and McGreal, 2021, p. 6). It argues that it was commissioned by the Agri-Food Sector to fill this absence which offers the report both an air of legitimacy and attempts to depoliticise it as if it was not commissioned to oppose the PMB. This is reflected throughout the report which uses the CCC de-carbonisation scenarios as its basis as they are the most credible and authoritative accounts, despite "stretching feasibility" (Smyth, Stokes and McGreal, 2021, p. 6,19).

Although there are many appeals to the CCC as a source of authority the report in essence is an economic exercise. It takes the CCC projections to the required reduction in GHG emissions from each sector for the tailwind scenario, the most extensive considered by the CCC with 94% reductions in NI as a whole by 2050, and calculates the required reductions for a scenario which sees net-zero by 2045. Having done this the report determines that for example the beef and other cattle carbon emissions are projected to reduce by 86% by 2045, and dairy cattle emissions are

projected to reduce by 87% by 2045. From this point it assumes that this will translate into an 87% and 86% respective reduction in herd numbers (Smyth, Stokes and McGreal, 2021, p. 49). This is then followed by an engagement with economic models concerned with profitability, viability and herd size which determines that with this model over 20,000 farms will cease to operate, destroying rural life.

This approach assumes an almost inevitability of the position of farmers, if a percentile in ghg reduction equals a percentile of herd reduction there is very little that can be done but reduce the herd. However, that is not the case. The argument put forward is a very negative one, and not one put forward by the industry in different circumstances. An example of this is the focus on carbon intensity, one which the CCC itself reflects on. Since 1990 emissions from the production of milk have reduced by 31% per unit of production, however, this is because yields have increased meaning that the emissions are spread across a greater volume (CCC, 2019, p. 49; Knox, 2021). Over this same period emissions have increased slightly since the baseline year. However, hidden behind these figures is the fact that the dairy herd has also grown by 14.7% from 277,628 dairy cows in 1990 to 318, 372 in 2021 (DAERA, 2019a; 2021a). If the herd had remained static although growth of output would have been marginally less than 67% there would still have been considerable growth coupled with a reduction in emissions. Similarly, the report, as well as the CCC, ignores potential innovations which while less proven are not less important, given the emphasis on carbon capture storage which is still significantly underdeveloped. An example of this is the introduction of seaweed in cattle feed which is projected to cut methane emissions in cattle by almost a third (RTE, 2021a).

This is a clear omission, and considering members of the prospective NI Diamond, AFBI and QUB are at the centre of these studies it is particularly stark. Indeed, the aim of this research project is relatively conservative given research in Australia and the US has seen reductions of up to 80%, meaning it's inclusion as a potential option was possible. The KPMG report may not be to blame for this as the CCC only

includes changes to live stock diets that improve nutrition, probiotics and nitrate additives (CCC, 2019, p. 62). There are similar potential benefits for example within livestock genetics which have similarly been ignored or downplayed (Thompson, 2021). However, this goes to the heart of the problem, these are documents which aim to limit the field of possibility and are conservative in the extreme.

The issue, or absence of, NI's peatland in both the KPMG report and the CCC report is telling. Currently NI's peatland is considered under the land use change category of the CCC through the degradation and damage to peatland which releases carbon into the atmosphere. This contributes around 1.9MtCO2e in each year, accounting for around 10% of NI's total emissions and will be added to the inventory in the early 2020s (CCC, 2019, p. 55). This means that within the existing targets restoration of NI's peatland is absolutely necessary, which will likely require new agricultural practices and a reduction of herd size in sensitive locations (Smyth, Stokes and McGreal, 2021, p. 50). This is a case where there is no alternative but to change and there is a direct correlation between livestock and emissions which cannot be protected by creating a special category for methane emissions. That is not to say that the crude methodology employed by KPMG to reflect herd reductions with farm closures is correct, that is intended to restrict the possible. Motivations to focus on peatland in these discussions go further than focusing on reducing emissions, restored peatlands in addition to no longer emitting carbon will sequester a substantial amount of carbon each year which these reports do not consider. This may be due to the CCCs conservative approach as they state that they were not included in the "fifth carbon budget" due to "uncertainty in quantifying their abatement potential" (CCC, 2019, p. 57). This conservative approach is perhaps why the CCC holds such an authoritative reputation, however, it also allows for misleading interpretations of the scenarios.

In addition to appeals to the authority of the CCC to restrict the fields of possibility the KPMG report relies upon the existing carbon accounting to not consider existing

carbon sequestration and storage on agricultural land (Smyth, Stokes and McGreal, 2021, p. 50). The key example of this is the possibility of new hedgerows and the better management of existing hedgerows. Rather than demanding that these be included, and therefore reducing the net emissions of the agricultural sector, as demanded by farming representatives in the past, the KPMG uses this absence as an opportunity to obscure potential reductions and emphasise the risk to herd size. The KPMG report admits to this limitation, however, in the same section dismisses it by stating that an introduction of 10,000km of new hedgerow, or a 10,000km improved hedgerow over a ten-year period would equate to less than 1% of NI current agriculture carbon emissions. It is unclear why 10,000km has been chosen as the maximum level of ambition considering that as of 2018 there were 113,650km of hedgerow of which in 2003 36% were considered to be "species rich"(DAERA, 2003). It is unclear what percentage of hedgerows are being well managed, however, there does seem to be a link between the two with opportunities for biodiversity gains as well.

With regards to the introduction of new hedgerows again 10,000km appears to display a lack of ambition with hedgerow numbers decreasing from 125,000km in 1986 to 113,650km in 2018 (DAERA, 2003; Spaans, Caruso and Montgomery, 2018).

The 10,000km target would only see a restoration to levels where stocking rates were at some of the highest ever seen. A forestry commission assessment in 1950 showed that there were 1, 000, 000km of hedgerows in the UK while a countryside survey carried out in 2007 showed that there were 402,000km of managed hedgerow alongside a further 145,000km of "linear features" (Hedgelink, no date; People's Trust for Endangered Species, no date). This demonstrates an almost 50% of hedgerows at the UK level. While historical data on hedgerow abundance is not available in NI the Hedgerow Action Plan states that "removal rates of 0.5% per year since the 1960s are common" while more continue to disappear today (DAERA,

2003; Stewart, 2015). This demonstrates that a major function of the KPMG report is to limit the field of possibility on climate action.

While dismissing all of the above, the KPMG claims that the overwhelming majority, 87% of GHG emissions required in the PMB scenario will come from reductions in consumption of meat and dairy products, along with a significant shift towards lab-grown meat (Smyth, Stokes and McGreal, 2021, p. 22). This assumption sits alongside another which determines that this shift in purchasing is not replaced by imported products and is indeed a behavioural change towards veganism and vegetarian diets in the NI population. This is misleading as the issue at stake is food production and consumption at the UK level which the NI Government cannot influence (Smyth, Stokes and McGreal, 2021, p. 47).

Even if the focus is restricted to NI this has no direct impact on the herd within their modelling as they just directly reduced the herd by the percentage of emissions needed, instead this only considered what percentage of the NI diet would be required to change to meet Climate Change goals. Considering that 80% of NI's milk products are exported, and that NI produces five times the amount of food required by the population, it is understandable to be a little cautious around these projections. They consider that 75% less consumption of meat and dairy products in NI would result in a 92% reduction in emissions and collapse of the industry. In actual fact the local population only consumes 20% of the meat and dairy and dietary changes would result in a 15% reduction (Dairy Council Northern Ireland, no date).

There are three clear implications of the KPMG arguments. The first is that substantial reductions in meat and dairy consumption are necessary if NI (and the planet) is to prevent catastrophic warming. The second is that the agri-food industry, and this report, takes an essentialist and stationary approach to a necessary transformation. Through both land use change and food consumption they assume a

static field of principles and an unchanging agri-food system. An alternative approach taken by the Nature Friendly Farming Network is that while meat consumption reduces it is better to focus on the production of a premium product allowing for continued, or even new, profitability (Carson and Sandford, 2020). The third implication is that there is a clear ordering effect within these arguments with economic and social sustainability, within a certain frame, prioritised over and above environmental sustainability.

7.9 Conclusion

This ordering of sustainability which has occurred raises questions about the agri-food industry's seriousness in aiming to address the climate crisis. The use of the baseline scenario "to understand the impacts of the PMB proposal on the economy and rural communities" (KPMG, 2021) demonstrates an unserious engagement with the issue, nor an imaginative approach to transformation or a just transition. Indeed, although the argument was made that the CCC should be followed, the KPMG accuses the CCC of "stretching feasibility" as if allowing for further argument and opposition down the line. The limitations placed on rural communities by the agri-food sector are clear with social sustainability linked directly with the NI dairy and cattle sectors, an essentialist performance out of date in the 1980s. Although this thesis has been critical of the approach taken in England the approach taken there embraces this knowledge as it attempts to construct an alternative market for land managers. Finally, underpinning all of this is the ideological belief in economic growth as the source of prosperity. Within the Climate Change debate there seems to be acts of obfuscation as political strategy. The discussion is always about what the debate is not about, the focus on GHG emissions is about jobs, environmental policy should not include agricultural concerns, rural frameworks should not include the environment. Yet while this obfuscation continues no policy or debate engages with what is at stake. The real consequences of catastrophic Climate Change are not measured in pounds per head but in lives.

Chapter 8 - Conclusions

8.1 Introduction

This thesis has been written at a time of great turmoil. Since 2016 the UK has questioned its' place in the world, and to an extent NI has questioned its' place in the UK, the world and how to go forward into the future together. With uncertainty and antagonism at home, the globe was struck by catastrophe as the foundations of the world shook in the face of a deadly pandemic. Geopolitical unrest continued after the worst phase of the pandemic as the Russian army invaded Ukraine unleashing devastation on its people. The consequences of this invasion were felt across Europe leading to a cost- of- living crisis in the UK due to increased energy costs, as well as impacts on food costs leading to questions around both climate targets and food security (Channon, 2022; Davies, 2022; Manning, 2022; Mathiesen, Webber and Keate, 2022). Beside these events the question of how rural environmental governance has changed because of Brexit for a nation of only 1.9 million may seem trivial, however, this conclusion will put the research into context demonstrating that although the period studied only dates to 2016, the topic stretches back decades and will carry on into the future. With the DUP refusing to form an assembly unless the NI Protocol, which they argued impinged upon their constitutional identity, was abolished, or substantially reformed the future of NI is once again uncertain (McClements and Horgan-Jones, 2022). It is important to reflect on and consider the future of NI's rural environmental governance considering both this uncertainty, and the changes to the system of governance under Sustainable Productivism.

The first task of this concluding chapter is to summarise and reflect upon what has been learned during this research. This begins with a thick description of what NI's Rural Environmental Governance looks like after Brexit, and how it came to be. An elaboration of this story is required for a critical aspect of this question, which concerns the discourse which came to dominate NI's new system of governance,

Sustainable Productivism. A central focus of this thesis was the identification and naming of Sustainable Productivism, and in this conclusion I have identified how Sustainable Productivism is different, and similar, to alternatives in the literature. Just as Sustainable Productivism became established as hegemonic in NI climate action threatened its position, and the final task of this summary is to consider the impact that climate action and other such threats may have on Sustainable Productivism.

Following on from this summary the conclusion will reflect upon specific contributions this thesis has made to the different literatures it engaged with. This section will consider how this research engages with issues nationally, internationally and globally. Finally, it will outline the contributions this thesis made to PDT by developing a PDT conception of governance and building upon Glynos et al's (2015) nodal framework to research it. The final component of this conclusion will reflect on research areas which would prove rich following this thesis.

8.2 Rural Environmental Governance in NI after Brexit

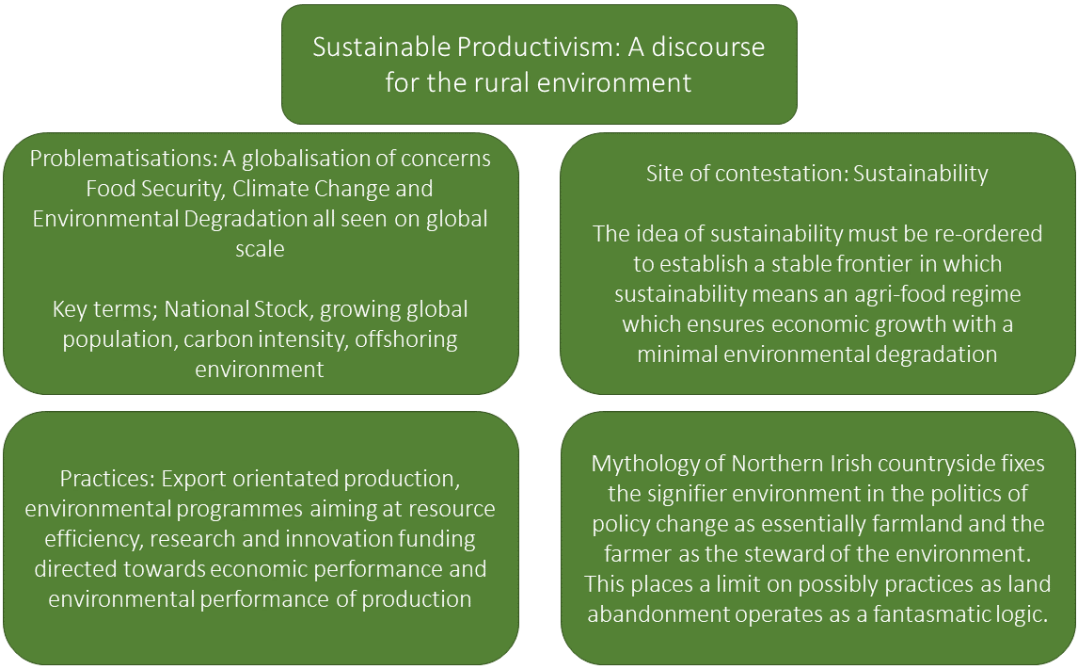
As hypothesised at the beginning of this thesis, Brexit and the subsequent Brexit process has resulted in significant changes to NI's rural environmental governance. However, this thesis has also demonstrated that changes have been constricted and shaped by existing discourses in NI. Due to the turbulence of NI politics the system of governance developed there takes on components of the English system through Environmental Improvement Plans and the juris of the Office for Environmental Protection, however, this extension was then leveraged to suit local politics. The campaign for an independent environmental protection agency secured a victory when in the NDNA Agreement all parties had committed to the establishment of an IEPA, however, the inclusion of NI in the OEP has led to the DUP, a party embedded within Sustainable Productivism to claim that the OEP fills that description. Even

though they fulfil completely different roles, this obfuscation allows for the NIEA to continue their approach of relaxing enforcement to encourage economic growth.

8.2.1 Sustainable Productivism

The focus on economic growth by the NIEA, and the interaction with the developments in the UK occurred as the Brexit process became intermingled with existing discourses. Logics of Productivism have integrated many of the environmental demands which challenged them to create a discourse identified in this thesis as Sustainable Productivism (see Figure 8.1 for summary). Not merely a logic as it successfully brought together different logics into a whole linking together a range of practices, actors, and demands, Sustainable Productivism has become hegemonic in the rural environmental governance system in NI as it expanded across a range of powers repatriated from the EU. The new system of governance attempted to create a governance network through Sustainable Productivism's co-option of the demands and of environmentalists, including formal representation within a decision-making structure.

Figure 8. 1 A summary of Sustainable Productivism



Source: Authors own

A critical finding from this PhD is that within Sustainable Productivism there are not compromises between social, economic and environmental pillars of sustainability but rather a vision of the rural is constructed in which they are aligned through a process of ordering. Sustainable Productivism as a discourse places economic and social sustainability as priorities, alongside environmental sustainability where this can support profitability, as shown in Figure 6.5. Indeed, those imbedded in Sustainable Productivism, such as the policy network outlined in Table 5.2, or the Governance Network envisioned in Figure 7.2, would not see this as prioritisation as they would argue that soil quality, productivity, and resilience are deeply interconnected converting this into a win-win, and as this is the only way of organising a rural society depending on agri-food in a sustainable way, the de-prioritised demands such as biodiversity and water quality are not de-prioritised, this is the only way to meet them.

This thesis further revealed that Sustainable Productivism works at both local and global levels, as does the ordering as it attempts to meet the demands of climate

action. The transition from productivism to Sustainable Productivism came because of the climate crisis as a challenge to productivist logics. As shown in Figure 6.7 the prioritisation occurring within 6.5 coincides with the local and global divide in so far as these issues relate to climate action.

The transformation of productivism then was a result of its interaction with Climate Change, and Climate Change continues to be a site of potential transformation for Sustainable Productivism. Chapter 7 demonstrated the difficulty faced by Sustainable Productivism in containing the calls for climate action and directing them towards their preferred policy choices. While the Climate Change Act (NI) 2022 was passed in a way that was acceptable to the agri-food industry the issue of land use in NI has merely been put off into the future. Facing serious changes because of decarbonisation the rural environment in NI will be at the centre of political contestation with alternative logics waiting in the wings for a dislocatory moment in which to challenge Sustainable Productivism. As shown throughout Chapter 7 the consequences of the Climate Change Act (NI) 2022 are likely to involve significant changes in land use, changes that NI are currently unprepared to even discuss as evidenced by the Peatland Strategy. At the current rate NI is likely to act as a consistent laggard with regards to climate action, and given the ambitions set out by the UKG Environmental Strategy and the legal standing given to climate targets NI inaction will be a site of contestation politically and legally, with the consequences being a challenge to Sustainable Productivism.

8.3 Sustainable Productivism: A Critique

Any post-Sustainable Productivist future of NI will arise out of the problematisations of Sustainable Productivism. Throughout this thesis amid necessary thick descriptions, construction and analysis of Sustainable Productivism as a discourse there has also been the presence of critique both implicit and explicit. This section brings these together to identify three central flaws in Sustainable

Productivism which are; the ordering of demands, or even the cherry picking of global or local demands, the ahistorical and stagnant approach to land use, and the reliance on marketisation as an organising principle, which substantially influences the prior two.

8.3.1 The Demands of Sustainable Productivism

To expand upon a point in section 5.5.2 a key demand of Sustainable Productivism, like Productivism, is food security. The difference in the 21st century, and in Sustainable Productivism, is that food security is no longer a local or national issue but a global one with the local agri-food industry contributing towards global food security. There are a number of issues with this formulation of food security as a focus on food production (Tomlinson, 2013; Candel *et al.*, 2014; Berry *et al.*, 2015). Food security is primarily about the accessibility of food, and while production is a key component of this so are availability and affordability, where NI performs particularly poorly when compared to elsewhere in the UK (Ferguson, 2021).

The NI industry portrays itself as a net-positive from a climate perspective contributing over 400% of NI's food needs, although this is only true if the populations diet consisted of only meat and dairy. This attempt to justify the level of production in NI, and the export orientated nature of the industry is challenged by the need to change diets in NI, GB and across the world to address the climate crisis. The consumer needs of the local population are not the concern as they already produce more than is needed locally, therefore a local change in diet should not challenge the industry. It is the competition faced globally which is the concern. They are not the only food producers specialising in grass growth and raising livestock. Indeed, consumer trends in the Global South towards a "western diet" consisting of more meat and dairy products has driven ecological devastation in the clearing of land for the production of meat and dairy (Koerber, Bader and Leitzmann, 2017).

In response to this the NI industry has attempted to portray local production as exceptional from an environmental and welfare standpoint. This is why they claim to have a unique role in the global system as no-one is as environmentally friendly as they are when producing the same, or even inferior products (Anonymous, 2019a). However, it is important to bear in mind that this is based on historical deforestation and environmental destruction. The competitive nature of the market drives an industry insecurity which in turn drives the quest for new markets, but also causes a fierce protection over existing ones which is why veganism is seen as an existential threat, although logically it should not be (FarmingUK, 2017; Buxton, 2022). This debate forgets one important element, and the starting point for the concerns, the "western diet" is not a sustainable one. If food consumption patterns were to stay as they are with no increases, it would not be sustainable, therefore, increases somewhere must result in greater decreases elsewhere (Tomlinson, 2013; Koerber, Bader and Leitzmann, 2017). Therefore, the focus on food security within NI should not be about food production, but accessibility, availability and sustainability of diets.

A further problematisation of Sustainable Productivism is contained in the above, that is NI's unique position as an environmentally friendly place for farming. By reducing food production in NI the environmental consequences of food production would be offshored, be that through biodiversity loss or carbon leakage. The key to this is an admission that NI is an ecological desert and challenge that this cannot be changed (Baraniuk, 2021). A common criticism of western approaches to conservation is that it is an exercise of colonialism (Kashwan *et al.*, 2021). They are historically based in colonialism and the places least likely to have unleashed environmental devastation on their own nations are the least developed ones (Upadhyay, 2016; Mahony and Endfield, 2018; Eichler and Baumeister, 2021). Thus most attempts to protect biodiversity occur in the Global South, and place restrictions on the economies of those nations, that the nations of the global north

did not face (Akenji *et al.*, 2021). In NI this is manifest as Sustainable Productivism's concern for biodiversity as a global issue, and de-prioritisation of the issue locally. Similarly, to this, and perhaps understandable, the social sustainability focus of Sustainable Productivism is that of NI's rural communities, not the communities they are competing with in the commodities markets.

8.3.2 Disconnected from the land and its history

Within these arguments there is an ahistorical understanding of the context in which we find ourselves. NI's role as a global food producer is not the result of natural processes, but partially a by-product of a colonialism which forced the colonised to replace food crops with cash crops tying them into a market system which was inevitably weighed against them, and with the majority of the products of those crops consumed in the colonisers countries (Raschke and Cheema, 2008; Marrero and Mattei, 2022). Each of the smaller participants within this market are caught up in a race in which there is no end, and that is economic growth. It is clear that economic growth as a way to meet people's needs is ineffective, even more so when the aim is to meet people's needs in a way that is sustainable (Kothari, Demaria and Acosta, 2014; Lloveras *et al.*, 2022). As an organising principle economic growth, coupled with many historical injustices and patterns of inequality encourages forms of production and consumption which are unsustainable and unethical (Næss, 2006; Antonakakis, Chatziantoniou and Filis, 2017). Natural resource use more than tripled between 1970 and 2017, with the UN stating in 1998 that 86% of the worlds resources were consumed by just 20% of the world's population (Shah, 2001; International Institute for Sustainable Development, no date). A minor example of this is the political economy of coffee production. Coffee is a luxury good with the majority of consumption taking place in rich nations that do not produce it, while production takes place in countries that do not drink it. The land used to produce this coffee is invariably the most productive land while less productive land is used for subsistence farming (Akenji *et al.*, 2021). While other foods may be bought locally

the global North exports its consumption demands to the Global South taking up far greater ecological space than their counterparts (Akenji *et al.*, 2021; Givens and Huang, 2021). Therefore, it is not as simple a case as NI producing food in a way that is environmentally friendly, which it is not, but instead about a global food system which prioritises the Global North's luxury consumption.

Sustainable Productivism is not merely exploitative, or ignorant of exploitation, abroad, but at home it locks rural communities into a particular form of organisation which according to van der Ploeg (2006), is largely de-embedded from them as a community, and instead merely uses their most important resource, land. The argument for a socially sustainable rural in NI is purely based on food production, ignoring other opportunities to rural communities. There are two aspects to this, the first is that rural land is one of the most important resources crucial for energy production, carbon sequestration, fibre, timber and nature (Heron, McAreavey and Attorp, 2023). There are many demands placed on land as a multi-functional resource which Sustainable Productivism wishes to ignore, or subsume under agriculture, and taking a sustainable system view of NI's land may threaten Sustainable Productivism. The other aspect of this is that rural communities should not be "sacrifice zones" or "zones of extraction" for the benefit of urban communities (Cirefice, Mercier and O'Dochartaigh, 2023). They are distinct places, communities, with important cultural value, and most importantly, they are places where people make their homes. They do not exist for the benefit of urban communities, and this should be recognised. The introduction of lab produced meat may be concerning for other reasons, however, the Sustainable Productivism fear that it would take away from rural communities is misguided, it should free resources for rural communities. The same is true of electricity production, and any other form of production which is taken on by urban communities, there should not be a divide between the two with relationships of extraction or ignorance but synergy and community.

8.3.3 Sustainable Productivism Ungoverned

This leads to the final problematisation of Sustainable Productivism, and that is related to all the above, it is ill-equipped to address the issue of the climate crisis and indeed will contribute towards it, because it does not believe the issue will be addressed, or that it is its place to take the first step. Often incorrectly called the tragedy of the commons, because the commons have rules, the philosophical idea that each independent actor unregulated will engage in unsustainable practices because of the fear their neighbours will also holds true (Felice and Vatiero, 2012). Inherent within Sustainable Productivism is the idea that if they do not do it others will, and why should they sacrifice. Implication of this problematisation is that the solution must include some form of governance between nations, industries, organisational bodies. Or indeed whatever institution can pull together these opposing forces to create a sustainable system that takes a wider view than food production, perhaps even a wider view than food security and indeed looks at the sustainable use of resources as a whole.

8.3.4 Sustainable Productivism Governed

The circumstances which allowed for the hegemony of Sustainable Productivism, and the reason climate action threatens that, is the lack of long-term vision for land use in NI. There are individual sectoral targets which will impact land use, for example, the 10% of land which mining applications are connected with, the planned 50% increase in woodland cover, the 30% designated for nature, the restoration of peatland. However, these are articulated alongside a demand that neither farmland nor productivity are reduced. These targets need not necessarily be contradictory, however, the way they are expressed leads to the creation of sites of antagonism between land users, and potential land users. This means that the node of distribution is a constantly subject to contestation. However, both the Kendall Review and NIEL have argued for the development of a rural land use framework

for NI which may bring these contestations into the open and create a mechanism for either a governance network or policy network which operates agonistically. Indeed, the current system in which difficult decisions, conversations, are put off to a later date is likely to, and has, resulted in circumstances where farmers feel betrayed, whereas they should be a part of deciding their future.

To go further there is the potential for the development of a land use strategy as a whole, one that complements both the food strategy and energy strategy. This would be able to encompass urban food production, a growing requirement for meeting net-zero, as well as intertwining food and energy production. This disconnect is of particular concern to the UFU who argue that farmers do not receive credit as producers of energy, a system focused on land use would be able to do this. It would also provide an important forum for considering NI's relationship with global injustices and climate action. The key point is that developing a whole system approach may be central to creating a vision of the future of NI, however, it is also clear that this cannot be done alone.

8.4 Future Reflections: Constitution and Consequences

The potential for change in the future of rural environmental governance in NI is ever linked to the constitutional situation. This has three dimensions; the first is the struggle of devolution in NI as it goes through its most recent downturn, the second being the politics of the UK and the important role that has in shaping the future of NI as highlighted in Chapter 2 and 4, and the last is the potential for the re-unification of Ireland which has emerged as a question which can no longer be dismissed, partially as a result of Brexit.

8.4.1 NI in the 2020s

This period of study for this thesis ended on the 5th of May 2022 when an election for the NI Assembly was held. This election saw two major developments the first, is

Sinn Féin coming top of the polls in both votes and seats, a first for any nationalist party in NI's history (Burton, 2022). The second major development was a breakthrough in the centre ground of the sectarian politics of NI with the neither unionist nor nationalist Alliance Party doubling their seats to emerge as the third party in NI (Burton, 2022). Since the election NI politics has reverted to stalemate without an Executive with the DUP currently protesting the NI protocol (McClements and Horgan-Jones, 2022). Nostradamus would not dare to try and predict the future of politics in NI; however it is possible to tease out some possibilities for the rural environment as a result of the last six years.

The effect of the collapse on policy development is likely to be less substantial than that seen in Chapter 5 given that the returning Executive lasted two years offering significant opportunities to sign off new policies and strategies as seen in Chapter 6, although the length of absence at this point is worrying. The effect of the two years of government mean that Sustainable Productivism was able to become embedded with official sign off meaning policies are likely to continue. However, there is an area of ambiguity, that is the Kendall review. The governments immediate response was somewhat positive, however, without commitment or broad discussion of where points of agreement and disagreement were. Recommendations that the Government agreed with openly, such as the industry led Sustainability Body, or behind closed doors are likely to be progressed (Poots and Lyons, 2022).

How this will be resolved is not clear with the Secretary of State Chris Heaton-Harris rowing back on his commitment to call an election in October 2022 if an Executive was not formed (McClements and Horgan-Jones, 2022). Uncertainty has continued into the spring of 2023 with the renegotiation of the NI Protocol to the Windsor Framework not being positively received by the DUP who voted against it in Westminster (Parker and Campbell, 2023). This uncertainty comes at a critical time in the role out of the new agricultural policy with Poots extending the deadline for the soil nutrient health scheme (DAERA, 2022d). As this scheme is a pre-requisite for

receipt of subsidy a failed roll out will have significant consequences for the policy framework, the economy and rural communities more widely. The uncertainty around the presence of a minister, or better yet an Executive, who could make decisions in response to this is a threat to communities in NI.

Should an Executive return to Stormont this thesis has highlighted the increasing important of DAERA as a site of decision making, and one that has influence extending beyond the department. Although it is currently with the DUP a new Executive, either before or after an election, may result with a minister from another party. Considering that every party bar the DUP has been more supportive to environmental causes this would result in significant changes, and potential changes that address the flaws of Sustainable Productivism identified earlier. In addition to this there is an important opportunity to pass secondary legislation to implement the Climate Change Act (NI) 2022, this includes the establishment of supporting bodies which may be influential in years to come. Finally, a land use strategy for NI is on the agenda, whoever holds DAERA has a powerful role to play in the development of that strategy, and in the future of NI. As noted throughout this thesis, but most prominently in Chapters2 and 4, the UKG has a powerful role to play.

8.4.2 The UKG

As warned in Chapter 2 the crucial differences between the UKG and the EU as the sovereign government in these areas is certainty. EU policy, particularly CAP, has a long-term trajectory guided by the Commission, and most radical changes are made more conservative through negotiations. In addition to this there are deadlines for implementation, and for policies such as the CAP funding is secured for an extended period. In short, policies are discussed at length beforehand, and once a policy is agreed there is no room for second thoughts. The UK on the other hand has many opportunities for policies to change with votes in the Westminster the main determinant.

The environmental governance developments in Chapters 2 and 4 emerged in the period immediately following Brexit with Michael Gove as Defra Minister and Theresa May as PM. Due to the necessity to pass legislation to manage Brexit they set into motion both the Agriculture and Environment Act both of which carried on into Boris Johnsons Government, due in part to the swiftly approaching deadline and de-prioritisation of these aspects of Brexit. However, as warned in Chapter 2 leaving the EU left the environment vulnerable to de-regulation. Although Liz Truss became PM after the data collection period for this thesis, and was removed within weeks, it is important to note the changes that her government proposed, in particular, the sunsetting of EU law, the potential scrapping of ELM approaches, the use of enterprise zones, and a general move away from sustainability towards prioritising economic growth in the crudest sense as these have continued to an extent under the new Prime Minister Rishi Sunak (HM Treasury, 2022; Marshall and Prior, 2022; Rees-Mogg, 2022).

The first of these was announced by Jacob Rees-Mogg, the former Secretary of State for Business, Energy and Industrial Strategy on 22nd September as he declared that by 31st December 2023 any retained EU law not specifically legislated for would expire (Rees-Mogg, 2022). This includes both the Birds and Habitats Directives, all EU regulations not legislated for, as these apply directly from the EU. Interestingly the announced bill aims to remove EU interpretations from formerly EU laws, and provide UK courts greater discretion in departing from EU case law. These are potentially significant announcements for the rural environment, however, the effect remains to be seen depending on UKG priorities. The current UKG priorities are currently quite clear with government announcing a review of the ELM and the establishment of "enterprise zones" which are in reality low regulation zones many of which overlap with designated areas. These are just examples of a general trend away from a focus on sustainability. While Truss lasted only 44 days as Prime Minister resigning on 20th October 2022 , this emphasises the problem for

environmental governance in the UK post-Brexit as raised by Halfacree (2023): uncertainty. The future of the rural environment outside of the EU is uncertain, at the whims of government, and as warned in Chapter 2, the safeguards put in place are proving inadequate to curb this behaviour.

The potential effect of these changes on NI's rural environment is not known, however, given the role the UKG has had in influencing NI policy, and increasing environmental ambition the absence of this presence may allow for NI to revert to their role as a laggard. Importantly for NI, The Climate Act (NI) 2022, set net-zero targets into NI law, therefore, regardless of UKG approaches to net-zero there is a safeguard within NI law to prevent a lax approach from DAERA. That is not say that this will not have an impact on the debate in NI given how the targets are UK-wide, there is a likelihood that should the UK approach to net-zero reverse there will be questions around why changes to NI's economy are necessary.

Alternatively, NI may become more closely aligned with ROI whose similar, even integrated, economy and updated commitment to net-zero may prove attractive. This trajectory is most uncertain as the UKG progress the NI Protocol Bill which would allow for the UKG to unilaterally scrap components of the NI Protocol, and to alter disputes around the bill to ensure they are not resolved by the CJEU. This has set the UKG at loggerheads with the EU, places NI in a position of uncertainty as to the consequences of these actions, and places the return of Stormont based on the outcome. The rise of Sinn Féin, Brexit and the UKGs clumsy approach to NI have raised the question of an old solution to NI's governance problem, a United Ireland.

8.4.3 Ireland's Future

The story of the island of Ireland is a long and tragic one that I will not re-tread, however, it is necessary to remark upon the different light it is cast in today (O'Leary, 2018). Since the vote to leave the EU the Island of Ireland has taken on a renewed importance as an object from a range of actors, this is embodied politically

by the NI/ROI Protocol, reformed as the Windsor Framework. However, opposition to the framework, when it expresses lack of concern with the supposed economic unification of Ireland is not concerned with the functions of the all-Ireland economy but instead the dislocation with Great Britain (Carswell, 2020). Indeed, the move towards an all-Island corporation tax rate demonstrates this long moving trend (J. Campbell, 2021). There are at least two areas relevant to this thesis that have taken on the all-island tone, although there are others.

The first is the recognition that Ireland is a single bio-geographic region. This was one of the main campaigning objectives of Nature Matters NI and is recognised in the protocol in rules such as the phytosanitary regulations for example (Nature Matters NI, 2018). This means that there is already an element of environmental governance that is continuing to an all-island basis. The second component is the regulation of the agri-food industry which occurred in recognition of how deeply interconnected the industries are north and south of the border (Northern Ireland Affairs Select Committee, 2018). This is important as seen throughout this thesis the importance of the agri-food industry to NIs economy, particularly as an organising principle for rural communities, many of which are border communities (Northern Ireland Affairs Select Committee, 2018). This too is represented in the protocol.

This has continued to new projects, for example, both knowledge and advisory regimes, CAFRE and Teagasc have increased the amount the work together at both the grassroots and national level (McKendry and O'Boyle, 2020). Similarly, when ROI applied for Grass Fed Irish Beef to be included as a protected product, NI opposed it on the basis that it should be an All-Island designation (Forde, 2022). This has now been submitted on this basis. In addition to this, the first unionist politician to take a seat in the Seanad when offered was the former President of the UFU, Ian Marshall (McCambridge, 2021a). The deep interconnection between these two industries, politically, economically, and socially, harbour potential for a united Ireland in which resources are pooled towards common goals more easily than they

are with London at present. There are potential concerns when these industries are not in lock step also, for example, the two different climate action regimes, and the approach taken to them, could potentially harm one industry. This could also be taken as a reason to slow decarbonisation and result in a race to the bottom. Indeed, ROIs record on rural environmental governance is not a good one either, therefore, any future constitutional change in NI may not have a significant impact, in fact it may remove one of the drivers for environmental improvement, the UKG (Torney and O'Gorman, 2019).

8.5 Contributions

This thesis has made contributions to a range of literatures, although primarily within the context of environmental governance and agriculture policy. The thesis has made an original contribution to the academic literature through the application of PDT to environmental, agricultural and institutional politics to consider rural environmental governance. This has advanced a number of literatures in novel ways, with the focus the distribution of actions across scale taking a central place in the thesis the following section will be organised to reflect these scales, the contribution of the thesis, and the originality of that contribution. It considers the contributions this thesis has made to literature focussing on NI and the UK, the EU, and the original contributions which have global implications. Finally, it outlines the contributions this thesis has had as a theoretical endeavour in advancing PDT.

8.5.1 NI

This thesis has contributed to a growing body of research concerned with rural environmental governance in NI, building upon the work of Attorp and McAreavey (2020) as well as Gladkova(2020). Their work on the agri-food sector during the GfG period acts as a useful precursor to my research which offers a wider view on how the dominance of this sector impacts the governance of the rural environment as a whole, i.e beyond merely the agri-food. The combined efforts of this literature acts to

advance Greer's (1996) analysis of agricultural policy making in NI. This is additionally useful as Greer's analysis considers the exceptionalist/productivist period, while this thesis has been able to engage and consider how NI has navigated the post-exceptionalist period. Greer's work was also noteworthy for its emphasis on the effect of NI constitutional position on agriculture policy. This thesis is original in it's contributions to the NIs agricultural policy making as it opens up the network to consider policy beyond agriculture to demonstrate the linkages and dependencies across policy areas, and how these attempt to create a coherent whole.

NI's constitutional situation has also been a prominent focus for research on environmental governance in NI. This literature encompasses the work of Dobbs (2022), Brennan et al(2017) and Turner (2006a, 2006b, 2013), and this thesis contributes to these by offering an insight into how the constitutional situation affects the post-Brexit environmental governance literature, demonstrates how these are interlinked with the agri-food policy network, and builds on the work of Dobbs in offering a thick description of NI post-Brexit. An important component of environmental governance in NI is the Climate Act (NI) 2022 which this thesis was able to analyse. The thesis contributed to the analysis of both climate governance and climate politics in NI with an analysis of how the Climate Act (NI) 2022 impacted NI's environmental governance regime, as well as analysis of the operation of political and fantasmatic logics during the climate debate. This ties into an overall consideration about the narrative that NI tells itself about rural communities, the economy and what rural land is for. It offers a clear outline of the politics of how the rural environment is governed in NI, challenges to the prevailing system and offers an insight into what the future entails.

8.5.2 EU

Although the research was ostensibly about the Brexit process, it was based upon academic research on policy making and governance in the EU, primarily

agricultural policy. The major contribution this thesis has made to the academic literature has been through its engagement with the agri-discourses literature, and the work on post-exceptionalism. By engaging with the work of Alons and Zwaan (2016), and Rutz et al(2013) this thesis has shown how discourses of the CAP, and the process of replacing it are interlinked. Indeed, this research will prove useful for academics concerned with de-europeanisation more broadly in that it demonstrated that national discourses operate within a supranational system and seek to expand upon exiting that system. This is deeply interconnected with the structure of policy networks, the potential for transformation of policy networks and allows us to consider what other nations may do if they left the EU by analysing their existing discourses and extrapolating from them, and it allows us to consider how these discourses are changed by the supranational process. Additionally, throughout the thesis engagement with post-exceptionalism has been clear. The difficult with post-exceptionalism is the classification of a more concrete descriptive framework, instead post-exceptionalism is classified as everything that exceptionalism was not. Upon exiting the EU actors in NI were readily able to problematise the CAP and offer a classification based on how it was implemented locally, as well as reform it to a post-exceptionalist formulation which suited local politics. This demonstrates that the reason post-exceptionalism is such a nebulous concept is that is a European one, with the strength of the concept, its flexibility and broadness, also it's weakness.

As the EU has expanded its remit, particularly around social and environmental concerns, policies such as the CAP have had to compromise around their primary goals. The inclusion of other goals and actors exhibits what Attorp and McAreavey (2020) term tense post-exceptionalism, however this is not so much as a description of a governance framework than it is a diagnosis of political stagnancy. The Brexit process in this regard has been to seek cohesion across agriculture, environment and governance architecture to move past post-exceptionalist tension to a cohesive policy. I have called this Sustainable Productivism but is essentially a variant of post-

exceptionalism in that post-exceptionalism offers a remarkably broad classification. Indeed, there are a variety of these discourses which fit within the scope of post-exceptionalism, including sustainable intensification and green growth (Loos *et al.*, 2014; Fletcher *et al.*, 2019). While the latter applies to a form of argumentation or vision which is justificatory rather than constitutive it could be argued that Sustainable Productivism is a land use variant of Green Growth, as is Sustainable Intensification. Where the two differ is in their approach to land sparing, while Sustainable Intensification relies upon land sparing Sustainable Productivism does not. The novel application of PDT to this field was essential in revealing these findings and contributes significantly to the originality of this thesis.

8.5.3 Global

It is the identification of Sustainable Productivism which is the global contribution of this research. This research lays the groundwork for future research to identify Sustainable Productivism in other nations, or even policy areas. Further it supports research in identifying discourses that may be casually dismissed as green growth and allows for consideration of specific practices and their consequences. The importance of Sustainable Productivism is the dual globalisation and localisation of demands and how the discourse reflects this through frames and practices. Through this the thesis considers issues of global importance through considering the complexity and difficulty of managing a nation as small as NI sustainably, and the pressing need to reassert a twin localisation and globalisation of governance. As Nyberg et al (2018) remarked the twin globalisation and localisation of demands allows for the production of contradictory practices. It is the narrowness of the vision which emerges from Sustainable Productivism as one focused merely on the production of food whereas the needs of humanity are many and include food, energy, resources, and nature. As has been shown in this thesis a small nation cannot make the planet sustainable on its own and indeed those who do are accused of

abandoning communities by those who engage in the politics of pessimism, this thesis presents an opportunity to reconsider governance across scales.

The articulation of government that goes beyond a particular policy area or institution, but instead considers governance as a system working towards a particular goal, alongside the development of the nodal framework to analysis it is an advance that I feel is particularly useful. If one considers the framework for post-exceptionalism for example, this useful in identifying that a system is post-exceptionalist, as well as the presence of multiple conflicting ideas, however, it is not particularly apt for considering practice. In particularly using the nodal framework to identify acts of prioritisation and the ordering of demands illustrates that while multiple voices may be present, they are not necessarily being heard. By focusing on action alongside idea the nodal framework and the discourse theoretical governance allow for identification of the future.

8.5.4 Discourse Theory and Research Strategy

Finally, all these contributions would not have been possible without the innovative model developed for analysing governance by adapting PDT. By developing a PDT conception of governance this thesis has provided PDT with both a better conceptual framework to providing understanding to complex systems and governance regimes. Griggs and Howarth (2016) set the task for future studies to open up discourse theory to the interplay between and beyond networks. Underpinned by a firmer PDT conception of governance this thesis was able to offer a description of the formation of a discourse which attempted the construction of a governance network, and interacted with actors and elements outwith the network. In addition, the tasks of analysing the interplay of governance at different scales was central to this thesis which has demonstrated how governance from a PDT sense has operated at the supranational, national and local levels with particular focus on the relationship between them.

A limitation of this thesis was that it failed to truly explore the radical potential of the discourse theory conception of governance developed in chapter 3, in particular, for the rural environment. Given the scale of the task set with the need to consider two levels of government, one missing for half of the research period, and the multiple political crises that marked the period the focus of the thesis was often drawn to the elite actors and their responses. However, the conception of governance developed in chapter 3 will support researchers in exploring governance interactions outwith the structures set up in the state focussing on economic actors, social networks and individuals. Finally, while the thesis was unable to fully delve into "craft of network management" it did identify and explore the construction of a governance network, and particularly the problematisations and exclusionary behaviour of the network (Griggs and Howarth, 2016, p. 319). In addition to these theoretical contributions and accomplishments this thesis developed and demonstrated practical research strategy for future researchers by building upon Glynos et al's nodal framework. This thesis has enriched the discourse theory tradition and given future researchers tools to apply it more widely and deeply than before.

8.6 Future research

The contributions section prior outlined several ideas for future research which this thesis has opened the pathway for, however, there are several specific problems that can be addressed that this thesis was unable to. As the data collection period ran until May 2022 and the issue is far from settled the first recommendation for future research is for researchers to consider this topic in relation to ongoing politics, particularly those addressed in section 8.4. Indeed, it is the politics which will determine the future, and it would be interesting for future research to consider the next steps forward regardless of changes.

There is a growing body of research concerned with forms of participative and deliberative democracy on the Island of Ireland. This would be an interesting model to apply to the land use strategy to ask what is it the people of NI, and particularly people living in rural areas, want from the land. Rather than what can existing economic dynamics extract from the land.

Research in the future should also try and address the question of what do we owe the land, and what do we owe to one another. An unfortunate gap in this research was an explicit normative take on what NI should do beyond the reflections in this conclusion and Chapter 7. Now that we know where we are, and where we are going, future research can look at a change of direction and how to get there. Of particular interest would be a focus on practices and the granular detail that high level policy does not capture. For example, what is the role of agricultural contractors in the role out of low emissions technologies, and are they adequately supported to optimise this role? Evidence from interviews suggests they are not, yet it is these practical questions alongside the politics that enables them to be addressed that will shape the future.

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