The European Approach to Sustainable Food Security:

What Role for the Common Agricultural Policy?

Alicia Ann Epstein

Submitted in accordance with the requirements for the degree of Doctor of Philosophy

The University of Leeds

School of Law

June 2017
The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

This copy has been supplied on the understanding that it is copyright material and that no quotation from the thesis may be published without proper acknowledgement.

The right of Alicia Ann Epstein to be identified as Author of this work has been asserted by her in accordance with the Copyright, Designs and Patents Act 1988.

© 2017 The University of Leeds and Alicia Ann Epstein
Dedicated to Molly Brown and Carlos Fabian
Acknowledgements

I would like to thank everyone that has supported me as part of this endeavour. Especially, I would like to thank my family, the Schiffers and all my friends back in Sweden for their relentless patience and encouragement. I owe a special debt of gratitude to my father, Ed Epstein, for his time and assistance, and to Jonathan Thiry for his love of programming. Likewise, I must say thank you to my homie, Irene Otamiri, for having all the right answers and for always pointing me in the right direction. Till Mandana Sadr, tack för ditt tålamod och din kärlek.

I would also like to thank Dagmar Schiek for her initial support and for pushing me to consider coming back to Leeds for my PhD.

A very special thank you goes to Klaus Bosselmann for his greatly appreciated hospitality and the opportunity to visit the New Zealand Centre for Environmental Law at the University of Auckland in 2014, as well as for introducing me to the Global Ecological Integrity Group and the force of nature that is Laura Westra. These experiences have been truly invaluable to me and I look forward to continuing to work with you both.

I must also express my deepest gratitude to the Leeds family and David Adsetts in particular. I am forever grateful for your hospitality and for making Leeds my home away from home. Thanks as well to my colleagues Abdulmalik Altamimi, Byron Karemba, Moa Näsström and Shatha Shannag for their input and much valued intellectual points of discussion.

To Johannes, no words can express my gratitude. Du är bäst!

Last, but not least, I would like to thank Michael Cardwell for his unwavering support and invaluable input throughout this project. I truly could not have done this without his encouragement and I am grateful to have had the privilege of undertaking this project together with him. In many ways, he has exceeded the role of mentor, and needless to say, I will miss the many colourful and heart-warming exchanges that we have shared over hot plates of food, on and off campus. However, as this Chapter of our journey ends, I look forward to many more years of fruitful discussion and friendship.
Abstract

Food security has always been at the heart of the Common Agricultural Policy (CAP). However, the way in which this objective has been pursued and formulated has changed considerably since the policy was first introduced in 1962. Not least, the European approach to food security has evolved from being primarily focused upon ensuring high levels of food supply and internal price stability to becoming increasingly responsive to the environmental implications of agricultural intensification. Thus, as the wider costs of intensive production have garnered heightened recognition, so too has appreciation of the need to move towards ecologically sustainable forms of agriculture, as a pre-requisite for securing long-term food security.

In response, the sustainable management of natural resources and climate change has become a central CAP objective aimed at addressing the environmental externalities of land management practices funded under the CAP. And the relevance of this discussion has recently been carried forward in the context of the 2013 CAP reforms, which delivered the latest in a long line of measures aimed at greening the policy and reducing the negative externalities of European agriculture. These were explicitly introduced to give expression to the underlying principle of sustainable development, but important questions remain as to their ability to provide ecologically sustainable solutions.

This thesis explores the central CAP objective of sustainable agriculture and its key role for ensuring food security. In doing so, it seeks to add to the current debate by critically assessing the impact of the sustainable development paradigm upon the framing of the EU agri-environmental measures and the greater implications that these may have for the long-term protection of ecological systems and food security. In particular, it analyses the main legal measures delivered by the 2013 CAP reforms and the extent to which they correspond to these long-term objectives.
Table of Contents

Acknowledgements ........................................................................................................ iv
Abstract ............................................................................................................................... v
Table of Contents ............................................................................................................. vi
Table of Legislation ......................................................................................................... xi
Table of Cases .................................................................................................................. xv
Introduction ...................................................................................................................... 1
  Contribution .................................................................................................................... 7
  Outline ............................................................................................................................... 9
1. Food Security: An Overview of Approaches Prior to the 2013 Reforms 11
  1.1 Introduction ............................................................................................................. 11
  1.2 The Meaning of ‘Food’ in Food Security ................................................................. 12
  1.3 Western Approaches to Food Security in the 20th Century ................................... 14
    1.3.1 Experiences of Hunger, Malnutrition and Food Insecurity ......................... 14
    1.3.2 International Responses to Food Crises ......................................................... 17
    1.3.3 Definitions of Food Security .............................................................................. 18
    1.3.4 The Focus on Supply and Pricing ................................................................. 21
  1.4 A Brief Historic Overview of the CAP and the European Approach to Food Security .................................................................................................................. 24
    1.4.1 The Initial Objective of Increased Production and the Resort to Market Measures ............................................. 25
    1.4.2 External Dimensions of Food Security and the Prevailing Atmosphere of Protectionism under the Early CAP .......... 30
  1.5 From Empty Pots to Overflowing Storage Coffers: The Effects of Overproduction ......................................................................................................................... 31
    1.5.1 Food Surpluses ................................................................................................. 32
    1.5.2 Appreciating the Environmental Effects of Intensification ....................... 34
  1.6 Change and Reform: Reappraising the European Model of Agriculture .......... 35
  1.7 A Changing Food Security Paradigm? .................................................................. 41
2. Reforming the CAP Towards 2020: The Impact of Recent Food Crises and the Looming Challenges to Food Security ................................................................. 43
  2.1 Introduction ............................................................................................................. 43
  2.2 The 2007-2008 Food Crisis and Ensuing Market Volatility ................................. 44
    2.2.1 Causes and Consequences ............................................................................. 44
    2.2.2 The Impacts Upon Food (in)Security in the European Context . 48
2.3 The Rising Challenges to Food Security ......................................................... 51
   2.3.1 Meeting the Growing Global Demand for Food: The Geo-Political and Ecological Challenges ................................................................. 51
   2.3.2 Physical and Ecological Limitations to Substantially Increasing Global Agricultural Output ................................................................. 52
   2.3.3 Understanding the Current and Projected Changes to the Earth System and the Wider Implications for Food Security .............................. 57
   2.3.4 Disruption of Terrestrial Nitrogen and Phosphorous Cycles ....... 59
   2.3.5 The Impacts of the Loss of Biodiversity ............................................. 61
   2.3.6 The Impending Impacts of Climate Change .................................... 64
2.4 Setting the Tone of the Wider European Debate on Food Security .......... 68
2.5 Meeting the Looming Challenges to Food Security: Outlining the Commission’s Initial Vision for CAP Reform ............................................. 73
   2.5.1 Overarching Reform Objectives ....................................................... 74
   2.5.2 Viable Food Production ....................................................................... 75
   2.5.3 Balanced Territorial Development ..................................................... 76
   2.5.4 The Sustainable Management of Natural Resources and Climate Action .................................................................................................. 77
2.6 Enhancing the CAP’s Environmental Dimensions: A Key Priority of the Cioloş Reforms .................................................................................. 79
3. Sustainable Agriculture: The Impacts and Limitations of the Current Development Paradigm .................................................................................. 82
3.1 Introduction ................................................................................................. 82
3.2 The Ecological and Perpetual Dimensions of Food Security: The Case for Sustainable Agriculture ................................................................. 84
   3.2.1 Sustaining the Ecological Resource Base for Present and Future Generations: The Basic Premise for Long-term and Equitable Food Security ................................................................................................. 86
   3.2.2 The Long Road Ahead ......................................................................... 89
   3.2.3 Framing the Objective of Sustainable Agriculture under the Current Development Paradigm ................................................................. 91
3.3 The Imperative of Sustainable Development: A Driving Force behind the Integration of Environmental Objectives into the CAP ......................... 94
3.4 Environmental Policy Integration under the CAP: (Re)Linking Agricultural Policy to the ‘Environment’? ................................................................. 100
   3.4.1 The Single European Act: Getting the Community’s Environmental Act Together ......................................................................................... 104
   3.4.2 Building the Foundation of the CAP’s Agri-Environmental Framework: The Opportunities of Early Reform ........................................... 108
3.4.3 Deepening the Level of Environmental Policy Integration and Enforcing the Commitment to Sustainable Development ........ 110
3.4.4 The Introduction of Mandatory Environmental Standards ...... 116
3.4.5 The Cross-Compliance Framework ........................................ 118
3.4.6 Expanding the Agri-Environmental Framework under the Second Pillar ........................................................................................................... 122
3.4.7 The Health Check ........................................................................ 128
3.5 Taking Stock of the Strides made prior to the 2013 Reforms ............ 131
4. Delivering and Negotiating the 2013 CAP Reforms: An Overview of the Basic Legal Framework ................................................................. 135
4.1 Introduction ...................................................................................................... 135
4.2 The 2011 Impacts Assessment and Legislative Proposals .................. 136
4.3 The Direct Payments Regulation ................................................................. 138
  4.3.1 The Greening Component .................................................................... 140
  4.3.2 Other Forms of Direct Payments .......................................................... 142
4.4 The Rural Development Regulation ............................................................ 146
4.5 Regulation on the Financing, Management and Monitoring of the Common Agricultural Policy ................................................................. 150
  4.5.1 Cross-Compliance ............................................................................... 151
4.6 Negotiating the Final Measures ................................................................. 153
  4.6.1 Political Responses to the Commission’s Proposals ....................... 154
  4.6.2 Inputs from Civil Society ..................................................................... 160
4.7 Reaching Agreement in Times of Uncertainty: The Wider Context of the Negotiations ............................................................... 163
5. The Post-2014 Direct Payments Regime ....................................................... 166
5.1 Introduction ...................................................................................................... 166
5.2 An Overview of the Main Elements ............................................................ 167
5.3 Payment for Agricultural Practices Beneficial for the Climate and the Environment ................................................................................. 170
  5.3.1 Crop Diversification ............................................................................. 172
  5.3.1.1 Implementation of the Crop Diversification Measure .... 177
  5.3.2 Permanent Grasslands .......................................................................... 178
  5.3.2.1 Implementation of the Permanent Grassland Measure . 182
  5.3.3 Ecological Focus Areas ....................................................................... 183
    5.3.3.1 Implementation of the EFA Measure: The Main Elements 189
5.4 Voluntary Coupled Support: Ex-post Review of the new Framework ...... 197
5.4.1 The Basic Framework .......................................................... 197
5.4.2 Implementation of VCS Payments ...................................... 199

5.5 Expected Outcomes for Biodiversity and Climate Change .............. 202
5.5.1 Biodiversity: Can the Post-2014 Direct Payments Framework Pro\nvide Meaningful Protections? .................................................. 203
  5.5.1.1 Addressing the Main Targets and Objectives of EU\nConservation Policy ............................................................. 203
  5.5.1.2 Expected Policy Outcomes .......................................... 204
5.5.2 Addressing the Challenges of Climate Change: Does the New\nDirect Payment Regime provide a Viable Approach? ......................... 208
  5.5.2.1 The Role of Agriculture for Meeting EU Climate\nObjectives ................................................................. 208
  5.5.2.2 Expected Policy Outcomes .......................................... 210

6. The Revised Rural Development and Cross-Compliance Frameworks 214
6.1 Introduction .................................................................................. 214
6.2 The Main Elements of the post-2014 Rural Development Framework ..... 215
  6.2.1 Strategic Objectives and the Continued Centrality of Sustainable\nDevelopment ............................................................................ 215
  6.2.2 Priorities and Focus Areas ...................................................... 217
6.3 Measures with Environmental and Climate-Related Foci ................. 222
  6.3.1 The Agri-Environment-Climate Measure ............................... 223
  6.3.2 Organic Farming ................................................................... 227
  6.3.3. Natura 2000 and Water Framework Directive Payments ....... 230
  6.3.4 Payments to Areas Facing Natural or Other Specific Constraints 232
  6.3.5 European Innovative Partnership ........................................... 237
6.4 The Cross-Compliance Framework .............................................. 239
  6.4.1 The Main Elements of the Revised Cross-Compliance Regime 240
  6.4.2 The Substantive Outcomes: A Substantial Retreat from Earlier\nAmbitions? .............................................................................. 242

Conclusion ......................................................................................... 247
Bibliography ...................................................................................... 255
  Books ......................................................................................... 255
  Chapters in Edited Volumes ........................................................ 256
  Journal Articles ........................................................................... 258
  Policy Reports ............................................................................. 264
  Online Sources ............................................................................ 270
List of Abbreviations ................................................................................................................274
Table of Legislation

**EU Regulations**


**EU Directives**


**Implementing and Delegated Acts**


Commission Implementing Regulation (EU) 485/2013 of 24 May 2013 amending Implementing Regulation (EU) No 540/2011, as regards the conditions of approval of the active substances clothianidin, thiamethoxam and imidacloprid, and prohibiting the use and sale of seeds treated with plant protection products containing those active substances [2013] OJ L139/12


Table of Cases

<table>
<thead>
<tr>
<th>Case Number</th>
<th>Plaintiff/Case</th>
<th>Year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-353/92</td>
<td>Greece v Council</td>
<td>1994</td>
<td>ECR I-3411</td>
</tr>
<tr>
<td>5/67</td>
<td>Beus v Hauptzollamt München</td>
<td>1968</td>
<td>ECR 83</td>
</tr>
<tr>
<td>5/73</td>
<td>Balkan v Hauptzollamt Berlin-Packhof</td>
<td>1973</td>
<td>ECR 109</td>
</tr>
<tr>
<td>2/75</td>
<td>Mackprang</td>
<td>1975</td>
<td>ECR 607</td>
</tr>
<tr>
<td>114/76</td>
<td>Be-Mühle v Grows-Farm</td>
<td>1977</td>
<td>ECR 1211</td>
</tr>
<tr>
<td>46/86</td>
<td>Romkes</td>
<td>1987</td>
<td>ECR 2687</td>
</tr>
<tr>
<td>C-57/89</td>
<td>European Communities v Federal Republic of Germany</td>
<td>1989</td>
<td>I-924.</td>
</tr>
<tr>
<td>C-2/90</td>
<td>Commission v Belgium</td>
<td>1990</td>
<td>ECR I-4471</td>
</tr>
<tr>
<td>C-293/97</td>
<td>R v Secretary of State for the Environment and Minister of Agriculture, Fisheries, and Food, ex parte Standley</td>
<td>1999</td>
<td>ECR I-2626</td>
</tr>
<tr>
<td>C-20/01</td>
<td>Commission v Germany</td>
<td>2003</td>
<td>ECR I-3609</td>
</tr>
<tr>
<td>C-428/07</td>
<td>The Queen (on the application of Mark Horvath) v Secretary of State for Environment, Food and Rural Affairs</td>
<td>2009</td>
<td>ECR I-6355</td>
</tr>
<tr>
<td>Joined Cases C-333/15 and C-334/15</td>
<td>Planes Bresco v Comunidad Autónoma de Aragón</td>
<td>2016</td>
<td>ECLI:EU:C:2016:426</td>
</tr>
<tr>
<td>T-622/14</td>
<td>Lauritzen Holding v EUIPO - DK Company (IWEAR)</td>
<td>2017</td>
<td>ECLI:EU:T:2017:143</td>
</tr>
</tbody>
</table>
Introduction

The most recent reform of the Common Agricultural Policy (CAP) was initiated in April 2010 under the leadership of the, then, Commissioner for Agriculture, Dacian Cioloș,¹ and concluded in September 2013 when political agreement was reached between the European Parliament (EP), the Council and the European Commission. The final legal acts were formally adopted in December of that year, programming the CAP framework for the 2014-2020 period. However, the process leading up to the 2013 reforms was arguably different to previous rounds in several notable ways. It was, for example, the first time that the EP was acting as a full-fledged legislative partner, together with the Council, under the Ordinary Legislative Procedure.² It was also exceptional in that it commenced in the aftermath of the worse global food crisis since 1974, as well as the start of deepest financial depression since the 1930s.

Definitely, the experiences of 2007-2008 and beyond were influential in setting the tone of the CAP negotiations. In particular, the 2007-2008 food crisis was instrumental in steering the direction of the talks and prompted the central institutional actors to focus on food security as ‘a question of the utmost urgency for the EU’.³ The crisis, which occurred following decades of relative market stability, sent shockwaves through the global food system with dramatic effects on the prices of a number of staple crops.⁴ For instance, in 2009 the EP raised its alarm over wheat and maize prices, amongst others, which had risen globally by 180 and almost 300 per cent, respectively, from late 2006-2008.⁵ These increases had particular implications for

---

food security and the access to food in net-importing countries, many of which were low-to-middle-income economies.\(^6\)

The sharp increases in price also impacted the access to food by the poorest members of European society which, compounded with the financial crisis that started to unfold in 2008, had the effect of reducing the purchasing power of the average household, with the Commission estimating that the 16 per cent of Europeans living below the poverty line at the time were at greatest risk of being squeezed by the extraordinary price volatility that characterised staple commodities.\(^7\) Moreover, the potential market recovery was undermined by further instability in 2010-2011, when food prices started to rise once again.\(^8\)

In response to these developments, the Commission initially took direct action in the form of market measures aimed at ensuring the supply of food and lifting existing barriers to production, in order to counterbalance the steep rises in food prices.\(^9\) In addition to exposing vulnerabilities of the global food system, the crisis also had the effect of propelling a much wider societal debate on food security, which was being increasingly recognised for its propensity to come under pressure from a number of converging environmental, geo-political and demographic changes over the coming decades.\(^10\) Key amongst these emerging challenges were projections of significant human population growth, as well as greater levels of affluence and prosperity during the first half of the 20\(^{th}\) century.\(^11\) More specifically, it was estimated


\(^7\) European Commission, Tackling the challenge of rising food prices, Directions for EU action, COM(2008) 321, 3.


\(^11\) At the time, the UN estimated that the global population would reach 9 billion by 2050, but later revised this figure upwards to 10 billion. See; United Nations, Department of Economic and Social
that these factors could increase the demand for food by up to 60 per cent by 2050, with much of this rise stemming from global dietary shifts towards greater consumptions of resource intensive products, such as meat and dairy.

However, the prospects of raising the output of food to meet this demand without further undermining global ecological systems and climate change were put sharply into question given existing restrictions to both expanding, as well as intensifying agricultural production. With regard to extensification, for instance, there were, and remain, obvious limitations given the lack of available land left to convert to agricultural uses in many parts of the world. Also, such expansion would have the effect of exacerbating the challenges of climate change due to the unavoidable release of CO₂ associated with land conversion. On the other hand, agricultural intensification in regions such as Europe have already been widely pursued, with great cost to both the environment and human health. Not least, accelerated rates of biodiversity loss, the pollution of waterways and soil, as well as climatic changes have all been closely linked to intensive agricultural management practices. In this light, Tilman et al have observed that although there exists some agreement regarding the possibility of producing food to meet the needs of up to 10 billion people there is ‘little consensus on how this can be achieved by sustainable means’. Consequently, they argue that overcoming these obstacles will represent ‘one of the greatest scientific challenges facing humankind because of the trade-offs among competing economic environmental goals, and inadequate knowledge of the key biological and ecological processes’.

According to the Foresight Report on The Future of Food and Farming, a ‘redesign of the whole food system’ would be required in order to successfully

---

15 Royal Society (n 10).
19 Ibid.
overcome the long-term challenges to food security.\textsuperscript{20} In particular, it stressed that ‘[u]nless the footprint of the food system on the environment is reduced, the capacity of the earth to produce food for humankind will be compromised with grave implications for future food security’.\textsuperscript{21} In doing so, moreover, it added that ‘[c]onsideration of sustainability must be introduced to all sectors of the food system, from production to consumption, and in education, governance and research’.\textsuperscript{22} And, in practical terms, the Food and Agricultural Organisation (FAO) of the United Nations (UN) underlined in 2009 the importance of translating the increased awareness of the challenges to food security ‘into political will and effective action to render the system better prepared to respond to long-term demand growth and more resilient against various risk factors that confront world agriculture.’\textsuperscript{23}

In the European context, the start of the CAP reform process in 2010 presented a major opportunity to formally address these challenges, with the Commission affirming that a central aim of the 2014-2020 programming framework would be to ‘guarantee long-term food security for European citizens and to contribute to growing world food demand’.\textsuperscript{24} The premise of this approach was to be found in its guiding Communication \textit{The CAP towards 2020: Meeting the food, natural resources and territorial challenges of the future}, which set forth the Commissions initial vision for legislative reform based on three strategic objectives: (i) viable food production; (ii) the sustainable management of natural resources and climate action and; (iii) balanced territorial development.\textsuperscript{25} And two defining features may be highlighted at this point.

First, as already indicated, the Communication outlined a clear ambition to keep the focus of the reforms on addressing the long-term and structural challenges to global food security that had been highlighted in recent years.\textsuperscript{26} Secondly, moreover, it emphasised significantly the need to do so without further undermining the viability of ecological systems and resources that underpin agricultural productivity. Not least,
the importance of this approach was underscored by the strategic aim to ensure ‘the sustainable management of natural resources and climate action’,27 and an increased understanding of the need to ‘preserve the food production potential on a sustainable basis throughout the EU’.28 More specifically, it pointed to the need ‘to enhance the sustainable management of natural resources such as water, air, biodiversity and soil’ as primary reasons for CAP reform.29 And, in its accompanying Memo to the Communication, the Commission further noted that one of the main challenges of the CAP would be to maintain the ‘capacity to produce quality products in sufficient quantities whilst at the same…encouraging sustainable production practices’.30

These and other acknowledgements of the link between food security and sustainable agriculture suggested that the formulation of environmental measures would be a focal point of the reform agenda. In doing so, the Commission had a number of choices as to how to extend and improve the structures of environmental governance under the CAP. It could, for instance, have supported the expansion of targeted environmental schemes and climate measures under the CAP’s rural development framework, as had long been advocated by some environmental interest groups and commentators.31 Likewise, the Commission could have chosen to reinforce the cross-compliance regime that had been in operation since 2005,32 but which suffered from differing levels of implementation and, consequently, differing levels of environmental outcomes and benefits across the EU.33 In particular, there

27 European Commission (n 24) 7.
28 Ibid, 2.
29 Ibid, 6.
30 European Commission, Background note: Commission Communication on the future of the CAP, 18 November 2010 MEMO/10/587.
was the option of integrating relevant aspects of the Water Framework Directive\textsuperscript{34} (WFD) and the Sustainable use of Pesticides Directive\textsuperscript{35} into cross-compliance, which, by some accounts, had so far ‘had little impact on reducing pollution’.\textsuperscript{36}

Concrete expression of the Commissions intended direction of travel was revealed by the publication of the main reform proposals and Impact Assessments in October 2011.\textsuperscript{37} The reform package contained four basic acts covering direct payments, rural development, horizontal measures and rules on the common market organisation (CMO) of agricultural products. Key amongst the proposed measures was the formulation of a novel ‘greening component’, intended to impose agri-environmental obligations upon farmers in exchange for their receipt of basic income support under the direct payment framework.\textsuperscript{38} More specifically, the proposed Direct Payments Regulation called for each Member State (MS) to ‘use part of their national ceilings for direct payments to grant an annual payment…for compulsory practices to be followed by farmers addressing, as a priority, both climate and environment policy goals’.\textsuperscript{39} These practices were to cover crop-diversification, the maintenance of permanent grasslands, and the designation of ecological focus areas (EFA),\textsuperscript{40} with the


\textsuperscript{38} Ibid, Proposal Direct Payments Regulation, Preamble (26).

\textsuperscript{39} Ibid.

\textsuperscript{40} Regulation (EU) 1307/2013 of the European Parliament and of the Council of 17 December 2013 establishing rules for direct payments to farmers under support schemes within the framework of the
significance of this greening component being reinforced by the requirement that some 30 per cent of direct payments be tied to observation of the agricultural practices which it mandated. In addition, the proposals included changes to the agri-environmental measures under the rural development framework, as well as to the horizontal applicability and substance of cross-compliance.

Importantly, the Commission contended that these revisions of the CAP framework would ‘accelerate the process of integration of environmental requirements…and reinforce the ability of land and natural ecosystems to…address major EU biodiversity and climate change adaptation objectives’. This was similarly echoed in commentary by the General Secretariat of the Council, which emphasised that the ‘coherence and consistency of the greening model is essential in order to ensure…more sustainable agriculture’. In consequence, one of the defining features for measuring the success of the 2013 reforms is arguably whether the revised legal framework corresponds to the objective to create greater synergies between food production and the protection of agricultural resources.

**Contribution**

Against this background, the present thesis explores the central CAP objective of sustainable agriculture and its crucial role for ensuring food security in the EU context. In doing so, it seeks to add to the current debate by critically assessing the impact of the sustainable development paradigm upon the framing of EU agri-environmental measures and the greater implications that these may have for the long-term protection of ecological systems and food security. More specifically, it analyses the main legal measures delivered by the 2013 CAP reforms and the extent to which they correspond to these long-term objectives.

The thesis and arguments are generated by research questions that guide the analysis of relevant legal instruments and policy measures. These include:

- What is food security?

---


41 Proposed Direct Payments Regulation (n 37) 3.

What is the role of the CAP for ensuring food security in the EU context?

What is the link between food security and sustainable agriculture?

How has the concept of sustainable agriculture been pursued in the EU context?

What has been the impact and influence of the principle of sustainable development upon the formulation of the objective of sustainable agriculture under the CAP?

To what extent do the 2013 CAP reforms correspond and provide meaningful responses to the fundamental objective of sustainable agriculture?

Given this primary approach, the employed methodology may largely be described as doctrinal. However, this characterisation may be complemented by two additional features of the underlying research. First, the research questions are embedded within a theoretical framework that provides the conceptual prisms through which the analysis and the final conclusions are generated. More specifically, this framework provides the basis for exploring the concept of sustainable agriculture and the notion of sustainability that lay at its core. Key to this discussion is a systematic review of the sustainable development paradigm, which has underpinned policy approaches to sustainable agriculture for more than two decades. Thus, although the thesis is inductive in the sense that the analysis and conclusions are derived from a defined conceptual framework, this process has been influenced by normative understandings and formulations of sustainable agriculture.

Secondly, there has been a deliberate attempt to extend the scope of the underlying legal analysis by engaging with non-legal and inter-disciplinary literature. Not least, appreciation of the ecological challenges to food security demands consideration of wide-ranging scientific and academic findings, as well as in-depth understanding of the constantly evolving policy frameworks that have been implemented in response. Moreover, in this context more than in any other, the depth of the thesis has been profoundly enriched by the opportunity to undertake part of the research at the New Zealand Centre for Environmental law, University of Auckland, whose mission is to develop scholarship focused on the transnational and inter-
disciplinary aspects of environmental law. The visit has also led to the wider dissemination of the current work through publication at international fora.

Outline

The thesis proceeds in two parts, consisting of three Chapters respectively. The first part outlines the fundamental research problem and the theoretical considerations that underpin the subsequent analysis. More specifically, Chapter 1 begins by exploring the concept of food security and the impact that it has had on international policy formulations since the early 20th century. The discussion is then complimented by detailed consideration of the approach to food security in the European context and the historic role that the CAP has played for pursuing this central objective. The Chapter concludes with an overview of the policy’s legal framework and outcomes prior to the 2013 reforms.

Chapter 2 then looks at the background to these recent reforms and the main events that served to influence the formulation of the prospective CAP agenda. It considers, in detail, the impact of the 2007-2008 food crisis on the institutional debates surrounding food security and the role of the CAP for meeting this central EU objective. Moreover, the Chapter discusses the wider ecological challenges to food security and the increased understanding of their projected implications for agricultural productivity. The discussion also explores the difficulty of ensuring food security against a backdrop of rising global food demand for resource-intensive commodities, with the final part of the Chapter outlining the main objectives of the 2013 reforms.

Chapter 3 moves away from the broader treatment of food security in Chapters 1 and 2, and focuses on the ecological and teleological dimensions of this concept. More specifically, it considers the primary link between food security and ecological sustainability and argues for the need to ensure the productive capacity of agricultural resources for the benefit of food security for both current and future generations. Not least, given the pervasive impacts of conventional farming and the rising threats to the stability of global ecological systems and functions, the discussion centres on sustainable agriculture as an indispensable imperative moving forward. The first part of the Chapter considers the sustainable development paradigm and the extent to

---

43 This research was made possible by the Worldwide Universities Network and a research mobility grant for early career researchers.
which it has impacted upon the formulation of sustainable agriculture, as a key CAP objective. Environmental policy integration has been a crucial part of this process and the second part provides a historical overview of the incremental changes that have been made to the CAP framework in order to bring it closer in line with the EU’s wider objective of sustainable development.

The second part of the thesis analyses the main legal measures introduced by the 2013 CAP reforms and Chapter 4 begins with an overview of the legislative proposals delivered by the Commission in October 2011. Of the four proposed regulations, three included measures with specific environmental objectives. These related to direct payments, rural development and cross-compliance under the proposed horizontal regulation. An overview of each of these is offered before considering key elements of the subsequent intra-institutional negotiations that served to determine their fate. In particular, the negotiations focused on reaching agreement on the novel ‘greening component’ proposed by the Commission, and this process is outlined before discussing some of the main reactions by stakeholders and NGO’s. The enacted regulations are then analysed in the following two chapters.

Chapter 5 considers the framework for direct payments introduced by the 2013 reforms, with a focus on the introduction of the three specific measures aimed at delivering ‘benefits to the environment and the climate’. These measures were, by far, the main novelty of the reforms and were intended to extend the process of environmental policy integration under the CAP. In this light, the analysis considers the extent to which their implementation and expected outcomes correspond to the objective to ensure the sustainable management of natural resources and climate change.

The changes made to the rural development framework were far less extensive and those elements relating to agri-environmental instruments are detailed and examined in the first part of Chapter 6. The second part of the chapter considers the role of the cross-compliance regime under the new horizontal framework.
Chapter 1

Food Security: An Overview of Approaches Prior to the 2013 Reforms

1.1 Introduction

The question of how to feed human populations has undoubtedly existed since the dawn of civilisation and every society has had to address this challenge based on varying means, priorities and preconditions. Consequently, the concept of food security is not new, but rather one that has undergone substantial change over time and space.\(^1\) This Chapter traces some of the main developments that have underpinned Western approaches to food security and the creation of the CAP following the end of the Second World War. The aim is to provide an initial layer of discussion concerning the conceptual and legal frameworks that have defined food security as the primary objective of European agricultural policy since that time. The discussion is then carried forward in Chapters 2 and 3, where the ecological dimensions of production agriculture are further considered in light of current and future challenges to food security.

The Chapter is divided into two parts and commences with a historic outline of the agricultural production policies, market crises and experiences of food (in)security that served to shape international responses and definitions of food security in the 20\(^{th}\) century. Against a backdrop of a significantly expanded global food system, these experiences have been particularly instrumental in bringing about a paradigmatic focus on supply and pricing policies, as fundamental pillars of national and international approaches to food security.\(^2\) Given their role in the framing of recent

---

agricultural production practices, supply and pricing considerations are therefore distinguished as key dimensions of the international food security paradigm, although other micro-level aspects such as individual and household access to food are also highlighted. The second part of the Chapter considers, more closely, food security in the European context and provides an overview of the historical legal and political framework that underpinned the formation of the CAP and the distinctly European approach to food security that was subsequently pursued under the Treaty of Rome. In doing so, the discussion aims at highlighting some of the main developments and policy outcomes that have served to shape the policy, including the main elements of reforms carried out prior to the Cioloş reforms in 2013.

1.2 The Meaning of ‘Food’ in Food Security

On the most basic level, food security is undoubtedly concerned with food. In the EU context there exists no legal definition of food security, though, as a preliminary point of reference it is possible to look to the legal definition of food within the context of EU food safety law. Specifically, Article 2 of Council Regulation (EC) 178/2002 defines food as ‘any substance or product, whether processed, partially processed or unprocessed, intended to be or reasonably intended to be ingested by humans’.³ Thus, although this definition covers food in a variety of forms (primary, as well as, processed food products), it is important at this early stage to point out the very limited utility of focusing solely on the food in food security. For instance, the definition does not include animal feed, which is meant for animal ingestion, rather than human.⁴

Yet, as will be seen, crops produced for animal feed constitute a significant part of the global food chain and are as much affected by agricultural inputs (such as fertilisers and pesticides) and outputs (such as waste and environmental degradation) as food grown for human consumption.⁵ Perhaps, then, a more conducive way of

---

⁴ Ibid, Article 2.
explaining the basic concept of food security in the present context is that it is concerned with a wider understanding of food and food production. This includes food products meant for direct human consumption, as well as crops grown for the purpose of providing animal feed for livestock, which are in their turn intended to provide ingestible products for humans in one form or another.\(^6\)

A broader classification is offered by the Treaty on the Functioning on the European Union (TFEU), which refers to agricultural products as meaning ‘products of the soil, of stockfarming and of fisheries and products of first-stage processing directly related to these products’.\(^7\) In other words, even though the term agricultural products linguistically indicates a reference to primary products of the soil, the concept may be understood as extending to primary products of the sea, such as fish and other ‘seafood’.\(^8\)

However, in order to aggregate a more comprehensive definition of the concept of food security it is necessary to look to multidisciplinary literature, as well as international agreements and policy documents. As shall be seen, this is not a straightforward task, as approaches have varied considerably and according to some estimates there existed some 200 definitions and 450 indicators of food security by 2002.\(^9\)

---

Consumption (The Royal Institute of International Affairs, London, 2014) 5. The production of animal feed may also have significant impacts upon the price of food in general, see, R. Trostle, ‘Global Agricultural Supply and Demand: Factors contributing to the Recent Increase in Food Commodity Prices’, Economic Research Service (United States Department of Agriculture 2008) 5.

Annex I of the Treaties provides a full list of the products of fisheries and stock farming that are covered by the agricultural policy. Although, note that not all products listed there are meant for human or animal ingestion.

Article 38 TFEU.

\(^8\) Ibid.

1.3 Western Approaches to Food Security in the 20th Century

1.3.1 Experiences of Hunger, Malnutrition and Food Insecurity

Throughout the 20th century, as economies have become ever-more interlinked, food security has evolved into a policy objective increasingly pursued at the national, regional and global level.\(^\text{10}\) Indeed, the earliest internationally concerted efforts to deal with food security took place under the auspices of the League of Nations and dated back to the 1930s when the first accounts of the extent of global hunger and nutrition were undertaken.\(^\text{11}\) At that time, the increased nutritional value of food was credited as a key factor in human development, which had been facilitated by the tremendous strides made by nutritional and health sciences since the late 18th century.\(^\text{12}\) Moreover, the discovery of hybridisation in North America served to significantly increase the output of staple crops, which had promising implications for supplying sufficient nourishment and calories for a growing and more affluent human population.\(^\text{13}\) Hence, the link between nutrition (primarily in the form of food) and human development formed a central part of early attempts to combat hunger and malnutrition, as well as to improve global food security.\(^\text{14}\)

It was also during that time that the effects of the Great Depression were being increasingly felt across industrialised economies, with particularly devastating effects on hunger and malnutrition. The existence of such depravation was, of course, not a new phenomenon, but a specific feature of the great depression was that people were starving amidst a time of agricultural surpluses.\(^\text{15}\) Indeed, a particularly long-lasting observation made by scientists and policy-makers at the time, was of the parallel


\(^{13}\) Millennium Ecosystem Assessment, Drivers of Change in Ecosystem Condition and Services (MEA, Scenarios, 2005) Chapter 7, 197.


\(^{15}\) For instance, there were several occasions during – and after – the First World War, where food production in the US outweighed demand. To prevent farm incomes from collapsing, the US government intervened by exporting excess supplies in the form of food aid, among other things. See, eg: J. Black, ‘The Experience of Adjustment Relating to Food and Nutrition’ in T.W. Schultz (ed) Food for the World (reprinted; Arno Press 1976: original print; University of Chicago Press 1945) 17.
existence of malnutrition and hunger amongst children, elderly and the unemployed in some of the most economically advanced nations of the world.\(^{16}\) The great paradox was, nonetheless, that several of these same governments, such as that of the United States (US), were tackling substantial surpluses of food and other agricultural products, while some portions of the population could barely afford to eat.\(^{17}\) These developments would gradually have the effect of shifting the initial focus of industrialised nations away from nutrition, and increasingly towards trade-related considerations of supply and pricing as key dimensions of food security at the national and international level.\(^{18}\) Moreover, as will be further explored below, this paradigmatic change had important implications for the formulation of national agricultural production policies at the time, which increasingly pursued the objectives of supply and pricing through the use of direct market and production adjustment measures following the experiences of the 1930s.\(^{19}\) Likewise, this provided part of the context in which the CAP framework was later created and implemented.

In the US context, food production had not only outdone demand, but demand was further stifled by the lack of purchasing power that prevailed within the context of mass unemployment and economic depression.\(^{20}\) Apart from the simple reality that many people simply could not afford to increase their calorific consumption despite prices being pushed down to record levels, a well-founded concern was of the potentially harmful effect that overproduction could have on the vulnerable incomes of farmers and farming communities, and, thereby food security.\(^{21}\) This was inconsistent with observations in economic theory, which showed that the net-barter terms between primary producers and those of processors and manufacturers higher up on the production chain were characterised by a long-term negative trend for the former.\(^{22}\) In other words, primary food producers were arguably not getting a fair share of wealth and income compared with their overall input and contributions. The

---

\(^{16}\) Shaw (n 10) 12-13.
\(^{18}\) Shaw (n 10) 13.
\(^{19}\) See 1.4, below.
\(^{20}\) Black (n 15) 17.
latter aspect should not easily be overlooked in the context of food security and, as will be further elaborated below, has been a particular focus of the CAP since its commencement.

Moreover, the dynamics of production and over-production are highly complex, as they are often linked to a number of interrelated and reinforcing social, economic and political factors. On the socio-economic level, as has been seen, the welfare of farming communities and individual farmers may be negatively affected when market prices for their products fall. This is, indeed, likely to be the case for any given industry or sector that experience significant reductions in revenue. However, one of the most striking features of agricultural ‘exceptionalism’ is the length to which the EU and other national governments have been willing to go to ensure that farming communities enjoy ‘a fair standard of living…by increasing the individual earnings of persons engaged in agriculture’. The latter position has historically expressed itself in various degrees of willingness to support farm incomes, which is in recognition of the role of food as a basic necessity that may warrant extraordinary measures to ensure its availability. Conversely, it has also resulted in numerous instances of food surpluses due to increased financial incentive to produce. The irony is, of course, that the overproduction of food can also have the effect of threatening farm incomes by driving down prices, which may reduce levels of production and create food shortages, thus, potentially having a direct and negative effect upon food security.

Such a state of affairs occurred in the US, where measures were introduced in response to reduced consumer demand in the 1930s. Despite originally being intended to bolster the income of farming communities, these price support mechanisms had the opposite effect of incentivising increased production and food surpluses, which ultimately served to further drive down the price of food. In response, contemporary commentators pointed out that although ‘the logical response to food surpluses would

---

25 Article 39(1)(b) TFEU.
26 This was, for instance, a scenario facing EU food production after many years of surplus production prior to the MacSharry reforms. See 1.6 below.
27 Shaw (n 10) 13.
be to rein in production, the US and other exporting nations chose to use marketing adjustments’, which had a direct impact on farm incomes.\textsuperscript{28} Not least, the adoption of marketing measures increasingly led surplus food producing nations to look to global markets as outlets for their agricultural products. Thus, rather than reining in production through production adjustment measures, ‘the prevailing notion of…exporting countries was that they could dispose of their surpluses by dumping them in [for instance] Europe’ prior to the World War Two.\textsuperscript{29}

1.3.2 International Responses to Food Crises

Another effect of the augmented reliance on export markets was that national food supply networks became increasingly global and interdependent – prompting equally global efforts to address food security. The creation of the Food and Agriculture Organisation (FAO) of the United Nations (UN) in Hot Springs, Virginia, in 1943 marked such an effort and has been largely instrumental in defining food security and coordinating international efforts ever since.\textsuperscript{30} Following the Second World War, the situation with regards to food supplies varied considerably between countries and continents. For instance, American food production and output emerged relatively unaffected due to its geographic distance from the battles zones, while the situation in many parts of Europe differed greatly. There, food shortages and rationing would continue for years after the war and this harsh reality arguably had a remarkable impact upon the subsequent formation and objectives of the European agricultural policy.\textsuperscript{31} The particularities of the CAP will be explored in greater detail below, but for now it may suffice to mention that despite the promising start to international efforts aimed at addressing food security at the Hot Springs Conference in 1943, many nations, as well as the original European Economic Community (EEC), would continue to pursue rather inward-looking agricultural policies.\textsuperscript{32}

After relative economic stability and growth during the 1950s and 60s, initial signs of disruption were felt in 1972 when food production dropped for the first time

---

\textsuperscript{28} Black (n 15) 17.
\textsuperscript{29} Ibid, 18.
\textsuperscript{31} E. Neville-Rolfe (n 2) 187.
since the end of the Second World War.\textsuperscript{33} This reduction was principally due to heavy droughts, which had a significant impact on wheat production in the Soviet Union and led to massive purchasing on the world market.\textsuperscript{34} The situation was worsened in the following years, with poor weather conditions further affecting agricultural output and contributing to a near depletion of cereal stocks in several regions, including the Far East and North America, as well as rising food prices.\textsuperscript{35}

Although these developments had certainly been cause for concern, it was not until 1974, when the world experienced one of the most severe oil crises to date, that the instability on agricultural markets translated into a full-blown emergency requiring international cooperation and assistance in order to minimise the risk of food insecurity in those nations worse affected. This prompted the UN to convene the 1974 World Food Conference, which Maxwell has argued was ‘born largely out of the shock at the sharp rise in world food prices in the preceding two years and fear that the world food system was running out of control’.\textsuperscript{36} The message was also brought home, if it had not already been, that disruptions on the global level could have a significant impact on food security on the regional, national and local level and vice versa.\textsuperscript{37} Thus, notwithstanding the years of economic growth and stability that had characterised much of the post-war period, it was clear that severe insecurity within the global food system could – and would – continue to occur, even as societies became increasingly wealthy and developed.\textsuperscript{38}

1.3.3 Definitions of Food Security

Against a backdrop of market instability, low crop yields, and ensuing famine in some parts of the world,\textsuperscript{39} the report of the 1974 World Food Conference sought to address food security by providing, what is largely considered to be the first major

\textsuperscript{34} Ibid, 3.
\textsuperscript{35} Ibid, 1.
\textsuperscript{36} S. Maxwell (n 1) 156.
\textsuperscript{37} B. McDonald, Food Security (Polity Press, 2010) 12.
\textsuperscript{38} FAO, The State of Food and Agriculture 1973 (FAO, Rome, 1973) 1. Such pronouncements were also made following the food crises that occurred 2007-2008. See for instance long term projections of high prices and volatility: OECD, Rising Food Prices: Causes and Consequences (OECD, 2008).
\textsuperscript{39} See, eg; R. Stringer, Food Security in Developing Countries, Policy Discussion Paper No.0011 (Centre for International Studies 2002).
international definition of the concept. According to the report food security entailed;

‘[the] availability at all times of adequate world food supplies of basic foodstuff…to sustain a steady expansion of food consumption…and to offset fluctuations in production and prices’.  

This definition placed considerable importance on the supply of food (in terms of quantity), as well as the need to ensure the stability of food prices and to expand food consumption. Consequently ‘[t]he focus of the debate was on strengthening food production to increase availability and stability of world food supplies of basic foodstuffs…to meet increasing demands’. However, this enunciation of food security failed to include the role of food safety and issues of access in attaining food security and many subsequent definitions made by various international bodies have attempted to incorporate these aspects, to one extent or another. For instance, the FAO expanded its own definition of food security in 1983 to reflect this shortcoming by adding that food security included: ‘Ensuring that all people at all times have both physical and economic access to the basic food that they need’. Likewise, the importance of individual and household access was subsequently reflected in the 1996 UN World Food Summit, which adopted a considerably more complex definition than that expounded upon in 1974 and remains one of the most oft-cited definitions to date. According to this:

‘Food security [at the individual, household, national, regional and global levels] is when all people, at all times, have physical and

---

42 Mechlem (n 40) 633.
44 It added that food security included: ‘Ensuring that all people at all times have both physical and economic access to the basic food that they need’. FAO, World Food Security: a Reappraisal of the Concepts and Approaches. Director General’s Report (FAO, Rome, 1983).
economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life’.\textsuperscript{45}

Definitely, the 1996 declaration expanded the definition of food security to include the key dimensions of access and food safety as part of the food security paradigm.\textsuperscript{46} For instance, it highlighted that ‘constraints on … incomes to purchase food…prevent basic food needs from being fulfilled’.\textsuperscript{47} Moreover, as will be further elaborated below, a vast body of academic literature has also contributed to a more nuanced understanding of the complex roles of access and vulnerability as they relate to food security on the individual and household levels.\textsuperscript{48}

The increased focus on these micro-level aspects of food security marked an important shift towards addressing the structural deficiencies that may cause people to be food insecure or, equally, prevent them from becoming food secure, and has also been instrumental for conceptualising the key role of individual and household \textit{access and entitlement} to food.\textsuperscript{49} Thus, it should be noted from the outset, that although the focus of the current thesis is on the production-related aspects of ensuring food security under the CAP, these merely reflect one dimension (albeit a major one) of the food security matrix. Food security on the individual level, on the other hand, definitely depends on additional considerations, but these are beyond the scope of the present discussion.

\textsuperscript{45} FAO, Rome Declaration on World Food Security and World Food Summit Plan of Action, World Food Summit 13-17 November (FAO 1996) para 1.

\textsuperscript{46} R. Zhang, ‘Food security: Food Trade Regime and Food Aid Regime’ (2004) 7 Journal of International Economic Law 265, 266.

\textsuperscript{47} FAO (n 45) Preamble.


\textsuperscript{49} One of the, perhaps, most oft cited pieces of work in this field is: A. Sen, Poverty and Famine: An Essay on Entitlement and Deprivation (Clarendon Press, Oxford: 1981). However, the link between food security and individual access has long been stressed by other economists within context of nutrition. See, for instance: L. Joy, ‘Food and Nutrition Planning’ (1973) 24 Journal of Agricultural Economics 165; F. Levinson (n 48).
Notwithstanding the increased attention to these dimensions of food security, however, international approaches and definitions have continued to hinge strongly on maintaining adequate food supplies, as well as, ensuring that these be subject to pricing policies that make them accessible and affordable. Therefore, the following section briefly outlines some basic observations on supply and pricing, before exploring how these factors have impacted upon the approach to food security policy under the CAP.

1.3.4 The Focus on Supply and Pricing

It is arguably somewhat self-evident that ensuring the existence of sufficient food supplies represent the most immediate and basic means of pre-empting food insecurity. Indeed, dating back to ancient civilisations, the availability of, eg buffer stocks have played an important role in ensuring food security, translating into overall societal stability in times of peace, war, famine and abundance alike. Recently, however, the high costs of maintaining and storing intervention stocks, along with increased reliance upon trade, have brought stock levels down significantly. This was a cause for significant concern during the food crisis of the 1970s when, as already noted, a series of bad harvests, combined with low levels of cereal stocks were partly responsible for the sharp rises in food prices that were experienced at that time.

As will be discussed extensively in Chapter 2, a combination of similar conditions were experienced during the recent 2007-2008 food crisis, during which low global food stocks did little to address the inelasticity of, for instance, grain supply and demand functions, which tend to be highly susceptible to relatively small shocks, especially when stocks are low. This contributed, amongst other factors, to global wheat and maize prices rising by 180 per cent and almost 300 per cent respectively.

51 Ibid. See also; B. Kemp, Ancient Egypt: An Anatomy of Civilisation (Routledge, 2006) 322. Kemp points out that interventions stocks were standard both at institutional and private levels in ancient Egypt to offset supply and price fluctuations of staple crops.
52 This was for instance notes in; Council Regulation (EC) 1/2008 temporarily suspending customs duties on imports of certain cereals for the 2007/2008 marketing year [2008] OJ L1/1 Preamble (5); FAO, Crop Prospects and Food Situation: No 2, April 2008 (FAO, Rome, 2008) 6-7.
54 Headey and Fan (n 4) 7.
from late 2006-2008. Moreover, similar to the course of events described above in relation to crisis of the early 1970s, the prospects of replenishing stocks was further undermined by significantly reduced grain harvests in Russia and Ukraine, with both countries further restricting global supply and trade through the imposition of export restrictions. This prompted global agencies to call for systems of international grain reserves, but such plans have yet to come to fruition.

Importantly, however, it should be added that notwithstanding the potential role of stocks and supply, it has been widely acknowledged that the existence of sufficient amounts of food, calculated on a per capita basis, does not necessarily guarantee food security. Thus, although falling outside the European context, important works such as Sen’s Poverty and Famine have emphasised the role of access for individual food security and pointed out that many a famine has occurred while the supply of calorific output remained largely the same on a per capita basis. According to Sen, ‘[w]hile food availability will clearly be an important influence on [the] terms of exchange, other forces are also involved, and famines can thus arise from causes other than food availability decline’. This was, for instance, observed with regards to the Bengali famine of the early 1940s where widespread starvation occurred despite relatively minor fluctuations in the overall availability of food and without major declines in supplies. Similarly, as seen above, although far from constituting a famine, the extent of malnourishment and hunger experienced in the U.S. during the economic depression of the 1930s was clearly also linked to a lack of access for many people, as seen above.

It follows that within systems based on capital exchange, price is a key factor for determining the access of individuals and household to food, with price stability

---

57 Ibid, 3. See also; Headey and Fan (n 4) 7.
59 Sen (n 49) 7-8.
60 Ibid, 34. See also, FAO (n 23).
61 A. Sen, ‘Starvation and exchange entitlements (n 58) 39-41.
62 For instance, a leading Harvard Professor of Economics concluded that much of the hunger and malnourishment that existed among the poor was due to their lack if consumption power, which severely limited their access to food and nutrition. See, Black (n 15) 17.
constituting a core focus of macro-level frameworks and policies.\(^6\) And, the dedicated preoccupation of politicians and economist alike with the price stability of agricultural products is one that is seemingly unparalleled in other sectors. Indeed, food security is seen as a fundamental condition for achieving the greater aim of societal stability, and, as will be seen below, continues to be a central objective of EU agricultural policy, notwithstanding numerous reforms aimed at reducing market intervention and the expansion of additional dimensions (such as environmental governance) of its approach to food security.\(^6\) Thus, even though global price shocks and food crises tend to have a greater impact upon developing – and often import-dependent – countries,\(^6\) the effects of sudden price fluctuations also have implications for the poorest members of developed societies, whose access to food is particularly vulnerable to price fluctuations.\(^6\)

Food price volatility has consequently been highlighted by the Commission as ‘one of the main risks [to]… food security’,\(^6\) while, the FAO has pointed out that ‘high food prices may have detrimental long-term effects on human development as households, in their effort to deal with rising food bills, either reduce the quantity and quality of food consumed, cut expenditure on health and education or sell productive assets’.\(^6\) However, as already noted in the discussion above, this point also reflects the nuanced nature of price policy, as downward fluctuations of price are problematic for producers ‘because of their negative effects on revenue’.\(^6\) Thus, low market prices do not necessarily provide incentives to produce and can even lead to shortages of supplies if producers pull out of the market or turn to cultivating alternative crops for which they expect higher returns.

Against this background, it is clear that food security is determined by a number of multifaceted mechanisms, some of which are beyond the realm and control

\(^{64}\) B. Gardner, European Agriculture: Policies, Production and Trade (Routledge 2006) 3; European Parliament (n 2 above), paragraph F.
\(^{67}\) M. Huchet-Bourdon, Agricultural Commodity Price Volatility: An Overview, Food, Agriculture and Fisheries Working Papers, No. 52 (OECD, 2011) 10.
\(^{69}\) Huchet-Bourdon (n 67) 9.
of agricultural policy.\textsuperscript{70} Moreover, the interplay between food price volatility and supply is further complicated by the intricate role played by fossil fuels for the production of food in conventional agricultural systems.\textsuperscript{71} Indeed, rising oil prices were instrumental in generating parallel increases in food prices, and thereby restricting access to supplies, during both the price shocks experienced in 1974 and the more recent global crisis.\textsuperscript{72} Thus, as will be extensively discussed in the subsequent Chapter, not only does the entrenched reliance upon fossil fuels continue to have a major impact upon food security, but it has also become increasingly recognised for its implications for long-term productivity, given the impact of this use upon climate change and the environment.\textsuperscript{73}

Before considering these recent developments, the remainder of this Chapter provides a brief historic overview of the CAP and its role in formulating and pursuing the objectives of food security in the European context. As will be seen, the emphasis on high levels of supply and pricing stability have remained constant features of the CAP framework throughout this time, and have served to define the EU’s underlying approach to food security in a number fundamental ways.

1.4 A Brief Historic Overview of the CAP and the European Approach to Food Security

Undoubtedly, the very meaning of a distinctly ‘European’ approach has undergone tremendous change, from one determined for – and by – six founding MSs, to one that now extends to 28. However, one aspect that all of these MSs have in common is that accession to the EU has entailed that the governance of food security policy has been significantly transferred to the EU institutions and administered within the framework of the CAP. Thus, in order to further explore the wider ecological implications of the European approach to food security in subsequent chapters, it is first necessary to

\textsuperscript{70} OECD, Managing Risk in Agriculture: A Holistic Approach (OECD, 2009) 5.
\textsuperscript{73} These aspects will be considered at length below at 2.2.1 and 2.2.2.
consider how this policy objective has been pursued and implemented under the auspices of the CAP.

The following subsections commence with an overview of the early architecture of the CAP and its distinctive approach to food security. Thereafter, consideration will be afforded to some of the negative externalities of this early framework, such as the effects of overproduction and environmental impacts, before turning to the process of formal CAP reform that has been undertaken since the early 1990s. The account spans about five decades and covers the period from the policy’s inception under the Treaty of Rome, to the implementation of the so-called Health Check reform in 2009. The main purpose of this discussion is to provide an initial outline of the main developments that have served to shape the CAP and pave the way for the 2013 reforms, with the latter being more closely analysed in subsequent chapters.

1.4.1 The Initial Objective of Increased Production and the Resort to Market Measures

Following the end of the Second World War, political and economic cooperation were increasingly seen as possible means of breaking with decades of devastating nationalism and inward-looking policies. Thus, for the six founding MSs of the EEC, the establishment of the common market provided a compelling platform for pursuing peace, prosperity and supranationalism between the previously warring parties.74 Importantly, it was established that any attempt at European integration would necessarily have to include a common market for agricultural products, in addition to steel and industrial goods.75

The initial plan for integration was sketched out under the leadership of the former Belgian Prime Minister, Paul-Henri Spaak, and summarised in a report delivered to the negotiating parties.76 However, neither the Spaak report, nor the resulting Treaty of Rome gave rigid guidance as to how the proposed agricultural

---

75 In particular, this had been the French ultimatum for allowing the free movement of German industrial goods.
policy was to be carried out.\textsuperscript{77} Indeed, apart from the fact that agriculture was to fall under the exclusive competence of the EEC, it would largely be left to the institutions of the latter to choose between the prescribed methods of integration of agricultural markets.\textsuperscript{78}

The fundamental provisions of the CAP were contained under Title II of the Treaty of Rome, with Article 39 (1) laying out the primary objectives of the policy. These were:

(a) to increase agricultural productivity by promoting technical progress and by ensuring the rational development of agricultural production and the optimum utilisation of the factors of production, in particular labour;
(b) thus to ensure a fair standard of living for the agricultural community, in particular by increasing the individual earnings of persons engaged in agriculture;
(c) to stabilise markets;
(d) to assure the availability of supplies;
(e) to ensure that supplies reach consumers at reasonable prices.\textsuperscript{79}

Foundation for the structural policy in agriculture was provided under following subsection, with regional concerns to be addressed as a key priority.\textsuperscript{80} Furthermore, Article 40(2) provided that these objectives should be pursued through a ‘common organisation of agricultural markets’, which ‘shall take one of the following forms, depending on the product concerned’:

(a) common rules on competition;
(b) compulsory co-ordination of the various national market organisations;
(c) a European market organisation’.

\textsuperscript{77} The Spaak report suggesting that trade barriers in agriculture should be reduced in order to facilitate the overall move towards greater economic integration, but did not offer any concrete input as to how this could be brought about. See, J McMahon, EU Agricultural Law (Oxford University Press, 2007) 38-39.
\textsuperscript{78} This point was duly pointed out in the Haberler report, which conveyed a worry that the EEC would chose to adopt an agricultural policy that ‘would reduce the European demand for imported agricultural goods’. See, GATT, Trends in International Trade: Report by a Panel of Experts (GATT, 1958) paragraph 58; R. Fennell, The Common Agricultural Policy: Continuity and Change (Clarendon Press, Oxford, 1997).
\textsuperscript{79} Article 39(1) EEC.
\textsuperscript{80} Article 39(2) EEC.
In order to implement such common organisation, moreover, the EEC was empowered under Article 40(3) to include ‘all measures required to attain the objectives set out in Article 39, in particular regulation of prices, aids for the production and marketing of the various products, storage and carry-over arrangements and common machinery for stabilising imports or exports’.  

The subsequent organisation of the European agricultural market would overwhelmingly be pursued in the form of Common Organisations of the Market (COM) under the CAP which, in turn, had a decisive impact upon food security and production in the EU. One of the main reason for this was that underlying framework of the COMs was largely based on the three core principals of; (i) common financing; (ii) common prices and; (iii) community preference.

First, the principle of common financing essentially expressed the collective financial solidarity that was expected to extend to the expenses incurred in running the CAP. In other words, MS were required to share in the responsibility of funding the CAP budget, which would then be used at the supranational level to cover the costs of, eg, export refunds, intervention purchases, price support and other expenses that would otherwise have to be covered to by national budgets.

Second, the setting of common prices sought to harmonise market prices across the Community, and was operationalised by a framework of highly complex and technical legal measures aimed, amongst other things, at eliminating distortion of intra-Community competition between farmers. This was especially relevant from an economic perspective, since considerable differences in national prices risked creating competitive advantages for those countries with lower price levels and

81 Article 40(3) EEC.
83 Ibid, 39.
85 Neville-Rolf has, for instance, pointed out that financial solidarity was of particular importance to traditionally exporting countries, such as The Netherlands. See, Neville-Rolf (n 2) 7.
86 This required a uniform method of calculation, which led to the creation of a common price level and denominator for the national currencies. On the difficulty in maintaining this system in the absence of a common currency see, for instance: Neville-Rolf (n 2) 5-7; C. Ritson and A. Swinbank, European Green Money, in C. Ritson and D. Harvey (eds), The Common Agricultural Policy, (CAB International, 2nd edn, 1997) 115; McMahon (n 77) 42-51.
thereby undermining the integration process as a whole. In setting common prices the community also opted to set commodity prices slightly higher than those prevailing on world markets, which had the effect of raising farm incomes and protecting the latter from international competition. Importantly, with regards to food security, it followed that the high prices offered to farmers for their products would have the effect of stimulating production and eventually even overproduction of food and feed. However, this was arguably difficult to reconcile with Article 39(1)(e), which included, as one of the main CAP objectives, ensuring that these supplies reached consumers at reasonable prices.

The system of common pricing was based on calculations of: first, a target price, which was the price that it was hoped a product would attract on the open market; secondly, an intervention price, which obliged national authorities to ‘intervene’ and purchase agricultural commodities when they fell below a certain price; and, thirdly a threshold price established by means of, eg variable import levies that raised the price of third country goods (which tended to be cheaper) in order to prevent these from causing the price of European products to fall.

Thirdly, the ECJ has pointed out in *Greece v Council* that community preference is not strictly speaking a legal principle, but rather an enunciation of the special treatment and market position that is afforded EU producers vis-à-vis third country producers. This can be exemplified by the use of import duties, variable import levies and export subsidies. Thus, as will be further discussed below, by insulating European producers from market signals while guaranteeing the income of farmers, the twin pillars of common pricing and community preference had the combined effect of significantly increasing food production, albeit at a high economic and environmental cost. In this light, the early pursuit of European food security centred upon the idea of increased production with the purpose of ensuring the availability of food supplies for the European populous, as well as providing a fair standard of living for the agricultural community.

---

88 Ibid, 30.
89 See, for instance: GATT (n78) paragraph 195.
90 See below at 1.5.
92 See, eg, McMahon (n 77) 55-60.
Importantly, increased agricultural productivity and farm incomes were merely two out of the five CAP objectives listed in Article 39, with the ECJ declaring from the outset that no clear hierarchy existed between these objectives and that it was acceptable that they could not all be attained simultaneously. Rather, the Court held that it might at times be necessary to afford temporary priority to one of the objectives for the purpose of fulfilling the ‘demands of the economic factors or conditions in view of which [Community] decisions are made’. Moreover, the Community was afforded wide discretion for the purpose of implementing the policy. However, as pointed out by Advocate General Capotorti in *Bela-Mühle v Grows-Farm*, the framework of the COMs often led to a disproportionate legislative focus upon eg raising farm incomes, through price and market support. Furthermore, it has also been stressed that this imbalanced focus has largely been at the expense of undertaking structural reform of the agricultural sector, even though the need for such reform had been stressed as early as 1968 in the so-called Mansholt Plan.

Nonetheless, the Community continued to pursue an agricultural policy that was largely based on market measures aimed at increasing production and raising farm income. The latter was especially evident given the choice to set Community prices at levels slightly higher than those prevailing on the international market, despite the higher cost for consumers. This has even prompted some to argue that, due to the seemingly economic illogicality of the CAP, its main purpose could not possibly have been to ensure food security, but must instead have been to secure the income of the farming community. Importantly, though, the Court of Justice has held that Article

---

94 Case 5/73 Balkan v Hauptzollamt Berlin-Packhof [1973] ECR 1091, 1112. However, subsequent cases sought to qualify the ‘Balkan formula’ by adding that the Court could, indeed, strike down even temporary measures if these risked jeopardizing the fulfilment of other CAP objectives. See, eg, Case 114/76 Bela-Mühle v Grows-Farm [1977] ECR 1211.
96 See, eg, the opinion of AG Capotorti in *Bela-Mühle v Grows Farm* where he warned that the extent of the disproportional legislative focus could be rendered illegal according to a strict interpretation of Article 33(1) TFEU. Case 114/76 Bela-Mühle v Grows-Farm [1977] ECR 1211, 1229.
97 Ibid.
39(1)(b) does not constitute an income guarantee for farmers, but rather measures aimed at market stabilisation.

1.4.2 External Dimensions of Food Security and the Prevailing Atmosphere of Protectionism under the Early CAP

By the time that the Treaty of Rome was ratified in 1957, most Western European states had already grown accustomed to the protectionist policies that had served to shield domestic agricultural markets and producers from external competition for decades. Thus, it was perhaps not too surprising that the founding Member States ultimately decided to adopt an agricultural policy that continued along similarly protectionist lines. Some have even argued that the removal of protective measures would have been ‘neither politically acceptable nor socially desirable…[as] alternative systems would have required too big a break with tradition and a departure into mechanisms of policies in which Member countries were for the most part inexperienced, and for which the necessary bureaucratic structure did not exist’. On the other hand, others have submitted that the centralised European policy was even more protectionist than previous national ones since it covered a wider range of agricultural products and generally resulted in overall higher prices due to the pressures exerted by high price countries.

Importantly, however, it was established at an early point that the aim of the Community would not necessarily be to achieve full self-sufficiency, thereby indicating that international trade would continue to play a role in providing sufficient food supplies. Indeed, Article 39(1)(d) does not exclude trade as means of ensuring the availability of food supplies, nor does it specify that it must be attained solely by

---

100 See, eg Case 2/75 Mackprang [1975] ECR 607.
102 McMahon (n 77) 3-4.
103 It may be worth noting that Western European states had also experienced brief periods of free trade, eg with the string of preferential trade agreements that were concluded following the signing of the Cobden–Chevalier Treaty between the UK and France in 1860. See, for instance: D. Lazer, ‘The free trade epidemic of the 1860s and other outbreaks of economic discrimination’ (1999) 51 World Politics 447, 469-470.
106 McMahon (n 77) 39.
internal production. However, international observations stressed from the outset the potentially negative impacts of the envisioned CAP. For instance a GATT expert panel report led by Professor Haberler in 1958 was keen to emphasise that adverse effects of protectionism could be reduced if there were greater willingness among the contracting parties to ‘shift away from price-support towards deficiency payments’.

The report also stressed the propensity for food surpluses to arise under a system based on price support and external protection, and cautioned that the disposal of such surpluses on world markets could have a particularly detrimental effect on countries that otherwise enjoy a comparative advantage.

The choice to pursue high levels of external protection should, moreover, not be viewed in isolation, as there were many other social, economic and political factors that would serve to affect the CAP framework. However, the framing of protectionist policies was arguably key to early European attempts to attain food security through the adoption of market measures primarily aimed at increasing production, as well as, farm incomes. As further discussed below, the policy of pursuing high levels of external protection undoubtedly came with considerable pressure from fellow GATT signatories. This has, in turn, been a major driver of policy reform of the CAP, increasingly subjecting farmers to the market forces and signals.

1.5 From Empty Pots to Overflowing Storage Coffers: The Effects of Overproduction

One of the main effects of the early CAP framework was its propensity to encourage production, by means of guaranteed price support and market measures. Together with increasingly efficient and advanced technologies, this paved the way for greater intensification and specialisation of agricultural production. Indeed, as already highlighted, the widespread reliance upon, eg, nitrogen fertilizers and pesticides have

---

107 Furthermore, Community institutions would continue to recognise their dependence on trade, even as it was tackling large surpluses in the 1970’s. See, for instance: Directorate-General for Agriculture of the European Communities, Agricultural Situation in the Community (Newsletter on the Common Agricultural Policy 1974) 4.
108 GATT (n 78) paragraph 50. The UK, for instance, operated such a system prior to joining the EU.
been instrumental in attaining the political objective of greater self-sufficiency through increased internal production.\textsuperscript{111} However, this intensification has not come without its fair share of economic, social and environmental costs resulting from overproduction and the strenuous usage of natural resources.\textsuperscript{112} The following sections consider some of the main effects of intensification, before turning to the early CAP reforms that were carried out with the aim of addressing the negative consequences that past polices have given rise to.

1.5.1 Food Surpluses

One of the most contentious legacies of the CAP is arguably the lakes of wine and mountains of butter that were accumulated as a result of coupling farm incomes with production. In other words, the early CAP and its reliance on market measures had not only given farmers incentive to produce; it had also encouraged them to overproduce.\textsuperscript{113} The guaranteed price support that was due to farmers entailed that they would get paid for their goods, whether there was a demand from consumers or not. There was, thus, an immense motivation for farmers to produce at maximum capacity in order to capitalise on the generous subsidies offered in exchange.

As expressed by Kay, ‘[p]rice support drove up production, which drove up surpluses, which drove up the budget costs’.\textsuperscript{114} This incentive resulted in vast surpluses for a number of products by the mid-1980s, at which time the output of beef, veal, pig meat, cereals, sugar, wine, eggs and poultry were all estimated to be beyond the level required for self-sufficiency within the Community.\textsuperscript{115} It follows that even though certain sectors, such as pig and poultry, never benefited from direct price guarantees, they nonetheless ‘benefited indirectly along with all other feed-based systems through subsidised cereal feed from large arable payments’,\textsuperscript{116} in that cereals

\textsuperscript{112} See, for instance: European Environmental Agency (EEA), Europe’s Environment: The Third Assessment (European Environmental Agency, Copenhagen, 2003).
\textsuperscript{113} European Commission, The Development and Future of the CAP, COM (91) 1.
\textsuperscript{114} A. Kay, The Dynamics of Public Policy (Edward Elgar Publishing, 2006) 84.
\textsuperscript{116} Friends of the Earth, ‘Feeding the Beast’ 2009 (http://www.foe.co.uk/sites/default/files/downloads/feeding_the_beast.pdf, last accessed on 27 June 2017).
constituted a key input for intensive feed systems. Moreover, these sectors ‘also benefitted from export subsidies and other market interventions which maintained prices above a minimum threshold’.

The most pressing situation was possibly that pertaining to the dairy industry, where quotas were introduced in 1984 to curb the high levels of surpluses.117 Prior to their introduction, the level of production had effectively bypassed demand, with the demand even experiencing a slight reduction in the case of dairy.118 These commodities were subsequently stored or disposed of on the international market at great cost to the Community, which was required to compensate farmers for products that were superfluous on the internal market.119 In this light, Winters has argued that the budgetary implications of having to deal with these surpluses were such as to effectively ‘endanger the future of the CAP, which by 1984 accounted for 69.8 per cent of the Community’s entire budget’.120

Cardwell has also pointed out that the adoption of such a drastic solution as quotas ‘clearly reflected the critical state of imbalance that pervaded the dairy sector’.121 Moreover, even when quotas were introduced, the overall effectiveness of the scheme has been questioned based on the initial quotas being set too high ‘with the result that, notwithstanding reductions in quotas over the years serious problems have been encountered in balancing supply with demand’, which in turn entailed that surpluses still existed many years after the scheme was put in place.122 Some have also attributed the inefficiency of the quota system to the failure to couple it with reductions in price ‘for the consumer that would be likely to lead to an increased demand’.123

It would take many revised attempts, an enormous budget and a mass of legislation before measures to curb overproduction had the desired effect124 and according to some estimates the total cost of the CAP even trebled between 1980 and

---

118 Court of Auditors, Special Report No. 2/87 on the Quota/Additional Levy System in the Milk Sector [1987] OJ C266/1, paragraph 1.1.
119 Ibid, paragraph 1.2.
120 M. Winter, Rural Politics (Routledge, 1996) 130.
121 Cardwell (n 24) 8. See also Preamble to the implementing legislation 856/84 and 857/84.
123 Neville-Rolf (n 2) 28.
Importantly, given these and other outcomes, the Commission has ultimately had little choice but to concede that the ‘imbalance between price support and other measures was not what the original designers of the CAP intended’.126

1.5.2 Appreciating the Environmental Effects of Intensification

In addition to creating unnecessary surpluses and corresponding budgetary burdens, the intensification of agricultural production also gained increased attention for its propensity to impact negatively upon the environment.127 However, although these implications were considered in the Community’s very first environmental action plan in 1973,128 Jack has argued that the latter ‘had only limited knowledge of this environmental impact’ and that it took until the mid-1980s before the adverse effects of agriculture seriously considered.129

As is extensively explored in the following chapters, this awareness was further advanced in the beginning of the 1990s when the concept of sustainable development was endorsed as the main Western paradigm for growth-based development. In the context of European agricultural policy, this has entailed an incremental reappraisal of the historic approach to food security and its propensity to impact negatively upon the environment.130 Thus, in 1991 the Commission expressly acknowledged that, if left unchecked, systems that link support to production not only had the potential to stimulate production growth and encourage intensification of production techniques, but could also have negative environmental impacts in the long-run.131 Without mincing its words, the Commission noted that ‘[w]here intensive production takes place nature is abused, water is polluted and the land impoverished’.132

Importantly, the increased appreciation of the link between conventional agricultural activity and ecological degradation has prompted the EU to adopt a

125 Cunha and Swinbank (n 2) 69.
129 Jack, (n 88) 45-46. See also, European Commission (n 126) 50.
130 The process of environmental policy integration is covered extensively in Chapter 3.
131 European Commission, The Development and Future of the CAP, COM (91) 100, 2.
132 Ibid.
number of strategic legal measures aimed at addressing the most pressing of these developments over the course of several decades. Although strictly speaking, many of these measures have not been implemented under the agricultural title of the Treaties, they have nonetheless been part of the process of environmental policy integration (EPI), which has been instrumental for ‘greening’ the CAP and adding an environmental focus to what was originally a production-oriented policy. Given the centrality of this process to the current thesis and posed research questions, a detailed account of the CAP’s environmental framework is provided in Chapter 3, while the main ecological challenges to agriculture are considered in Chapter 2. Before concluding the current part of the discussion, however, an initial overview is offered of the major reforms that have been pursued for the purpose of re-programming the policy to more accurately reflect societal demands and expectations.

1.6 Change and Reform: Reappraising the European Model of Agriculture

In response to the experiences outlined above, a process of incremental reform commenced in the 1980s with the aim of moving CAP expenditure away from market support measures, toward more direct forms of income support. This process was formalised by the so called MacSharry reforms of 1992, which focused primarily on reducing market distortion and price support, as well as increasing competition within the agricultural sector and reducing the budgetary burden of the CAP. More specifically, this included the conversion of market measures into coupled subsidies, whereby payments could be linked to either the number of livestock or hectares. These were phased in to compensate farmers for the reductions in price support, however, as is further elaborated in Chapter 3, coupling could only ever serve as a partial fix, as it retained an immediate link between income and production without

---

133 For an extensive overview, see, J. Scott, EU Environmental Law (Longmans, London, 2001).
134 For instance, EU conservation legislation forms a key part of the EU environmental framework, but have implication for farmers and other land managers. See, below 3.4.
135 The reforms were dubbed after the acting Commissioner at the time.
136 Cu and Swinbank (n 2) 60.
placing substantive obligations on payment recipients.\textsuperscript{139} Thus, as pointed out by McMahon, these ‘were not wholesale reform of the CAP, rather a response to both internal and external problems’.\textsuperscript{140}

A major source of external pressure for these and subsequent reforms stemmed from the Community’s undertakings as a contracting party of the GATT.\textsuperscript{141} Indeed, in its 1980 Green Paper ‘Reflections on the Common Agricultural Policy’ the Commission listed external commercial conditions and financial restraints as the policies main constraints.\textsuperscript{142} Amongst other issues, the generous provision of subsidies and export refunds had effectively served to ‘dump’ these products onto international commodity markets with highly distorting effects and at great cost to consumers.\textsuperscript{143} Hence, its trading partners were pushing for less trade-distorting policy measures and greater access to the European markets by means of decreased protection.

Moreover, as already outlined, the need to stifle overproduction and reduce the use of expensive export refunds was likewise the source of increased internal pressure to alleviate the haemorrhaging Community budget, which had been all but overburdened by the CAP.\textsuperscript{144} One way in which this was addressed under the MacSharry reforms was through the introduction of compulsory set-aside, aimed at compensating farmers for taking land out of production and thereby reducing the level of Community output and surplus production.\textsuperscript{145} As is further discussed in Chapter 3, however, the effects of this initial instrument was weakened by a limited uptake by farmers.

The process of market reorientation was carried forward under Agenda 2000, which delivered a substantive reform package consisting of some 20 pieces of legislation aimed at addressing and overhauling a number of EU policy areas. Key amongst its priorities for CAP reform was the expansion of the framework of direct support, as a continuation of the move from price to producer support that was

\textsuperscript{139} See below, 3.4.3.  
\textsuperscript{140} McMahon (n 77) 234.  
\textsuperscript{141} Cardwell (n 24) 319.  
\textsuperscript{142} European Commission, Reflections on the Common Agricultural Policy COM (80) 800, 4.  
\textsuperscript{144} European Commission, (n 131) 2.  
initiated in the early 1990s. For instance, Council Regulation 1253/99\(^{146}\) further lowered the intervention price for cereals, while Council Regulation 1254/99\(^{147}\) aimed at reducing the oversupply of beef by lowering the basic price in that sector.\(^{148}\) Likewise, the extension of milk levies and quotas featured prominently, as the need to curb overproduction in this sector remained a central challenge to widespread market reform.\(^{149}\) In particular, the latter revealed a sustained focus on meeting the Community’s obligations to liberalise agricultural trade under the WTO agreements, as noted above.\(^{150}\)

However, Agenda 2000 was also instrumental for the development of the CAP framework in a number of additional ways that may be highlighted as part the current discussion. For instance, the reform was essential for preparing the EU for its largest round of accessions, with the need for budgetary discipline being particularly predominant in this respect.\(^{151}\) Thus, in recognition of the need to address these issues, the Commission contended that ‘[e]nlargement plays a far greater role in Agenda 2000 than in any of the large financial packages of the past’.\(^{152}\)

Importantly, the reforms embarked on a process of transforming the structural policies of the CAP into a broader framework for rural development.\(^{153}\) These policies, which had remained largely intact following the MacSharry round, were becoming increasingly in need of reform in light of the overall low levels of employment and the high degree of modernisation and consolidation that had been attained in many of the agricultural sectors of the EU 15.\(^{154}\) Furthermore, the budgetary burden of extending structural payments based on past regimes to acceding MSs – in which agricultural sectors were generally less advanced and retained a larger share of the overall work force – provided ample reason to reconsider the ways in

---

\(^{151}\) Cardwell (n 141) 67.
\(^{152}\) European Commission (n 150) 11. The specific aspects and implications of enlargement were set out in a separate communication. See, European Commission, Enlargement and Agriculture: Successfully Integrating the new Member States into the CAP, SEC (2002) 95.
\(^{153}\) See Preamble of regulation.
\(^{154}\) European Commission, (n 151) 26.
which rural development was funded and pursued under the CAP.\textsuperscript{155} Against this background, the EU opted to abandon the old framework of its structural policies for one that was committed to ‘supporting the broader rural economy’ including the provision and promotion of environmental public goods under the newly created Rural Development pillar.\textsuperscript{156} In particular, the Commission called for ‘a prominent role be given to agri-environmental instruments to support a sustainable development of rural areas and respond to society’s increasing demand for environmental services’.\textsuperscript{157}

With regards to direct payments, moreover, Agenda 2000 introduced compulsory measures aimed at environmental protection under Regulation 1259/1999.\textsuperscript{158} Thus, although the reforms were not primarily formulated to pursue environmental objectives, there was nonetheless an anticipation that they would contribute indirectly to improving the CAP’s environmental performance. Not least, there was an expectation that the price reductions introduced under Agenda 2000 would lead farmers to lessen their use of fertilisers and pesticides in order to save on input costs and increase their own profit margins.\textsuperscript{159} Such arguments were raised by the EU in favour of the price cuts, but were arguably somewhat offset by the underlying rationale of direct payments, which were essentially compensated farmers for the loss of coupled compensation. Thus, as one report noted ‘direct payments does not change the price relation between input and output, but it does influence profitability of the specific agricultural activity, and thus influence crop choice and land use’.\textsuperscript{160} In this light, the introduction of direct payments may be seen to have perpetuated the CAP’s failure to internalise the negative environmental costs of agricultural production by simply topping up the profit margins of farmers following the reductions in price support.\textsuperscript{161}

\begin{footnotes}
\item[155] Ibid, 47-48. See also, European Commission, ‘Study on alternative strategies for the development of relations in the field of agriculture between the EU and the associated countries with a view to future accession of these countries’ Agricultural Strategy Paper prepared for the European Council, Madrid 15-16 December 1995 COM (95) 607, 31.
\item[157] European Commission (n 151) 33.
\item[160] Ibid, 13.
\item[161] Ibid, 14.
\end{footnotes}
Another significant development that occurred during these early CAP reforms related to the policy’s growing imperative to ensure food safety throughout the supply chain. In particular, this focus evolved from a string of food safety scares that started in the late 1990s and prompted the EU to adopt a comprehensive and integrated legislative framework ‘covering all sectors of the food chain’. According to the Commission the main objectives of food safety legislation was to ‘establish a high level of consumer health protection and clearly attribute primary responsibility for safe food production to industry, producers and suppliers’. And, to this end, the creation of an independent European Food Safety Authority responsible for risk assessment and risk management was a key feature of the comprehensive European response, based on scientific evidence to inform high standards of food safety. Thus, the significance of food safety legislation has also been explained based on the ‘inextricable links between food safety and farming, and thereby [conferring] on farming the distinctive status and responsibilities that go with being the first link in the food chain’.

The role of farmers for ensuring food safety was further underscored during the next set of CAP reforms, the Mid-Term Review (MTR), which made direct payments conditional upon observing specific environmental, food safety, phytosanitary and animal welfare standards, known as cross-compliance as of 1 January 2005. The details of this regime will be extensively discussed in Chapter 3. For present purposes, however, it may be added that another significant aspect of the MTR definitely pertains to the introduction of the single farm payment (SFP), which sought to consolidate the various arable and livestock payments into a single one. More specifically, this entailed ‘that all direct payments (not simply those

---

164 Ibid, 3.
166 Cardwell (n 141) 19.
168 Ibid.
associated with the MacSharry reforms of 1992), previously paid on an area or headage basis, would be converted into the SFP’.

In order to discourage further intensification, moreover, the SFP was intended to be based on past production levels, but despite the Commission’s initial insistence that payments should be exclusively based on these, a number of exceptions persisted. For instance, Regulation 1782/2005 allowed for the partial implementation of the new SFP scheme, alongside continued arable and livestock payments for a number of years past the initial deadline. Notwithstanding this and other exceptions, however, Cunha and Swinbank have argued that this shift implemented by the MTR was particularly important for enhancing the EU’s negotiating position under the Doha Development round by switching a substantial amount of its support from blue box to green box payments.

The last set of reforms to take place prior to the CAP 2020 was the so-called Health Check in 2009. These were less extensive than the previous MTR and mainly sought to continue the general move towards streamlining, simplifying and modernising the CAP in order to enable farmers to respond more efficiently to market signals. For instance, it sought to decouple most of the remaining production-incentivising payments following the MTR, although MS were able to maintain coupled support for a number of specific sectors, including goat, sheep and suckler cow premia. In preparation for the expiration of dairy quotas in 2015, the Health Check also attempted to limit the impact for farmers by slightly increasing quotas during the last remaining years of the system. Moreover, as is detailed in Chapter 3 and of central relevance to the current thesis – the 2009 reforms abolished compulsory set-aside, while streamlining certain elements of the cross-compliance regime and increasing the level of EU funding for rural development.

---

1.7 A Changing Food Security Paradigm?

Undoubtedly, the CAP has been significantly overhauled during the past decades to reflect the changing internal and external circumstances that have evolved since it was first introduced. In particular, this has entailed ‘a switch of emphasis from the primary objective of increasing productivity and competitiveness to enhancing the long-term sustainability of agricultural policy and the agri-food system and giving the producer more opportunities to respond to market signals and the ever-growing demand for food’.\(^\text{173}\)

A corresponding shift of focus has also taken place, from an approach to food security based on consistently high levels of output to one that has increasingly embraced a multifunctional role of agriculture and farming in order to maintain the ‘richness and diversity of landscapes and cultural and natural heritage’.\(^\text{174}\) Indeed, the OECD has underscored that this goes beyond the primary function of supplying food and fibre and includes the provision of additional services and public goods, such as environmental conservation, preservation of biodiversity and the strengthening of rural economies, amongst others.\(^\text{175}\) Similarly, Cardwell has described this as a new form of agricultural exceptionalism ‘based less upon farmers as providers of food and more upon, inter alia, notions of rurality, care for the environment and food safety’.\(^\text{176}\)

The multifunctional aspects of agricultural and rural activity were likewise reflected in the context of the subsequent 2013 reforms.\(^\text{177}\) For instance, the Commission stressed in its 2010 communication that the CAP would continue to support ‘the increasing diversity of agriculture and rural areas following successive enlargements, and the demands by EU citizens on the environment, food safety and quality, healthy nutrition, animal health and welfare, plant health, the preservation of


\(^{175}\) OECD, Multifunctionality: Towards an Analytical Framework (OECD, 2001) 27.

\(^{176}\) Cardwell (n 141) 20.

the countryside, biodiversity and climate change’. As will be seen in the next chapter, however, the 2013 reforms also marked an important conceptual shift in the EU’s approach to food security by moving beyond the language of multifunctionality, to emphasising the role of the CAP for ensuring the protection and sustainability of agricultural resources. Thus, in contrast to previous agendas, the Commission envisaged that a central objective for the reforms would be ‘to preserve the food production potential on a sustainable basis throughout the EU, so as to guarantee long-term food security for European citizens and to contribute to growing world food demand’. In order to fully grasp the underlying motivations for this direction of travel, the discussion therefore turns to considering the main events that impacted upon on both the process and substance of the most recent round of CAP reforms.

---

Chapter 2

Reforming the CAP towards 2020: The Impact of Recent Food Crises and the Looming Challenges to Food Security

2.1 Introduction

As highlighted above, each successive reform of the CAP has been driven by specific priorities and shaped by internal, as well as external policy considerations. Undoubtedly, the same applied to the most recent round, which was concluded in 2013 under the leadership of the Commissioner for Agriculture, Dacian Cioloș and programmed the CAP framework for the 2014-2020 period. The current Chapter traces some of the main events and developments that served to set the initial tone of the CAP 2020 reform agenda and is divided into three parts.

The first of these outlines the main effects of the global food crisis and general market instability of 2007-2008, as well as the institutional debates and responses that followed at EU level. The second part expands the discussion by considering some of the major projections that are expected to affect future food security and the particular challenges that these are likely to pose to agricultural production and productivity, according to current trends. In light of these developments, the third, and last, part of the Chapter provides an initial account of the CAP 2020 reform agenda, which clearly articulated food security as a fundamental objective for the policy moving forward. Specific attention is given to the Commission’s 2010 guiding communication, The CAP Towards 2020: Meeting the Food, Natural Resources and Territorial Challenges of the Future,¹ which provided a fundamental point of departure for the intra-institutional negotiations that would subsequently serve to determine the outcomes and substance of the Cioloș reforms. In particular, this document expressed a decisive intention to enhance the sustainable use and protection of natural resources as key objectives for ensuring food security under the post-2014 framework.

2.2 The 2007-2008 Food Crisis and Ensuing Market Volatility

The decade since mid-2000 has been marked by experiences and projections that have served to re-emphasise food security as the main objective of the CAP. This process was partly catalysed by the 2007-2008 global food crisis, which not only resulted in price hikes that threatened access to food by the poorest members of society – but was notably also followed by increased volatility and price fluctuations on agricultural commodity markets in 2010-2011.\(^2\) The impact of these events were resolutely reflected in numerous policy statements and communications issued by the EU’s main institutional actors in response to rising insecurities on the global markets and fears that price volatility could become the future norm rather than the exception.\(^3\)

The following subsections highlights some of the main elements of this institutional exchange and the role of these in influencing the European food security debate that preceded – and ultimately set the tone of – the reform process initiated by the European Commission in 2010.

2.2.1 Causes and Consequences

The root causes of the 2007-2008 food crisis continue to be widely debated, and although a full account is beyond the scope of the current discussion, a number of key coinciding developments have frequently been mentioned in relation to the extreme price hikes and volatility that characterised agricultural commodity markets during this period.\(^4\) For instance, in early 2009 the EP highlighted that ‘for the first time since the 1970s, the world is facing an acute food crisis, determined by both structural, long-term factors, as well as by other determinants’.\(^5\) According to the Commission, these

\(^2\) S. Spratt, Food Price Volatility and Food Price Speculation (Institute of Development Studies, 2013)
included the impacts of ‘poor harvests in a number of regions of the world, a historically low level of stocks, the depreciation of the US dollar, and export restrictions in a number of traditional suppliers to the world market’. 6

It may also be noted that the market volatility of 2007–2008 coincided with the start of one of the most challenging economic crises to hit the EU and its member states in recent times. Indeed, in 2008 the EP pointed out that the effects of the global food crisis at the European level were ‘closely interconnected with the financial crisis in which liquidity injections made by central banks to prevent bankruptcies may have increased speculative investments in commodities’. 7

Together, these and other factors had significant impacts upon food prices for a number of staple products, including wheat and maize, which rose by 180 and almost 300 per cent respectively from late 2006-2008. 8 Moreover, food prices were further inflated by record high energy and fertiliser prices, which saw input costs rise for European farmers by almost 200 and 150 per cent each, during roughly the same period. 9 Indeed, the Commission noted that ‘the effects of soaring food prices [were] worsened by simultaneous increases in energy prices’, 10 which was especially worrisome for European living below the poverty line at the time. 11

In total, overall global food prices are estimated to have risen by over 80 per cent from 2007-2008. 12 And, the impacts of this market volatility were particularly felt in net food importing countries, many of which were developing or amongst the least developed nations at the time. 13 The sharp increases in staple commodity prices even prompted the UN to warn that the fundamental human right to food was in danger of being undermined in those nations were access to food was most severely limited or affected. It expressly recognised that ‘the complex character of the worsening of

6 European Commission, EU’s Response to the High Oil and Food Prices, Memo/08/41 (European Commission, Brussels, 2008) 7.
8 European Parliament resolution of 13 January 2009 (n 3) paragraph A.
10 European Commission (n 6) 3.
11 Ibid.
12 European Parliament resolution of 22 May 2008 (n 3) paragraph A.
the current global food crisis, in which the right to adequate food is threatened to be violated on a massive scale, as a combination of several major factors, including macroeconomic factors, also impacted negatively by environmental degradation, desertification and global climate change, natural disasters and the lack of the necessary technology to confront its impact, particularly in developing countries and least developed countries’.  

The UN’s Special Rapporteur on the right to food, Oliver de Schutter, was especially vocal about what he considered to be the underlying causes of the food crises and issued numerous high-impact reports outlining his position. For instance, in 2009 he entered into a high-level open debate with the Director General of the WTO, Pascal Lamy, where the two discussed the impacts and implications of global trade upon food systems and the right to food, in particular. A central concern raised at the time was of the growing potential for energy markets to affect agricultural commodity prices and the structural implications for food security. Indeed, as already indicated, the convergence of high energy prices in 2007 served to propel the food crisis, largely due to the close link between conventional agriculture and inputs such as fertilisers and pesticides, as well as processing and transportation. He was, however, particularly critical of growing international ambitions to increase biofuel production as a means of attaining the dual political objectives of lower energy costs and climate change mitigation through reduced GHG emissions.

According to the Rapporteur, the emergent economic and policy incentives to produce renewable feedstock had not only exacerbated the ongoing food crisis by diverting land and resources towards biofuel production, but also posed serious structural threats to ensuring access to food and food security for the most deprived members of the global population in the future. In contrast with other sources of

14 Ibid.
20 Ibid.
renewable energy, he emphasised that the production of biofuel had the potential to stand in direct competition with the cultivation of food crops for a limited set of resources and, as such, could lead to subsequent price hikes, volatility and land use change unless steps were taken to address the complexities of encouraging the further expansion of biofuel production.\textsuperscript{21} Indeed, de Shutter even went so far as to call for a complete moratorium on the use of food crops for fuel and argued against the established goal of incentivising additional investment though increased subsidies and other policy instruments.\textsuperscript{22}

While the call for an international moratorium was not heeded, there was some evidence that these criticisms were taken on board at the European level. Following the sharp rise in food prices, for instance, the EU engaged in a reassessment of its biofuels policy so as to ensure that renewable energy targets would not conflict or pose a threat to the central objective of food security.\textsuperscript{23} To this effect, the European Social and Economic Committee (ESSC) explicitly acknowledged that ‘the development of bioenergy have repercussions on food security for reasons closely linked to prices and local factors’.\textsuperscript{24} Moreover, pertaining to resource use, it submitted that further development ‘of biofuels will definitely exacerbate the water crisis, and access to water could be a limiting factor for the production of feedstock such as corn and sugar cane’.\textsuperscript{25}

With regards to the aggregate effects of this production upon the 2007-2008 food crisis, however, the EP contended that ‘media reports blaming biofuels for the current food crisis are exaggerated as far as the EU is concerned … [but acknowledges that] the policy in countries such as the United States of assigning more land for maize

\textsuperscript{21} Ibid.
\textsuperscript{24} European Social and Economic Committee, Opinion of the European Economic and Social Committee on ‘Food security and bioenergy’ (own-initiative opinion), (2013/C 341/04), paragraph 1.8-1.9.
\textsuperscript{25} Ibid.
growing to produce bioethanol has had a knock-on effect on the price and availability of maize and other cereals on the global food market’.  

2.2.2 The Impacts upon Food (in)Security in the European Context

Although the overall impacts of the food crisis upon European consumers were somewhat tempered by the ‘appreciation of the euro … the declining share of agricultural raw materials in food production costs compared to energy and labour costs…and…the low share of food in the total household expenditure’,  

27  the effects of rising food prices and global market instability were particular felt by the poorest members of society.  

28  Indeed, compounded with the most serious economic crisis in decades and reduced purchasing power for the average household, the Commission estimated that the 16 per cent of Europeans living below the poverty line in 2008 were at greatest risk of being impacted by the extraordinary price volatility that characterised staple commodities at the time.  

29  Thus, in its impact assessment on the EU’s ‘Food Distribution Programme for the Most Deprived Persons of the Community’ the Commission pointed out that although the situation was markedly different to that of structural under-nourishment and starvation in less developed economies ‘the lack of adequate food [was] still a striking aspect of material deprivation’ in the EU.  

30  To this effect, the programme, which has been in operation since 1987, still constitutes a key instrument for meeting the EU’s obligation to ensure that the basic human right to food can be meaningfully extended to its most deprived citizens.  

31  However, even it had difficulty responding

__________________________

26  European Parliament, resolution of 22 May 2008 (n 3) paragraph 19; European Parliament resolution of 25 October 2007 on rising feed and food prices, paragraph E.

27  European Commission, Tackling the challenge of rising food prices: Directions for EU action, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM (2008) 321 final, 6.

28  European Parliament, resolution of 18 January 2011 on recognition of agriculture as a strategic sector in the context of food security (2010/2112(INI)) paragraph M.

29  European Commission (n 27) 3.


31  Ibid, 18.
effectively to the effects of the 2007-2008 crisis, which had seemingly taken European policy-makers largely by surprise.\textsuperscript{32}

In particular, the Commission and other institutions expressed their concern over the record low levels of intervention stocks.\textsuperscript{33} This was partly the result of successive CAP reforms that had served to dramatically reduce the level of intervention purchasing without changing the framework of the scheme, which continued to be based primarily on the distribution of intervention stock.\textsuperscript{34} Indeed, only temporary changes had been made that allowed funds to be directed to market purchases, but these proved inadequate to fully cope with the pressures and implications of the food crisis.\textsuperscript{35} The Commission also noted that considering the direction of European agricultural policy, past levels of intervention purchasing were unlikely to be resumed in the foreseeable future, with the effect that the stocks upon which the program depended would continue to remain low.\textsuperscript{36} Thus, if left unchanged the EU’s food distribution program would struggle to keep up with the growing need, which saw the scheme expand from serving 13 million people in 15 MSs in 2006, to 18 million in 20 MSs by 2010.\textsuperscript{37}

The Commission responded by drastically increasing the share of the program budget spent on market purchases in 2008, but was fiercely challenged when it attempted to maintain these high levels in the 2009 budget. In that case, an action for annulment was brought before the General Court by Germany and supported by Sweden (amongst other MSs), which argued that Commission Regulation No 983/2008 went beyond the scope intended for the food distribution program as provided in the so called ‘single CMO regulation’.\textsuperscript{38} The latter established general rules for the common market organisation of agricultural markets and, in particular,

\begin{footnotesize}
\begin{itemize}
  \item[32] European Commission (n 27) 3.
  \item[33] European Commission (n 30) 7-8. European Parliament resolution of 13 January 2009 (n 3) paragraph F.
  \item[36] European Commission (n 30) 8.
  \item[37] Ibid, 10-11. Importantly, the data used by the Commission did not include figures for Romania, Bulgaria and Croatia, which undoubtedly suggest that the real figures were likely even higher at the time.
  \item[38] Council Regulation (EU) 1234/2007 (n 35).
\end{itemize}
\end{footnotesize}
Article 27(1) of the regulation specified that market purchases for the scheme were only intended ‘where the temporary unavailability of a product exists during implementation of the annual plan that that product can be purchased on the market’. However, Germany and other MSs argued that the scheme was entirely determined by the levels of intervention stock and did not permit the Commission to circumvent these rules by simply substituting intervention stock with market purchases.

Ultimately, the Court agreed with these MSs and approved the partial annulment of the contested legislation. And, following this ruling, the basis for the food distribution scheme was amalgamated and funded under the newly established Fund for European Aid to the Most Deprived (FEAD) in 2014, to more accurately respond to socio-economic impacts of food insecurity and price volatility.

In addition to addressing the effects of food insecurity on the individual and household levels, EU institutions also reacted to global market instability by calling for the use of production measures aimed at boosting food supplies and pushing down prices. The EP, for instance, stressed as a matter of urgency the need to facilitate a temporary ‘increase in milk quotas in order to stabilise prices on the internal market’. The Commission duly responded by advising the Council to remove the obligation to set aside 10 per cent of arable land for the 2008 harvest, increasing milk quotas by 2 per cent and suspending import duties on cereals. Although it is difficult to quantify the exact impact of these measures, the abolition of set-aside in particular was credited by the EP with making a ‘considerable contribution to increasing the supply of agricultural commodities’.

---

40 Case T-576/08, Federal Republic of Germany v European Commission.
44 European Parliament resolution of 13 January 2009 (n 3) paragraph 15.
2.3 The Rising Challenges to Food Security

2.3.1 Meeting the Growing Global Demand for Food: The Geo-Political and Ecological Challenges

In addition to recent experiences of market volatility and crisis, it has become increasingly clear that food security will need to be provided amidst a growing number of converging geo-political and ecological challenges. Consequently, the need to address these developments have taken centre stage in European and international food security debates and, as already noted, a key such challenge is posed by the major increase in global food demand that is expected to arise as a result of demographic changes (such as urbanisation) and a rapidly growing global population, stemming predominantly (although not exclusively) from increased fertility rates in Africa and Asia.\(^{45}\) Indeed, the UN recently revised its data, which suggest that the human population is destined to reach almost 10 billion, rather than 9 billion as previously indicated, by the year 2050, and 11.2 billion by 2100.\(^{46}\) Based on these projections and current consumption trends, the FAO has estimated that the global food demand could increase by an additional 70 per cent by 2050,\(^{47}\) while others suggest this figure could rise by over 100 per cent before the end of the century.\(^{48}\)

This is undoubtedly expected to have particular implications for many developing and least developed countries where the ‘concentration of population growth…will make it harder for those governments to…combat hunger and malnutrition…and implement other elements of a sustainable development agenda’.\(^{49}\) However, population growth alone will not account for the significant increases in demand that are projected to occur by 2050. Rather, demand is expected to be particularly propelled by greater levels of material wealth in developing countries,

---


\(^{46}\) Ibid, 2.


\(^{49}\) United Nations (n 45) 4.
where dietary and consumption patterns are already shifting towards higher intakes of sugars, dairy and meat products.\textsuperscript{50}

With regards to resource use, the combination of changing consumer preferences and greater affluence is anticipated to create substantial increases in the demand for a number of commodities that emanate from some of the most environmentally taxing forms of agricultural production.\textsuperscript{51} For instance, recent studies have suggested that the global demand for dairy and meat products could rise by as much as 65 and 76 per cent, respectively, by the year 2050.\textsuperscript{52} This may be contrasted with a global population rise of around 30 per cent and an increase of 40 per cent in the demand for cereals intended for direct human consumption.\textsuperscript{53} It is, however, critical to stress that the extent to which this growing demand is translated into increased production will ultimately depend on a number of factors including consumer choices, dietary preferences and the content of agricultural production policies, but many commentators nonetheless agree that a corresponding surge in output will be necessary according to current projections.\textsuperscript{54}

2.3.2 Physical and Ecological Limitations to Substantially Increasing Global Agricultural Output

In the past, such increases in agricultural output have been based on two fundamentally different approaches, namely; extensification and intensification.\textsuperscript{55} Thus, while total production on, eg, the African continent has mainly increased through the expansion of agricultural land in recent decades – the massive surges in

\textsuperscript{50} J. Weinzettel \textit{et al}, ‘Affluence Drives the Global Displacement of Land Use’, (2013) 23 Global Environmental Change 433. In economic terms this is also known as Bennett’s Law, which observes that people are likely to move from ‘starchy, plant-dominated diets to more varied diets and meat consumption’ as wealth increase’. See, H. Charles and J. Godfray, ‘Food for Thought’ (2011) 108 PNAS 19845.


\textsuperscript{52} R. Bailey, A. Froggatt and L. Wellesley, Livestock: Climate Change’s Forgotten Sector. (Royal Institute of International Affairs London, 2014) 4. Livestock production also has the effect of driving up demand for grains and protein crops, which are used to feed animals rather than humans directly.

\textsuperscript{53} \textit{Ibid}, 4. Although the demand for, eg, grains and protein crops are expected to increase in parallel with the growing population, only a proportion of this output is likely to be used for direct human consumption.

\textsuperscript{54} D. Tilman \textit{et al} (n 48) 20260.

\textsuperscript{55} \textit{Ibid}, 20261.
output that occurred in many developed regions (such as Japan, North America and the Europe) following the Second World War, have primarily been accomplished by intensifying production on existing land. This was, likewise, part and parcel of the Green Revolution in the 1960s, which transformed agricultural productivity and boosted yields in many part of Asia through the adoption of intensive agricultural practices, including mechanisation and the widespread use of chemical pesticides and fertilisers. Looking to the future, however, both of these options are fraught with limitations that could have serious implications for food security and cannot, therefore, easily be overlooked.

In the case of extensification, the most formidable obstacle is perhaps the obvious lack of land on which to increase agricultural output. Indeed, in many regions of the world – including Europe – much of the land suitable for production has already been diverted to this end and whatever is left is often too stony, saline, wet, dry or afforested to be of significant agricultural use. Moreover, the prospects of bringing additional land into production is not only severely limited by competition from other human activities (such as urbanisation and infrastructural expansion); it is also greatly prohibitive considering the unavoidable ecological costs of, eg converting forests and other eco-systems into cropland. Among these, the risks of exacerbating global climate change and biodiversity loss are particularly pertinent, as such conversion would certainly result in extra releases of carbon into the atmosphere and the propelled loss of biological habitat, respectively. This additional warming of the Earth’s climate, in particular, could have potentially devastating effects for food security, making it a particularly taxing option for meeting the growing global demand

56 Global output is estimated to have increased by almost 200 per cent from 1961-2006, while the total expansion of cropland corresponded to just 11 per cent. See, T. W. Hertel et al ‘Global Market Integration Increases Likelihood that a Future African Green Revolution Could Increase Crop Land Use and CO2 Emissions’, (2014) 111 (38) PNAS, 13800. See also, Millennium Ecosystems Assessment, Ecosystems and Human Well-being: Scenarios Volume II Findings of the Scenarios Working Group of the Millennium Ecosystem Assessment, Scenarios Assessment (Island Press, 2005) Chapter 7. European agriculture has also been characterised to a lesser extent by the expansion of agricultural lands through, for instance, the conversion and drainage of sensitive wetlands.
61 Ibid.
for resource-intensive food. Moreover, Rockström et al, have warned that further agricultural land expansion may ‘seriously … undermine regulatory capacities of the Earth system’. 63

The generally appreciated limitations associated with further expansion have consequently sparked renewed interest and debate over the possibilities of meeting the growing food demand through intensification. In particular, attention has been given to maximising yields through so called ‘sustainable intensification’, which entails, albeit in an oversimplified manner; ‘producing more food from the same area of land while reducing the environmental impact [of such production]’. 64 As will be further detailed below and in Chapter 3, the sustainable intensification paradigm has gained significant traction within the context of European agricultural policy, as presenting a possible framework for meeting the limits to land conversion in the future. However, it is crucial to stress that although a certain level of intensification may be viable in some regions of the world (such as in the case of sub-Saharan Africa where agriculture continues to be characterised by low-intensive production) – European agriculture is already amongst the most intensive in the world. 65 Indeed, considering the exponential rates at which yields have risen in the past century, some have questioned the extent to which it is possible to continue to pursue this historically upward trajectory of agricultural output. 66

There are also indications that the high levels of yield growth experienced in recent decades are slowing down even in some of the world’s most productive regions. For instance, Ray et al have recently suggested that yield increases for staple crops such as wheat and maize have been reversed in certain European regions in recent

Thus, while crop demand is likely to increase globally, they suggest that productivity gains will ‘fail to keep pace with projected demands’. Similarly, Soussana and Lemaire have stressed that productivity is likely to be further ‘affected by climate change in most regions of the world’. With regards to Western European states, in particular, this could have implications for future food security considering that climate variability has been directly linked to yield variability for a number of staple crops including wheat.

Against the ostensible uncertainties involved with further intensifying production, recent academic and political attention has also been devoted to considering how non-production-related adaptation may contribute to reducing some of the pressures that are increasingly being placed on the ecological resource base. In particular, there has been a focus on the demand side and the potential benefits that may be derived from behavioural and consumer changes. For instance, Tilman and Clark have recently highlighted the links between dietary choices, environmental sustainability and human health. They argue that altering global diets and reducing the demand for meat protein from ruminants (and other sources of high GHG emissions) could significantly mitigate the 80 per cent increase in GHG emissions which they expect will stem from food production over the coming decades. It follows that in the European context, where for example meat consumption is still far above the global average, alterations in diet could be particularly instrumental in reducing the ecological impact of agricultural consumption and production.

In the absence of such changes, however, there exist significant technological challenges that need to be overcome in order to deliver the efficiency gains necessary to ensure that increased output does not take place by putting additional pressures on

---

67 This study specifically focused on yield growth rather than overall yields. See, D.K. Ray et al, ‘Climate Variations Explain a Third of Global Crop Variation’ (2015) 6 Nature Communications, 4-5.
68 Ibid, 5.
70 D. K. Ray et al (n 67) 5-6.
72 Ibid, 521. See also, R. Bailey, A. Froggatt, L. Wellesley, Livestock: Climate Change’s Forgotten Sector (Royal Institute of International Affairs, London, 2014).
73 Buckwell et al (n 59) 19.
agricultural and ecological resources. In this light, the sustainable intensification paradigm can be seen as highly aspirational as it depends on the development of farming methods and management practices, which may not yet exist and, by definition, may have to be radically different from conventional ones if further outputs are to be attained without comparable externalities. Given the spirit of optimism (technological and otherwise) that underpins the sustainable intensification paradigm some have therefore cautioned that past ‘agricultural practices that have greatly increased global food supply have had inadvertent, detrimental impacts on the environment and on ecosystem services, highlighting the need for more sustainable agricultural methods’.\(^{75}\) Thus, there remains significant reservation as to the extent to which the ‘intensification of crop production on the land already under agriculture will be enough to produce the amount of food required and what that will imply in terms of soil, crop and water management’.\(^{76}\)

As will be further argued in the following chapter, it is also of critical importance to distinguish between projected increases in food demand, such as those attributable to the FAO, and the normative claim that agricultural output ‘needs’ to be raised in order to feed the growing population.\(^{77}\) Indeed, the former relies on statistical data to predict consumption patterns based on current trends and anticipated socio-economic and demographic developments. In other words, aggregate projections such as the possible doubling of the global food demand before the end of the century reflect what could happen under specific modelling scenarios, but not what necessarily has to happen or how reality will actually play out.

Thus, as outlined above, a number of options certainly exist for feeding the growing human population without having to double food production or to solely rely on the prospects of technological progress and solutions, which may or may not ultimately be realised. Key amongst these options is the possibility of decisively addressing the current and anticipated demand for livestock products, with a view to reversing the upward trajectory that is generally expected.\(^{78}\) On the one hand, this would require significant reductions in per capita consumption of animal products

\(^{75}\) D. Tilman \textit{et al} (n 18) 672.


\(^{77}\) I. Tomlinson, ‘Doubling food production to feed the 9 billion: A critical perspective on a key discourse of food security in the UK’ (2013) 39 Journal of Rural Studies, 82.

\(^{78}\) Bailey \textit{et al} (n 72).
where such intake is high (for instance in the EU and USA). With regards to many of the world’s developing and least developed nations on the other hand, the challenge arguably entails ensuring that their path towards greater material wealth and affluence does not replicate the historical dietary patterns of the West.

Such changes could potentially also entail significant long-term benefits for public health compared to the default scenario projected by the FAO. For instance, Tilman and Clark have argued that in the absence of dietary changes the latter trajectory is likely to greatly increase the ‘global incidences of type II diabetes, cancer and coronary heart disease’. Most importantly, the reduced demand and consumption of foods derived from animal products would appear to be absolutely crucial to reducing the ecological footprint of agriculture, while at the same time freeing up land that could be converted to producing far more calorie-efficient commodities to feed the growing population.

2.3.3 Understanding the Current and Projected Changes to the Earth System and the Wider Implications for Food Security

In additional to the demographic and socio-economic changes mentioned above, food security is also expected to be affected by a number of fundamental changes to the bio-physical, chemical and ecological processes that enable food production and cultivation. Indeed, as noted in the introductory Chapter, the very nature of agricultural activity entails that it is inextricably linked to – and dependent on – the functioning of processes that affect phenomena such as climate, biodiversity, pollination and carbon sequestration amongst many others. Yet, there exists widespread agreement that the stability of these and the ecological services that they provide are increasingly coming under threat as consequences of the anthropocentric development that has taken place over the past centuries. Indeed, these changes are considered to be so profound that they have given rise to the current geological epoch

79 Tilman and Clark (n 71) 4.
characterised as the ‘Anthropocene’ and distinguishable from others by the extent of human impact on terrestrial systems, especially the climate and the environment.\(^{81}\)

Key to grasping the extent of these impacts has been the evolution of Earth sciences and the increased understanding of biophysical and biochemical systems that has taken place within these disciplines in recent years. Rockström et al, for instance, identify nine planetary systems which, together, affect the entire function of the Earth System and thereby the conditions for life itself, as they have been known throughout the Holocene period.\(^{82}\) These systems include; ‘the global biogeochemical cycles of nitrogen, phosphorus, carbon, and water; the major physical circulation systems of the planet (the climate, stratosphere, ocean systems); biophysical features of Earth that contribute to the underlying resilience of its self-regulatory capacity (marine and terrestrial biodiversity, land systems); and two critical features associated with anthropogenic global change (aerosol loading and chemical pollution)’.\(^{83}\)

Within each of these systems, Rockström et al point to the existence of critical thresholds beyond which underlying systemic functions risk becoming largely unstable and unpredictable.\(^{84}\) Indeed, of the nine overarching systems identified, three are considered to be in grave danger of transgressing the boundaries within which they have operated throughout the Holocene period. These pertain to the disruption of the nitrogen cycle and phosphorous flows (which are counted as a single system by the authors); the rate of biodiversity loss; and climate change. Importantly, all three are intimately connected with, and affected by, agricultural activity.\(^{85}\) The following sections will therefore outline each of these phenomena, before considering the extent to which they were reflected in the early discourse of the 2013 CAP reforms and, in particular, the Commission’s initial white paper, which served as a political roadmap for those reforms.

---


82 J. Rockström et al (n 63) 8. The nine systems are identified by Rockström et al as part of the planetary boundaries framework, but, as pointed out by Steffen et al, there exist many sub-systems and alternative categorisations of these systems. See W. Steffen et al, ‘Planetary Boundaries: Guiding Human Development on a Changing Planet’, (2015) 347 6223 Science 1.

83 Ibid.

84 It should be noted that agriculture was of little relevance to pre-Neolithic societies, which consisted of hunter-gatherer anthropological orders. It was only following the widespread knowledge and adoption of primitive farming methods that early human communities opted to transform these nomadic orders by attaching themselves to the land and, thereby, becoming dependent on cultivation as a main source of food security and survival.

85 Steffen et al (n 82) 3.
2.3.4 Disruption of Terrestrial Nitrogen and Phosphorous Cycles

Conventional agricultural systems have been widely defined by the intensive use of inputs such as fertilisers and pesticides (both organic and inorganic), which have partly underpinned the vast productivity gains that have taken place over the course of the last century. In addition to high yields, however, they have long-since been recognised for their contribution to the pollution of natural waterways through eutrophication due to the run-off of surplus fertiliser application, as well as their risks to public health through the contamination of groundwater, with the latter constituting an important source of drinking water within the EU. Indeed, this was recognised in the Community’s very first Environmental Action Plan (EAP), which expressed its concern over the polluting effects of intensive agricultural production and the ‘use of certain persistent insecticides… herbicides…and certain fertilisers’ as early as 1971.

In particular, such pollution has been linked to the excessive use of nitrogen fertilisers, as well as the subsequent mismanagement of waste and slurry, both of which remain primary sources of diffuse water pollution in the European context. In response, the EU has implemented a number of environmental directives, several of which have had implications for the way in which these inputs are managed, stored and applied by agricultural producers. These will be discussed in Chapter 3, but for present purposes it may be noted that the Nitrates Directive, as well as Water

---

90 European Environmental Agency, Nutrients in European Ecosystems (EEA, Copenhagen 2000) 21.
Framework Directive (WFD) have added important dimensions to the governance of water resources under the CAP.\textsuperscript{93}

Notwithstanding these and other efforts to curb pollution, as well as the use of harmful inputs, the European Environmental Agency (EEA) estimated that about 29 per cent of European rivers\textsuperscript{94} had poor or bad ecological status with regards to nitrate levels in 2012, while 48 per cent of these were recorded as having moderate ecological status.\textsuperscript{95} Moreover, the Commission estimated that 40 per cent of EU agricultural land was vulnerable to nitrate pollution, posing further threat to water resources and human health.\textsuperscript{96} In recent years, however, there has been a growing appreciation of the wider impacts that have resulted as a consequence of this use and that extend far beyond localised pollution of waterways.\textsuperscript{97} Indeed, the abrupt changes to lakes and marine ecosystems in recent decades have significantly modified global phosphorous and nitrogen cycles, with human activities now accounting for the conversion of more nitrous oxide ‘from the atmosphere into reactive forms than all of the Earth’s terrestrial processes combined’.\textsuperscript{98}

Importantly, moreover, Steffen \textit{et al} have emphasised that the global disruptions to these biochemical flows have mainly stemmed from agricultural intensification in a limited number of regions, including Europe.\textsuperscript{99} And, in the case of nitrogen (N), Rockström \textit{et al} have stressed that, ‘although the primary purpose of most of this new reactive N is to enhance food production via fertilization, much reactive N eventually ends up in the environment—polluting waterways and coastal zones, adding to the local and global pollution burden in the atmosphere, and accumulating in the biosphere’.\textsuperscript{100} This could, in turn, have unforeseeable

\begin{footnotesize}

\textsuperscript{94} According to EEA, rivers are the water bodies with the worse, overall, ecological status. See, European Environmental Agency, Special Report 8/2012 (EEA, Copenhagen 2012) 37.

\textsuperscript{95} \textit{Ibid}.


\textsuperscript{98} Rockström \textit{et al} (n 63) 15. See also, Steffen \textit{et al} (n 82) 5. Rockström \textit{et al}, have chosen to treat these global phosphorous and nitrogen cycles together, but acknowledge that these could be analysed separately depending on the methodology (15).

\textsuperscript{99} Steffen \textit{et al} (n 83) 3,5.

\textsuperscript{100} Rockström \textit{et al} (n 63) 15.
\end{footnotesize}
consequences for future food security, considering that nitrogen acts as a slow variable by ‘eroding the resilience of several sub-systems of the Earth System’.  

2.3.5 The Impacts of the Loss of Biodiversity

The accelerated loss of biodiversity that has taken place over the past decades has likewise been greatly attributed to agricultural intensification, which has given rise to land use changes and farm management practices that have caused both the destruction and fragmentation of wildlife habitats across Europe. Indeed, the crucial role that farmland plays for the provision of such habitats has long since led to the CAP being singled out as one of the flagship policies tasked with realising the EU’s commitments to halting biodiversity loss. However, despite an extensive history of ambitious strategies, targets and instruments recognising the existential importance of biodiversity, many indicators used to measure this phenomenon continue to show worrying signs of decline due to a set of complex pressures stemming largely, though not entirely, from agriculture.

This decline has particularly affected species that otherwise depend on agricultural landscape features and the active management of farmland for habitat and space. And reports indicate that important populations, such as those of wild and farmland birds, continue to be negatively affected by agricultural practices despite the introduction of cross-compliance measures in 2005, which were partly motivated for their potential to contribute towards the EU’s biodiversity goals.

However, given the reliance of agriculture on key ecosystem services provided by birds and other species, the loss of biodiversity goes beyond merely constituting an unfortunate testament to the anthropogenic impacts of modern development. Rather, as a general rule, ‘reductions in the number of genes, species and functional groups of organisms reduce the efficiency by which whole communities

---

101 Ibid, 15.
102 Ibid, 22.
104 For instance, the 7th EAP cites the poor implementation by MSs of EU conservation legislation as one of the main reasons for this continued decline. OJ L 354, 176 (Annex).
105 European Economic and Social (n 24) paragraph 3.4.1.
106 See below at 3.4.4 and 3.3.5.
capture...biologically essential resources, produce biomass, decompose and recycle biologically essential nutrients’.107 Moreover, persistent levels of biodiversity loss have the potential to impact upon the resilience and stability of agricultural systems that are relied on for food cultivation.108 Indeed, important ecosystem services such as ‘carbon sequestration, nutrient cycling, soil structure and functioning, water purification and pollination...rely on biological diversity’ for realising current levels of food production and outputs.109 Consequently, as much as 80 per cent of the crops grown for human consumption in the EU have been estimated to rely on wild pollinators for maintaining current yields.110 It is therefore particularly worrying that reports have continued to stress that many pollinating species are not merely in decline, as long-since indicated, but that these losses have accelerated despite the ratification of the Convention on Biological Diversity more than twenty years ago.111

In the European context, the International Union for the Conservation of Nature recently indicated that some bee population have declined by as much as 80 per cent over the last decade alone.112 Specifically, the report suggested that these exacerbated rates of loss have stemmed from the adoption of agricultural management and production practices such as the growing trend to move from hay cropping to silage production, which is more intense and requires early – rather than – late season cropping.113 In addition, the damaging effects that the use of neonicotinoid insecticides have had on a number of native bee species have recently been documented114 and similar declines have been recorded pertaining to other pollinators

113 Ibid, 21. Silage is mainly grown and produced as a feed alternative to hay and has become increasingly popular in some parts of the EU, such as the UK. It is considered to have a greater nutritional content, as well as greater palatability, than hay when stored correctly. It is, however, also considered to be more intensive than hay cropping and is used to support the livestock industry, which already has a considerable environmental footprint.
such as farmland butterflies. Indeed, this prompted the EU to take legal action in 2013 by restricting the use of certain neonicotinoids, against significant opposition from farm interest groups.

On the political level, this decline has been the cause of both wide-spread criticism and political failure, as the EU was unable to meet its own biodiversity targets for the year 2010. According to the Commission itself, this failure was clearly reflected in assessments indicating that ‘only 17 per cent of habitats and 11 per cent of species of key ecosystems protected under EU legislation [were] in a favourable state’. Moreover, with regards to protected Natura 2000 sites, it noted that as much as ’40 to 85 per cent of habitats and 40 to 70 per cent species of European interest have an unfavourable conservation status’. Thus, in its subsequent White Paper on the EU’s biodiversity strategy, the Commission pointed out that the alarming rate at which biodiversity loss has occurred in recent decades makes it ‘the most critical global environmental threat alongside climate change.

With regards to the global implications of reduced biodiversity, Rockström et al have stressed that ‘the world cannot sustain the current rate of loss of species without resulting in functional collapse’. This undoubtedly has specific implications for food security, considering the role that genetic diversity plays for the functioning of ecological services and processes, as already mentioned with regards to pollination and pest control. Importantly, a reduction of genetic diversity entails that future increases in global food demand will have to be met without the ecological resources that have been available to previous generations. As will be elaborated in Chapter 3, it therefore follows that meaningful attempts to sustain the basis for agricultural production must invariably also strive to protect the various elements of

120 European Commission (n 118) 1.
121 Rockström et al (n 63) 22.
biodiversity, which include the existence of diversity ‘within species (genetic diversity), between species (species diversity) and of ecosystems (ecosystem diversity’).\textsuperscript{123}

### 2.3.6 The Impending Impacts of Climate Change

Article 1 of the United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as ‘a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods’. And, as discussed in the introductory Chapter, modern intensive agriculture constitutes one of the human activities that has contributed the most, both directly and indirectly, to the atmospheric loading of GHGs and the incremental changes to the Earth’s climatic patterns that have been brought about as a result.\textsuperscript{124}

More specifically, the EU estimates that around ten per cent of its total GHG emissions stems from agricultural production and the release of Nitrous Oxide (N\textsubscript{2}O) and Methane (CH\textsubscript{4}), in particular, both of which have been overwhelmingly linked to livestock production and have climate-warming effects that are 310 and 21 times higher than Carbon Dioxide (CO\textsubscript{2}), respectively.\textsuperscript{125} However, these figures arguably reflect a limited picture as they do not account for externalities associated with the production of animal feed and other inputs stemming from outside the EU. As a result, some argue that actual GHG emission for agriculture may be considerably higher than the official records suggest.\textsuperscript{126}

Regardless of the accounting methods employed, it has long-since been clear that agricultural productivity stands to be particularly impacted by climatic changes, which are projected to have varying regional effects on agriculture across the EU.\textsuperscript{127}

\textsuperscript{123} Article 2, United Nations Convention in Biodiversity.
\textsuperscript{124} European Environmental Agency, Climate change, impacts and vulnerability in Europe 2012: An indicator-based report (EEA, Copenhagen, 2012).
In Northern Europe, for instance, an increase in average temperatures and frost-free days is expected to extend growing periods and lead to an expansion of suitable cropping areas and greater productivity.\textsuperscript{128} Although these are often upheld as a ‘positive’ features of climate change, it is important to note that the benefits of rising average temperatures are also likely to be constrained by projections of increased precipitation and flooding in the aforementioned regions.\textsuperscript{129} Likewise, the prevalence of pests and invasive species are expected to rise in parallel with average temperatures in the northern MSs.

The immediate outlook is even more troubling with regards to the EU’s southern regions where ‘the benefits of projected climate change will be limited, while the disadvantages will be prevalent’.\textsuperscript{130} Indeed, agricultural activity in these regions has already been affected by incidences of increased water stress and shortages, soil erosion, and more frequent extreme weather events, among others.\textsuperscript{131} Furthermore, current trends suggest that climate change is expected ‘to have a significant impact on crop yield potentials in Southern Europe, particularly in relation to water availability’.\textsuperscript{132} Certainly, this also has implications for the ‘increasing challenge of water scarcity and its impact on food production’.\textsuperscript{133} In other low-lying areas (such as the Netherlands), on the other hand, the risks of climate change and further sea-level rise include the inundation of agricultural lands and salinization of otherwise productive soils.\textsuperscript{134} Needless to say, the impacts upon food production in these regions

---

\textsuperscript{128} European Commission, ‘Sixth National Communication and First Biennial Report from the European Union under the Framework Convention on Climate Change’ (European Union, Luxembourg, 2014) 130.

\textsuperscript{129} European Commission, Adaptation to Climate Change Impacts on Human, Animal and Plant Health, SWD (2013) 136, 6 (accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: An EU Strategy on Adaptation to Climate Change, COM (2013) 216).


\textsuperscript{131} See, e.g, European Court of Auditors, Integration of EU Water Policy Objectives with the CAP: a Partial Success, Special Report No 4 (European Court of Auditors, Luxembourg, 2014)


\textsuperscript{134} European Commission (n 128) 130.
are not likely to be favourable for ensuring long-term food security and are expected to further intensify regional disparities within the EU.\footnote{135} Many of these changes are already being observed and experienced. For example, the IPCC has recently attributed to climatic variations the reductions in the output of grain, cereals and wheat which occurred in Southern Europe from 2003 to 2010.\footnote{136} Similarly, the sharp fluctuations in food prices that have been experienced in recent years have been regarded, at least in part, as stemming from the uncertainties and effects of climate change.\footnote{137} As noted above, such volatility is expected to continue – thereby creating a particular threat to food security for low-income earners and households.\footnote{138} Indeed, the IPCC has noted that ‘all aspects of food security are potentially affected by climate change, including food access, utilization, and price stability’.\footnote{139} Moreover, there would appear to be limited ability to rely on the cultivation of biofuels to reduce agriculture’s carbon footprint, with the EESC noting that ‘the production of second generation biofuels that use wood and straw could remove carbon sinks and thus increase CO$_2$ levels’.\footnote{140}

Against this background, it is crucial to note that the anthropogenic release of GHGs has not only been a historic driving force of climate change, but it is widely expected that this impact will continue to increase at the global level.\footnote{141} Indeed, according to the IPCC, GHG emissions rose between the years 2000 to 2010 ‘despite a growing number of climate change mitigation polices, which have been implemented at various levels of governance’.\footnote{142} With regards to the extent of these impacts, the Panel submitted that ‘the precise levels of climate change sufficient to trigger abrupt and irreversible change remain uncertain, but the risk associated with

\footnotesize{
\textsuperscript{135} Ibid, See also, Kovats et al \(n \) 127); European Commission, Green Paper of 29 June 2007 on adapting to climate change in Europe - options for EU action COM(2007) 354 final, 4. \\
\textsuperscript{136} Kovats et al \(n \) 127) 1284. \\
\textsuperscript{137} European Commission \(n \) 27) 3. \\
\textsuperscript{138} Ibid. \\
\textsuperscript{140} European Economic and Social Committee \(n \) 24) paragraph 1.6. \\
\textsuperscript{141} International Panel on Climate Change \(n \) 139) 10. It might also be noted that Abraham et al have recently found that industrial-era warming started to take place in the oceans and across the continents at a far earlier point than previously anticipated See, N. J. Abraham et al ‘Early onset of Industrial-era Warming Across the Oceans and Continents’, (2016) 536 Nature 411, 411–412. \\
\textsuperscript{142} International Panel on Climate Change \(n \) 139) 5.}

crossing such thresholds increases with rising temperature (medium confidence). This may, however, be contrasted with the opinion of Rockström et al, that the atmospheric loading of GHGs have already transgressed the thresholds beyond which they risk becoming highly unstable and unpredictable.

Undoubtedly, this state of affairs is bound to entail large risks to global and regional food security, which is only likely to be exacerbated by the rising demand for food and the growing global population. What is perhaps most critical to stress in the context of the present discussion, however, is that climate change and other challenges to food security ‘partly arise because agriculture continues to undermine its own sustainability by degrading natural capital, pollinators, soil fertility, biodiversity, water and air quality’. In other words, the effects of current modes of production includes not only food, but also generates significant externalities that threaten the integrity of the very processes upon which future food cultivation depends, including the required climatic conditions. It follows that agriculture has a major role to play in not only meeting the world’s growing food demand, but also in ensuring that ecological resources are protected for the benefit of long-term food security. As will be submitted in the next Chapter, the latter reflects the intergenerational dimension of food security and hinges upon a duty to safeguard agricultural resources for the benefit of both current and future generations. However, the extent to which these obligations are met will largely depend on the ambitions of agricultural policies and their ability to transpose this ethical imperative into ecologically sustainable production and management practices.

143 Ibid, 13.
144 See above, 2.3.3.
145 International Panel on Climate Change (n 139) 14.
147 G. M. Poppy et al, ‘Food security in a perfect storm: using the ecosystem services framework to increase understanding’, 369 (1639) Philosophical Transactions of the Royal Society B, 3.
148 European Parliament (n 133) paragraph 13.
2.4 Setting the Tone of the Wider European Debate on Food Security

In addition to the immediate responses to food price volatility outlined above, the 2007-2008 crises and rising challenges to long-term agricultural productivity also sparked a wider debate on food security that had been relatively subdued during the preceding years of market over-production.\textsuperscript{150} Key aspects of this discussion took place at the institutional level of the EU and were expressed in numerous policy documents, statements and communications aimed at highlighting the strategic importance of long-term food security, as well as assessing the role of the CAP in pursuing this central objective. The EP was especially vocal and adopted several resolutions in the months and years following the crisis in which it clearly recognised food security as ‘the central challenge for agriculture not only in the EU but globally’.\textsuperscript{151} In particular, it called on other EU institutions to prioritise ‘immediate and continual action to ensure food security for EU citizens and at global levels’.\textsuperscript{152}

That said, the Commission did indeed take such immediate action through the introduction of market measures in 2008 and 2009.\textsuperscript{153} However, before setting out its own vision for addressing long-term and systematic challenges to food security the Commission was keen to invite broader societal input by opening up a public consultation that formally initiated the latest CAP reform process in April 2010. As a novelty introduced by the Cioloş Commission, this public consultation took place online during the course of two months (until 10 June 2010) and sought to ‘give as many EU citizens, stakeholders, and think tanks, research institutes and others, as possible the opportunity to have their say early on in the reflection process about the future of the CAP’.\textsuperscript{154} In doing so, it covered a number of issues and compiled the submission of diverse opinions between the aforementioned groups as they related to the role of the CAP and the priorities of the reform process. Pertaining to the latter, the three groups largely agreed that a common EU policy was necessary for ensuring

\textsuperscript{150} As noted in the introduction, The Foresight Report was particularly instrumental with regards to lifting the wider societal challenges to food security. See, Foresight (n 64). See also, H. C. J. Godfray \textit{et al.}, ‘Food security: the challenge of feeding 9 billion people’, (2010) 327 Science 812.

\textsuperscript{151} European Parliament (n 133) paragraph 10.

\textsuperscript{152} \textit{Ibid}, paragraph 37.

\textsuperscript{153} See above at 2.2.2.

food security for European citizens, but expressed wide-ranging views as to what the focus and future rational of the CAP should be. For instance, stakeholders such as producers were adamant to stress the importance of providing continued support for farmers and rural communities in order to ensure the existence of safe and reliable food sources. On the other hand, think-tanks and NGOs predominantly tended to highlight the need to prioritise the provision of public goods as the main rationale for future income support, while members of the general public were also inclined to stress the importance of ensuring access to – and the production of – high quality foods at affordable prices.

Respondents were particularly divided on the question of whether the reforms should seek to address food security from the point of internal sufficiency (a view mainly put forward by members of the general public) or to adopt a broader and more outward looking approach, as highlighted by many producers. Likewise, the EP addressed these points in the weeks and months following the public consultation, when it provided further details of its vision for CAP reform and the objectives that should underpin agricultural policy over the subsequent programming period and beyond. With regards to the internal dimensions of food security, for instance, it submitted ‘that a common agricultural policy is more relevant than ever before to ensure that the cross-border dimension of food supply…is guaranteed in a properly functioning Single Market’. However, the EP also stressed that the CAP should continue to play an important role at the international level and ‘contribute to meeting the increased demand for food globally’. Essentially, it underscored that regardless of the geopolitical direction of the reform process; the collective need for food security, safety and high nutritional contents of agricultural commodities ‘should continue to constitute the primary raison d’être for the CAP’.

It might be reiterated that these and other statements were not only important means of communicating immediate reactions to the global and systemic challenges to food security that came to a head in 2007-2008; they ultimately also served to reveal

155 Ibid, 5-6.
157 Ibid, 14.
158 European Parliament resolution of 8 July 2010 (n 3) paragraph 55.
159 European Parliament resolution of 13 January 2009 (n 3) paragraph 37.
160 European Parliament resolution of 8 July 2010 (n 3) paragraph 6.
the basic visions for CAP reform that each of the three main institutions would bring to the negotiating table once the so called trilogue discussions commenced in earnest. This disclosure was particularly welcome with regards to the EP as it engaged in the legislative process on an equal footing with the Council for the first time since the inception of the CAP in 1962, following the adoption of the Lisbon Treaty. To this end, the publication of the so-called Lyon and Dess reports were both instrumental for laying the strategic positons that the EP could be expected to defend vis-à-vis the Commission and the Council in the upcoming negotiations.

The Lyon report, in particular, provided an important means for indicating to the Commission some of the main policy positions that the EP would be defending over the following years, as it sought to negotiate the legal substance of existing and proposed CAP measures under the post-2013 framework. A key focus of the report pertained to the link between food security and the ‘public goods’ discourse, which the EP argued should provide the basis for rationalising and justifying the continued relevance of the CAP. For instance, in its resolution of 8 July 2010 it stressed ‘that food is the most important public good produced by agriculture [and] … unless sustainable (economically, socially and environmentally viable in the long term) farming activity continues across the EU, the provision of public goods will be at risk’. Importantly, moreover, it drew a distinction between so called ‘first generation public goods’ with reference to food security and food safety, and ‘second generation public goods’, which largely pertained to non-productive outputs such as support for ecosystem services and land management practices. Indeed, the EP explicitly stressed that although the latter category of public goods have gained increased importance under the CAP in recent decades, they should be viewed as ‘complementary to the first-generation goods and should therefore not replace them’.

163 The Dess Report was adopted by the European Parliament in its resolution of 23 June 2011 (n 3).
165 Ibid, paragraph 6.
166 Ibid.
welfare should only be pursued to the extent that they do not affect production or the supply of food.

As will be further elaborated below, this position was especially problematic as it indicated from the outset that the EP would be reluctant to support the introduction of policy instruments that could affect productivity and farm output. Indeed, in its resolution of 13 January 2009 it expressed concern over the prospects of introducing additional legal measures aimed at protecting ecological and agricultural resources as it feared these could have a ‘dramatic impact by reducing the tools available to farmers to maximise yields and may, in effect, lead to a dramatic reduction in EU farm output’.167 As will be seen in Chapter 4, this position was largely carried forward to the reform negotiations and, as pointed out by Hart, ultimately served to juxtapose the issues of productivity and environmental protection of agricultural resources in ways that could potentially serve to restrict the greening agenda subsequently put forward by the Commission.168

Key to the current discussion and thesis, moreover, is the misleading distinction set by the EP’s rhetoric between the current societal needs for food security and the prospective need to preserve the ecological resources, systems and processes upon which agricultural production depends. As is extensively argued in Chapter 3, long-term and equitable food security requires both dimensions to be pursued, but is especially dependant on the latter if future generations are to benefit from the same resources as the present one in order to meet their own needs for food security and agricultural productivity. In particular, this ‘simplistic’ position served to create a false dichotomy between environmental protection and food security, based on the premise that the former would undermine the latter by reducing levels of output and income.169 Hence, rather than spurring a renewed commitment to the creation of agri-environmental instruments capable of providing meaningful ecological protections and benefits, the experiences of recent food crises had the effect of encouraging measures aimed at ensuring or even boosting current levels of production with little regard for the long-term implications for food security.

167 European Parliament resolution of 13 January 2009 (n 3) paragraph 24.
169 Ibid.
Importantly, the EP’s deliberate convolution of the public goods debate and its choice to elevate the supply of food as the primary CAP objective also served to reveal a continuation of the EU’s long-standing approach to food security; centred upon meeting supply-side challenges with increased productivity and the stabilisation of food prices through support measures. As discussed in Chapter 1, this approach closely reflects the CAP Treaty objectives, which place considerable emphasis on attaining and maintaining high levels of productivity in order to ensure the supply of food for consumers, as well as the income of producers. Likewise, this embedded food security paradigm was firmly expressed in the aforementioned resolution ‘on the Common Agricultural Policy and Global Food Security’ where the EP specifically called ‘for food production to be stepped up in order to keep pace with increasing demand’. With reference to data from the FAO and projecting that rapidly changing consumer habits in emerging economies, increased wealth and population growth, it noted that these trends ‘will continue to drive the demand for agricultural goods and processed foods’. In response to these challenges, the EP submitted that ‘the CAP should play a significant role in the EU’s foreign affairs and … besides securing the EU’s food production, the CAP can contribute to meeting the increased demand for food globally’.

Undoubtedly, these and other EU institutional statements expressed optimism over the potential for long-term growth that the rising global food demand were expected to entail for European agricultural producers. With regards to struggling sectors within the dairy and livestock industries, for instance, the Commission anticipated that ample opportunities would avail themselves for EU producers to expand and export to new markets as demand for such products was expected to grow over the coming decades. However, the 2007-2008 food crises had also served to highlight a number of major and complex challenges to ensuring food security for a rapidly growing human population. In particular, projections of increased climate change, loss of biodiversity and other systemic changes to the Earth’s ecology

171 European Parliament resolution of 13 January 2009 (n 3) paragraph 42.
172 European Parliament resolution of 13 January 2009 (n 3) paragraph 16.
173 Ibid, paragraph 37.
174 See, European Commission (n 1).
underscored the obstacles to meeting the ensuing demand for resource intensive commodities, such as animal products, with the historic modus operandi of intensification and increased output.

In the European context, this raised important questions about the future role of the CAP and the extent to which it should be programmed to respond to these projections and the growing global demand for food. Consequently, this served to bring the issue of sustainability to the fore of the food security debate in a way that was unprecedented in previous CAP reforms. Before exploring the substance of the Commission’s long-term vision for food security under the CAP, the following sections consider some of the main challenges that are expected to affect long-term agricultural productivity.

2.5 Meeting the Looming Challenges to Food Security: Outlining the Commission’s Initial Vision for CAP Reform

Against the above discussed political background and impending challenges to food security, the inter-institutional legislative process formally began with the publication of the Commission’s white paper, The CAP Towards 2020: Meeting the Food, Natural Resources and Territorial Challenges of the Future, on 18 November 2010.175 Bearing in mind the Commission’s role in the legislative process and, in particular, its central mandate to make legislative proposals, this communication was undoubtedly the most central policy document to be published prior to the unveiling of the legal proposals and accompanying impact assessments in 2011. Thus, as in the case of previous reforms, the Commission’s Communication did not only serve to outline the latter’s own vision for the future CAP – it was also fundamental for setting the basic parameters and direction of the inter-institutional negotiations that would subsequently determine the legislative outcomes of the 2013 reforms. The following subsections therefore outline the main elements of this initial document, before considering more closely the link between food security and the central objective to pursue sustainable agriculture.

175 European Commission (n 1).
2.5.1 Overarching Reform Objectives

As outlined in the introductory Chapter, and revealed by its title, the communication focused on mapping the role of the CAP in meeting the main challenges to food production, natural resources and territorial cohesion during the 2013-2020 programming period and beyond. In doing so, the Commission echoed many of the arguments and responses to the impending challenges to food security discussed above. For instance, it repeated the EP’s call to strengthen the CAP in order to contribute towards global food security and to ensure the supply of food, in particular.176 This entailed, according to the Commission, that the ‘environment, climate change and innovation should be guiding themes that steer the policy more than ever before’.177 Importantly, moreover, the communication sought to incorporate some of the main elements of the EU’s 2020 Strategy, including the aim that the CAP should contribute towards ‘sustainable, smarter and more inclusive growth for rural Europe’.178

In order to address these and other challenges, the Commission outlined three objectives that were intended to shape the contents of its forthcoming legal proposals, as well as the subsequent programming of the CAP framework. These were the goals of (i) viable food production; (ii) the sustainable management of natural resources and climate action and (iii) balanced territorial development.179 As will be seen, the first and second of these objectives (i) and (iii) primarily addressed the socio-economic challenges to production agriculture in the European context. However, notwithstanding their central importance for supporting farmers and other agricultural land managers, the underlying aim of this thesis is to explore the role of the CAP in meeting the ecological challenges to long-term food security. The focus of the current discussion is therefore overwhelmingly on the second objective, and is carried forward in subsequent Chapters, which consider the extent to which the CAP framework has been able to provide meaningful responses to the imperative of ensuring the sustainable management of natural resources and climate action. Nonetheless, for the sake of providing a comprehensive overview of the

176 Ibid, 5.
177 Ibid, 10.
178 Ibid, 3.
179 Ibid, 7.
Commission’s reform agenda, each of these objectives are briefly outlined, before considering the wider implications of the second objective in Chapter 3.

2.5.2 Viable Food Production

This objective was largely aimed at maintaining the economic viability of farming, as well as ensuring the competitiveness of European agricultural sectors. Thus, in response to the anticipated increases in global food demand, in particular, the Commission argued that the EU should address these challenges by maintaining ‘its productive capacity…while respecting EU commitments in international trade and policy coherence for development’. With regards to trade, moreover, the Commission stressed that increased liberalisation and integration of the global economy had created a ‘considerably more competitive environment’, which has posed various challenges to the viability of farming structures and sectors in the European context. In this light, enhanced competitiveness was considered to be key to placing farmers in a better position to face future market volatility and continued consolidation of the global economy.

Similar to the EP resolutions outlined above, the Commission contended that the ‘long-term competitiveness of the agricultural sector lies in its ability to overcome the challenge of climate change and the sustainable use of natural resources whilst at the same time being more productive’. In other words, while recognising that future agricultural activity and productivity are likely to be negatively affected in the absence of fundamental transformation of contemporary and intensive agricultural systems, the Commission nonetheless unwaveringly maintained that increased levels of productivity would be imperative. As already suggested, this position reflected the prevailing discourse of the sustainable intensification paradigm and the underlying notion that increased agricultural output will be fundamental to meeting future demand.

In this context, maintaining high levels of productivity was not only emphasised in terms of contributing to global food security. Indeed, as outlined above,

---

180 Ibid, 4.
181 Ibid.
182 Ibid, 5.
183 European Commission, Background Note: Commission Communication on the Future of the CAP, Memo/10/587 of 18 November 2010 (European Commission, Brussels) 1.
it was seen as especially central to guaranteeing the incomes of the farmers and supporting the socio-economic structures of rural communities. Thus, the communication emphasised that ‘any significant cut back in European farming activity would in turn generate losses in GDP and jobs in linked economic sectors’.184

As is further discussed in Chapter 4, such considerations were particularly instrumental for limiting the scope of the subsequently proposed greening measures, which were expressly formulated with a view to having minimal impact on farm incomes.185

### 2.5.3 Balanced Territorial Development

The third objective aimed at addressing a number of challenges that were outlined with regards to social and territorial cohesion between EU MSs. In particular, the Commission noted that considerable differences continued to exists between the functioning of the CAP in the EU-15 and the thirteen MSs that have joined since 2004.186 Indeed, as noted in Chapter 1, the direct payments framework was based on historical reference periods and incomes in the case of old MSs, following the Mid-term review in 2003. However, no such past equivalent existed for the newer ones, with the result being that a disproportionally large amount of the total Pillar I budget was awarded to the former during the 2005-2013 programming period, despite the accession of major agricultural producers such as Poland and Romania.

Under the leadership of Dacian Cioloş, the Commission contended that these inequalities were no longer tenable and argued that the notion of a ‘common’ agricultural policy could only be justified by seeking to attain a more acceptable status quo.187 One of the main strategic aims of the reforms was, therefore, to make CAP support more ‘equitable and balanced between Member States and farmers by reducing disparities between Member States’.188 And, with regards to the direct payments regime, in particular, this required adaptations relating to ‘redistribution,

---

184 European Commission (n 1) 3.
185 See below at 4.6.1.
186 European Commission (n 1) 7.
187 European Commission, Background Note: Commission Communication on the Future of the CAP, Memo/10/587 of 18 November 2010 (European Commission, Brussels) 1.
188 Ibid.
redesign and better targeting of support’. It was thus clear from the outset that addressing the structural imbalances of the direct payments regime would be a key focus of the 2013 reforms.

### 2.5.4 The Sustainable Management of Natural Resources and Climate Action

Most importantly for present purposes, the Commission listed, as one of the primary reasons for the CAP 2020 reform, the need ‘to enhance the sustainable management of natural resources such as water, air, biodiversity and soil’. Indeed, it argued that this would be absolutely necessary in order ‘to preserve the food production potential on a sustainable basis throughout the EU, so as to guarantee long-term food security for European citizens and to contribute to growing world food demand’. In addition to the supply of food, moreover, the Commission noted that the active management of natural resources farmers remained essential in order to ‘maintain the rural landscape, to combat biodiversity loss and contributes to mitigate and to adapt to climate change’. Thus, given the unprecedented projections of increased food demand, a central challenge for the CAP over the 2013-2020 programming period would be to preserve the ‘capacity to produce quality products in sufficient quantities whilst at the same…encouraging sustainable production practices’.

This echoed rhetoric espoused by the Commission in its 2009 Review of the EU Strategy for Sustainable Development, which explicitly recognised that in order to ‘achieve long-term food security, there is a need for future policies to take into account environmental concerns, such as water demand in agriculture, deforestation, soil degradation and climate change adaptation needs, employing science-based approaches and local indigenous knowledge’. Likewise, the EP stressed in its resolution of June 2010 that the provision of sustainable food security would be ‘at risk’ unless sustainable farming activity continued to be supported and prioritised

---

190 European Commission (n 1) 6.
191 Ibid, 2.
192 Ibid.
193 European Commission (n 187) 3.
under the CAP framework.\textsuperscript{195} And, in 2011 it added that ‘a strong and sustainable agricultural sector across the EU and a thriving and sustainable rural environment, ensured by a strong CAP, are vital components of meeting the food security challenge’.\textsuperscript{196} As will be further discussed in the following Chapters, this potentially involved developing numerous aspects of the CAP framework, although enhanced environmental governance was definitely stressed as a key component in this regard. In particular, the communication elevated three subsidiary priorities that would be emphasised in pursuit of the objective of sustainable agriculture over the 2014-2020 programming period:

- To guarantee sustainable production practices and secure the enhanced provision of \textbf{environmental public goods} as many of the public benefits generated through agriculture are not remunerated through the normal functioning of markets.

- To foster \textbf{green growth} through \textbf{innovation} which requires adopting new technologies, developing new products, changing production processes, and supporting new patterns of demand, notably in the context of the emerging bio-economy;

- To pursue \textbf{climate change} mitigation and adaptation actions thus enabling agriculture to respond to climate change. Because agriculture is particularly vulnerable to the impact of climate change, enabling the sector to better adapt to the effects of extreme weather fluctuations, can also reduce the negative effects of climate change.\textsuperscript{197}

Although the communication remained silent on the details of the Commission’s vision for reform, it did reveal a clear preference to pursue these objectives through the introduction of a mandatory greening component to be incorporated within the Pillar I direct payments regime. This measure ‘could take the form of simple, generalised, non-contractual and annual environmental actions’ and, importantly,

\textsuperscript{195} European Parliament resolution of 8 July 2010 (n 3) paragraphs 30-31.
\textsuperscript{196} European Parliament resolution of 18 January 2011 (n 3) paragraph 1.
\textsuperscript{197} European Commission (n1) 7.
could ‘go beyond cross-compliance’. In doing so, moreover, the Communication clearly re-affirmed that the overall architecture of the CAP should remain the two pillar structure, with Pillar I encompassing support delivered to all farmers on an annual basis and Pillar II support being directed on a multiannual and contractual basis to deliver specific objectives identified in Member State programming. Indeed, it was expressly declared that ‘the separation between the two pillars should bring about clarity, each pillar being complementary to the other without overlapping and focussing on efficiency’.

The communication concluded by outlining three possible directions for the CAP to pursue post-2013; the adjustment, integration and refocusing scenarios. While adjustment would have centred largely on the issues of equity and the distribution of CAP funds, the integration scenario promised better targeting to ‘allow to address EU economic, environmental and social challenges and strengthen the contribution of agriculture and rural areas to the objectives of Europe 2020 of smart, sustainable and inclusive growth’. The third option, however, was expected to entail the most ‘far reaching reform of the CAP with a strong focus on environmental and climate change objectives, while moving away gradually from income support and most market measures’. In consequence, markedly different policy measures and results could be expected under each of the outlined scenarios, with correspondingly varying environmental outcomes to be anticipated for the 2014-2020 programming period, depending on the preferred option of the Commission.

2.6 Enhancing the CAP’s Environmental Dimensions: A Key Priority of the Cioloș Reforms

Definitely, recent experiences of global market instability and food crises were instrumental in lifting the issue of food security to the top of the 2013 CAP reform agenda. EU institutions initially responded by taking direct actions to maintain the supply of food and lifting existing barriers to production, such as compulsory set-

\[^{198}\text{Ibid, 8-9.}\]
\[^{199}\text{Ibid, 11-12.}\]
\[^{200}\text{Ibid, 12.}\]
\[^{201}\text{Ibid.}\]
aside, in order to counterbalance the steep rises in food prices experienced from around 2007.\textsuperscript{202} In doing so, they demonstrated a continued reliance upon tested market mechanisms, aimed primarily at incentivising greater productivity and price stabilisation. However, although such responses were successful in providing a degree of immediate redress, there was also an increasing appreciation that they would be insufficient to address some of the overarching and structural challenges that were expected to affect food security in the longer term.

The food security debate was further impacted by a growing and diverse body of literature aimed at taking stock of the 2007-2008 food crisis, as well as highlighting the main risks to future volatility and instability. For instance, as noted in the introductory Chapter, a number of high impact reports were published in the aftermath of the crisis, which gained notable attention for their attempts at informing public policy and driving the general debate relating to food security. These included publications such as the Royal Society’s ‘Reaping the Benefits: Science and the Sustainable Intensification of Global Agriculture’,\textsuperscript{203} and the Foresight report ‘The Future of Food and Farming: Challenges and Choices for Global Sustainability’,\textsuperscript{204} both of which stressed the environmental challenges of delivering food for a rapidly growing population with increased demands for resource-intensive foods and production practices. Importantly, moreover, they argued that the complex structures of the global food system, coupled with the unprecedented rise of climate change, amongst other looming factors, required policy-makers to fundamentally revise their approach to food security, as well as the role of agricultural systems, production methods and management practices.

In particular, there was explicit recognition that the historic method of boosting production and output would be insufficient for guaranteeing long-term food security. And, given the extraordinary externalities associated with intensive farming, such a productivity-driven framework would likely exacerbate many of the pressures that have already begun to manifest themselves, if based on current trends and consumption patterns. The broad consensus at both the scientific and political levels was therefore that the sector had a fundamental role to play in transitioning towards

\begin{footnotesize}
\begin{enumerate}
\item See above at 2.2.2.
\item Foresight (n 64).
\end{enumerate}
\end{footnotesize}
sustainable production patterns for the purpose of meeting future needs and demands. This was definitely reflected in the guiding communication of 2010 in which the Commission explicitly outlined the sustainable management of natural resources and climate change as one of three overarching objectives of the Cioloș reforms. Before analysing the substantive and legal outcomes that were finalised in 2013, as well as the extent to which they correspond to the underlying objective of ‘sustainability’, the following Chapter therefore considers the concept of sustainable agriculture more closely.
Chapter 3

Sustainable Agriculture: The Impacts and Limitations of the Current Development Paradigm

3.1 Introduction

Given the preceding discussion, it is clear that significant steps need to be taken to address the complex challenges that threaten to undermine agricultural productivity and future food security. As already pointed out, these changes have been caused by various drivers associated with human development and industrialisation, but the situation has undoubtedly been further compounded by the sheer environmental impact of modern agriculture. However, the externalities of agriculture are no longer limited to bringing about societal instability and collapse, as was the case in pre-industrial times. Rather, as already suggested, there is ample reason to believe that the pervasive effects of ‘conventional’ agriculture have been extended to include the disruption of the very ecological systems and processes that have hitherto allowed agriculture to flourish.\(^1\) There has then, perhaps, never been more pressing reason to ensure the sustainability of agricultural systems and to consider the role of farming in preserving the ecological resource base that current and future generations depend on for food security.\(^2\)

In the European context, the need to pursue sustainable agriculture was definitively acknowledged in the Community’s fifth environmental action programme (EAP), which stressed that the CAP should strike a more sustainable balance between agricultural activity and the natural resources of the environment.\(^3\) More importantly, the EAP also provided a decisive endorsement of the sustainable development paradigm, which has been central to defining the environmental scope of CAP policies.

---


\(^2\) J.A. Foley, Can we Feed the World and Sustain the Planet? A five-step global plan could double food production by 2050 while greatly reducing environmental damage’ (2011) November, Scientific American 62.

and objectives ever since. Yet, more than two decades after the adoption of sustainable development as the guiding growth paradigm – the ecological effects of agriculture remain significant, while reductions of its externalities continue to be incrementally integrated and pursued by the EU. In other words, although certain advancements have undoubtedly been made towards improving and expanding the CAP’s environmental framework, the practical outcomes would appear to fall considerably short of attaining the objective of sustainable agriculture. Consequently, many aspects of European agriculture continue to produce unsustainable outcomes, by way of their negative effects on natural ecosystems and the services provided by the latter. And, in 2010 the EEA concluded that ‘despite agricultural mitigation measures and steadily increasing organic farming, agriculture still exerts considerable pressure on the environment’.

This Chapter traces the normative impact of the Sustainable Development paradigm and the role that it has played in framing the objective of sustainable agriculture and the process of Environmental Policy Integration (EPI) that has been pursued to this end. The importance of this normative framework cannot easily be overstated, as it has been fundamental in formulating both the teleological objectives of European agricultural policy, as well as the substance of agri-environmental measures aimed specifically at meeting these objectives. Indeed, as already intimated, the need to advance the overarching goal of sustainable development featured as a core justification for further EPI under the 2013 reforms and, as such, has continued to play a prominent role in defining the CAP’s environmental contents. It follows that in order to answer the main research questions and analyse the extent to which the 2013 reforms may contribute towards the central objective of sustainable agriculture, it is imperative to first consider the conceptual parameters of this objective within the context of the current development paradigm.

---

6 For instance, with regards to the integration of water policy concerns, see, European Court of Auditors, Integration of EU Water Policy Objectives with the CAP: a Partial Success, Special Report No 4 (European Court of Auditors, Luxembourg, 2014).
The discussion is divided into two main parts. The first of these explores the objective of sustainable agriculture and its crucial role for ensuring food security in light of the growing global food demand and the highlighted risks to future productivity. In particular, it critically analyses how the sustainable development paradigm has impacted upon the policy formulation of sustainable agriculture and considers the centrality of the integration principle for implementing this objective.

The second part focuses on the process of EPI that has taken place under the CAP over the past decades and, which has provided the basic imperative to develop the policy’s environmental framework as a part of each successive reform. The aim of this discussion is to provide a detailed account of the agri-environmental legal architecture that was in place with respect to each of the two CAP pillars prior to the 2013 reforms. In doing so, it considers the main measures that have been adopted as a result of EPI and also seeks to contextualise this ‘greening’ process as one of the key expressions of the EU’s sustainable development paradigm in the field of agriculture. Thus, whereas previous Chapters focused on market – and production – related measures adopted by the EU in its pursuit of food security, the current discussion provides a critical account of the incremental legal developments that have determined the CAP’S environmental framework and the potential implications for long-term food security. This is of central importance to the overall thesis, as many of the legal instruments discussed in connection with the greening of both pillars have collectively served to determine the environmental standards to which agricultural producers adhere and which directly determine the environmental outcomes of the policy.

3.2 The Ecological and Perpetual Dimensions of Food Security: The Case for Sustainable Agriculture

An extensive and diverse body of literature exists on the topic of ‘sustainable agriculture’ and an overview of the debate reveals that a multitude of actors, stakeholders and experts have contributed to it in various ways. With specific regard

---


10 For a recent survey of the literature, see S.Velten et al, ‘What is sustainable agriculture? A systematic review’, (2015) 7 Sustainability 7833. See also, eg, E. Underwood et al, Options for
to academic contributions, researchers have considered the issue from a wide range of disciplinary and inter-disciplinary perspectives. Thus, commentary may be found in, for example, the fields of agro-ecology, environmental sciences more generally and development studies to name but a few, with each discipline often employing its own methodological and epistemological approaches. And, although this has undoubtedly allowed the debate to flourish, it has also militated against any unified definition of ‘sustainable agriculture’ and arguably ‘rendered the discussion and implementation of this idea extremely difficult’.

Notwithstanding the diverse landscape of academic commentary, a core presumption of this thesis is that long-term food security is absolutely tied to – and dependent on – sustainable agriculture. In this light, sustainable agriculture may be viewed as an operational concept, linking food security to the normative principle of sustainability. To explore and develop this position it is therefore necessary to briefly consider what constitutes sustainable agriculture and how the proposed understanding differs from other approaches? In answering this question, however, it must be stressed that the aim is not to prescribe or describe any particular form – or type – of agriculture as sustainable or otherwise. Rather, the intention is to tentatively outline the conceptual elements of sustainable agriculture, as they relate to food security in the present context. The discussion will then consider the central role that the sustainable development paradigm has played in framing this CAP objective and the legal measures that have been introduced in response to this imperative.

3.2.1 Sustaining the Ecological Resource Base for Present and Future Generations: The Basic Premise for long-term and Equitable Food Security

In contrast with approaches of the recent past, which have mainly focused on addressing the production, supply and pricing-related aspects of food security in market-based economies, the suggestion here is that future challenges require a far more purposive and ecologically grounded approach than has hitherto been the case. In particular, given the potential gravity of these challenges it is argued that there is an urgent need to rethink and reformulate the conceptual link between food security and the environment. Indeed, if the primary purpose of agriculture is to provide food, and thereby food security, then the latter is, by definition, fundamentally dependent on the ecological services and functions that make agriculture and food cultivation possible in the first place. Seen in this light, it becomes almost impossible to separate long-term food security from the permanent wellbeing and protection of these resources. Thus, it is suggested that the most elementary tenet of sustainable agriculture relates to the protection and preservation of agricultural resources, reflecting the sheer necessity for humans to live within the ecological boundaries that support their very existence.

This point is also intimately linked to the fundamental notion that long-term food security must be guaranteed and secured for an indefinite future. The latter can be said to reflect the perpetual or teleological dimension of food security and is based on the understanding that genuine attempts to attain equitable food security must include the protection of agricultural resources for the benefit of future life and generations. Indeed, in its seminal Communication on European agricultural policy, Direction towards Sustainable Agriculture, the Commission envisioned that ‘sustainable agriculture would call for a management of natural resources in a way which ensures that the benefits are also available in the future’. Thus, sustainable agriculture can be said to be grounded in perspectives of intergenerational equity aimed at sustaining the integrity of ecological systems and processes that enable food

---


production. In other words, ensuring that food is steadily produced and supplied for current generations does not amount to food security if, in the process, the prospects of production are reduced for future ones. Indeed, as articulated in the EU’s fifth EAP, the link between sustainability and food security can be summarised by the simple admonition: ‘Don’t eat the seed corn that is needed to sow next year’s crop’.21

Failure to adhere to this imperative would reflect a conscious choice to secure access to food in the short run, at the potential risk of food (in)security in the long term.22 Consequently, it is suggested that the latter would be both unsustainable and incompatible with the teleological and inter-generational dimensions of food security highlighted throughout the current discussion. Moreover, it raises serious questions about the moral and legal duties owed to future generations as the continued destruction of natural resources deliberately ‘robs [them] of genetic material with which to improve crop varieties, to make them less vulnerable to weather stress, pest attacks and disease’.23 Indeed, given the historical context it is particularly pertinent to stress the temporal aspects of agricultural production since there is often a ‘delay between emission, deposition and environmental effect’.24

Take once again the situation in post WWII Europe where food was in short supply and the only thing that arguably mattered was to produce it by whatever means possible. This may have been a necessary position considering the dire needs that existed at the time. It was by all accounts also successful in eventually supplying Europeans with a constant flow of agricultural commodities, but in hindsight it has done so at immeasurable cost to the environment.25 The consequences of intensification have already been discussed, but the main point here is that conventional approaches to agriculture have often marginalised the importance of ecological systems and services within the food security matrix. In the process, agriculture has contributed to extensive environmental damage of the very foundation

21 Council of the European Community (n 3) 21.
22 See the discussion above at 2.3.
of food production, which can hardly be seen as ensuring food security on a lasting basis.

Technological advancements during the past century have also resulted in agriculture becoming increasingly intrusive vis-à-vis nature, while simultaneously detaching itself more and more from its underpinning ecological processes. For instance, mechanisation and drainage technology has allowed large-scale conversions of wetlands and moorland into arable land.  

At the same time, the increased use of synthetic fertilizers and chemical pesticides has enabled cultivation on otherwise poor and unstable soils in many parts of Europe. In essence, such practices have continuously served to multiply yields, but have also changed the way in which food cultivation is negotiated with nature.

In this context it is also difficult to overlook the heavy dependence on fossil fuels and other non-renewable resources that underpin many aspects of conventional agriculture. Indeed, as already seen, fossil fuels have played a central role along the entire food chain and been decisive for maintaining the high levels of outputs that Europeans have grown accustomed to and, which have served to feed an ever-increasing global population. However, it is submitted that the very idea of using non-renewable resources for short-term gains would appear contrary to the notions of long-term food security and sustainable agriculture, highlighted herein. Not only does their use create a host of environmental challenges for future agricultural productivity, but the fact that they cannot be replenished at their rate of extraction means that they will not even be available for future generations, which should be sufficient to limit their current use. As pointed out by Godfray et al, this stands in direct contrast to the principle of sustainability, which implies the use of resources at rates that do not

26 For a comprehensive overview see, B. Jack, Agriculture and EU Environmental Law, (Ashgate, Farnham, 2009).
exceed the capacity of the Earth to replace them’. Moreover, they unequivocally recognised that even against the backdrop of a growing global population ‘dependency on non-renewable inputs are [by definition] unsustainable’.

3.2.2 The Long Road Ahead

This reveals another central argument of the current discussion, namely that despite institutional claims and environmental ambitions – sustainable agriculture still remains a distant goal. Thus, although the literature on sustainable agriculture represents a diverse range of inputs and opinions, there would appear to be mounting agreement that European agriculture still has a long way to go before it can assert itself as being sustainable. For instance, Godfray et al have proposed that ‘a rapid transition to sustainable agriculture is essential’, suggesting current approaches may be largely unsustainable. Similar to what has been argued above, they have also submitted that the future requires a different approach to agriculture, ‘one that is capable of feeding humans but which does not damage biodiversity and ecosystem services upon which it ultimately depends’. Indeed, the Commission has acknowledged that in the global context ‘60 percent of the world’s ecosystems that produce food are under threat’. And, consequently, it has conceded that meeting world food demand based on current production methods is likely to undermine any positive results achieved with regards to the ‘sustainable’ management of natural resources and environmental preservation in recent years. Undoubtedly, then, the challenge to reduce the externalities of agriculture cannot be underestimated ‘because

32 Ibid.
33 Ibid.
in the long run, sustainable production requires it’.\(^{37}\) The pressing question is how to achieve this identified goal?

Considering the many uncertainties that face modern food production, it would perhaps not be too far-fetched to suggest that an appropriate response would be to safeguard and sustain the ecological foundation of agriculture. Failing to do so could entail that the possibilities of future generations to feed themselves may be reduced or threatened. However, taking such steps to safeguard environmental resources may also have direct consequences for present generations, as it could require taking land out of production, possibly causing the loss or adaptation of livelihoods, reduced output of primary products and higher commodity prices, to name a few possible outcomes. These sometimes conflicting dilemmas reveal some of the complex socio-economic dynamics of agriculture and food production, as well as the competing interest and priorities that must be taken into account for the purpose of devising balanced and coherent agricultural policies. Likewise, they highlight the many difficulties that arise with regards to taking political and legal action at the EU level.

In practice, responding to these challenges may require a multitude of strategies and although there is general agreement with the proposition that approaches to sustainable agriculture should be ‘flexible and not prescribe a concretely defined set of technologies, practices or policies’,\(^{38}\) it is necessary to emphasise one major caveat in relation to the arguments submitted here; namely that these technologies, practices and policies must nonetheless be informed and underpinned by a moral and legal imperative to safeguard ecological resources for the benefit of food security for current and future generations.\(^{39}\) In other words, they must adhere to the fundamental principle of ecological sustainability, which has been described by Kim \textit{et al} as a ‘Grundnorm’ of international environmental law that has the critical function of guiding the formation of law and governance.\(^{40}\) It follows that although sustainable agriculture is not envisioned along particular lines, such conceptual and practical flexibility must arguably be limited and shaped within the

\(^{37}\) Benton (n 11) 8.
\(^{38}\) Pretty \textit{et al} (n 15) 6.
\(^{39}\) Bosselman (n 17) 31-32.
bounds of what is ecologically viable and sustainable.\textsuperscript{41} As is further elaborated in the latter part of this Chapter, this would require an ecocentric focus that has thus far been lacking under the current development paradigm, which continues to endorse anthropocentric growth models and to emphasise the socio-economic dimensions of farming and food security. Before doing so, however, it is necessary to first explore the main elements of sustainable development and the impacts that they have had for the formulation of sustainable agriculture as the focal CAP objective tasked with striking a balance between production and environmental protection.

3.2.3 Framing the Objective of Sustainable Agriculture under the Current Development Paradigm

When EU institutions refer to sustainable agriculture, it is important to note the context in which the on-going ‘sustainability’ paradigm is anchored, namely that of sustainable development. Over the years, sustainable development goals have permeated most, if not all, fields of EU policy-making and the CAP has been no exception.\textsuperscript{42} The background leading up to the publication of the Bruntland report\textsuperscript{43} and the EU’s subsequent endorsement of its formulation of sustainable development are well known.\textsuperscript{44} Yet, there has been limited debate about its wider implications for how the objective of sustainable agriculture has been adopted and pursued at EU level.\textsuperscript{45} This is of some potential significance, as the way in which this goal is formulated is likely to impact upon how legal instruments aimed at providing agri-environmental public goods are designed and targeted under the CAP. Indeed, considering its geographical scope and coverage, environmental policy measures have

\textsuperscript{41} H. C. J. Godfray \textit{et al} (n31) 814.
\textsuperscript{42} For an overview of local and regional sustainable development plans, see, Research Institute for Managing Sustainability, Contributions of the Regional and Local Authorities to Sustainable Development Strategies (European Union, Brussels, 2009).
\textsuperscript{43} Report of the World Commission on Environment and Development (n 23).
\textsuperscript{44} The main definition of sustainable development being: ‘Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs’.
\textsuperscript{45} For recent contributions to the debate, see, T. Kaphengst, Towards a Definition of Global Sustainable Land Use? A Discussion on Theory, Concepts and Implications for Governance, Discussion Paper (Global Lands, 2014); A. Buckwell \textit{et al}, Sustainable Intensification of European Agriculture, (RISE Foundation, Brussels, 2013).
the potential to impact considerably on the land management and production practices of farmers across Europe (and beyond).\footnote{D. Baldock, J. Dwyer, J. Sumpsi Vinas, Environmental Integration and the CAP: A Report to the European Commission DG Agriculture (Institute of European Environmental Policy, London, 2004)}

As already noted, the EU’s preoccupation with sustainable agriculture is often traced back to the 5th EAP of 1993, which attempted to lay down a road map towards more ‘sustainable’ development and singled out agriculture as a main source of environmental degradation and one of the sectors most in need of reform.\footnote{Council of the European Union (n 3) 35.} As will be further detailed below, these changes have largely taken place since the 1980s through EPI, which requires that environmental protection be integrated ‘into the definition and implementation of the Union policies and activities, in particular with a view to promoting sustainable development’\footnote{Article 130(r) of the Single European Act. Now Article 11 TFEU.}.\footnote{European Commission, A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development COM (2001)264 final, 14.} Moreover, the EU’s first major sustainable development strategy, the so called Göteborg Strategy of 2001, stressed that the environmental integration plans of the various sectoral policies (including the CAP) ‘should be consistent with the specific objectives of EU sustainable development strategy’.\footnote{Ibid.}

It follows that the CAP, being one of the EU’s most important and long-standing policies, has slowly come under pressure to contribute towards the goal of sustainable development by addressing the negative environmental costs of production agriculture.\footnote{Ibid.} A key policy response to this imperative has been the formulation of sustainable agriculture, as the main CAP objective tasked with creating ‘the desired relationship between agriculture and the environment’.\footnote{European Commission COM (99) 22 (n 4) 6.} Indeed, the Commission has clearly emphasised that the underlying notion of ‘sustainability’ in this context is directly linked to that of sustainable development.\footnote{Ibid.} Accordingly, the objective of sustainable agriculture under the CAP framework has been described as being aimed at preserving ‘the overall balance and value of the natural capital stock and a redefinition of short, medium and long-term considerations to reflect real socio-economic costs and benefits of consumption and conservation’.\footnote{Ibid.}
This position also reflects one of the core conceptual features of the sustainable development paradigm, namely the notion that the *social, economic* and *environmental* challenges of contemporary society may be balanced to create ‘sustainable’ outcomes and continued growth-based development.\(^{54}\) Consequently, one of the central questions surrounding the three-part concept has been how to actually carry out this balancing act in environmentally meaningful ways. In legal terms, such concerns have partially been addressed by environmental legislation, as well as the development and recognition of principles such as the polluter pays principle, the principles of prevention, precaution, and inter-generational equity.\(^{55}\) However, Avilés has pointed out that these principles have been of limited use in striking such balances, due, in part, to their inherent contradictions and uncertainty as to which considerations that should bear the greatest weight.\(^{56}\) Furthermore, important legal and conceptual questions remain as to what constitutes ‘a high level’ of environmental protection; the circumstances under which environmental concerns ought to outweigh economic and social ones; and how these should be measured and prioritised?

There are few EU policy areas in which these three elements of sustainable development appear to be in such potential conflict as under the CAP. Indeed, as already seen, Article 39(1) TFEU tasks the EU institutions with realising the socio-economic objectives of the CAP including; increasing agricultural productivity, stabilising markets and ensuring that products reach consumers at reasonable prices, while also providing a fair standard of living for the farming community. Importantly, the provision makes no mention of environmental aims or considerations, with the effect that the fundamental Treaty objectives of the CAP, remain highly committed to the economic and social aspects of EU agricultural policy.\(^{57}\) As will be seen below, however, these tendencies have definitely been tempered by the integration principle,

---


\(^{57}\) Article 39 TFEU.
which has been growing feature of EU law since the mid-1980s. In order to further develop this argument, the following section explore the main legal and normative dimensions of sustainable development before considering the process of EPI, which has been a primary vehicle for the concrete implementation and transposition of the current development paradigm within the context of the CAP framework.

3.3 The Imperative of Sustainable Development: A Driving Force behind the Integration of Environmental Objectives into the CAP

The principle of sustainable development has been one of the most defining features of European environmental law and policy since the late 1980s. Following its inclusion in the Treaty of Amsterdam, it has asserted its position as a fundamental principle of EU law and been ascribed a ‘VIP position’ at the very front of the Treaties, by virtue of Article 3 TEU. According to subsection (3) of that provision, the internal market:

‘shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment’.

In addition to the internal focus of sustainable development, Article 3(5) TEU states that the Union shall contribute to nothing less than ‘the sustainable development of the earth’, which gives expression to the external dimensions of the objective. Hence, as already intimated, the Treaty basis for sustainable development has played a fundamental role in defining both the external and internal polices of the EU, such

---

58 It was first incorporated in 1985 as a Treaty provision under Article 130(r) of the Single European Act.
60 This is further amplified by Article 21(2)(d) TEU, which requires that ‘[t]he Union shall define and pursue common policies and actions, and shall work for a high degree of cooperation in all fields of international relations, in order to: foster the sustainable economic, social and environmental development of developing countries, with the primary aim of eradicating poverty.'
as the CAP. However, Article 3 does not specify how sustainable development objectives relate to such policies, nor does it provide a detailed definition to clarify the legal scope of the concept. For these reasons, among others, it is necessary to look to additional Treaty provisions, as well as some relevant case law providing guidance on how the objective may be transposed into secondary law and policy.

In particular, it is necessary to consider Article 11 TFEU, which has been the main vehicle for operationalising the general Treaty objective of sustainable development set out in Article 3 TFEU. Commonly referred to as the integration principle, Article 11 TFEU, gives expression to a general principle of EU law and states that:

‘Environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development’.

As will be further discussed below, the integration principle was conceived at an early point in European environmental policy-making and was formally incorporated into EU law in 1985, under Article 130(r) of the Single European Act.\(^61\) However, its real utility has arguably been propelled by its specific use as a legal mechanism and principle aimed at achieving the Treaty objective of sustainable development. Indeed, European institutions have often highlighted that the ‘integration of environmental protection requirements into other policy areas is regarded as a key means of achieving sustainable development’.\(^62\) Thus, together with other EU environmental principles, such as that of precaution, prevention and the polluter pays,\(^63\) the principle

\(^{61}\) The idea of environmental integration was highlighted in the Community’s first EAP. See, Commission of the European Communities, ‘First Communication of the Commission about the Community’s Policy on the Environment’, SEC (71) 2616 final; This was incorporated as a Treaty provision under Article 130(r) of the Single European Act in 1985.


of integration has been a main Treaty source of environmental protection for the purposes of ‘promoting sustainable development’.

Moreover, the Treaty of Lisbon has added a further dimension by virtue of Article 6(1) TEU, which incorporates the Charter of Fundamental Rights and thereby Article 37 of the Charter.\(^{64}\) This echoes the contents of Article 11 TFEU in the human rights context by stipulating that ‘[a] high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development’.\(^{65}\) However, despite the elevated status of environmental protection as a core feature of the EU’s sustainable development paradigm, a few issues remain problematic with regards to the level of protection that has thus far been (un)attained by way of EPI under the CAP and other EU policies.

First, it must be stressed that the integration of environmental concerns into EU policies does not automatically guarantee environmental protection. This point is particularly illustrated by the lack of hierarchy that exists between the integration principle and other general principles of EU law.\(^{66}\) In other words, the requirement to integrate environmental protection and considerations into EU policies does not necessarily take precedence over other legal principles or Treaty objectives.\(^{67}\) Hence, the CJEU has held that – with regards to what is now Article 11 TFEU – it ‘does not provide that Community environmental policy is to take precedence over other Community policies in the event of a conflict between them’.\(^{68}\) However, the Court has also clearly explained that environmental policy considerations may nonetheless be prioritised and implemented through legal measures that conform to general principles of EU law, such as non-discrimination.\(^{69}\)

In the context of the CAP, this position was elaborated in *The Queen (on the application of Mark Horvath) v. Secretary of State for Environment, Food and Rural*
Affairs. The case involved the question of whether England, in implementing the SFP and cross-compliance in particular, could impose agri-environmental measures that went beyond the corresponding obligations of recipients in other parts of the UK. Amongst other things the claimant, Mr. Horvarth, argued that the requirement to maintain public rights of way was discriminatory, as it went beyond the minimum standards set for farmers by the devolved governments of Northern Ireland, Scotland and Wales. However, both the Court and the Advocate General (AG) decisively rejected the claim and, in so doing, also clarified the scope of the integration principle as the basis for implementing legal measures intended to provide the environmental framework of EU policies.

For instance, AG Trstenjak reiterated the instrumental role of Article 11 TFEU for achieving the aims set out in Article 3 TEU (including sustainable development). Not least, given the importance of the integration principle he argued that it ‘cannot be ruled out that in certain situations the protection of the environment can take precedence over the other aims of the CAP on the basis of that Treaty provision’. Likewise, the CJEU concluded that environmental protection, by virtue of article 11 TFEU, forms a part of the CAP and that the EU ‘legislature may therefore on the basis of Articles 36 EC and 37 EC [now Articles 42 and 43 TFEU], decide to promote environmental protection’. Furthermore, it added that measures aimed at achieving such protection and adopted under the agricultural title, were ‘not restricted to those pursuing agricultural objectives’.

These judicial clarifications are important in that they not only underscore that environmental concerns must be integrated into EU policies as a matter of law, but also that they may take precedence over social and economic considerations in order to give effect to the Treaty objectives expressed in Article 3 TEU. However, as already indicated, this does not settle the question of hierarchy and whether environmental protection should take precedence when such considerations clash with socio-

---

72 Opinion of Advocate General Trstenjak (n 69), paragraph 56.
73 Ibid.
74 Ibid, Paragraph 29.
75 R (Mark Horvath) v Secretary of State for Environment, Food and Rural Affairs (n 70), paragraph 29.
economic demands and objectives. Thus, even though there is a requirement to integrate environmental concerns into EU policies, this does not guarantee that such concerns will take priority in cases where competing social and economic objectives may exist or stand in direct conflict with environmental ones.\textsuperscript{76} This raises serious questions about the effectiveness of environmental integration and its ability to ensure the level of protection that is needed to secure ecological and agricultural resources for the benefit of long-term food security. As will be elaborated in the final part of the current chapter, the suggestion is not that environmental considerations should in any way take automatic precedence in cases of conflict. Rather, the main argument is that despite the conceptual equivalence that has been created by the sustainable development paradigm between environmental, social and economic considerations – the sobering reality is that ecological conditions provide the foundation for socio-economic ones and not the other way around.\textsuperscript{77}

In connection with the above made points, a central submission of the current thesis is that the integration – rather than prioritisation – of environmental concerns has been indicative of the limited, or ‘weak’, commitment to ecological sustainability that is inherent to the sustainable development paradigm and enshrined in the EU Treaties.\textsuperscript{78} This argument will be further elaborated throughout the chapter, but at present it may be noted that although the normative framework of sustainable development has provided a basis from which to pursue and formulate environmental protection measures, the paradigm remains strongly committed to the growth-driven models of development that have accelerated the anthropocentric impacts to the Earth’s ecological systems.\textsuperscript{79} Consequently, EPI has not infrequently been hailed for its potential to spur economic growth and provide new ‘green’ market opportunities, which has prompted some to question ‘whether the integration process leads to [genuine] sustainable development or just to better coordination’.\textsuperscript{80}

In this light, the choice to adopt policy integration as the main approach to environmental protection must also be placed within the wider context of what was

\textsuperscript{76} However, legitimate environmental concerns may undoubtedly override fundamental EU freedoms and socioeconomic concerns as an outcome of EPI. See, for instance; C-2/90 \textit{Commission v Belgium Case [1990] ECR I – 4471}, Judgement, paragraphs 28-30.

\textsuperscript{77} See, Bosselmann (n 17).

\textsuperscript{78} \textit{Ibid.} 50-57.

\textsuperscript{79} \textit{Ibid.} 29-31.

\textsuperscript{80} \textit{Ibid.} 189.
originally the Common Market. Considering that these objectives were largely pursued through economic integration from an early point, it is perhaps unsurprising that a similar approach was adopted in in the field of environmental policy. For instance, it has been suggested that the ‘[h]armonisation of environmental standards reflect[ed] the need to avoid green trade barriers and the perception that unregulated environmental externalities constituted an unfair source competitive advantage for polluting states’. Indeed, as is further discussed below, the very purpose of European environmental policy prior the Single European Act (SEA) was to contribute towards the ‘harmonious development of economic activities and a continuous and balanced expansion’. One interpretation, therefore, is that the choice to pursue integration does not flow from a genuine or principled commitment to environmental protection. Instead it may be argued that the integration of environmental objectives and the harmonisation of environmental legal standards may largely be seen as stemming from a political will to deepen the overall level of economic integration between EEC MSs.

Undoubtedly, this is relevant to the way in which environmental policy has been pursued and the question of whether integration has been able to address agricultural externalities in a meaningful way. Nevertheless, notwithstanding the aforementioned criticisms, EPI has played a fundamental role in shaping the CAP over the past decades and was arguably of central importance for determining the basic structure of the agri-environmental measures proposed by the Commission during the course of the Cioloş reforms. As will be detailed in Chapters 4, the decision to pursue further EPI through the introduction of various ‘greening’ measures was by far one of the most contentious and debated issues of the entire negotiation process. In order to fully assess the substance of the final regulations it is therefore imperative to first take account of some of the major political and legal developments that paved the way for these outcomes. Against this background, the following sections offer a detailed account of EPI under the CAP and the agri-environmental framework that was established and developed prior to the 2013 CAP reforms. The

81 J. Golub, Global Competition and EU Environmental Policy (Taylor and Francis, 2002) 2.
82 Article 2 EEC.
85 See Chapter 4.
discussion will then focus on the extent to which this framework has contributed towards the objective of sustainable agriculture and long-term food security, before considering the details of how sustainability was incorporated in the legislative proposals that were delivered by the Commission in 2011.

3.4 Environmental Policy Integration under the CAP: (Re)Linking Agricultural Policy to the ‘Environment’?

The notion of environmental – in addition to market - integration can be tentatively traced back to the early 1970s when the Community published its very first communication on environmental policy.\(^{86}\) Even though this initial document did not make specific reference to the terms EPI or greening, it did indeed propose that environmental considerations should constitute a primary and integrated aspect of the development of economic policies throughout the Community.\(^{87}\) Thus, even at this early stage in environmental policy-making, the Community revealed a clear preference for the integration principle as a means of reaching its stated objectives.

The first environmental Communication also alluded to some of the main obstacles to imposing environmental obligations on European farmers. For instance, with regards to the prospects of creating instruments aimed at curbing agricultural pollution, the Communication stressed that it would be of utmost priority that such Community-wide action be ‘allied with a thorough appraisal of ways of offsetting the resultant additional costs for agricultural producers’.\(^{88}\) As will be further discussed at various points below, this very early enunciation is indicative of the conflicting considerations that have faced every subsequent introduction of environmental measures under the CAP – namely the question of how to balance the genuine need to regulate the environmental impacts of agriculture, while also ensuring that the cost of compliance is economically viable for farmers.\(^{89}\)

The initial Communication was followed by an invitation from the European heads of state at the Paris Summit of 1972 for the Community to adopt its first

---


\(^{87}\) Ibid, 3.

\(^{88}\) Ibid, 18.

\(^{89}\) The latter, of course, being one of the main policy objectives set out in Article 39 TFEU.
environmental action program (EAP),\(^90\) which was delivered the following year in the wake of the UN's Stockholm Declaration.\(^91\) The latter constituted one of the first major international attempts to coordinate environmental policy and established a form of road map aimed at providing nothing less than ‘inspiration and guidelines to the governments and peoples of the world’\(^92\) in response to an increasing number of global environmental problems.\(^93\) Indeed, the European institutions would appear to have been highly susceptible to the inspirational tone of the Declaration, considering that the first EAP mirrored several of the principles contained therein. For instance, the EAP incorporated Article 13 of the Declaration, which provided that “[s]tates should adopt an integrated and coordinated approach to their development planning so as to ensure that development is compatible with the need to protect and improve the environment”\(^94\).

With regards to the transposition of these principles, the first piece of legislation to expressly mention the link between agricultural activity and the environment was Directive 75/268/EEC, also known as the Less Favoured Area (LFA) directive.\(^95\) It is, however, important to note that despite the explicit acknowledgement of this link, the Directive did not ‘represent a break-through in terms of integrating environmental objectives into the CAP’.\(^96\) Rather, the basic framework of the Directive had been negotiated by the UK as part of its accession agreement and was exclusively aimed at compensating farmers operating in areas where ‘natural handicaps’ prevented the high levels of productivity and output that served to maintain farm incomes in other parts of the Community.\(^97\) Thus, any positive environmental outcomes must, arguably, be regarded as incidental.

Notwithstanding the potential environmental benefits of implementing the

---

\(^93\) United Nations (n 91).
\(^94\) Ibid, Article 13.
\(^97\) Preamble (1).
LFA directive, little else happened by way of EPI under the CAP until the mid-1980s. One major exception, however, stemmed from the obligation to implement Council Directive 79/409/EEC, on the protection of wild birds (the Wild Birds Directive) throughout the Community. As the first piece of conservation legislation, it aimed at harmonising the protection of wild birds across the EEC territory and required MSs to take a number of steps to this effect. Importantly, it obliged MSs to ‘to preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species’ of naturally occurring wild birds. Moreover, this objective was mainly to be pursued through the creation of special protection areas (SPA) in which ‘appropriate steps to avoid pollution or deterioration of habitats or any disturbances affecting the birds’ had to be taken. It followed that the accurate transposition of these objectives and, especially, the creation of SPAs, would have to ensure that farming – and land use – practices adhered to the conservatory measures prescribed by the EEC institutions.

Although the Directive did not specifically mention the role of agriculture, the point had been raised in the Community’s first EAP, which formally invited the Commission to draw up the first piece of conservation legislation. In particular, it noted that the alarming decline in bird populations could lead to the proliferation of crop parasites, which, in turn, could induce the increased use of insecticides ‘harmful to man and the natural environment.’ Consequently, the EAP explicitly highlighted the vital ecological functions of birds in the context of farming and envisaged that their protection would have a positive effect on the environmental resources relied upon for food production. In doing so, it also recognised the environmentally damaging effects of agriculture, which were becoming increasingly apparent.

---

99 Article 3(1).
100 Article 1(1).
101 Article 4(4), later repealed due to strict interpretation of CJEU.
102 It is also worth noting that the Wild Birds Directive of 1979 provided very stringent criteria with regards to the designation of special protection areas (SPA), which resulted in a long list of infringement proceeding being brought by the Commission against individual MSs. For instance, in ‘Leybucht Dykes’ the EJC held that only ornithological arguments would normally be accepted for supporting the choice or omission to include sites as SPAs. This was supported by the fact that the Directive did not provide exemptions to the obligations laid out in Article 4. In that particular case, however, the court was willing to accept that other considerations may affect the designation of sites under exceptional circumstances. C-57/89 European Communities v Federal Republic of Germany [1989] 1-924.
103 Commission of the European Communities (n 86) 40.
Unfortunately, however, the Wild Birds Directive had little immediate effect on farming, as EU MSs were very slow to transpose it into national legislation.\textsuperscript{104} As late as 1993 the Commission recognised that ‘inadequate protection of habitats [constituted] the most serious problem met in applying Directive 79/409/EEC’.\textsuperscript{105} Indeed, it noted that more than a decade past the implementation deadline only Denmark appeared to be in, more or less, full compliance with the directive.\textsuperscript{106} And, although it was subsequently complemented by the Habitats Directive,\textsuperscript{107} the lack of proper implementation of the Wild Birds Directive by most MSs entailed that many European farmers remained largely unaffected by its obligations until the introduction of compulsory cross-compliance in 2005.\textsuperscript{108}

In addition to the slow pace of transposition, moreover, environmental harmonisation during this period also suffered from the lack of explicit legal competences as the basis for such action. Indeed, the EEC Treaty merely referred to the need to ensure the ‘harmonious development of economic activities…and a continuous and balanced expansion’ but did not mention the environment.\textsuperscript{109} Thus, Community action in this field often relied upon Articles 100 EEC and 235 EEC (now Articles 115 and 253 TFEU), which were mainly concerned with the proper functioning of the internal market, rather than environmental protection per se. Although several important pieces of legislation including the Wild Birds Directive were adopted under these two Articles,\textsuperscript{110} the obvious lack of a Treaty basis arguably prevented the Community from pursuing more far-reaching harmonisation.

\textsuperscript{105} European Commission (n 104) 57.
\textsuperscript{106} Ibid, 43.
\textsuperscript{109} Article 2 EEC.
3.4.1 The Single European Act: Getting the Community’s Environmental Act Together

This situation was fundamentally altered by the ratification of the SEA in 1985, signalling the official start to European environmental policy. It had taken almost three decades to muster the political will to amend the Treaty of Rome and provide explicit competencies to the Community in the field of environmental protection. The outcome was a new title on the environment, which entailed that environmental regulation could, from then on, be pursued without the need to justify such action as harmonising measures. Importantly, the new title included Article 130(r)(2), which essentially codified the previously non-binding integration principle by requiring that ‘[e]nvironmental protection requirements shall be a component of the Community’s other policies’.

However, Sands has insisted that this formulation went beyond the mere codification of existing environmental law. Instead, he argues that it ‘established a firm legal basis for its future development, in effect bringing the whole of the EC’s economic activities within the potential scope of environmental law-making’. Specifically, Article 130(r)(1) provided that EC action relating to the environment must have the objective to; (i) preserve, protect and improve the quality of the environment; (ii) contribute towards protecting human health and; (iii) to ensure a prudent and rational utilisation of natural resources.

With regards to agricultural policy, the extended scope of EC’s environmental mandate was certainly echoed by the Commission in a 1985 Green Paper, which not only focused on the control of harmful substances in the context of agriculture, but also highlighted the need to promote agricultural practices of benefit to the environment. This growth in environmental awareness also led to the introduction of a raft of environmental legislation affecting agricultural practices. One important example was the Nitrates Directive, which was itself adopted on the basis of Article

---

112 Article 130(r)(2) EEC.
114 Article 130(r)(1) EEC.
Indeed, as already noted in Chapter 1, the legislation was passed in response to the environmental, as well as, health risks posed by intensive farming and the heavy use of nitrogen fertilisers that had been part and parcel of agricultural intensification. In particular, it was hailed unequivocally introducing the polluter pays principle in the field of agriculture, in order to secure the reduction of water pollution caused by nitrates from agricultural sources, as well as, the prevention of such pollution. Hence, MSs were required to identify and designate so-called nitrate vulnerable zones (NVZ) within their territory. Alternatively, MSs could choose to designate their entire territory as NVZs, which was the preferred choice of the Netherlands, Denmark, and Finland, among others. The Directive also required MSs to establish national codes of good agricultural practice, but maintained that these would be voluntary for farmers to adhere to and therefore beyond the scope of punitive action for non-compliance.

As in the case of the Wild Birds Directive, however, the Nitrates Directive was haunted with problems of implementation and transposition from its adoption. For instance, the Commission voiced its concerns at an early point over the difficulties in monitoring the progress and outcomes of national implementation due to the very limited – and often entirely lacking – data provided by a significant number of MSs for monitoring purposes. These and other issues have resulted in high volumes of litigation over the years and the ECA recently noted that infringement proceedings regarding the proper application of the Nitrates Directive, as well as, cases challenging the appropriateness of action programs were open against eight MSs as late as in 2013 – twenty years after its adoption. Moreover, the ECA had earlier pointed out that the lack of implementation by MSs, as well as ‘the absence of adequate Codes of

---

117 Article 1.
118 Article 3(2).
119 Article 3(5).
122 European Court of Auditors, Integration of EU Water Policy Objectives with the CAP: a Partial Success, Special Report No 4 (European Court of Auditors, Luxembourg, 2014) 24, Box 5.
Good Agricultural Practice for much of Europe’s farmland, create a risk of widespread local incompatibility…with the EC Treaty’s polluter pays principle, ie the European taxpayer is meeting some costs which should properly be borne by the farmer’. 123

The Nitrates Directive also included a number of concessions, such as the ability to make compensation payments aimed at supporting farmers that incur expenses as a consequence of complying with national implementing rules. However, despite the potential to cast doubt on the operation of the polluter pays principle, some have argued that without them, the establishment of water protection zones ‘would have been very difficult’.124 As will be further discussed below, the general implementation of the Nitrates Directive was enhanced by the subsequent introduction of cross-compliance, but serious shortcomings remain with regards to the outcomes of these measures and the actual targets that must be met in order to reduce the harmful effects of diffuse nitrate pollution.

Notwithstanding the importance of the aforementioned directives that were adopted following the ratification of the SEA and aimed at curbing the environmental effects of agriculture, environmental integration under the CAP arguably remained somewhat limited in character. For instance, Council Regulation 797/85 on improving the efficiency of agricultural structures125 authorised MSs ‘to introduce special national schemes in environmentally sensitive areas’.126 It also specified that the EAGF aid would apply in cases where production was carried out in sensitive areas, as long as production was not further intensified ‘and that the stock density and the level of intensity of agricultural production [was] compatible with the specific environmental needs of the area concerned’.127 Research has pointed out the difficulty in estimating the environmental outcomes of such measures due to unreliable and limited data collection128 and, in reality, it would appear that potential benefits would depend on determinations of stock density and level of intensification not being set to high. Either way, payments for these services would be likely to return marginal

126 Article 19(1).
127 Article 19(3).
environmental benefits, as high thresholds may require only minimal effort by the farmer and little in the way of real change.

Thus, despite the reference to environmental protection, the main aim of Council Regulation 797/85 was clearly to address various structural challenges to farming, and it furthermore failed to specify the financial arrangements of the environmentally focused schemes. Although this shortcoming was partly addressed by Council Regulation 1760/87 – by allowing co-financing for such measures – the uptake remained restricted to a small number of MSs. Against this background, Lenschow has pointed out that these structural regulations not only constituted ‘a minimal counterweight to the environment unfriendly guarantee section of the CAP [but they also] suffered from a northern bias by focusing on side-effects of intensive production and neglecting issues such as soil erosion, desertification and forest fires which were concerned primarily with southern MSs’. Moreover, she argued that the failure to genuinely prioritise environmental measures within the CAP framework, at the time, could be explained ‘by the firmly institutionalised traditional structure of the CAP, preventing the radical reform necessary to remove the policy’s negative environmental externalities, and by the limited funds and political support for expanding structural adjustment measures targeted at environmental objectives’.

At the same time, public opinion was becoming increasingly critical of the CAP’s environmental costs, as well as its default propensity to account for the single largest portion of the Community budget. Not least, the desire to green the CAP was viewed by some as little more than ‘an attempt at repackaging a policy under attack into one acceptable to the growing policy community that demanded a say with respect to the CAP’s future’. Furthermore, Baldock and Lowe have pointed out that there was a need to give some ‘substance to the formal commitments made in various policy documents to integrate environmental considerations into agricultural

---

131 Ibid., 161. An overview of the institutional framework is beyond the scope of the current Chapter, but see, Also, with regards to the limited political will on MS level see also: R. Fennel, ‘Reform of the CAP: Shadow or Substance?’ (1987) 26 (1) Journal of Common Market Studies 61.
133 Lenschow (n 130) 167.
The response by Community institutions was to develop the CAP’s agri-environmental instruments through successive rounds of policy reform, with each of these providing novel opportunities to justify continued support to agricultural producers based on their central role in delivering the public goods at the heart of the CAP’s environmental objectives.

3.4.2 Building the Foundation of the CAP’s Agri-Environmental Framework: The Opportunities of Early Reform

As mentioned in Chapter 1, the MacSharry reforms of 1992 were largely aimed at reducing the CAPs budgetary burden by restructuring many of the policy’s market regimes. In addition to this internal impetus, moreover, the first major overhaul of the Community’s agricultural policy was seen as a necessary response to the external pressures that had been mounting from international trading partners for several years, most notably from the United States.\(^{135}\) To this effect, the main outcome of the reforms was to reduce the level of guaranteed price support, while increasing the level of producer support in the form of direct and coupled payments.\(^{136}\)

The reform package was also accompanied by Council Regulation 2078/92 on agricultural production methods compatible with the requirements of the protection of the environment and the maintenance of the countryside.\(^{137}\) In contrast with the structural regulations of the 1980s, however, Regulation 2078/92 made it compulsory for MSs to implement agri-environmental plans across their territory for the first time. Article 1 of the agri-environmental regulation listed seven objectives that national or regional schemes could be designed to achieve.\(^{138}\) These included the reduction of agricultural pollution; extensification of arable, sheep and cattle farming; improved land use practices; addressing land abandonment; long-term set-aside; improved land management for public access and leisure, as well as; training and education for farmers involved in certain types of farming. In all cases, except for that of set-aside,

---

\(^{134}\) Baldock, and Lowe (n 129) 15.


\(^{138}\) Article 1.
enrolment required farmers to commit to the program objectives for a period of 5 years. In contrast, Article 4 specified that farmers seeking remuneration for setting aside land would have to undertake to do so for a period of no less than 20 years. Moreover, regulation 2078/92 also improved the financial arrangements for supporting agri-environmental measures by committing the Community to cover 50 percent or 75 percent of the cost, depending on the region in question.139

Despite these financial incentives, however, the uptake by farmers remained low in several parts of the Community, severely limiting the reach of the agri-environmental programs.140 With regards to the set-aside objective, for instance, the Commission noted that the 20-year obligation to take land out of production served to dissuade enrolment where such schemes were offered.141 Furthermore, concerning those schemes that were able to attract enrolment by farmers, many questions remained about their environmental benefits. In particular, it became apparent that considerable differences existed regarding the efforts required by farmers in order to fulfil the objectives of individual schemes. Potter, for instance, argued that many programs had been defined by broad measures, which allowed farmers to claim compensation in return for minimal efforts and without any meaningful consideration of the environmental outcomes of such enrolment.142 This stood in sharp contrast to the Commission’s claims that the ‘premia should be regarded as compensation for the costs of delivering environmental public goods and [could] not be regarded as subsidies in an economic sense’.143

Notwithstanding such criticism, the EU continued to emphasise Regulation 2078/92 as constituting an important step towards improving the environmental performance of the CAP.144 In real terms, however, the environmental outcome of 1992 reforms were arguably limited in that, while MSs were required to establish agri-environmental schemes on the one hand, it remained completely voluntary for farmers to enrol and, thereby, subject themselves to the relevant obligations. This prompted

139 Article 8.
143 European Commission (n 141).
144 European Commission (n 4) 6.
some to argue that despite price cuts, the MacSharry reforms and its corresponding regulations were nonetheless committed to ‘paying off farmers for any concessions on their part’ rather than achieving tangible environmental outcomes.  

As already indicated, another important outcome was the introduction of compulsory set aside schemes under Council Regulation 1765/92. These obligations mainly targeted large-scale arable farmers by compensating them for setting aside a fixed proportion of their land in an attempt to reduce their level of production. However, despite successfully tempering the output of cereals, in particular, it was relatively apparent that environmental concerns did not figure prominently in the design of the schemes. For instance, Jack has noted that the implementing regulation allowed for rotational set aside with short duration times, which may have had fewer environmental benefits than taking land out of production on a long-term basis. Moreover, despite being required to ‘apply appropriate measures in favour of the environment that correspond to the specific situation in the area set aside’, he argued that MSs were given too much discretion for this obligation to bear meaningful weight.

3.4.3 Deepening the Level of Environmental Policy Integration and Enforcing the Commitment to Sustainable Development

Starting in 1992, the same year as the MacSharry reforms, the international and political impetus to increase the CAP’s environmental dividends was significantly propelled by the adoption of the Rio Declaration and the near universal endorsement of the sustainable development principle expressed therein. As mentioned in the

---

145 Lenschow (n 130) 170.
150 Jack (n 26) 81-82.
151 For a comprehensive overview see Bosselmann (n 17) Chapters 2 and 3.
introductory Chapter, the latter placed a direct obligation on contracting parties to integrate the objectives of sustainable development at every feasible level of governance and area of policy. In the European context such was reflected by the inclusion of sustainable development as one of the Union’s overarching objectives following the constitutional amendments made by the Treaty of Amsterdam in 1997. Moreover, the imperative to integrate environmental considerations within the framework of EU policies was decisively formulated by the Council when it met in Cardiff the following year.\textsuperscript{152} In particular, it endorsed the principle that all major policy proposals submitted by the European Commission should include a comprehensive environmental assessment of their impact.\textsuperscript{153} It also called for the various Council formations to devise their own strategies for pursuing the goals of sustainable development and environmental policy integration.\textsuperscript{154} The Agricultural Council, being one of the most important of these formations was requested to initiate this process as it engaged in the Agenda 2000 negotiations – the outcome of which would determine the CAP framework for the subsequent programming period and beyond.

Undoubtedly, the Cardiff mandate set in motion a political process that was instrumental in translating the EU’s international commitment to sustainable development into concrete and strategic policy objectives. This was furthered under the banner of Agenda 2000, which broadly sought to adapt Community policies to meet a number of external and internal changes, as well as making the necessary structural adjustments to accommodate the approaching Eastern accession to the Common Market. In this light, the CAP was a particularly important area of reform and although the Commission recognised the need to address a number of these structural issues, it sought the creation of ‘agri-environmental instruments to support a sustainable development of rural areas and respond to society’s increasing demand for environmental services’\textsuperscript{155}.

Notwithstanding the green rhetoric that accompanied the institutional negotiations of Agenda 2000, the legal outcomes pertaining to the CAP may, in many cases

\textsuperscript{153} Ibid, 6.
\textsuperscript{154} Ibid.
\textsuperscript{155} European Commission (n 147) COM (97) 2000, 33.
ways, be seen as no more than an extension of the process of market reorientation that was initiated during the MacSharry reform.\footnote{It should be stressed that the Agenda 2000 package delivered reform in a number of areas and introduced some 20 pieces of legislation, whereof the CAP was one of the main foci for reform.} For instance, Council Regulation 1253/99\footnote{Council Regulation (EC) 1253/99, [1999] OJ L160/18.} further lowered the intervention price for cereals, while Council Regulation 1254/99\footnote{Council Regulation (EC) 1254/99, [1999] OJ L160/21.} aimed to reduce the oversupply of beef by lowering the basic price in that sector. Likewise, the extension of milk levies and quotas featured prominently, as the need to curb overproduction in this sector remained a central challenge to widespread market reform.\footnote{Council Regulation (EC) 1255/99, [1999] OJ L 160/73.} At the same time, the reforms sought to expand the framework of direct support, as a continuation of the move from price to producer support that was initiated in the early 1990s. Indeed, there was a sustained focus on meeting the Community’s obligations to liberalise agricultural trade under the WTO agreements, which was similarly the case during the previous reform, as discussed in Chapter 1.\footnote{European Commission (n 147) COM (97) 2000, 12.} However, despite its main market foci, the Agenda 2000 reforms also introduced a number of notable changes to the CAP’s environmental orientation.

For instance, with regard to rural development, Council Regulation 1257/99 constituted the formal introduction of the CAP’s second Pillar, which consolidated several of the previous structural policies, as well as LFA payments\footnote{Council Regulation (EC) 1257/99, [1999] OJ L160/80, Articles 13-21.} and support for agri-environmental measures aimed at pursuing a broad range of Community objectives relating to agriculture and the environment.\footnote{\textit{Ibid}, Articles 22-24.} This was in line with prior proposals by the Commission to evolve the Community’s rural development policy to create a greater ‘balance between agricultural activity, other forms of rural development and the conservation of natural resources’.\footnote{European Commission, ‘Study on alternative strategies for the development of relations in the field of agriculture between the EU and the associated countries with a view to future accession of these countries’ Agricultural Strategy Paper prepared for the European Council, Madrid 15-16 December 1995 COM (95) 607, 23.} Likewise, the Commission sought to justify its continued support for LFA measures with reference to their role in maintaining threatened agricultural systems in marginal areas where such activity would otherwise cease. In particular, it stressed that the agri-environmental measures...
under the second pillar were envisaged as forming a key part of efforts to preserve and protect farm dependent biodiversity in these areas.\textsuperscript{164}

In order to meet the objectives of the Community’s rural development policy, and in line with the principle of subsidiarity, MSs were allowed considerable flexibility in designing their rural development programs (RDPs). This was, in part, down to a larger move to decentralise the management of the EAGGF and give the MSs an increased role in determining how to spend the contents of their national envelopes for Pillar I and Pillar II measures. However, notwithstanding the administrative and managerial powers that were extended to national authorities under Regulation 1257/1999, Article 43(2) of the same regulation served to limit this discretion with regards to agri-environmental measures, by requiring MSs to apply them ‘throughout their territories and in accordance with their specific needs’.\textsuperscript{165}

Thus, without exception, RDPs designed at national or regional level had to include agri-environmental schemes as part of the programming offered to farmers on a five-year contractual basis, starting in the year 2000.\textsuperscript{166} As a continuation of earlier policy, the Community sought to offset some of the costs to MSs by offering to co-finance agri-environmental measures at a rate of up to 75 per cent in so-called Objective 1 areas and 50 per cent elsewhere.\textsuperscript{167} However, Article 35 specified that Community support would be provided from the Guarantee – rather than Guidance – section of the EAGGF, which ultimately served to blur the lines between the funding and objectives of the two pillars.\textsuperscript{168}

The Agenda 2000 reforms also sought to address the relationship between direct payments, under the CAP’s first pillar, and the environmental outcomes of subsidised agricultural production. To this effect, Council Regulation (EC) 1259/1999 (the Horizontal Regulation)\textsuperscript{169} established common rules for direct support and was hailed as an important milestone in EU law-making. This was particularly due to its

\begin{itemize}
  \item \textsuperscript{164} European Commission (n 4) COM (99) 22, 16.
  \item \textsuperscript{165} Article 43(2) Council Regulation 1257/99 (n 161).
  \item \textsuperscript{166} Ibid, Article 23.
  \item \textsuperscript{167} The difference in funding was based on the division between so called Objective 1 and Objective 2 regions in Council Regulation (EC) 1260/99, [1999] OJ L161/1, which laid down general provisions on the structural funds. Article 1 of this regulation defines Objective 1 areas as those whose development is lagging behind, while Objective 2 areas relate to those facing structural difficulties. This is further specified in Articles 3 and 4 of the same regulation.
  \item \textsuperscript{168} The inconsistency of this funding decision was addressed by Council Regulation (EC) 1290/2005, [2005] OJ L209/1, which moved the funding of agri-environmental measures under the second pillar to the Guidance section of EAGGF.
  \item \textsuperscript{169} [1999] OJ L 160.
\end{itemize}
successful introduction of horizontal principles, which past attempts had ‘failed to deliver’.\textsuperscript{170} Importantly, they allowed MSs to introduce ‘environmental measures they consider[ed] to be appropriate in view of the situation of the agricultural land used or the production concerned and which reflect the potential environmental effects’.\textsuperscript{171} More specifically, Article 3 offered MSs three options for linking such measures to direct payments.

The first of these allowed MSs to provide support to farmers, in the form of direct payments, in return for agri-environmental commitments established on a national or regional scale. This option relied on farmers to enrol in agri-environmental schemes on a voluntary basis, which was essentially identical to the conditions under which such schemes were offered as part of the RDPs under Pillar II. Secondly, MSs could opt to forgo the contractual approach and, instead, impose general mandatory environmental requirements, applicable to all recipients of direct payments. And, thirdly, MSs could choose to impose ‘specific environmental requirements constituting a condition for direct payments’. In sum, these three options comprised the main effort to green direct payments under Pillar I and were – together with the mandatory inclusion of agri-environmental measures under Pillar II – attributed by many commentators as signalling ‘the real start to the process of integrating environmental objectives into the agricultural policy’.\textsuperscript{172}

Notwithstanding the considerable political efforts made by EU institutions – particularly the Commission – to bring environmental protection to the fore of the Agenda 2000 process, the final agri-environmental measures left much to be desired in terms of their expected practical impacts and outcomes. In the case of Pillar I payments, the main shortcoming was arguably that the Agenda 2000 reforms had failed, once again, to impose a compulsory environmental baseline that farmers would have to observe in return for direct payments. Instead, the approach of the Horizontal regulation was to allow MSs considerable discretion in determining the type of environmental measures that they, themselves, deemed to be appropriate. As one commentator put it, ‘[t]he most important omission [was] that Member States [were]
free to introduce or not to introduce environmental protection requirements’ under Article 3 of the horizontal regulation.\textsuperscript{173} In cases where such measures were not introduced, it followed that there was no means of inducing compliance with European environmental law because a mechanism for enforcement – by reducing their payments in instances of non-compliance – simply had not been created.\textsuperscript{174} However, even in the case of such punitive measures being introduced some commentators have been careful to stress that ‘[f]ailure to obtain payments should not be a reason for non-compliance with environmental legislation’.\textsuperscript{175} In other words, a loss of payment should not in any way reduce or diminish the basic obligations that farmers are required to comply with as a matter of EU law.

The continued lack of enforcement was a particularly unfortunate outcome of the reforms, considering the unsatisfactory levels of transposition that had so far been achieved for a number of directives affecting agricultural land use. As discussed above, several key pieces of environmental legislation had consistently failed to be fully, or even partially, transposed numerous years past their initial deadlines. Consequently, many of the environmentally damaging effects of agricultural land use practices had persisted, despite direct Community attempts at regulating such practices and their outcomes. For instance, the fifth EAP highlighted that, notwithstanding, the Wild Birds Directive and the conventions of Bonn and Bern, ‘the pressures on unique or endangered biota and their habitats [were] increasing’.\textsuperscript{176} Moreover, it specified that intensified agriculture continued to be ‘one of the most important causes of reduction in biological diversity’.\textsuperscript{177} Thus, unless EU regulators took action to induce compliance by farmers, it was highly unlikely that MSs would do so voluntarily, after failing to comply with their own obligations of transposition.


\textsuperscript{174} European Court of Auditors, see European Court of Auditors, Special Report No 14/2000 on “Greening the CAP” Together with the Commission’s Replies (European Court of Auditors, Luxembourg, 2000), [2000] OJ C353/1, 3.

\textsuperscript{175} van der Bijl (n 173) 18.

\textsuperscript{176} Council of the European Union (n 3) 23.

\textsuperscript{177} Ibid.
3.4.4 The Introduction of Mandatory Environmental Standards

The status quo was considerably altered following the subsequent Mid-Term Review (MTR), which for the first time introduced mandatory agri-environmental standards that were tied to the receipt of EU funds. This had been largely facilitated by the development of the direct payments regime and the successive shift from price support to producer support during previous reforms, which ‘provided an important opportunity to ensure that farmers fulfilled more specific environmental obligations’.178 Thus, although the MTR addressed a number of significant structural and market-related issues, as noted in Chapter 1, the introduction of cross-compliance under Regulation 1782/2003 was arguably the most significant addition to the CAP’s environmental framework at the time.

This change had been partly driven by the strong internal impetus to deliver greater environmental dividends following the outcomes of Agenda 2000 and its failure to impose minimum environmental standards. For instance, the EEA suggested that although progress towards internalisation in agriculture had been ‘moving in the right direction by reducing environmentally damaging subsidies’, it was nonetheless doing so at a markedly slow pace.179 Moreover, it argued that ‘integration with a real and large scale effect on the environment has yet still to be realised’.180 This sentiment was likewise echoed by the EU in its sixth EAP, which reiterated the centrality of the integration principle and proposed that EPI should be deepened as a key aim of the next programming period.181

A key indication of the Commission’s response was delivered in the seminal 1999 Communication, Directions Towards Sustainable Agriculture, which envisaged that the greening of direct payment through cross-compliance had the potential to ‘contribute to environmental improvement and sustainable development in agriculture’ if well implemented by MSs.182 Not least, these obligations promised to be implemented across a substantial proportion of EU agricultural land, given the

179 European Environment Agency, Environment in the EU at the turn of the century (EEA, Copenhagen, 1999) 407.
182 European Commission (n 4) COM (99)22, 21.
widespread cover of Pillar I payments.

In devising these measures, moreover, the Commission argued that two main considerations ought to be taken into account. First, it stressed the need to ensure that environmental instruments did not undermine competition by unduly burdening recipients of direct payments.\(^\text{183}\) This was, in its opinion, particularly important considering the failure of markets to reward farmers for undertaking environmentally beneficial production and management practices that went beyond the legal baseline.\(^\text{184}\) Secondly, the Commission underscored the need to take into account the societal demands for environmental protection and the reasonable expectation that the polluter pays principle should apply equally to agricultural sectors.\(^\text{185}\) As will be further explored, this point was central to ensuring the CAP’s legitimacy, as it continued to consume the largest share of the EU budget. In doing so, moreover, the Commission drew a clear distinction between obligations up to a defined baseline of good agricultural practice, where the polluter pays principle would fully apply, and obligations going beyond such a baseline, in which case the ‘provider gets’ principle can more accurately be said to apply.\(^\text{186}\)

The Commission’s position was further detailed in its main reform Communication, which described the MTR as an opportunity to ensure that the CAP ‘better meet’ the sustainable development goals adopted under the Agenda 2000 and Göteborg strategies.\(^\text{187}\) This included taking further steps ‘in the field of environment to reinforce compliance, reduce negative pressures of support mechanisms, and strengthen the provision of services’.\(^\text{188}\) Moreover, it stressed the need for animal health and welfare concerns to be fully integrated within the CAP, as well as the importance of creating greater balance between the two pillars.\(^\text{189}\)

With regards to Pillar I, the communication suggested that the full granting of direct payments should become ‘conditional on the respect of certain number of statutory environmental, food safety and animal health and welfare standards’.\(^\text{190}\) In

\(^{183}\) Ibid, 22.
\(^{184}\) Ibid.
\(^{185}\) Ibid.
\(^{186}\) For detailed discussion see, Cardwell (n 64).
\(^{188}\) Ibid, 11.
\(^{189}\) Ibid, 11-12.
\(^{190}\) Ibid, 21.
particular, the Commission underscored that the focus of these requirements would be to support ‘the enforcement of good farming practices defined as encompassing mandatory standards’.\textsuperscript{191} It also provided some preliminary details about the practical implementation of the envisioned measures, which would be applied on a ‘whole-farm’ basis and further require recipients of direct payments to maintain both used and un-used agricultural land in ‘good agricultural condition’.\textsuperscript{192} Failure to observe the cross-compliance obligations would result in a reduction of direct payments proportional to the breach in question.

Pertaining to the rural development framework, the Commission proposed that it be consolidated and strengthened by increasing the scope of the accompanying measures to better address concerns about (i) food safety and quality; (ii) to help farmers to adapt to the introduction of demanding standards, and; (iii) to promote animal welfare’.\textsuperscript{193} With regards to the first of these, the communication recommended encouraging farmers to participate in certification schemes and producer groups that promote quality assurance or certification schemes as means of ensuring safe food standards.\textsuperscript{194} Secondly, the Commission suggested that financial payments be made to assist farmers in meeting ‘demanding standards based on Community legislation in the fields of environment, food safety, animal welfare and occupational safety standards’.\textsuperscript{195} Thirdly, the Commission offered the possibility to make animal welfare payments that went beyond the mandatory reference level applicable to Pillar II agri-environmental payments, by 10 percent.\textsuperscript{196} This would entail an increase in community contributions from 75 percent to 85 percent for so-called objective one areas, and from 50 percent to 60 percent for other areas.\textsuperscript{197}

3.4.5 The Cross-Compliance Framework

As already outlined, one the most significant changes to the CAP’s environmental framework was the introduction of cross-compliance measures under Regulation

\textsuperscript{191} Ibid, 21.
\textsuperscript{192} Ibid.
\textsuperscript{193} Ibid, 24.
\textsuperscript{194} Ibid.
\textsuperscript{195} Ibid, 24-25.
\textsuperscript{196} Ibid, 25.
\textsuperscript{197} Ibid.
1782/2003, which established the rules for the new direct payments regime.\footnote{Council Regulation (EC) No 1782/2003 [2003] OJ L270/1.} In keeping with the Commission’s initial proposals, the final regulation divided these obligations into two distinct groups; statutory management requirements (SMR) and requirements to keep land in good agricultural and environmental condition (GAEC).\footnote{Article 1.} With regards to the SMRs, Annex III of the regulation specified the relevant provisions of Community acts that would be applicable to recipients of direct payments in the field of (i) environment; (ii) public, animal and plant health and; (iii) animal welfare.\footnote{Article 4, 4(2).} These included long-standing EU directives, such as the Wild Birds Directive;\footnote{Articles 3, 4(1), (2), (4), 5, 7 and 8 of Council Directive 79/409/EEC (n 98).} the Groundwater Directive;\footnote{Articles 4 and 5 Council Directive 80/68/EEC of 17 December 1979 on the protection of groundwater against pollution caused by certain dangerous substances [1980] OJ L 20/43.} the Sewage Sludge Directive;\footnote{Article 3 Council Directive 86/278/EEC of 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture [1986] OJ L 181/6.} the Nitrates Directive;\footnote{Articles 4 and 5 Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources, [1991] OJ L375/1.} and the Habitats Directive.\footnote{Articles 6, 13, 15, and 22(b) Council Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna, [1992] OJ L206/7.} And, as already noted, horizontal enforceability of these acts had previously depended on MSs to transpose their objectives into concrete national rules, as is generally the case for the implementation of directives.\footnote{Although, Council Regulation (EC) 1259/1999 (n 169) provided the option of implementing mandatory schemes.} By virtue of Article 4(2), however, specific provisions of these acts became directly enforceable as part of the new cross-compliance regime, which primarily addressed the impact of land use and management practices upon biodiversity (wildlife and habitat) and environmental pollution (particularly water pollution).

The second dimension of cross-compliance was to ‘ensure that all agricultural land, especially land which is no longer used for production purposes, is maintained in good agricultural and environmental condition’.\footnote{Article 5(1). Though proscribed on a voluntary basis, codes of ‘good agricultural practice’ were first introduced under the Nitrates Directive (n 116).} This required MSs to define, at national or regional level, minimum requirements for GAEC ‘taking into account the specific characteristics of the areas concerned, including soil and climatic condition, existing farming systems, land use, crop rotation, farming practices, and farm
The framework for defining these requirements was set out in Annex IV of the regulation and based on four thematic issues covering soil erosion, soil organic matter, soil structure, and a minimum level of maintenance. Furthermore, each of these issues was accompanied by a list of minimum standards that MSs were obliged to implement through their own GAECs.

First, for the purpose of addressing soil erosion MSs were required to ensure minimum soil cover, minimum land management reflecting site-specific conditions and the retention of terraces. Secondly, they had to safeguard soil organic matter levels through appropriate practices by setting standards for crop rotation where applicable and arable stub management. Thirdly, the annex specified that standards for appropriate machinery use were to be implemented with the aim of maintaining soil structure. And fourthly, MSs were required to implement standards pertaining to minimum livestock stocking rates, the protection of permanent pasture, retention of landscape features and the evasion of encroachment of unwanted vegetation on agricultural land, with the aim of ensuring a minimum level of maintenance and avoiding the deterioration of habitats.

As affirmed by the CJEU in The Queen (on the application of Mark Horvath) v. Secretary of State for Environment, Food and Rural Affairs, MSs enjoyed significant discretion when specifying and implementing requirements for GAECs. Indeed, it may be recalled that in that particular case there was little question by the Court that the devolved English administration was well within its remit to require recipients of direct payments to maintain public rights of way, as part of their efforts to retain landscape features. This is an important dimension of cross-compliance, as it allowed for the ability to formulate minimum environmental standards that take into account conditions on the national or sub-national level. However, as already indicated, the real key to cross-compliance was the possibility of sanctioning non-compliance. Thus, Article 6 provided that in cases where non-compliance with SMRs and GAECs resulted from actions or omissions that were directly attributable

---

208 Article 5(2).
209 Annex IV.
210 Annex IV
211 Case C-428/07, The Queen (on the application of Mark Horvath) v. Secretary of State for Environment, Food and Rural Affairs, [2009] ECR I-6355. See above, 3.3.
212 Ibid.
to the farmer, the total amount of direct payments would be ‘reduced or cancelled’.\textsuperscript{214} This related to all agricultural land belonging to the holding, including parcels set-aside.\textsuperscript{215} Moreover, Article 7(2) detailed that farmers could be subject to reductions of between 5 to 15 percent of their direct payment entitlements in cases of negligence and repeat negligence, respectively. In cases of intentional non-compliance, Article 7(3) ensured that the percentage of reduction would ‘not in principle be less than 20 percent and may go as far as total exclusion from one or several aid schemes and apply for one or more calendar years’. As has frequently been the case with CAP regulations, these seemingly straightforward provisions required further detailed rules on enforcement and monitoring in order to ensure their uniform application across the EU. Consequently, much of the detail surrounding the practical implementation of cross-compliance was provided in subsequent Commission regulations.\textsuperscript{216}

Finally, with regards to Pillar I reform, the MTR introduced changes to the rules on set-aside with the intention of ‘reinforcing its environmental benefits under the new system of support’.\textsuperscript{217} In particular, the Commission expected a reduction in nitrate surplus to stem from the shift towards rotational set-aside that was pursued under the MTR.\textsuperscript{218} This partly addressed the ECA’s prior criticism of Agenda 2000 for its failure to ‘address the serious nitrate pollution problems in regions of intensive pig and poultry production due to inadequate waste disposals’.\textsuperscript{219} For instance, it noted that the situation had been ‘aggravated by the unsatisfactory application of the Community’s Nitrates Directive by Member States’.\textsuperscript{220} In addition, it may also be noted that, Article 56(4) of Regulation 1782/2003 incentivised the cultivation of biomass on land under set-aside by allowing MSs to meet up to 50 percent of the costs associated with establishing these multiannual crops on set-aside land and energy

\textsuperscript{214} This applied to the direct payments listed in Annex I of Council Regulation (EC) 1782/2003 [2003] OJ L270/1.

\textsuperscript{215} Article 6(2)(b).


\textsuperscript{218} In particular, Article 56(2) provides MSs with the possibility of introducing mandatory rotation as a condition for meeting the set-aside requirements.

\textsuperscript{219} European Court of Auditors (n123) 2.

\textsuperscript{220} Ibid.
crops accounted for the largest non-food production on set-aside land.  

3.4.6 Expanding the Agri-Environmental Framework under the Second Pillar

The division of Pillar II into four so called axes added further weight to the MTR and expanded the environmental scope of the CAP’s rural development policy by dedicating the second of these to ‘improving the environment and the countryside’.  

Overall, these changes were aligned with those made to Pillar I and aimed amongst other things at promoting ‘a more rapid implementation by farmers of demanding standards based on Community legislation concerning the environment, public health, animal and plant health, animal welfare and occupational safety and the respect of those standards by farmers’.  

Furthermore, with regards to rural development, the Preamble to Regulation 1698/2005 specified that support for certain land management practices was intended to contribute to sustainable development and the preservation of the ‘natural environment and landscape’, as well as the protection and improvement of natural resources. This included addressing key issues such as ‘biodiversity, Natura 2000 site management, the protection of water and soil, climate change mitigation including the reduction of greenhouse gas emissions, the reduction of ammonia emissions and the sustainable use of pesticides’.  

Thus, as indicated by the Commission in its initial Communication, agri-environmental payments were expected to ‘continue to play a prominent role in supporting the sustainable development of rural areas and in responding to society’s increasing demand for environmental services’.

Definitely, the improvement of the agri-environmental framework under Pillar II was merely one aspect of the MTR, which pursued numerous other objectives within the context of rural development. These were set out in Article 4(1) of Regulation 1698/2005 and focused on improving (i) the competitiveness of agriculture and forestry; (ii) the environment and the countryside through support for

---

223 Ibid, Preamble, (27).
224 Ibid, Preamble (27).
225 Ibid.
226 Ibid, Preamble (35).
land management and; (iii) the quality of life in rural areas and encouraging diversification of economic activity. Each of these three objectives corresponded to a so called thematic axis and was further complemented by a fourth methodological axis based on the so called ‘Leader’ approach. As already indicated, Article 4(2) required MSs to implement the aforementioned objectives along these four axes. However, the measures implemented under the second axis are of central interest to the current discussion given their aim to improve the environment and the countryside, through payments ‘targeting the sustainable use of agricultural land’.227

In particular, the addition of the environmental axis was intended to support ‘the sustainable development of rural areas and [respond] to society’s increasing demand for environmental services’.228 Thus, the Preamble to Regulation 1698/2005 highlighted the need for such payments to ‘encourage farmers and other land managers to serve society as a whole by introducing or continuing to apply agricultural production methods compatible with the protection and improvement of the environment, the landscape and its features, natural resources, the soil and genetic diversity’.229 The importance of these objectives were especially underscored by the legal requirement for MSs to ring-fence a minimum of 25 per cent of their EAFRD entitlements for the funding of axis two measures.230 These were further divided into two main categories covering measures targeting the sustainable use of agricultural land231 and the sustainable use of forestry land.232 The remainder of this section exclusively focuses on the prior of these categories, which listed six measures contained in Articles 37-41 of the Rural Development Regulation.

The first axis two measure provided for compensatory payments to be made to farmers whose land and productivity was affected by (i) natural handicaps or (ii) located in mountainous areas.233 This represented an important overhaul and was intended to eventually replace the LFA scheme that had been a focal point of the EU’s rural development policy since the mid-1970s. In doing so, these changes also responded to a number of criticisms that had been levelled against the underlying

227 Ibid, Article 36. However, as already indicated, the four axes are somewhat interlinked and do not preclude environmental measures from being introduced in under other headings, such as Leader.
228 Ibid, Preamble (35).
229 Ibid.
230 Article 17(1).
231 Article 36(a).
232 Article 36(b).
233 Article 37.
rational of the LFA framework in the run-up to the MTR. For instance, in 2003 the ECA released a scathing report in which it raised serious concerns over the criteria used to determine eligibility for LFA payments. In particular, it noted that while 56 percent of the EU’s total utilised agricultural area (UAA) was designated as less favourable at the time, the indicators used to determine this classification differed widely between individual MSs and were recurrently based on outdated socio-economic data. This not only threatened the equitable implementation of the LFA framework throughout the EU, but also raised questions about its compatibility with WTO rules, which required regional assistance programs to be applied based on ‘neutral and objective criteria clearly spelled out in law or regulation and indicating that the region’s difficulties arise out of more than temporary circumstances’. The revised formulation under Article 37 was therefore particularly important for ensuring that the new payments were eligible for ‘green box’ inclusion, amongst other motivations.

With regards to the level of annual payments, moreover, the regulation specified that these should reflect ‘additional costs and income forgone related to the handicap for agricultural production in the area concerned’. In addition, it clearly emphasised the centrality of the polluter-pays principle and the need to ensure that such payments would only be made in exchange for commitments that went ‘beyond the relevant mandatory standards’.

The second axis two measure was covered under Article 38 of the Rural Development Regulation sought to provide compensatory payments to farmers operating within designated Natura 2000 areas and areas that were subject to river basin management programs under the EU’s Water Framework Directive (WFD). Specifically, these payments were to be ‘granted annually and per hectare of UAA to farmers in order to compensate for costs incurred and income foregone resulting from

---

235 Ibid.
236 Ibid, paragraphs 30-37.
237 Agreement Agricultural, Annex 2, paragraph 13(a).
238 Jack (n 26) 245. This also complies with the WTO Agreement on Agriculture.
239 Article 37(1).
240 Preamble (35).
241 Article 36(a)(iii). MS were required to designate these areas in accordance with Directives 79/409/EEC (n 98) and 92/43/EEC (n 107).
disadvantages in the areas concerned related to the implementation of Directives 79/409/EEC, 92/43/EEC and 2000/60/EC'.

To ensure no double funding, moreover, Commission Regulation 1974/2006 (the main implementing act) added that recipients of these compensatory payments were precluded from claiming payments under Article 31 of the main Regulation ‘as regards the implementation of Council Directives 79/409/EEC and 92/43/EEC’. As already noted, Article 31 sought to compensate farmers for the cost of complying with EU standards. And, since the latter did not preclude environmental standards, it would have been possible for MSs to introduce compensatory payments linked to the aforementioned directives under Article 31 and, thereby, entail that applicants could essentially be paid twice for fulfilling the same compliance measure.

The third Axis two measure was detailed in Article 39 and required MSs to introduce agri-environmental payments ‘throughout their territories, and in accordance with their specific needs’. As a general rule these contractual commitments were to be undertaken for a period of between five and seven years and exclusively covered measures that went beyond the cross-compliance obligations set out in Regulation 1782/2003 ‘as well as minimum requirements for fertiliser and plant protection product use and other relevant mandatory requirements established by national legislation and identified in the programme’. With regards to the latter, the implementing regulation added that ‘[c]ommitments to limit the use of fertilisers, plant protection products or other inputs shall be accepted only if such limitations can be assessed in a way that provides reasonable assurance about compliance with those commitments’. To ensure greater flexibility it also provided for ‘agri-environment or animal welfare commitments to be adjusted during the period for which they apply, provided that the approved rural development programme includes scope for such adjustment and that the adjustment is duly justified having regard to the objectives of the commitment’.

The fourth measure set out under axis two covered payments for animal

---

242 Article 38(1).
244 Article 39(1).
245 Article 39(3).
246 Article 26(3).
welfare commitments that went beyond the mandatory standards listed in Annex III of regulation 1782/2003. These were contained in Article 40 and intended to be made up of annual payments requiring commitments of between five and seven years. The implementing regulation provided important details of the type of measure covered and specified that all animal welfare commitment formulated pursuant to Article 40 of Regulation 1698/2005 were required to provide upgraded standards in at least one of six listed areas. These included measures aimed at ensuring (a) water and feed closer to their natural needs; (b) housing conditions, such as space allowances, bedding, natural light; (c) outdoor access; (d) absence of systematic mutilations, isolation or permanent tethering; (e) prevention of pathologies mainly determined by farming practices or/and keeping conditions.

The fifth, and final agri-environmental measure listen in the main regulation, provided for MSs to grant support payments for non-productive investments made by farmers. This applied to certain on-farm investment that enhanced ‘the public amenity value of a Natura 2000 area or other high nature value areas…defined in the programme’. Moreover, the implementing regulation specified that these non-productive investments only covered investments that did ‘not lead to any significant increase in the value or profitability of the agricultural…holding’. In accordance with the wording of Article 41(b) of the main regulation, this restriction was intended to ensure that the benefits stemming from such investments were of a public, rather than private nature.

However, although the aim of axis two payments was essentially to induce land management practices capable of providing tangible public goods and environmental benefits, it is important to note that measures implemented under the CAP’s second pillar continued to depend on the voluntary uptake of farmers. In other words, even though MSs were obliged to devote an unprecedented level of resources towards the funding and implementation of agri-environmental schemes as part of their RDPs, the choice of enrolment and participation remained firmly with the individual farmer. Furthermore, it may be reiterated that the funding arrangements for Pillar II measures only provided for partial funding from the EU budget, with MSs

248 Article 40(2).
249 Article 27(7) Commission Regulation (n 243).
250 Article 27(7).
251 Article 41(b).
252 Article 29 Commission Regulation (n 243).
having to draw the balance from their national funds. It follows that both the willingness of farmers to enrol and MSs to commit to developing meaningful and effectively targeted agri-environmental measures, varied widely across the EU.\textsuperscript{253} In response, the MTR increased the EU’s contribution to national public expenditure associated with the implementation of axis two measures. This included contributions of up to 80 percent in regions eligible under the so called convergence objective, and 55 percent of qualified public expenditure in other regions.\textsuperscript{254}

Notwithstanding, the increased budgetary commitments to rural development under the MTR, one of the main contentions since the creation of the two pillar system regarded the level of funding disparity that continued to exist between Pillar I and two. This has of course also had an effect on the level of funding devoted to agri-environmental measures under the second pillar and was partly addressed by the practice of modulation, which was first introduced on a voluntary basis with the aim of securing increased funding for rural development under Regulation 1259/1999.\textsuperscript{255} However, although there was some expectation that these transfers could play an influential role ‘in combating negative externalities in agriculture’, some have argued that this optimism was certainly tempered by the requirement of national co-funding, as already indicated.\textsuperscript{256} Consequently, only three MSs ultimately made use of this option when it was first offered.\textsuperscript{257}

In an effort to strengthen the CAP’s RDPs, compulsory modulation was therefore introduced by Regulation 1782/2003, which set out the basic conditions under which MSs were required to transfer funding from the first to the second pillar.\textsuperscript{258} The Commission was especially responsible for driving the process and viewed these financial transfers ‘as a first step in the necessary reinforcement of rural development’.\textsuperscript{259} Moreover, it underscored the role of these changes in achieving ‘a

\begin{footnotesize}
\begin{itemize}
\item 253 Matthews (n 172) 13-14. van der Bijl (n 173) 19.
\item 254 Article 70(b).
\item 255 Article 4 allowed member states to reduce direct payments by up to 20 per cent and switch the funds into certain Pillar 2 measures.
\item 257 The UK, France and Portugal opted to transfer various levels of EU funding from the first to the second pillar.
\item 258 Article 10.
\end{itemize}
\end{footnotesize}
better balance between policy tools designed to promote sustainable agriculture [under Pillar I] and those designed to promote rural development’. However, as will be further discussed in the following Chapters, the issue of funding continued to affect the underlying resources and commitments made by MSs to developing RDPs with targeted and well-designed agri-environmental schemes.

3.4.7 The Health Check

Compared to the significant reforms introduced under the MTR, the 2008 Health Check was definitely more modest both in terms of its scope and ambition. Indeed as outlined in Chapter 1, it primarily sought to ‘modernise, simplify and streamline the CAP and remove restrictions on farmers, thus helping them to respond better to signals from the market’. In particular, this included further decoupling of direct aid to farmers and incorporating such payments into the SFP although, as is seen in Chapter 5, some types of coupled support were maintained. For present purposes, moreover, the reforms included a number of measures that served to improve the quality of environmental governance under the CAP. Three of these may be highlighted as part the current discussion.

First, the Health Check abolished the requirement for farmers to set aside 10 per cent of their arable land. Indeed, as outlined in Chapters 1 and 2, this was partly in response to the volatility experienced on global food markets during 2007-2008 and was thus intended to enable farmers to ‘to maximise their production potential’. In doing so, however, the Preamble to direct payments regulation stressed that the abolition of the set-aside requirement ‘could in certain cases have adverse effects on the environment, in particular as regards certain landscape features’. Thus, the new framework attempted to take this into account by reinforcing EU provisions aimed at

---

260 Ibid, 15.
261 European Commission, Overview of the CAP Health Check and the European Economic Recovery Plan Modification of the RDPs, Fact Sheet (European Commission, Brussels, 2009), 2.
protecting specified landscape features, as well as allowing MSs to provide for the establishment and/or retention of habitats.\(^{265}\)

Secondly, Regulation 73/2009 introduced changes aimed at adjusting the scope of the cross-compliance framework.\(^{266}\) In particular, the Commission’s initial reform Communication highlighted the need for simplification of the scheme by amending the list of GAECs and SMRs where appropriate, as well as excluding elements that were no longer deemed to be directly relevant to the objectives of cross-compliance measure.\(^{267}\) Moreover, the pressure to address weaknesses of the regime were further highlighted in a 2008 report by the ECA, which identified a number of issues that threatened to undermine the explicit aim of cross-compliance to contribute to ‘sustainable agriculture’.\(^{268}\)

For instance, the Report criticised the design of the regime on the basis that the achievements of cross-compliance were incapable of being precisely monitored due to the absence of reliable and comprehensive ‘objectives, performance, indicators and baseline levels’.\(^{269}\) Indeed, the ECA found that a number of measures were of very limited use and should be viewed as mere formalities, as opposed to conferring meaningful obligations upon farmers.\(^{270}\) This was also echoed by the IEEP, which noted that the added administrative burdens and cost associated with the introduction of cross-compliance resulted in some MSs setting ‘light standard’ as a means of reducing the cost of implementation.\(^{271}\) This was further undermined by a weak – and in many cases non-existent – system of compliance monitoring, with the ECA noting that not a single breach of the Habitats and Wild Birds Directives had been recorded by MSs during the between 2005-2008.\(^{272}\) Thus, the report concluded that although cross-compliance was an essential part of the CAP framework, it would certainly need

\(^{265}\) Ibid.

\(^{266}\) Ibid, Preamble (3).


\(^{268}\) European Court of Auditors, Special Report No 8/2008: Is Cross Compliance an Effective Policy? (European Court of Auditors, Luxembourg, 2008), paragraph 17; European Commission (n 267) 4.

\(^{269}\) ECA (n 268) paragraph 13.

\(^{270}\) Ibid.


\(^{272}\) ECA (n 268) paragraph 65.
to be designed in a clearer and measurable way in order for it to reach its full potential.\textsuperscript{273}

In light of these and other criticisms, the 2008 reforms introduced a number of changes to the system of cross-compliance aimed at making ‘the CAP more compatible with the expectations of society at large’.\textsuperscript{274} For instance, they withdrew certain provisions previously enforced under SMR 6, pertaining to the identification and registration of animals.\textsuperscript{275} Moreover, as already indicated, there was some concern that certain environmental benefits could be lost as a result of the abolition of compulsory set-aside in 2008. The Health Check sought to address this risk by introducing an additional GAEC, which required buffer strips to be established along water courses.\textsuperscript{276} Further, the focus on water management was strengthened by the adoption of a second novel GAEC standard requiring authorisation procedures to be established for the use of water for irrigation.\textsuperscript{277} In addition, the cross-compliance regime was complemented by the introduction of a new optional GAEC standard on the establishment and/or retention of habitats.\textsuperscript{278}

Thirdly, and lastly for present purposes, it may be noted that the Health Check sought to promote a broader role for rural development both for the purpose of supporting existing EU policies on sustainable water management and biodiversity, as well as for meeting future challenges to agriculture, such as climate change.\textsuperscript{279} In practical terms, this direction of travel was partly funded by maintaining the system of compulsory progressive reduction of direct payments, ie modulation, established under the MTR. Thus, modulation rates were increased to seven per cent in 2009, with an additional one per cent being transferred from the direct payments budget on an annual basis until 2012.\textsuperscript{280} Moreover, a further four per cent modulation rate was imposed in each of the four years on farmers whose direct payments entitlements were

\begin{footnotes}
\item 273 \textit{Ibid}, paragraph 88.
\item 275 Annex II of Regulation 73/2009.
\item 276 Annex III Regulation (EC) 73/2009 (n 264).
\item 277 \textit{Ibid}.
\item 278 \textit{Ibid}.
\end{footnotes}
in excess of 300 000 Euros.\textsuperscript{281} And it may be noted that voluntary modulation had also been introduced under Regulation Council Regulation 1782/2007, which allowed MS to transfer up to 20 per cent of their direct payments budgets towards funding for rural development.\textsuperscript{282}

### 3.5 Taking Stock of the Strides made prior to the 2013 Reforms

In addition to expanding the CAP’s environmental framework, EPI has also been instrumental for maintaining its legitimacy and political support. Not least, the introduction of cross-compliance was intended to make ‘the CAP more compatible with the expectations of society at large’.\textsuperscript{283} Arguably, this should not be easily overlooked, as it may be recalled that although the proportion of EU expenditure has incrementally declined, it has remained the single largest policy and accounted for nearly half of the EU budget in 2010, when the CAP 2020 negotiations were slated to begin.\textsuperscript{284} Thus, in addition to building upon the CAP’s agri-environmental framework, EPI has provided a useful mechanism for justifying continued levels of decoupled income support earmarked for farmers. In this light Baldock \textit{et al} have pointed out that although it is not the primary role of the CAP to set environmental standards ‘it can contribute significantly to their enforcement and the adjustment of the farm sector to society’s changing expectations and requirements on the environment’.\textsuperscript{285}

However, neither the introduction in 2005, nor the fortification of the \textit{cross-compliance} regime under the Health Check, came without considerable criticism over its perceived lack of ambition and limited environmental outcomes. With regard to the former, for instance, it has already been seen that the SMRs were based on pre-existing legislation, which essentially meant that a sizable part of the Commission’s effort to ‘green’ the CAP rested on compensating farmers to follow the law. This not

\textsuperscript{281} Article 7(2). However, it should be added that no cap was introduced.


\textsuperscript{283} European Commission (n 274) 2.


only appeared illogical from an economic perspective, but there were also concerns that it could conflict with the polluter pays principle, which clearly required the producer to bear the costs of operating in compliance with basic legal obligations. Indeed, as pointed out by the ECA, this created considerable overlap between the cross-compliance measures and EU directives. Moreover, some of the directives already, technically, required implementation to be completed, with the relevant obligations intended to be imposed upon farmers years before the introduction of cross-compliance. To this effect, Söderberg has described cross-compliance primarily as an instrument for accelerating compliance and the transposition by MSs of EU environmental directives into national law.

The environmental benefits of cross-compliance have also varied considerably, depending on the type of farming involved. And, a particularly challenging aspect of cross-compliance has been how to empirically evaluate the outcomes of these policy measures. This was pointed out by the ECA in 2008, which stressed that the achievements of cross-compliance were incapable of being precisely monitored due to the absence of reliable and comprehensive ‘objectives, performance, indicators and baseline levels’. Likewise, Birdlife International and other environmental organisations, have noted the difficulties in evaluating policy instruments that they consider to be poorly designed and implemented. Needless to say, this has complicated efforts to measure the practical outcomes of cross-compliance against the Commission’s initial claims that it was expected to contribute towards the development of sustainable agriculture.

Shortcomings were also highlighted pertaining to the outcomes of the rural development framework. Indeed, during the 2007-3013 programming period, BirdLife International identified two main problems relating to agri-environmental measures. First, it concluded that RDPs often suffered from a lack of synergy and coordination between the various programs. Not only could such incoherence risk

286 ECA (n 268) 13. Importantly, however, the GAEC standards imposed obligations beyond the legal baseline to some extent.
287 Ibid.
289 Ibid.
290 ECA (n 268) 13.
292 European Commission (n 274) 2.
undermining the CAPs environmental objectives, but was also perceived as being ‘inherently contradictory’.293 For instance, the report found that Axis I measures in Latvia and Portugal focused solely on competitiveness, with no consideration of environmental objectives. This could have a distorting effect in cases where ‘modernisation measures fund the destruction of the same [High Nature Value] habitats that some Axis 2 measures seek to protect’.294

Secondly, the report identified ‘the necessity for a much more rigorous set of environmental safeguards’ to ensure that the rural development policy would not run contrary to the EU’s biodiversity objectives.295 In particular, it noted that following the adoption of the Health Check, these safeguards were mainly applicable to Natura 2000 management plans under the Environmental Impact Assessment Directive,296 but that this was not sufficient to offer adequate protection for land beyond the Natura 2000 networks. Rather, in those cases, RDPs may well have been funding projects, such as infrastructure developments, where the lack of environmental safeguards made it impossible to estimate their potential impact upon habitats and wildlife. This, in turn, entailed that such unassessed programs risked producing environmental outcomes that ran contrary to the EU’s own conservation and biodiversity strategies.297

In addition, other commentators strongly argued that the voluntary nature of Pillar II measures did not guarantee long-term or proper protection of the rural areas or the natural environment.298 And, of the instruments reviewed under Regulation 1698/2005, the ECA specifically found agri-environmental measures to be the most error-prone, accounting for over one eighth of the observed infringements during the previous programming period.299

294 Ibid.
295 Ibid.
296 Ibid, 13.
297 Ibid.
298 This has for instance been argued by Bugge with regards to the Norwegian example, where such protection is largely determined by contractual arrangements between farmers and various authorities. See, H. C. Bugge, ‘Vern av verdifulle kulturlandskap: Har vi de rettslige redskapene som trengs? Utvalgte kulturlandskap i jordbruket i rettslig lys’, (2013) 1 Utmark: Tidsskrift for utmarksforskning 1.
299 European Court of Auditors, Errors in Rural Development Spending: What are the Causes, and how are they being addressed? Special Report No 23 (European Court of Auditors, Luxembourg, 2014), paragraphs 56-57.
Following the completion of the MTR and Health Check reforms there undoubtedly remained a gap between the outcomes of the CAP’s environmental framework and the long-term objective to attain sustainable forms of agriculture. Indeed, in 2007 the Commission expressed its concern that the EU was not yet fully ‘on the path towards a genuinely sustainable future’.\textsuperscript{300} Thus, almost two decades after the sustainable development agenda was first prioritised, it was clear that agri-environmental measures had only had a limited effect on reducing agricultural externalities. It would therefore be left to subsequent reforms to continue to address these shortcomings.

Chapter 4

Delivering and Negotiating the 2013 CAP Reforms: An Overview of the Basic Legal Framework

4.1 Introduction

Following the initial consultation process and publication of the Commission’s main reform Communication, outlined in Chapter 2, the legislative process duly took off in October 2011 when the latter unveiled the contents of its legal proposals. The reform package included four basic regulations, as well as transitional rules for the year 2014 and a comprehensive Impact Assessment of the proposed acts, which provided the initial point of departure for the inter-institutional negotiations that followed. Definitely, a number of contentious issues and diverging positions between EU institutions, as well as stakeholders, were exposed during the course of these negotiations. These included the expansion and introduction of obligations intended to address the impacts of agriculture upon the environment and climate.

Ultimately, these differences became focal points of the Cioloş reforms and undoubtedly had direct impacts upon the formulation of the final measures agreed in June 2013. However, before analysing the specific regulations that resulted from this agreement, the current Chapter provides an overview of the proposed legal framework, as well as the political negotiations that served to shape the substantive outcomes of the reform. In particular, it explores the extent to which this process impacted upon the scope and ambition of those instruments intended to address agricultural externalities and increase the environmental dividends delivered under the CAP. For the purposes of the current thesis this includes gaining further understanding of the institutional stances on the CAP’s role in meeting the ecological challenges to food security, many of which were persistently highlighted throughout the course of the negotiations. Moreover, the discussion takes account of the wider political context of which these negotiations were part and the implications that this had for reform objectives.
4.2 The 2011 Impacts Assessment and Legislative Proposals

As has been the case in every previous instance of CAP reform, the Commission played a central role in determining the basic framework of the latest round of negotiations. Not least, this was due to the exclusive mandate to initiate legislation in the field of agriculture, which gave it a considerable command in influencing both the direction and substance of the inter-institutional dialogue, based on the contents of its legal proposals. However, despite this powerful prerogative it is important to underscore that the Commission remains restrained, both in theory and practice, by the political influence that the EP and Council wields over the subsequent legislative process under the ordinary legislative procedure. Thus, the Commission may be expected to take account of what is politically viable and acceptable when framing its proposals, rather than use its powers to promote measures expected to gain limited political approval. This includes assessing the overall socio-economic context in which the CAP operates, as well as the societal demands and expectations of this flagship policy.

Against this background, the legislative proposals published by the Commission on 12 October 2011 represented carefully weighed political calculations to pursue a defined direction of travel towards 2020 and beyond. Much of the overarching vision had been flagged up during the initial political debates and came as little surprise. For instance, as noted in Chapter 2, the Commission articulated in its main reform communication a clear preference for maintaining the two-pillar structure and the basic distinctions underpinning this division. Hence, it highlighted the need to develop the direct payments regime in order to attain better redistribution and targeting, as well as greater value and quality in return for EU funding.

---

pursuing these changes, the Commission added that ‘criteria should be both economic, in order to fulfil the basic income function of direct payments, and environmental, so as to support for the provision of public goods’.  

Moreover, with regard to rural development, it may be recalled that the communication largely supported the structure of existing Pillar II measures, but stressed the importance of the environment, climate change and innovation to act as guiding themes in the following programming period. Likewise, on the issue of market reform, which had been a major aspect of previous reforms, it endorsed a continuation of the CAP’s overall market orientation, while expressing the need to make further adaptations aimed at streamlining and simplifying the legal framework, as well as improving the food supply chain.

The impact assessment provided further input on the overall direction of the 2013 CAP reforms, as well as concrete justifications for the legislative proposals made to this end. Importantly it considered each of the three policy options outlined in the main 2010 communication. These included the co-called adjustment, integration and re-focusing scenarios. Based on the outcome of its assessment, the Commission expressed a clear preference to pursue the so-called integration scenario and considered it to be the ‘most balanced in progressively aligning the CAP with the EU's strategic objectives’. In doing so, it rejected, on the one hand, the adjustment scenario for being too limited in its approach to policy development and, on the other, the re-focusing model for being too far-reaching in its aim of expanding the CAP’s environmental framework.  

In support of this decision, the impact assessment stressed that the integration scenario provided, in the view of the Commission, instruments that were capable of mobilising ‘the necessary resources to increase productivity through innovation and to pool knowledge and resources through collaborative actions among the farmers and in the food supply chain’. As is further explored below, these and other statements offered important insights into the food security paradigm under which the EU operated – and continues to operate – and revealed some of the underlying political

---

6 Ibid.  
7 Ibid, 10.  
8 Ibid, 9-10.  
9 European Commission (n 3) 6.  
10 Ibid, 12.  
11 Ibid, 77.
motivations that served to shape the framework and contents of the negotiations. In particular, the emphasis on increasing productivity is relevant to both the main analysis of the existing legislative framework, as well as having broader implications for the direction of the CAP beyond the current programming period.¹²

The concrete measures were contained in three proposed regulations pertaining to direct payments, rural development and the Single CMO. And, similarly to previous reforms, these were also accompanied by a fourth horizontal regulation, which established a common monitoring and evaluation framework with a view to measuring the performance of the CAP.¹³ Together, as the Commission clarified, the proposed regulations sought, amongst other things, to pursue the objectives of the CAP 2020 by focusing on enhanced competitiveness, improved sustainability and greater effectiveness.¹⁴ And it may be highlighted that three of the four regulations, except for the CMO regulation, sought to implement measures specifically aimed at environmental protection. An overview of the main elements relating to each of these proposed regulations is therefore offered, before considering the political reactions and negotiations that served to shape the final measures that are the focus of Chapters 5 and 6.

4.3 The Direct Payments Regulation

As already noted, the Commission made it clear from the outset that a major part of its reform effort would be focused on overhauling the existing direct payment regime with the general aim of making it fairer and more targeted across the 28 MSs. This

¹²See, Chapter 5.
was reiterated in the proposals, which stressed the need to build on previous reforms and address some of the main funding disparities that continued to exist following the conclusion of the Health Check.\(^\text{15}\) For instance, the Preamble to the proposed direct payments regulation noted that the distribution of direct income support among farmers was ‘characterised by the allocation of disproportionate amounts of payments to a rather small number of large beneficiaries’.\(^\text{16}\) This not only created an unfair advantage for larger farms, but was also a subject of widespread public criticism and attention.\(^\text{17}\) Moreover, the Preamble emphasised that it was becoming increasingly difficult to justify and maintain the funding disparities that continued to exist between regions and MSs. Thus, one of the main long-term visions of the Ciolos reform was ‘to pave the way for convergence of the level of support within and across Member States’.\(^\text{18}\)

Against this background, the Commission proposed replacing the SFP with a new framework for direct payments. This regime was to be centred upon a so called basic payment and entailed ‘the expiry of payment entitlements obtained under [previous] regulations and the allocation of new ones’.\(^\text{19}\) Crucially, this approach provided the Commission with an opportunity to redefine the basis of payment entitlements, as well as the conditions for their receipt.\(^\text{20}\) For instance, with regards to eligibility, the Commission proposed detailed rules on the meaning of ‘active farmer’ to ensure the proper targeting of EU funds and support.\(^\text{21}\) In addition, the new framework also provided the ability to introduce new environmental measures that farmers would be required to observe in return for basic income support. And, in concrete terms, the Commission submitted that this would entail the introduction of a mandatory ‘greening’ component linked to direct payments and intended to support ‘agricultural practices beneficial for the climate and the environment applicable throughout the Union’.\(^\text{22}\)

\(^\text{16}\) Ibid, Preamble (15).
\(^\text{17}\) Ibid, Preamble (15).
\(^\text{20}\) Ibid, Preamble (20).
\(^\text{21}\) Ibid, Preamble (26).
At first glance, this approach was largely in keeping with the EP’s previous support for the ‘introduction, through a greening component, of an EU-wide incentive scheme with the objective of ensuring farm sustainability and long-term food security through effective management of scarce resources (water, energy, soil) while reducing production costs in the long term by reducing input use’.

As will be further discussed below, however, the practical details of these measures proved to be some of the toughest sticking points of the legislative negotiations. But first there will be consideration of the main elements of the greening component, as well as the general framework for direct payments proposed by the Commission.

### 4.3.1 The Greening Component

The choice to focus its greening efforts on Pillar I undoubtedly reflected an intention to pursue broad measures that would be uniformly applied and implemented across its 28 MSs. Indeed, the Commission stressed the importance of introducing ‘a strong greening component into the first pillar of the CAP for the first time thus ensuring that all European Union farmers in receipt of support go beyond the requirements of cross-compliance and deliver environmental and climate benefits as part of their everyday activities’. To this effect, each holding in receipt of the basic payment would obtain an additional payment per hectare for ‘compulsory practices to be followed by farmers addressing, as a priority, both climate and environment policy goals’.

These measures were to ‘take the form of simple, generalised, non-contractual and annual actions that [went] beyond cross-compliance and…linked to agriculture such as crop diversification, maintenance of permanent grassland and ecological focus areas’. According to the Commission, payments for these three measures would ensure ‘that all farms deliver environmental and climate benefits through the retention

---

25 Ibid.
26 European Commission, COM (2011) 625 (n 13) Preamble (26).
27 Ibid.
of soil carbon and grassland habitats associated with permanent pasture, the delivery of water and habitat protection by the establishment of ecological focus areas and improvement of the resilience of soil and ecosystems through crop diversification.\(^{28}\) Furthermore, they were defended on the basis that they would serve to reinforce the ability of agricultural ‘land and ecosystems’ to contribute to flagship EU objectives, such as those relating to biodiversity and climate change adaptation.\(^{29}\)

The specific rules on the payment for agricultural practices beneficial for the environment and the climate was detailed in Chapter 2 of the proposed direct payments regulation. The first of the three measures was governed by Article 30, which comprised the rules relating to crop diversification. All holdings consisting of more than three hectares of arable land would be required to cultivate at least three crops on the arable land. In addition, it specified that none of the three crops was to cover less than five per cent of the arable land or exceed a maximum of 70 per cent for the largest crop. This measures would not apply to land that was entirely used for grass production, entirely left fallow or cultivated with crops under water for a significant part of the year.\(^{30}\)

Secondly, Article 31 aimed to protect existing permanent grasslands by requiring that farmers maintain as permanent grassland areas of their holdings that were declared as such in 2014.\(^{31}\) They would, on the other hand, be permitted to convert a maximum of five per cent of their ‘reference area’ under permanent grasslands, while still complying with the greening component.\(^{32}\) Thus, based on these two short provisions, compliance did not appear to require positive action on the part of farmers, but would essentially be satisfied by them refraining from converting more than five per cent of the permanent grassland belonging to the holding in 2014. In addition, this measure was to be applied at farm level.

Thirdly, Article 32 required that recipients of direct payments devote at least seven per cent of their eligible hectares, not including land classed as permanent

\(^{28}\) Ibid, Explanatory Memorandum, 3.

\(^{29}\) Ibid.

\(^{30}\) Ibid, Article 30(1).

\(^{31}\) Ibid, Article 31(1). Further, Article 4(h) defined permanent grassland as ‘land used to grow grasses or other herbaceous forage naturally (self-seeded) or through cultivation (sown) and that has not been included in the crop rotation of the holding for five years or longer; it may include other species suitable for grazing provided that the grasses and other herbaceous forage remain predominant’.

\(^{32}\) Ibid, Article 31(2).
grassland, towards the establishment of ecological focus areas (EFA).\textsuperscript{33} To this end, beneficiaries were able to include ‘land left fallow, terraces, landscape features, buffer strips and afforested areas as referred to in article 25(2)(b)(ii)’ in the calculation of the required minimum area under EFA, but the provision clearly allowed for this list to be extended.\textsuperscript{34} Indeed, as was the case with regards to all three elements of the greening component, little detail was provided, which indicated that the practical aspects of implementation would be extensively assigned to the Commission through the use of delegated powers.\textsuperscript{35}

The regulation also outlined the financial arrangements, which required MSs to use 30 per cent of their annual budgets, set out in Annex II of the proposed regulation, towards funding the implementation of the greening component.\textsuperscript{36} With regards to the cost of compliance for farmers, the Commission argued, on the basis of its \textit{Impacts Assessment}, that greening was possible ‘at a reasonable cost to farmers although some administrative burden cannot be avoided’.\textsuperscript{37} Undoubtedly, the latter was a central consideration for the Commission when it formulated the three new measures and, as will be seen below, continued to be the focus of attention during the negotiations by both farm interest groups and its institutional counterparts. Moreover, the question would subsequently arise as to whether these costs would generate meaningful environmental outcomes when compared to the administrative expenditure.

4.3.2 Other Forms of Direct Payments

In addition to the basic payment and greening component, the proposals included six other forms of direct payments that were intended to complement the direct payments

\textsuperscript{33} \textit{Ibid}, Article 32(1).
\textsuperscript{34} \textit{Ibid}, Article 32(1).
\textsuperscript{35} \textit{Ibid}, Article 32(2); Preamble (27-29).
\textsuperscript{36} \textit{Ibid}, Explanatory Memorandum, 3. This figure had already been proposed by the Commission in July 2011, as part of its budgetary plan for the 2014-2020 programming period. See, \textit{A Budget for Europe 2020}. Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions COM (2011) 500. Brussels. It may also be worth noting that the regulation specified that the greening budget would not be subject to capping.
\textsuperscript{37} European Commission, COM (2011) 625 (n 13) Explanatory Memorandum, 6.
These were to be implemented on a voluntary basis, with the exception of the payment to young farmers, which required MSs to commit up to 2 per cent of their annual direct payments budgets to young farmers entitled to payment under the basic payment scheme. In doing so, the measure expressly sought to ‘facilitate the initial establishment of young farmers and the structural adjustment of their holdings after the initial setting up’ and was further supported under the second pillar, which provided for thematic sub-programs to focus on the issues relating to the support of young farmer.

The regulation also introduced a new voluntary simplified small farmer scheme under which participating MSs would be required to offer a lump sum payment to existing small holders in place of other direct payments. This included, inter alia, reducing ‘the obligations imposed on small farmers such as those related to the application for support, to agricultural practices beneficial for the climate and the environment, to cross-compliance and to controls’. Thus, although compliance with basic EU environmental standards would not be directly enforced under the proposed scheme, the simplification of applicable requirements and procedures were supported by the Commission on the basis that they would ‘reduce the red tape on small farmers and enhance their competitiveness’. And, to this effect it might be added that Article 92 of the proposed Horizontal Regulation explicitly exempted participators of the small farmer scheme from the obligations imposed under cross-compliance and the controls linked to their implementation. Moreover, the exemption of small farmers was further justified on the basis that it would lessen the burdens that were otherwise associated with the administration of the direct payment regime and associated environmental standards.

Other voluntary payments were essentially intended to function as top-up payments offered in addition to the basic and greening payments and covered a

---

38 Ibid, Article 1(b) listed a total of eight payments for which common rules were to apply. Special provision was made for Bulgaria and Romania to operate under separate frameworks, during the coming programing period. See, Articles 1(b)(viii), 16, 17.
39 Ibid, Article 37.
40 Ibid, Preamble (31).
41 Ibid, Article 8. See also Article 20 and Annex III to the proposed regulation.
42 Ibid, Preamble (38).
43 Ibid, Explanatory Memorandum, 8.
44 Ibid, 6.
payment for areas with natural restraints,\textsuperscript{46} voluntary coupled support payments\textsuperscript{47} and a crop specific payment for cotton.\textsuperscript{48} The first two of there are shortly outlined, before considering the proposal for the rural development regulation.

The payment for areas with natural constraints was a continuation of previous measures implemented with the intention of providing additional income support and maintaining the presence of farming in areas facing specific natural constraints, as well as complementing existing support under rural development.\textsuperscript{49} Thus, with a view to promoting ‘sustainable development’ in these areas, MSs would be able to ‘use part of their national ceilings for direct payments to grant an annual area-based payment, on top of the basic payment’.\textsuperscript{50} As pointed out by Mahé, moreover, the proposed classification of these areas was based on agronomic and biophysical features ‘rather than the former (absurd) definition which led some very fertile land to be classified as less-favoured’.\textsuperscript{51}

The proposed regulation also included measures relating to coupled support payments, which continued to exist despite successive reductions in the use of such instruments following each round of CAP reform. These measures would enable MSs to extend payments to sectors or regions ‘where specific types of farming or specific agricultural sectors undergo certain difficulties and are particularly important for economic and/or social and/or environmental reasons’.\textsuperscript{52} To this effect the regulation listed 21 sectors and primary production that would be eligible for coupled support, but added that it could ‘only be granted to the extent necessary to create an incentive to maintain current levels of production in the regions concerned’.\textsuperscript{53} Moreover, with regards to financing, each MSs would be free to allocate a maximum of five per cent of their annual direct payments budget towards funding coupled payments, as set out

\textsuperscript{46} \textit{Ibid}, Articles 34-35.  
\textsuperscript{47} \textit{Ibid}, Article 38.  
\textsuperscript{48} \textit{Ibid}, Article 42.  
\textsuperscript{49} \textit{Ibid}, Explanatory Memorandum, 8.  
\textsuperscript{50} Preamble (30).  
\textsuperscript{52} European Commission, COM (2011) 625 (n 13) Article 38(2).  
\textsuperscript{53} \textit{Ibid}, Article 38(1), 38(4). The 21 sectors listed in Article 38(1) included ‘cereals, oilseeds, protein crops, grain legumes, flax, hemp, rice, nuts, starch potato, milk and milk products, seeds, sheepmeat and goatmeat, beef and veal, olive oil, silk worms, dried fodder, hops, sugar beet, cane and chicory, fruit and vegetables and short rotation coppice’.
in Annex II of the proposed regulation.\textsuperscript{54} On the other hand, a number of exceptions were provided to allow for MSs to increase this figure beyond ten per cent.\textsuperscript{55}

In addition to the specific payments that were proposed for the 2014-2020 programming period, the regulation also included measures covering notifications and emergency,\textsuperscript{56} delegation of power and implementing provisions,\textsuperscript{57} as well as transitional rules, which empowered the commission to adopt temporary measures to ensure a smooth changeover from the pre-existing framework.\textsuperscript{58} With regards to the first of these, the Commission was furthermore empowered to respond to emergencies by way of implementing acts aimed at resolving specific problems and crisis.\textsuperscript{59} When acting under such powers, it would expressly be permitted to derogate from the provisions of the direct payments regulation provided that it was both necessary and justifiable.\textsuperscript{60} An example of a recent situation warranting such intervention was the 2011 outbreak of foodborne illness in Germany (primarily) where at least 53 people were estimated to have died and several thousand affected following consumption of infected vegetable products.\textsuperscript{61} Moreover, serious economic hardship was experienced by farmers in other parts of the EU due to widespread uncertainty and unfounded initial claims about the source of the outbreak.\textsuperscript{62} The proposed regulation would therefore give the Commission a clear mandate to intervene in such situations by imposing temporary emergency measures in order to address the emergence of sudden crisis.

Finally, it should also be noted that the proposed regulation addressed the issue of modulation, which has historically been used to progressively transfer funds from the first to the second pillar. To this effect Article 14(1) permitted MSs to transfer up to ten per cent of their direct payments budgets towards funding rural development areas.

\textsuperscript{54} Ibid, Article 35.
\textsuperscript{55} Ibid, Article 39(3).
\textsuperscript{56} Ibid, Articles 53 and 54.
\textsuperscript{57} Ibid, Articles 55 and 56.
\textsuperscript{58} Ibid, Article 58. The proposal indicated that the new framework should take effect from 1 January 2014, but as will be seen below, the late finalisation of the negotiations entailed that the reforms would not be implemented until 2015 and onwards. Thus, transitional rules would have to be formulated by the Commission according to its power to adopt delegated rules for this purpose.
\textsuperscript{59} Ibid, Article 54.
\textsuperscript{60} Ibid, Article 54(1).
\textsuperscript{62} Ibid. Initial reporting of the outbreak suggested that it could be traced to Spanish vegetable farmers although subsequent findings showed that it stemmed from producers located in Lower Saxony.
measures. However, this flexibility not only extended the option to transfer funds from Pillar I to Pillar II, but also provided for defined levels of so called reverse modulation to be made in MSs where the level of direct payments remained below 90 per cent of the EU average.\textsuperscript{63} As will be seen below, the latter was unsurprisingly met with considerable scepticism from those interest groups and stakeholders that had continuously supported the reduction of Pillar I funding, for the benefit or more funding for targeted support under the rural development framework.

4.4 The Rural Development Regulation

In order to provide the full context of the proposal for rural development, it should be noted that this part of the CAP framework is embedded within the EU’s broader cohesion policy, aimed essentially at addressing social and economic disparities between and within the various regions.\textsuperscript{64} Thus, the proposed rural development regulation was part of a larger set of initiatives setting out shared rules for all funds operating under this common strategic framework.\textsuperscript{65} This was for instance reflected in its mission statement which, in addition to the three main CAP objectives outlined by the Commission, stressed the role of the EAFRD in contributing to the Europe 2020 Strategy ‘by promoting sustainable rural development throughout the Union in a complementary manner to the other instruments of the common agricultural policy…to cohesion policy and to the common fisheries policy’.\textsuperscript{66}

Given these multiple and intersectional objectives of rural development policy, the proposal called for the second pillar to focus on a number of core priorities ‘relating to knowledge transfer and innovation in agriculture, forestry and rural areas, the competitiveness of all types of agriculture and farm viability, food chain organisation and risk management in agriculture, restoring, preserving and enhancing ecosystems dependant on agriculture and forestry, resource efficiency and the shift

\textsuperscript{63} Ibid, Article 14 (2); Explanatory Memorandum, 9.
\textsuperscript{64} In particular, the EAFRD is funded under this framework.
\textsuperscript{66} European Commission, COM (2011) 625 (n 13), Article 3.
towards a low carbon economy in the agricultural, food and forestry sectors, and promoting social inclusion, poverty reduction and the economic development of rural areas.\(^67\) Considering the sheer breadth of these priorities, the current discussion is limited to highlighting a number of them in passing, instead focusing on those instruments aimed directly or indirectly at remunerating practices beneficial to the environment and the climate.

With regards to the general contents of RDPs, the regulation proposed that measures should be formulated to pursue six thematic priorities aimed at (i) fostering knowledge transfer and innovation in agriculture, forestry, and rural areas; (ii) enhancing competitiveness of all types of agriculture and enhancing farm viability; (iii) promoting food chain organisation and risk management in agriculture; (iv) restoring, preserving and enhancing ecosystems dependent on agriculture and forestry; (v) restoring, preserving and enhancing ecosystems dependent on agriculture and forestry, and; (vi) promoting social inclusion poverty reduction and economic development in rural areas, with a focus on the following areas.\(^68\) Together, these priorities sought to streamline the measures introduced under the CAP’s second pillar and effectively meant the abolishment of the four axes that had steered programming objectives during the 2007-2013 period.\(^69\) In particular, the Commission noted that the potential overlap between different axes made it unsuitable for priorities to continue to be grouped along these lines.\(^70\)

Consequently, the proposed framework entailed that agri-environmental measures could be formulated to pursue a number of the six intersectional priorities. In particular, this pertained to the fourth and fifth of these, although there was nothing to prevent measures with an environmental focus or impact from being formulated under any of the aforementioned headings. Indeed, Article 14 of the proposed regulation explicitly provided for all second pillar measures to pursue one or more of the Union’s priorities for rural development. Moreover, the Commission reiterated the important of the CAP’s rural development priorities to be ‘pursued in the framework of sustainable development and the Union's promotion of the aim of protecting and improving the environment as set out in Articles 11 and 19 of the Treaty, taking into

\(^{67}\) Ibid, Preamble (5).
\(^{68}\) Ibid, Article 5.
\(^{69}\) Ibid, Explanatory Memorandum, 8.
\(^{70}\) Ibid.
account the polluter pays principle’. 71 Thus, as already seen in the context of previous reforms, agri-environmental measures were definitely envisaged as central contributions to the advancement of EPI under the 2020 agenda.

With reference to sustainable farming, the following measures were proposed. First, required MSs were required to formulate and implement agri-environment-climate payments based on their national, regional and local needs and concerns. 72 These were intended to replace the former ‘agri-environmental’ instruments and, as under previous regulations, were to be granted on a contractual basis for a period of five to seven years and covering ‘commitments going beyond the relevant mandatory standards…relevant minimum requirements for fertiliser and plant protection products use as well as other relevant mandatory requirements established by national legislation’. 73

Secondly, the proposed regulation sought to introduce a dedicated payments, to be granted on a per hectare of UAA basis, to producers that undertake organic farming practices and methods as defined in Council Regulation (EC) No 834/2007. 74

Thirdly, Article 31 provided for special payments to be made to farmers operating within designated Natura 2000 areas, as well as those required to take action in order to meet the objectives of the EU’s WFD. With regards to the latter, in particular, support was to be granted in cases where river basin management plans imposed obligations that went beyond basic EU environmental standards 75 or the SMRs and GAECs that constituted the cross-compliance regime. 76 Likewise, payments were to be authorised where such plans pursuant to the WFD served to impose ‘major changes in land use, and/or major restrictions in farming practice resulting in a significant loss of income’. 77

In addition, Article 32 was intended to allow MSs to provide specific payments to areas facing natural or other specific constraints on the basis that ‘land management should be continued in order to conserve or improve the environment, maintain the

71 Ibid, Preamble (6).
72 Ibid, Article 29(1).
73 Ibid, Article 29(3). It may also be noted that extended contracting periods had the potential to be approved See, Article 29(5) of the same proposed regulation.
76 Ibid, Article 31(4)(b).
77 Ibid, Article 31(4)(d).
countryside and preserve the tourist potential of the area or in order to protect the coastline’.78 Thus, environmental considerations would not be mandated, but may form one of several justifications for determining the type of land defined as facing natural or specific constraints.

The proposed framework also included other measures that had previously been contained under axis two of Regulation 1698/2005, such as payments to farmers who undertake animal welfare commitments beyond the basic cross-compliance obligations. However, having called for an end to the axis approach, the proposal also sought to introduce new tools aimed at enhancing the environmental dimensions of the EU’s rural development policy. For instance, it emphasised the importance of establishing – and building upon – EU-wide networks capable of facilitating useful exchanges and cooperation between actors and stakeholders.79 In particular, it required that a network be established to support the European Innovative Partnership (EIP) for agricultural productivity and sustainability.80 This was set out under Title IV and intended to (i) promote a resource efficient, productive, low emission, climate friendly and resilient agricultural sector, working in harmony with the essential natural resources on which farming depends; (ii) help deliver a steady supply of food, feed and biomaterials, both existing and new ones; (iii) improve processes to preserve the environment, adapt to climate change and mitigate it and; (iv) build bridges between cutting-edge research knowledge and technology and farmers, businesses and advisory services.81 As highlighted in connection with the proposed direct payment regulation, the Europe 2020 strategy was central to shifting the emphasis of Pillar II measures towards a renewed focus on innovation and partnership. And, as is seen in Chapter 6, much of the practical detail pertaining to implementation would ultimately have to be fleshed out by the Commission in the form of delegated acts.

78 Ibid, Article 33(4).
79 Ibid, Article 52.
80 Ibid, Article 53.
81 Ibid, Article 61.
4.5 Regulation on the Financing, Management and Monitoring of the Common Agricultural Policy

The proposed Horizontal Regulation, was intended to replace Council Regulation 1290/2005\(^{82}\) with a revised financing, management and monitoring framework covering both pillars of the CAP. In particular, the new system was formulated with a view towards meeting the targets of the 2020 strategy and its overarching guidelines on EU policy formulation and sectoral objectives.\(^{83}\) This included the central aims of increasing the efficiency of policy measures, as well as creating effective monitoring and evaluation mechanisms for the purpose of measuring their performance over the coming programming period.\(^{84}\)

On the part of the Commission, this was translated into a concrete imperative to ensure that the outcomes of CAP instruments were in line with the policy’s broader objectives. Hence, it stressed the importance of establishing a common monitoring and evaluation framework aimed at ensuring among other things ‘that relevant data, including information from Member States is available in a timely manner’.\(^{85}\) In practical terms, moreover, this required strategic changes to be made in order to bring the horizontal framework closer in line with the 2020 mandate, as well as to ensure greater coherence between the two pillars.

Against this background, the proposal encompassed a comprehensive framework aimed at ensuring, in quantifiable ways, the compatibility of CAP measures with basic regulatory standards and overarching EU objectives and principles. In particular, this had been a central critique of the cross-compliance regime, which according to the ECA not only weakened certain aspects of the rural development framework,\(^{86}\) but also required considerably improved structures for monitoring and measuring its performance.\(^{87}\) Thus, the most significant aspect of the proposed regulation, for present purposes, relates to the introduction of the cross-

---


\(^{83}\) See, for instance the press memo by the European Commission: CAP Reform: An Explanation of the Main Elements, MEMO/11/685 (12 October 2012, Brussels) 7 (see graph).

\(^{84}\) European Commission, COM (2011) 625 (n 13), Explanatory Memorandum, 7.

\(^{85}\) Ibid, Preamble (68).


\(^{87}\) Ibid, paragraphs 76-84.
compliance regime under the horizontal title and the consequent changes that were made with the intention of streamlining and creating greater consistency between Pillar I and Pillar II agri-environmental measures.  

4.5.1 Cross-Compliance

As already noted, the decision to include cross-compliance under the horizontal regulation was mainly aimed at improving the coherence between CAP measures and the monitoring and evaluation framework that was set forth therein. To this effect, the Commission affirmed that cross-compliance should remain an integral part of the CAP structure and contribute ‘to the development of a sustainable agriculture through a better awareness of beneficiaries of the need to respect those basic standards’. Indeed, this was considered to be especially important for ensuring continued public and political support for the CAP, although other motivations, such as the reoccurring theme of simplification, were also influential in determining the reform agenda in this area. In particular, the Preamble to the regulation underscored that the reformed framework should comprise ‘rules to better address water, soil, carbon stock, biodiversity and landscape issues as well as minimum level of maintenance of the land’.

In concrete terms, the Commission proposed that the separate lists of existing SMRs and GAECs should be revised and ‘streamlined so that its consistency [would be] ensured and made more visible’. Hence, the main structural change proposed by the regulation was the organisation of these measures into groups within a single list. The relevant provisions were to be found in Annex II, which laid down four thematic issues that fell within the broad area of ‘environment, climate change and good agricultural condition of the land’. The first pertained to water and required compliance with Articles 4 and 5 of the Nitrates Directive, as well as three GAECs relating to the establishment of buffer strips, irrigation use and the protection of

88 COM (2011) 628 (n 13) Preamble (52).
89 Ibid, (51).
90 Ibid.
91 Ibid, Explanatory Memorandum, 7.
92 Ibid, Preamble (58).
93 Ibid, (52).
94 Ibid, Annex II.
groundwater against direct and indirect pollution. The second addressed ‘soil and carbon stock’ and covered four GAECs regarding minimal soil cover, land management, soil protection and the protection of wetlands and other carbon rich soils. The third governed biodiversity, which required compliance with a number of provisions under the Wild Birds and Habitats Directives. And, the forth covered ‘landscape and minimum level of maintenance’, which was linked to GAEC 8 and required the retention of a number of landscape features.

The revised measures undoubtedly presented a simplified break-down of the cross-compliance obligations, compared to that of Regulation 73/2009. Moreover, the proposed framework effectively reduced or eliminated a number of the GAECs and SMRs that existed under that piece of legislation. Arguably, however, surprisingly little was added in terms of substance. For instance, despite the importance of agriculture and the CAP for meeting the objectives of the EU’s WFD, the relevant provisions of this directive were not included as basic SMRs that recipients of CAP funding would have to comply with over the 2013-2020 programming period. Similarly, the regulation failed to include directly implementable requirements to comply with appropriate provisions of the Pesticide Directive despite its obvious implications for agriculture.

Instead, the regulation provided that the two directives would only be included in the Annex once they were ‘implemented by all MSs and the obligations directly applicable to farmers [had] been identified’. To this effect, the Commission would be empowered to amend the Annex by way of delegated acts in order include the relevant provisions of the two directives. It should, however, be noted that the deadline for the implementation of the WFD was set for the end of 2013. And, considering that the reformed measures were not expected to take full effect before 2015, it was not entirely clear why the Commission would be reluctant to include the relevant provisions of the directive from the outset. Indeed, Mahé noted that this was

95 Ibid.
96 Ibid.
97 Ibid.
99 COM (2011) 628 (n 13), Article 93.
100 Ibid.
101 See below at, 6.4.
particularly regrettable considering that the cross-compliance regime had so far ‘had little impact on reducing pollution’.102 Moreover, as seen in relation to other directives, numerous MSs were expected to fall short of meeting the official deadline, which would materially delay the inclusion of the relevant measures as part of the Union-wide cross-compliance regime.

Furthermore, the Commission was empowered to ensure that measures were taken ‘to maintain the land under permanent grassland at the level of farmers, including individual obligations to be respected such as obligation to reconvert areas into permanent grassland where it is established that the ratio of land under permanent grassland is decreasing’.103 Undoubtedly, there was a level of overlap with the permanent grassland measure that formed part of the greening component set out in the direct payments regulation.

4.6 Negotiating the Final Measures

The publication of the proposed regulations set in motion the formal negotiation process, which sought to reach political agreement between the Commission, EP and Council on the framework intended to govern the CAP during the 2013-2020 programming period, including transitional provisions for 2014.104 However, it also sparked a much wider debate, inviting input from a range of institutional and non-governmental actors, as well as stakeholders, academics and interest groups offering alternative perspectives for the reforms. And, from the outset, it was apparent that the Commission would be intensely challenged on a number of key issues. The opposition came from several sources, but for present purposes, the inter-institutional trilogue discussions were especially important for understanding the negotiations between the EP and Council, and which ultimately served to affect the substance and ambition of the measures that were adopted in December 2013.105 This was not least the case with

103 COM (2011) 628 (n 13) Article 93.
regard to the greening and environmental components, which proved from an early point to be a major matter of contention that demanded considerable effort and negotiation before a political agreement was reached.\(^\text{106}\)

The remaining sections of this Chapter consider some of the main features of these negotiations, as they relate to the environmental elements of the Commission’s proposals, before undertaking a more detailed analysis of the substantive legislative outcomes in the following Chapters.

### 4.6.1 Political Responses to the Commission’s Proposals

As already indicated, much of the political and academic commentary focused on the formulation of the proposed greening component, which was effectively the main new contribution towards furthering the process of EPI under the leadership of Commissioner Cioloş. Indeed, these measures were considered to be particularly central to maintaining the policy’s overall legitimacy and support.\(^\text{107}\) However, it was received with differing responses, ranging from arguments in favour of further strengthening the three proposed measures, to those opposed to the idea of imposing additional obligations on farmers. On the whole, though, Hart has argued that regardless of orientation or agenda, the greening proposals ‘were met with widespread criticism from the majority of actors’.\(^\text{108}\)

With regards to the EU institutions, the proposals were likewise received with mixed reviews, although some analysts suggest that the EP and Council essentially held very similar positions regarding key components.\(^\text{109}\) However, this did not prevent them from developing differentiated negotiating mandates, which undoubtedly served to complicate the process and the prospects for agreement. In relation to the greening measures, in particular, both actors entered the negotiations

---

\(^{106}\) Further changes were made with regards to a number of outstanding issues in September 2013. See, European Commission, (\[http://europa.eu/rapid/press-release_IP-13-864_en.htm\] accessed on 27 June 2017).

\(^{107}\) K. Hart, Achieving a Transition Away from CAP Direct Payments, (IEEP, London, 2010) 2. See also, Matthews (n 105).

\(^{108}\) Hart (n 2) 2.

\(^{109}\) Ibid, 15.
with long lists of amendments and political demands aimed at limiting their scope. Many of these are beyond the current discussion, but some of the main positions deserve further consideration in order to fully understand the context in which the final measures were formulated and agreed.

Turning to the specific components, it may be recalled, firstly, that with regard to crop diversification, the proposed measure was intended to apply to recipients of direct payments with holdings consisting of three hectares or more. However, both the EP and the Council insisted that the threshold be raised to at least ten hectares – with the latter additionally calling for exceptions to crop diversification for a number of specific farm types.\(^\text{110}\) Moreover, both institutions took the position that the three crop minimum should only be applied to holdings with more than 30 hectares, whereas smaller farms would only be required to grow two crops.\(^\text{111}\) It should also be noted that they argued for the maximum and minimum ratios to be relaxed. Combined, these amendments effectively entailed that the coverage of the proposed measure would be considerably reduced if these changes were to be adopted.

Pertaining to the permanent grassland measures, on the other hand, there was less controversy and the main input from both the EP and Council was for the measure to be applied at national or regional level, as opposed to farm level as originally proposed. This meant that farmers would merely be required to take action if more than five per cent of the national or regional ratio of the permanent grassland registered in 2014 were to be converted thereafter. In such cases, MSs would have to ensure that those farmers responsible for this conversion be placed under an obligation to restore pre-existing grasslands.

By far the most contentious aspect of the negotiations related to the proposed EFA measure, which had been hailed, not least by the Commission itself, as the most promising aspect of the reforms,\(^\text{112}\) Indeed, compared to the crop diversification and permanent grassland measures, the EFA measure, as first envisioned, was broad in scope in that it required recipients of direct payments to designate seven per cent of their holding towards the establishment of these areas. Moreover, the wording of the proposal indicated that the measure would apply equally to all farms, with no mention having been made of differentiated thresholds according to farm size (although, as

\(^{110}\) For an overview of the amendments made by the Council and EP see, Hart (n 2).

\(^{111}\) Ibid, 11.

\(^{112}\) Ibid, 15.
already highlighted, farmers enrolled under the small farmer scheme would not be expected to comply with the greening requirements).

Notwithstanding this exemption, the adoption of the proposed measure would have entailed that a significant portion of EU agricultural land would be ‘focused’ towards providing water and habitat protection, as part of the broader objective of improving biodiversity.\(^\text{113}\) However, the Commission was adamant to stress that this was not a reversion to ‘set-aside’, which had primarily been introduced to address overproduction.\(^\text{114}\) Consequently, the proposed direct payment regulation stipulated that EFAs could be made up of a number of different elements including land left fallow, terraces and landscape features, such as hedges, ponds, ditches, trees in a line, in a group or isolated field margins.\(^\text{115}\) Moreover, buffer strips could be counted, provided that no production take place on the designated areas.\(^\text{116}\) This element was especially stressed by the Commission, in its 2012 communication A Blueprint to Safeguard Europe’s Waters, for its potential to contribute towards the objectives of the WFD, by providing a natural water retention measure as part of wider effort to create ‘a type of Green Infrastructure’.\(^\text{117}\) Finally, areas afforested with funding from EAFRD would likewise be able to be counted towards this end.\(^\text{118}\)

Despite these efforts of the Commission to provide for flexibility regarding the implementation of the proposed EFA measure, the measure was fiercely opposed on the basis that it would serve to limit agricultural output, by placing restrictions on land use and management practices.\(^\text{119}\) Indeed, as may be recalled from the discussion in the preceding Chapters, the experiences of the 2007-2008 food crisis had served to shape the tone of the CAP reform in a number of ways. Not least, an increasingly


\(^{114}\) See, eg, Commissioner Cioloş, SPEECH/12/112, Meeting the Challenge, Birmingham, 21 February 2012. Although, as mentioned in the previous Chapter, incidental environmental benefits certainly resulted at times. See, Council Regulation (EEC) 2078/92 of 30 June 1992 on agricultural production methods compatible with the requirements of the protection of the environment and the maintenance of the countryside, [1992] OJ L 215/85.

\(^{115}\) European Commission, COM (2011) 625 (n 13) Article 32.

\(^{116}\) Ibid.


\(^{118}\) European Commission, COM (2011) 625 (n 13) Article 32.

productivist narrative was furthered at institutional level, which proposed meeting the challenges of food security with growing productivity and output. Against this background, Swinnen argued that the increases in commodity prices associated with the crisis gave ‘strength to the productionist argument that the food supply should not be constrained by extra regulations’. He also noted that this argument had found considerable support amongst the members of the Council, where it was used to weaken important elements of the Commission’s greening proposals. Thus, with the aim of reducing the requirements linked to EFAs, the German Agriculture Minister, and member of the Council, expressed that it would be ‘absurd to leave seven per cent of land fallow’ given the global demand for food.

Consequently, the overall aim of both the Council and the EP would be to add greater flexibility to the application of the EFA measure. This was done in a number of ways. For instance, they sought to reduce the percentage of land necessary to fulfil the EFA requirement to five and three per cent, respectively. Moreover, they both strongly attempted to limit its application by insisting that farms consisting of less than 10 or 15 hectares, again respectively, would be exempt from the measure altogether. It should also be highlighted that their negotiating positions entailed that, even in cases where the EFA would require basic compliance, a long list of amendments was made to extend the types of land use that could be carried out, as well as the features that could be counted as part of the EFA. Importantly, several of these uses involved production, for instance of nitrogen fixing crops, and were

---

121 Ibid.
subsequently contained in the final measures. Thus, for the sake of avoiding unnecessary repetition, the details will be spared for further discussion in the following Chapters.

The issue of equivalence was another major negotiating point driven by the Council, which proposed that MSs should be permitted to use national certification schemes in place of the Commission’s greening measures. In other words, the idea was to allow national schemes, mainly under Pillar II, to be counted as equivalent to the latter and would, therefore, be sufficient to satisfy these obligations. In practice, the Commission had already provided for such equivalence, for instance, with regards to farmers who fulfilled the conditions laid down in Council Regulation 834/2007 on organic production and labelling of organic products. Indeed, the Preamble to the proposed direct payment regulation suggested that given the recognised environmental benefits of these farming systems, organically certified producers would not be required to undertake any further action to comply with the greening measures.

MSs such as the UK, however, strongly argued for this list to be extended ‘as a means of introducing more flexible ways of implementing greening with the ability to tailor the measures to local circumstances’. Though, it should be added that this flexibility was viewed by others ‘as a potential loophole through which MSs would seek to avoid the greening requirements’. As pointed out by Hart and Manadue, it was also likely to add significant complexity and cost to the implementation of the new framework, given the number of certification schemes that would potentially be eligible (they estimated 67 schemes in four different MSs). To reduce the risk of such an outcome, the Commission responded by delivering a list of practices that could be considered equivalent to the greening measures.

---

126 European Commission, COM (2011) 625 (n 13) Preamble (26).
127 Hart (n 2) 17.
128 Ibid, 18.
129 Hart and Menadue (n 124) 9.
130 As will be further discussed in Chapter 5, these practices were ultimately contained in Annex IV of the Direct Payments Regulation.
The issue of equivalence had also raised concern over the potential for the new greening measures to overlap with those managed under the second pillar. In particular, this fluidity created potential conflicts with regards to double funding—a practice that goes against the legal and financial principles of both the EU and the WTO. And, perhaps with a view to pre-empting such outcomes, the proposed horizontal regulation explicitly included a provision prohibiting double funding of CAP measures. However, this did not prevent the Council from submitting a number of amendments that effectively enabled farmers to be paid twice—first under the second pillar and secondly by way of the greening payment—for the same service. The absurdity of this situation was not lost on the EP which, to its credit, remained adamantly opposed to the idea of making concessions on double funding. And this position ultimately defeated the proposals levelled by the Commission.

Notwithstanding this positive effort to maintain the effectiveness of the greening payment, the overall approach of both the Council and the EP was arguably to limit, rather than strengthen, the potential benefits of the greening measures by insisting on changes that would essentially entail that the majority of concerned farmers would, in one way or another, either comply by default or be exempt from compliance. This was especially surprising with regards to the EP, considering its initial support for enhancing the protection of agricultural resources beyond that provided under cross-compliance. Thus, pertaining to the fate of the greening measures, Bureau and Mahé noted that although the draft legislation would have provided much needed protection of biodiversity, the Committee on Agriculture and Rural Development (COMAGRI) played a central role in diluting the strongest elements of the Commission’s initial proposals.

However, this mandate was not necessarily supported by all factions of the EP and Hart has suggested that the institutional dialogue within the EP was characterised

---

131 Hart and Menadue (n 124), 28.
135 Ibid.
by ‘the divide between those seeking to improve the environmental benefits that could be achieved through [greening] … and a larger group who wanted to maintain the status quo and minimise the degree to which the measures impinged upon productive farm activities’. According to Bureau and Mahé this alignment could partly be explained by the underlying composition of COMAGRI, which was dominated by farm interests, partly because of the close connection of many of its MEPs to farming and ‘because CAP technicalities put off other MEPs’. The latter is of particular importance, as it arguably allowed a political vacuum to be filled by ‘MEPs taking stances in favour of the farm sector, basically arguing for the status quo and for the upgrading of payment rates per hectare in the new member states’.

Moreover, the domination by farm interests allowed for the internal EP discussion to be reduced to a ‘simplistic, production-focused view of European food security [that] was never really challenged’. Indeed, as already seen, these arguments were carried forward in the context of the main negotiations and ultimately ‘changed the terms of the debate on the future CAP by elevating the food security argument at the expense of the public goods one’. Consequently, Erjavec et al have argued that ‘the dominant role of productivist political setting and discourse was to turn greening into a greenwash strategy’.

4.6.2 Inputs from Civil Society

The productivist tone of the negotiations arguably thus reflected a highly problematic dichotomy between environmental protection and food security, based on the premise that the former would undermine the latter by reducing levels of output and income. This undoubtedly served to embolden traditional farm interest and lobby groups, many of which were intent on opposing even modest attempts to impose additional

137 Hart (n 2) 7.
138 Bureau and Mahé (n 136) 92.
139 Ibid.
140 Hart (n 2) 7.
obligations on farmers in receipt for direct payments. Indeed, such a state of affairs was particularly evident with regards to the position taken by one of the main farm interest organisations, Copa Cogeca, which suggested that the introduction of environmental measures could threaten food security and entail higher food prices for consumers if they had the effect of restricting production.143

It was thus clear from the outset that aspects of the proposals that were perceived to affect either output or productivity would be fiercely resisted by farm groups. Indeed, Copa Cogeca, unequivocally opposed the imposition of mandatory greening measures on the grounds that they would ‘undermine the ability of the agri-food sector to be competitive, efficient and to achieve sustainable growth’.144 Presumably, this agenda was further powered by the increased profitability that had been observed in, for instance, the cereal sector (with cereals being produced on almost half of EU farms) in previous years, as this would presumably provide a financial incentive to resist incursions on production through the introduction of land use measures.145 Moreover, Matthews has pointed out that such sentiment was particularly critical of the EFA element of the greening component, since it was viewed in terms of its potential to threaten production.146 As will be seen, however, this concern was addressed by the direct payment regulation as finally enacted by allowing considerable possibilities for cultivation on EFAs.147

Against this background, the position of many environmental organisations differed significantly to those detailed above.148 Indeed, rather than criticising the Commission for imposing additional obligations upon farmers, these actors questioned whether the Commission had gone far enough and whether the costs would even be worth the final product.149 So stark a contrast was especially reflected with

---

144 Ibid, 3.
146 Matthews (n 105) 22.
147 See below at, 5.3.3.
148 Briefing of Birdlife Europe, the European Environmental Bureau, the IFOAM EU Group, and WWF, ‘Reform Proposals of the Common Agricultural Policy: Common briefing of BirdLife Europe, the European Environmental Bureau, the IFOAM EU Group and WWF following discussion in the Council on Greening the CAP’, (BirdLife International, Brussels, 2012).
149 Ibid.
regards to food security and the role that the CAP was envisaged to play in meeting the long-term ecological challenges outlined in Chapter 2. Thus, while the EP and Council, as well as the main farm interest groups had fiercely defended the need to maintain or even increase productivity as a pre-requisite for food security, environmental organisations, in particular, argued that the most pressing issue was to ensure that natural resources and agricultural systems were protected with a view to ensuring long-term sustainability of agricultural resources.

In doing so, NGOs such as BirdLife International did not exclude the possibility of limiting production in areas where the ecological benefits of doing so would outweigh those of production.\textsuperscript{150} Hence, some commentators even proposed designating up to 10 per cent of eligible hectares on each holding for ecological purposes, rather than the 7 per cent that had been proposed for the implementation of the EFA measure.\textsuperscript{151} And it may be noted that comparable measures had already been implemented in Switzerland under the framework for ‘Biodiversity Promoting Areas’, which has been a compulsory aspect of agricultural policy since 1993 and currently comprises 13 per cent of Swiss farmland.\textsuperscript{152}

Similarly, the proposed crop diversification measures was strongly criticised by environmental groups for being insufficient to meet the basic objective of improving the resilience of soil and ecosystems.\textsuperscript{153} Instead, they lobbied from an early point that crop rotation would have been a better alternative, with greater potential to provide environmental benefits.\textsuperscript{154} This view was, likewise, shared by the Committee on the Environment, Public Health and Food Safety, which argued that the crop rotation had the advantage of preventing monoculture, improving biodiversity and lowering the need for pesticide use.\textsuperscript{155} This had also been acknowledged by the

\textsuperscript{150} Ibid.
\textsuperscript{151} L. Ribbe \textit{et al}, Für eine ökologisierte Erste und eine effiziente Zweite Säule, Stellungnahme der KLU zur Reform der gemeinsamen Agrarpolitik (Umweltbundesamt, Germany, 2011).
\textsuperscript{152} Bundesamt für Landwirtschaft, 2013 Agrarbericht (Federal Office for Agriculture (BLW), Bern, 2013).
\textsuperscript{154} Ibid.
\textsuperscript{155} Committee on the Environment, Public Health and Food Safety, Opinion of the Committee on the Environment, Public Health and Food Safety for the Committee on Agriculture and Rural Development on the Proposed Direct Payments Regulation, (2011/0280(COD)) (September 2012) (Dan Jørgensen MEP being the Rapporteur). On pesticide use, generally, see, eg, O. Hamlyn,
commission in its 2010 communication on the future of the CAP, but was later dropped in favour of diversification and maintaining levels of productivity.

4.7 Reaching Agreement in Times of Uncertainty: The Wider Context of the Negotiations

With regards to the wider context of the CAP negotiations, it may be recalled that they not only took place in the aftermath of the 2007-2008 food crisis, but that they also coincided with the start of one of the most challenging economic crises to hit the EU and its MSs in recent years. Indeed, the Commission’s impact assessment was expressly formulated to take account of the policy impact of ‘the economic crisis and the pressure on public finances’ in each of proposed policy scenarios. In other words, environmental measures that could increase the CAP budget were very likely to be opposed by most political factions at both EU and national levels.

This was particularly evident in the context of the, then, ongoing MFF negotiations during which the Prime Minister of the UK, David Cameron, penned an open letter to the president of the Commission, Jose Manuel Durao Barroso, urging the EU to consider the strained economic circumstances of its MSs when determining the budget and spending allocations for the 2014-2020 period. Specifically, Cameron and his co-signatories called for the budget not to exceed 2013 levels or to grow beyond the prevailing rate of inflation. However, Matthews pointed out that this would have entailed a decrease of the annual budget in real terms ‘and even more as a share of EU gross national income*. Moreover, the EP did not share the idea of


157 European Commission (n3) 5.

158 See, Swinnen (n 120).


freezing or reducing overall CAP spending and had in fact suggested that at least a five per cent increase would be required to properly fund the policy.161

Numerous commentators have since argued that the effect of the general economic climate was to put additional pressure on policymakers to maintain the status quo, and of dissuading them from supporting reform measures that would imply an increase in CAP funding.162 Moreover, it served to place a considerable emphasis on socio-economic impacts and indicators, which had a tangible effect on the scope and formulation of specific agri-environmental instruments.163 Indeed, with regards to the EFA measure in particular, the Commission was under pressure from the Council to give assurances that it would be ‘implemented in ways that do not require the land in question to be taken out of production and that avoids unjustified losses in the income of farmers’.164 Not least, in justifying the formulation of its crop diversification measure, the Commission expressly cited the individual cost of implementation as a main reason for not pursuing more ambitious targets.165

As already outlined, second pillar funding was, likewise, affected by the prevailing budgetary constraints. And, although, the EP successfully managed to maintain EU contributions to the EAFRD, it was nonetheless unable to secure increased support for rural development, which had been an implicit expectation of the two previous CAP reforms.166 Moreover, as will be discussed in Chapter 6, the adopted framework provided additional scope for MSs to reduce their rural development spending by affording them considerable flexibility to transfer funds between pillars.

Against this background, the following two Chapters will consider the main outcomes of the most recent round of CAP negotiations and the extent to which the final measures reflect the environmental objectives that were stated at the outset of the reform process (as discussed in Chapter 2). More specifically, Chapter 5 analyses

161 Hart (n 2).
163 Swinnen (n 120) 21.
165 Specifically, it pointed out in its impact assessment that it could have required that the main crop not exceed 50 per cent of the arable land, rather than the 70 proposed See, European Commission (n 3) 56.
166 Hart (n 2) 2.
the new direct payments regime, which arguably underwent the greatest transformation, while Chapter 6 critically assesses the principal changes made to the rural development and cross-compliance. In doing so, the discussion aims to provide an initial overview of the impacts that the post-2014 framework is expected to have upon the protection of the natural resources and ecosystems services that underpin agricultural productivity and long-term food security.
Chapter 5

The Post-2014 Direct Payments Regime

5.1 Introduction

The main elements of the new direct payments regime were adopted in December 2013 under Regulation 1307/2013 and took effect on 1 January 2015.\(^1\) Overall, the architecture of the Commission’s initial proposals remained largely intact following the inputs of the institutional reform process. However, the final measures, as formulated and enacted, also revealed additional changes that are of relevance to the current thesis, given their potential implications for the management of ecological resources and, thereby, long-term food security.

As is seen below, some of these changes, such as those relating to the new greening measures, had obvious environmental implications. Others aspects of the new system of direct payments, on the other hand, were afforded considerably less attention during the course of the negotiations, but may nonetheless be expected to have a notable impact on the environmental scope of Pillar I payments over course of the 2014-2020 programming period. For instance, notwithstanding the introduction of the highly publicised greening payment, Regulation 1307/2013 does not require compliance with these and other basic EU environmental obligations by small farmers.\(^2\) As will be further discussed below, it also enabled the continuation and expansion of voluntary coupled payments, which may undoubtedly be seen as a clear departure from previous reform agendas.\(^3\) Indeed, the latter represents a particularly surprising outcome, the full effects of which were only fully known once MSs had notified the Commission of their individual preferences of implementation in late 2014.

---


\(^2\) Ibid, Preamble (54).

\(^3\) See below, at 5.4.
A key feature of the new system is the level of flexibility and choice that has been afforded to MSs in their implementation of direct payments. This was especially apparent following the publication of the Commission’s delegated and implementing acts in March and June of 2014, which sought to complement the framework laid out in the basic regulation. However, these supplementing acts did not only serve to clarify essential details, but arguably also added a level of complexity to what had, until that point, been presented as fairly straightforward measures. Indeed, as will be extensively discussed below, this not only affected crucial elements of the new greening measures, but also had implications for the implementation of other Pillar I payments.

Against this background, the current Chapter analyses the system of direct payments that is set to be in operation until 2020 and the extent to which it might be expected to contribute towards meeting the environmental objectives and challenges of the CAP. Undoubtedly, similar questions have been raised in connection with previous reforms and are likely to invite further inquiry given the current role of direct payments. Indeed, following the implementation of the new framework, these payments continue to absorb the vast majority of the CAP budget (just under 70 per cent of the total CAP budget and about a quarter of the total EU budget), with the basic payment being the most widely applied CAP measure and accounting for almost 55 per cent of the total direct payments budget in 2015. Thus, given its direct link to the area of land under agricultural use (ie the payment depends on the existence of eligible hectares), the basic payment operates over an extensive portion of the EU’s territory with the potential to affect the management of important ecological systems and resources.

### 5.2 An Overview of the Main Elements

The new system of direct payments consists of nine substantive measures laid down in Annex I of Regulation 1307/2013 of the European Parliament and the Council (the

---


Each of these are linked to specific objectives and include the (i) basic payment scheme; (ii) single area payment scheme (SAPS); (iii) redistributive payment; (iv) payment for practices beneficial to the environment and the climate; (v) payment for areas with natural constraints; (vi) payment for young farmers; (vii) voluntary coupled support; (viii) crop specific payment for cotton; and (ix) small farmer scheme. Five of the nine schemes are entirely voluntary, while (i) or (ii), (iv) and (vi) must be applied by all MS and are intended to provide a uniform basis for the transfer of payments made by the EU to its farmers.

As already indicated, the centrepiece of this framework was the introduction of a new basic payment, which replaced the former SFP in most MSs at the start of 2015. This basic payment provides farmers a fundamental layer of income support subject to determined criteria, including fulfilment of the ‘active farmer’ clause and having at their disposal a minimum amount of eligible land. In addition, Article 36 of Regulation 1307/2013 provides for the continued operation of the single area payment scheme (SAPS) which was previously implemented by newer MSs most recently under Regulation 73/2009. Consequently, excluding Croatia, Malta and Slovenia, the single area payment scheme (SAPS) will continue to run until 2020 in ten of the thirteen MSs that joined the EU since 2004.

Certainly, the main novelty for present purposes was the mandatory attachment of the payment for practices beneficial to the environment and the climate to the basic payment (SAPS where applicable), which entailed that receipt would be directly linked – and dependent on – compliance with the greening measures. These will be extensively discussed below. However, apart from the greening payment and the payment to young farmers (vi) – which requires all MSs to allocate up to two per cent of their direct payment budgets towards providing a top-up payment to new operators under the age of 40 – the remaining schemes are voluntary and depend on the preferences of individual MSs and their willingness to allocate resources from their national ‘envelopes’ to fund these. As already noted, this flexibility undoubtedly gives MSs a degree of choice in applying Pillar I measures, as well as the possibility of taking national circumstances and farming conditions into account when deciding

---

7 These are laid out in Annex I of Regulation 1307/2013 (n 1).
8 Ibid, Article 21(2).
9 Ibid, Article 9. MSs are responsible for ensuring that non-discriminatory standards are developed for each such eligibility criteria.
on whether or not to include certain schemes as part of their national and/or regional frameworks. However, an overview of MS notifications reveal that most of the payment schemes listed above will undoubtedly have very limited application throughout the present programming period. Indeed, while the special payment for areas with natural constraints (v) will only be applied by Denmark, the crop specific payment for cotton (viii) will, for obvious reasons, only apply to a minority of southern MSs where such production is undertaken and will not be subject to further analysis.\(^{10}\)

On the other hand, the notifications submitted to the Commission also reveal noteworthy uptakes of other schemes. For instance, the small farmer scheme (ix) has been implemented in a total of 15 MSs where payments between 500-1250 Euros have been offered to eligible farmers in place of the basic payment.\(^{11}\) And, as pointed out above, claimants under the simplified small farmer scheme will not be required to observe the agri-environmental measures that are otherwise mandatory with regards to direct payments.\(^{12}\) In other words, neither the greening measures, nor the rules on cross-compliance will be applicable against participants of the small farmer scheme.\(^{13}\)

Thus, as will be seen in the context of implementation, this exemption has, together with other factors, affected the coverage and outcomes of these basic environmental provisions, given the large proportion of small farmers that operate in several of the MSs that have opted to implement the scheme.

Perhaps the most significant revelation of MS notifications regards the widespread implementation of voluntary coupled support (VCS), as provided for in Chapter I of Title IV of the basic regulation. Under these rules, MS are permitted to divert different percentage of their direct payment budgets toward granting coupled support ‘where specific types of farming or specific agricultural sectors that are

\(^{10}\) The EU cotton sector accounts for 1 per cent of global output and 0.2 per cent of the value of European agricultural production, but is given additional support for its socio-economic significance. Cotton is currently only grown commercially in Greece (approximately 80 per cent of output), Spain (approximately 20 per cent of output) and Bulgaria (on less than 1000 hectares). Although, Article 58 of Regulation 1307/2013 also provides for the payment to be granted to cotton farmers in Portugal. See, [http://ec.europa.eu/agriculture/cotton/index_en.htm](http://ec.europa.eu/agriculture/cotton/index_en.htm), last accessed on 27 June 2017.


\(^{12}\) Article 92 Regulation 1306/2013.

particularly important for economic, social or environmental reasons undergo certain difficulties’. This freedom of choice has resulted in all but one MS, Germany, opting to introduce payments that are directly linked to production in a total of 18 out of the 21 eligible sectors. Moreover, the notifications reveal that 11 MSs have opted to transfer the maximum 13 per cent of their direct payment budget towards funding VCS, while four of these have even been granted special approval by the Commission to extend coupled payments well beyond this maximum limit.

In order to further explore the environmental outcomes and implications of the new direct payments framework, the following sections consider those measures that will be most widely applied (in terms of territorial coverage) and attract the greatest levels of EU funding over the course of the current programming period. As already suggested, this includes a detailed analysis of the payment for practices beneficial to the environment and the climate, as well as the use of coupled support payments during the current programming period. In addition to the above mentioned direct payments, it should be noted that the new regime provided for the voluntary transfer of funds between the CAP pillars. However, it may be recalled that this flexibility was not limited to transfers from Pillar I to Pillar II, as during previous programming periods. Rather, the new framework has also enabled reverse modulation, which has ultimately impacted on the overall level of funding available for agri-environmental measures under the second pillar. This will be discussed in the following Chapter.

5.3 Payment for Agricultural Practices Beneficial for the Climate and the Environment

As seen in connection with previous reforms, the incremental integration of environmental policy measures has been central to the implementation of the EU’s

14 Direct Payments Regulation (n 1) Article 52(3).
15 However, in the UK, where a regional scheme is in place, only Scotland has chosen to implement VCS. Thus, apart from Germany; England, Whales and Northern Ireland have also refrained from introducing coupled support. See below, at 5.4.
17 Belgium (17 per cent), Finland (20 per cent), Malta (57 per cent) and Portugal (21 per cent). See, European Commission, Direct Payments 2015-2020: Decisions taken by Member States: State of Play as at June 2016 - Information Note (European Commission, Brussels, 2016) 9.
sustainable development strategy and resulted in structural changes to both pillars of the CAP. And definitely a number of these changes, such as the introduction of cross-compliance under Pillar I and the minimum financing requirements imposed to secure the prioritisation of agri-environmental measures under Pillar II, have partly been formulated with the intention of increasing the environmental benefits of EU-funded farming activity. Indeed, in the context of the 2013 reforms, the Commission expressed its expectation that these measures would contribute towards meeting the CAP’s main environmental objectives by accelerating ‘the process of integration of environmental requirements…and reinforce[ing] the ability of land and natural ecosystems to…address major EU biodiversity and climate change adaptation objectives’.18 Likewise commentary from the General Secretariat of the Council underscored that the ‘coherence and consistency of the greening model is essential in order to ensure…more sustainable agriculture’.19

However, it is also important to reiterate that these changes have been vital for maintaining public and political support for the continuation of the vast transfer of payments that are made in the form of direct payments to farmers. Thus, by adding environmental conditions and obligations to the receipt of these payments, the intention has been to address agricultural externalities, as well as ensuring the provision of a minimum level of public goods. In this light, the decision to link direct payments to greater environmental services and benefits was crucial for ensuring continued support for the CAP.20 Indeed, as highlighted at numerous points above, the choice of the Commission to focus its reform efforts on changing the basis and structure of Pillar I payments was accompanied by a corresponding attempt to ensure that these payments delivered improved environmental dividends.21 This was particularly important given the widespread territorial coverage and substantial budgetary allocation attributed to the basic payment. In reflection of its significant

21 Direct Payments Regulation (n 1) Preamble (37).
application, the approach under the new framework has therefore been to attach mandatory practices to the receipt of basic income support.

As originally proposed by the Commission, Regulation 1307/2013 requires MSs to grant, on top of the basic payment, ‘an annual payment which may take account of internal convergence in the Member State or region, for compulsory practices to be followed by farmers addressing, as a priority, both climate and environment policy goals’. Consequently, MSs have had to commit 30 per cent of their direct payments budgets towards funding the ‘greening component’, which is currently second only to the basic payment in terms of overall spending.

The decision by the Commission to focus its efforts on greening the first pillar was, as already highlighted, primarily defended on the basis that it would ensure the greatest possible coverage of additional environmental measures due to the high uptake of basic income support (formerly under the SFP and SAPS) among EU farmers. Indeed, the underlying rationale was that the three greening measures were to apply on a general basis to all recipients of basic income support, which would certainly have added to the environmental obligations of a sizable portion of EU farmers. However, as already indicated, the new framework has also been accompanied by a degree of flexibility that has effected the application of the greening measures in a number of ways. Against this background, the following sections examine each of the three greening measures and consider the extent to which they may be expected to meet initial assurances of improved environmental protection and management of resources by recipients of the basic payment.

### 5.3.1 Crop Diversification

The obligations relating to crop diversification are set out in Article 44 of Regulation 1307/2013 and further supplemented by detailed rules on implementation under Delegated Regulation 639/2014. The new framework requires recipients of the basic payment whose arable land is not ‘entirely cultivated with crops under water for a

---

22 Ibid.
23 Ibid, Article 42.
significant part of the year or for a significant part of the crop cycle’ to cultivate at least two crops if they operate on holdings of between 10–30 hectares, whereas holdings consisting of over 30 hectares are required to grow at least three crops. In addition, farmers subject to a two crop minimum must ensure that the main crop does not cover more than 75 per cent of the arable land, and in cases where the holding is subject to a three crop minimum requirement, the two main crops shall not cover more than 95 per cent of the total arable land.\(^{25}\)

Certainly, the enacted framework provides notably less coverage than that originally proposed, which would, in principle, have required farmers to cultivate at least three different crops where their arable land covered more than three hectares, with none of the three crops covering less than five per cent of the arable land and the main crop not exceeding 70 per cent of the such land. In addition to reducing the minimum number of crops, the final measure also exempts all holdings consisting of less than ten hectares on the basis that the ‘obligations relating to crop diversification should be applied in a way that takes into account the difficulty for smaller farms to diversify, while continuing to make progress towards enhanced environmental benefit, and in particular the improvement of soil’.\(^{26}\) Moreover, the way in which the final measure has been formulated is likely to affect its application and implementation in a number of material ways.

First, it may be noted that the general rules have been relaxed in favour of grassland and land laying fallow.\(^{27}\) Indeed, the Preamble to Regulation 1307/2013 explicitly calls for exceptions to be made ‘for farms that already fulfil the objectives of crop diversification as a result of being covered to a significant extent by grassland or fallowland, for specialised farms rotating their parcels each year or for farms that because of their geographical localisation would have excessive difficulties in introducing a third crop’.\(^{28}\) Consequently, the maximum threshold of 95 per cent does not apply to holdings where grasses or other herbaceous forage or land lying fallow cover more than 75 per cent of the arable land.\(^{29}\) In such cases, Article 44(2) provides

---

\(^{25}\) Direct Payments Regulation (n 1) Article 44(1).

\(^{26}\) Ibid, Preamble (41). Although, as already mentioned, the small farmer scheme explicitly exempts qualifying farmers fulfilling the agri-environmental obligations linked to both the greening measures and cross-compliance.

\(^{27}\) Ibid.

\(^{28}\) Ibid.

\(^{29}\) Ibid, Article 44(2).
that the main crop shall not cover more than 75 per cent of the remaining arable land, except where this area is covered by grasses or other herbaceous forage or land laying fallow.

Similarly, complete exemptions from the crop diversification requirements are extended to, amongst others, ‘farms that already fulfil the objectives of crop diversification as a result of being covered to a significant extent by grassland or fallowland’. The details are provided in Article 44(3)(a) and (b), under which the crop diversification requirement does not apply to holdings ‘(a) where more than 75 per cent of the arable land is used for the production of grasses or other herbaceous forage, is land lying fallow, or is subject to a combination of these uses, provided that the arable area not covered by these uses does not exceed 30 hectares’, or; ‘(b) where more than 75 per cent of the eligible agricultural area is permanent grassland, used for the production of grasses or other herbaceous forage or for the cultivation of crops under water for a significant part of the year or for a significant part of the crop cycle, or is subject to a combination of these uses, provided that the arable area not covered by these uses does not exceed 30 hectares’.

Moreover, special rules apply to holdings situated north of the 62nd parallel or certain adjacent areas. In their case, holdings consisting of ten hectares or more of arable land are merely required to cultivate a minimum of two crops, with none of them covering more than 75 per cent of arable land unless the main crop is grasses or other herbaceous forage, or land laying fallow. And it may also be noted that the crop diversification measure will not apply to holdings ‘where more than 50 per cent of the areas of arable land declared were not declared by the farmer in his aid application of the previous year and, where based on a comparison of the geo-spatial aid applications, all arable land is being cultivated with a different crop compared to that of the previous calendar year’.

Secondly, implementation of the crop diversification measure is affected by the definition of what constitutes a ‘crop’ for the purposes of compliance under the current framework. This is provided in Article 44(4), which defines as a ‘crop’; ‘

---

30 Ibid, Preamble (41).
31 Ibid, Article 43(a) and (b).
32 Ibid, Article 44(3)(c).
(a) a culture of any of the different genera defined in the botanical classification of crops;
(b) a culture of any of the species in the case of *Brassicaceae, Solanaceae*, and *Cucurbitaceae*;
(c) land lying fallow;
(d) grasses or other herbaceous forage;

To this should be added that the regime was further relaxed by permitting winter crops and spring crops to be considered distinct crops even if they belong to the same genus (although the supplementary Commission Delegated Regulation does provide that, where a main crop is under-sown with a second crop, the area is to be considered as covered only with the main crop). Important, moreover, this list is non-exhaustive and may be extended for the purpose of; ‘(a) recognising other types of genera and species than those referred to in paragraph 4 of this Article and; (b) laying down the rules concerning the application of the precise calculation of shares of different crops.

Thirdly, the rules for implementing the crops diversification measure have been further detailed with regards to the calculation of shares of different crops. These rules are set out in Delegated Regulation 639/2014 and relate to the period that may be taken into account for the calculation of the relative share of crops, the implications of landscape features situated on arable land and the specific cases of mixed cropping in distinct rows, under-sowing and the use of seed mixtures.

With regards to the first of these, Article 40 of the delegated act specifies that for the purpose of calculating the shares of the different crops, as required under Article 44 of the basic act, ‘the period to be taken into account shall be the most relevant part of the cultivation period taking account of the traditional cultivation practices in the national context*. To this effect, each hectare of arable land belonging to a holding ‘shall be taken into account only once in one claim year for the purpose of the calculation of the shares of different crops’. According to the Commission, this would allow for account to be taken of the practical timing of crop

---

33 *Ibid, Article 44(4); Commission Delegated Regulation (n 24) Article 40(3).
34 Direct Payments Regulation (1) Article 40(1).
35 Commission Delegated Regulation (n 24) Article 40(1).
cultivation, which differ considerably across the 28 MSs, as well as facilitate a simple administration.36

The second aspect of crop diversification addressed in the Commission’s delegated regulation was the issue of landscape elements situated within arable fields and the need to clarify to farmers and MSs how to take account of the arable area occupied by such features.37 For the purpose of calculating the shares of different crops, Article 40(2) therefore provides that ‘the area covered by a crop may include landscape features that form part of the eligible area in accordance with Article 9 of Delegated Regulation (EU) No 640/2014’.38

The third element introduced under the delegated regulation relates to supplementary rules for specific cases of mixed cropping in distinct rows, undersowing and the use of seed mixtures. With regards to mixed cropping systems where two or more crops are grown in distinct rows, Article 40(3) allows them to be counted as distinct crops, provided that they each cover at least 25 per cent of the arable area. However, additional crops that are part of mixed cropping systems consisting of a main crop and an under-sown second crop are not recognised as distinct crops under this framework. In such cases, the arable area will only be considered as covered with one crop.39 The provision also clarifies that the use of seed mixtures may be recognised as partial fulfilment of the requirement to grow at least two crops. Specifically, Article 40(3) of the delegated regulation provides that areas ‘on which a seed mixture is sown shall, irrespective of the specific crops included in the mix, be considered as covered with one single crop and referred to as ‘mixed crop’. Moreover, where it can be established that the species included the seed mixtures are different to each other, MSs may choose to recognise those different seed mixtures as distinct

36 Ibid, Preamble (40).
37 Ibid, Preamble (41).
38 Ibid, Article 40(2). Further, Article 9(1) of Delegated Regulation 340/2014 provides that: ‘Where certain landscape features, in particular hedges, ditches and walls, are traditionally part of good agriculture cropping or utilisation practices on agricultural area in certain regions, Member States may decide that the corresponding area shall be considered part of the eligible area of an agricultural parcel within the meaning of Article 67(4)(a) of Regulation (EU) No 1306/2013 provided that it does not exceed a total width to be determined by the Member State concerned’. Moreover, Article 9(2) adds that: ‘Any landscape features subject to the requirements and standards listed in Annex II to Regulation (EU) No 1306/2013 which form part of the total area of an agricultural parcel shall be considered part of the eligible area of that agricultural parcel’.
39 Ibid, Article 40(3).
single crops, provided that those different seed mixtures are not used for grasses or other herbaceous forage.\textsuperscript{40}

Fourthly, and lastly, it should also be noted that Annex IX of Regulation 1307/2013 lists four practices that are recognised as equivalent to the crop diversification measure, thereby, requiring no further action on the part of the farmer to fulfil this element of the greening component. First, this includes crop diversification practices that go beyond those required under the basic framework. For instance, holdings on which at least four crops are grown will automatically comply, provided that main crop does not exceed 75 per cent of the arable land.\textsuperscript{41} Secondly, certain crop rotation practices may be recognised as fulfilling the crop diversification obligation, provided that a ‘more environmentally beneficial multiannual sequence of crops and/or fallow is followed’ and/or a minimum of four crops are grown, again with none of the main crops exceeding 75 per cent of the arable land. Thirdly and fourthly, the Annex recognises winter soil cover and the cultivation as catch crops as practices equivalent to the crop diversification measures.\textsuperscript{42}

\textbf{5.3.1.1 Implementation of the Crop Diversification Measure}

As already noted, the principal objective of crop diversification is to improve the resilience of soils and ecosystems.\textsuperscript{43} However, given the dilution of the proposed measure, it would seem that crop diversification will only be applied on a small share of European farmland, leaving most holdings and beneficiaries of direct payments virtually unaffected.\textsuperscript{44} For instance, analysis by the Joint Research Centre in 2015 found that agricultural income at the national level decreases by less than one per cent and that the proportion of reallocated land represents less than 0.5 per cent of the total agricultural area, although individual farmers could see a significant fall in income in excess of 10 per cent.\textsuperscript{45} Likewise, a similar analysis conducted by the European

\textsuperscript{40} Ibid, Article 40(3).
\textsuperscript{41} Direct Payments Regulation (n 1) Annex IV.
\textsuperscript{42} Ibid, Annex IX.
\textsuperscript{43} Ibid, Preamble (41); European Commission (n 18) Preamble (26).
\textsuperscript{44} Institute for European Environmental Policy, ‘Political Agreement on the CAP: Is this really a Paradigm Shift for the Environment?’ (IEEP, London, 2013).
Commission found that, when comparing the difference between a status quo policy assumption and greening in 2025, the area subject to the crop diversification requirement represents 0.8 per cent arable area and 0.6 per cent of UAA in the EU-27. Notwithstanding these projections, the response of the Commission has been positive given that, in its view, the figures indicate that most farmers are already operating in compliance with the crop diversification requirement, which is seen as a successful effort of targeting those who undertake monoculture.

5.3.2 Permanent Grasslands

The second part of the greening component is set out in Article 45 of Regulation 1307/2013 and aims at ‘preserving the permanent grassland areas that contribute most to the protection of the environment and in particular carbon sequestration, biodiversity and soil protection’. As already noted, the protection of such areas was previously part of the cross-compliance regime, which contained an obligation to maintain permanent pasture. However, following the 2013 CAP reform, the greening instrument now provides the primary platform for delivering this objective, with two distinct responsibilities being placed on MSs to: (i) designate permanent grassland in environmentally sensitive areas and; (ii) ensure that the ratio of areas

---

48 Commission Delegated Regulation (n 24) Preamble (43). What constitutes ‘permanent grassland’ is defined in Article 4(1)(h) of the regulation: “permanent grassland and permanent pasture” (together referred to as “permanent grassland”) means land used to grow grasses or other herbaceous forage naturally (self-seeded) or through cultivation (sown) and that has not been included in the crop rotation of the holding for five years or more; it may include other species such as shrubs and/or trees which can be grazed provided that the grasses and other herbaceous forage remain predominant as well as, where Member States so decide, land which can be grazed and which forms part of established local practices where grasses and other herbaceous forage are traditionally not predominant in grazing areas’. For a decision of the CJEU on the necessary degree of permanence required under the earlier cross-compliance regime, see Case C-47/13, Martin Grund v Landesamt für Landwirtschaft, Umwelt und ländliche Räume des Landes Schleswig-Holstein, Judgment of 2 October 2014, ECLI:EU:C:2014:2248 (in respect of ‘permanent pasture’).
50 Direct Payments Regulation (n 1) Article 45(1).
of permanent grassland to the total agricultural area declared by the farmers … does not decrease by more than 5 per cent compared to a reference ratio to be established by Member States in 2015’.\textsuperscript{51}

With regards to the first aspect of the permanent grassland measure, Article 45(1) requires MSs to designate environmentally sensitive grasslands covered by the Birds Directive\textsuperscript{52} and the Habitats Directive,\textsuperscript{53} including ‘peat and wetlands situated in these areas, and which need strict protection in order to meet the objectives of those Directives’.\textsuperscript{54} In particular, it aims to protect the most environmentally sensitive parts of Natura 2000 areas by prohibiting conversion or ploughing of permanent grasslands in these areas.\textsuperscript{55} Hence, MSs are required to designate environmentally sensitive grasslands in Natura 2000 areas, but may also choose to recognise additional sensitive areas that are not covered by the aforementioned directives, including grasslands and carbon rich soils, in order to ensure further protection of environmentally valuable permanent grasslands.\textsuperscript{56} Such additional action may be taken on the basis of one, or more, of eight criteria listed under Article 41 of the delegated regulation. These include areas:

(e) covering organic soils with a high percentage of organic carbon, such as peat land or wetlands;
(f) hosting habitats listed in Annex I to Directive 92/43/EEC or protected under national legislation;
(g) hosting plant species listed in Annex II to Directive 92/43/EEC or protected under national legislation;
(h) being of significant importance for wild bird species listed in Annex I to Directive 2009/147/EC;
(i) being of significant importance for wild animal species protected under Directive 92/43/EEC or protected under national legislation;

\textsuperscript{51} Ibid, Article 45(2).
\textsuperscript{54} Direct Payments Regulation (n 1) Article 45(1).
\textsuperscript{55} Ibid, Article 45(1).
\textsuperscript{56} Ibid, Article 45(1).
(j) covering permanent grassland of high nature value as defined by objective criteria to be established by the Member State;
(k) covering soils with a high risk of erosion;
(l) being located in a sensitive area designated within the river basin management plans pursuant to Directive 2000/60/EC.

The second aspect of the measure, requires MSs to ensure that the total area of permanent grassland, relative to the area of agricultural land, does not decrease more than five percent below the relevant reference ratio.\(^{57}\) The ratio may be determined on the national, regional, sub-national or holding level and in the event that it decreases by more than 5 per cent, MSs are responsible for enforcing ‘obligations at holding level to reconvert land into permanent grassland for those farmers who have land at their disposal which was converted from land under permanent pasture or from permanent grassland into land for other uses … in the past’.\(^{58}\) This may include, but is not limited to, providing individual and ‘precise instructions to be respected by the farmer concerned on how to reverse the environmental damage caused in order to restore the environmentally sensitive status’.\(^{59}\) Importantly, MSs are required to establish rules for calculating, as well as maintaining the aforementioned reference ratio of permanent grassland.

Detailed guidance for the calculation of the ratio of permanent grassland was provided under Article 43 of the delegated act. In particular, the provision specifies that grassland situated on holdings enrolled in the small farmers scheme, as well as those used for organic production shall not be included in the overall ratio of permanent grassland to the total agricultural area.\(^{60}\) Likewise, MSs were able to deduce from the calculation of areas with permanent grassland, areas declared by farmers in 2012 as land under permanent pasture that have been converted into land for other uses, provided that the rules on the maintenance of permanent pasture as laid down in Article 6(2) of Regulation 73/2009 and in Article 93(3) of Regulation 1306/2013 were met.\(^{61}\)

\(^{57}\) Ibid, Article 45(2).
\(^{58}\) Ibid, Article 45(3).
\(^{59}\) Commission Delegated Regulation (n 24) Article 42.
\(^{60}\) Ibid, Delegated Regulation, Article 43(1).
\(^{61}\) Ibid, Delegated Regulation, Article 43(2).
Once MSs have calculated the relevant reference ratio, it is incumbent upon them to establish rules to maintain permanent grasslands by ensuring that they are not reduced beyond the five per cent reference ratio. In doing so MS may require farmers to seek authorisation prior to converting permanent grassland to other uses. Such conversion may, for instance, be subject to the condition that another area of a corresponding number of hectares be converted to permanent grassland, in which case the latter is to be considered as permanent grassland as of the first day of conversion. It should, however, be noted that MSs are under no obligation to establish rules for pre-authorisation of the conversion of permanent grasslands. Rather, Article 43(2) of the delegated act requires that MSs establish rules for reconversion in the event that the area of permanent grassland does fall below the applicable reference ratio. In other words, while MSs are under an obligation to monitor the ratio of permanent grassland to the total agricultural area on an annual basis, no concrete action is required until and unless it has been established that this ratio has, in fact, been transgressed. As will be further discussed below, this modus operandi is clearly more reactive than the aforementioned authorisation instrument, as it only becomes operational once the damage has been ‘done’.

In the event that the reference ratio of permanent grasslands falls below five per cent, MSs will have to determine of the range of farmers that will be subject to reconversion obligation according to the basic criteria established under Article 44(2) of the aforementioned regulation. Moreover, MS are required to inform farmers of this obligation before 31 December of the year in which the decrease beyond 5 per cent is established. This obligation ‘shall be complied with before the date for the submission of the single application for the following year, or in the case of Sweden and Finland, 30 June of the following year’. By way of derogation from the meaning of permanent grasslands provided under Article 4(1)(h) of the basic act, areas that are reconverted to grass or green cover may be regarded as permanent grasslands from the first day of reconversion or establishment.

---

62 Ibid, Delegated Regulation, Article 44(1).
63 Ibid, Delegated Regulation, Article 44(1). This has the potential to create a discrepancy between actual permanent grassland and those areas subject to this legal classification as a result of being considered as permanent grassland as of the first day of conversion and land that has been under green cover for five years or more. See, Direct Payments Regulation (n 1) Article 4(1)(h).
64 Ibid, Article 44(2).
5.3.2.1 Implementation of the Permanent Grassland Measure

With regards to the first aspect of the permanent grassland measure, the decisions taken by MSs in 2014 revealed that varying levels of protection for grasslands have been pursued during the post-2014 programming period. Thus, while ten MSs have chosen to designate 100 per cent of all permanent grassland located within Natura 2000 areas as environmentally sensitive, other MSs have chosen to designate considerably less.65 Most notably, Portugal and Estonia have each designated a mere one per cent of such grasslands as environmentally sensitive, while Ireland and Latvia have designated two and three per cent respectively. On the whole, 75 per cent of permanent grasslands located in Natura 2000 areas have been afforded this added layer of protection across the EU-28.66 However, there has clearly been a limited appetite to extend this status beyond the basic obligation, with only three MSs (Czech Republic, Latvia and Luxembourg) opting to designate grasslands located outside areas covered by the Birds and Habitats Directives.

As outline above, the second aspect of the measure requires that MSs maintain permanent grasslands at 95 per cent of the 2015 reference level. Accordingly, MSs have had to calculate and submit to the Commission the reference ratios that will be applicable from that year and onwards.67 And, following implementation, it would appear that MS have, in most cases, opted for utmost flexibility, with 24 MSs choosing to apply the ratio of permanent grassland at national level, while Belgium, Germany, France and the UK have done so at the regional level. Malta was the only MS that reported having no permanent grassland in 2014.

As has been seen, MSs were also granted considerable flexibility to establish the conditions under which conversion – not exceeding the 5 per cent ratio – may be authorised and/or monitored. Consequently, the choices made to this effect have the potential to influence the type of grasslands converted and the net decline that may be expected, based on the detailed rules drawn up by the MSs and other competent

65 European Commission, Direct payments 2015-2020 Decisions taken by Member States: State of play as at June 2016, Information note (European Commission, Brussels, 2016) Table A:13, 35. It should, however, be noted that although the UK, as a whole, did not designate all permanent grassland in Natura 2000 areas as environmentally sensitive, three out of the four devolved administrations (excluding Scotland) have opted to do so.
66 Ibid.
authorities.\textsuperscript{68} And, given the level of flexibility, these impacts are likely to differ accordingly. In Germany, for instance, authorisation to convert permanent grassland must be sought before any action is taken and will, as a general rule, only be granted if an equivalent areas of land is re-instated as permanent grassland in same region as the farmer seeking the conversion.\textsuperscript{69} Further, in total only three MSs – Germany, Luxembourg and Portugal – have chosen to implement systems of pre-authorisation. By contrast, the approach taken in other MSs, including the UK is arguably more reactive, as the competent authority will only intervene to restore permanent grasslands on the regional level once the 5 per cent ration has been transgressed.\textsuperscript{70} The ecological outcomes of the permanent grassland measure will be further discussed below in connected with the expected impacts of the new direct payments regime upon climate change mitigation.

5.3.3 Ecological Focus Areas

As noted in the previous Chapter, the introduction of the EFA element was, in addition to being recognised as the most promising of the three measures, also the most contested during the course of the inter-institutional negotiations for its potential to affect production.\textsuperscript{71} The outcome has been that the final measures differ notably from those originally proposed. For instance, as a matter of preliminary consideration, it may be recalled that whereas the proposed legislation would have imposed a general obligation to implement the EFA on holdings consisting of more than seven hectares,\textsuperscript{72} the measure, as enacted, sets this threshold at 15 hectares.\textsuperscript{73} Furthermore, this requirement was initially intended to apply to seven per cent of the eligible area belonging to the holding, but has been reduced to five per cent in respect of arable

\textsuperscript{68} K. Hart, Green direct payments: implementation choices of nine Member States and their environmental implications (IEEP, London, 2015) 39.
\textsuperscript{69} Bundesministerium für Ernährung und Landwirtschaft, Umsetzung der EU-Agrarreform in Deutschland, Ausgabe 2015(BMEL, Berlin, 2015), 42-43.
\textsuperscript{72} European Commission (n 18) Article 32(1).
\textsuperscript{73} Direct Payment Regulation (n 1) Article 46.
land, although the EP and the Council have the possibility of raising this to seven per cent pursuant to Article 43(2).

The basic thresholds entail that a notably larger portion of the land managed by European smallholders will be entirely exempt from the requirement to establish EFAs than initially sought by the Commission. Indeed, according to Pe’er et al, the area threshold of 15 hectares entails that this exemption applies to about 88 per cent of EU holdings and 48 per cent of the farmed area. Notwithstanding this substantial limitation in coverage, however, the approach is defended in the Preamble on the basis that the EFA measure ‘should be applied in a way that avoids putting a disproportionate burden on smaller farms in comparison to the additional enhanced environmental benefit’. Moreover, the regulation provides for a number of additional exemptions to be made for holdings fulfilling specified criteria. For instance, provided that the arable area is not covered by those uses, and does not exceed 30 hectares, they will not be subject to the EFA requirement where more than 75 per cent of the arable land is used for production of ‘grasses or other herbaceous forage, is land lying fallow, is used for cultivation of leguminous crops, or is subject to a combination of those uses’.

Exemption is also made for holdings consisting of less than 30 hectares where more than 75 per cent of the eligible agricultural area ‘is permanent grassland, is used for the production of grasses or other herbaceous forage or for the cultivation of crops under water either for a significant part of the year or for a significant part of the crop cycle, or is subject to a combination of those uses’. Likewise, where more than 50 per cent of the land surface area of an MS is covered by forests, Article 46(7) allows those MSs to exempt holdings situated in areas designated as facing ‘natural constraints’ from complying with this greening measure, provided that more than 50 per cent of the relevant ‘unit’ is covered by forest and there is more than three times as much forest land as agricultural land. This condition is met by five MSs, of which

---

74 Ibid, Article 46(1).
75 This Treaty provision mandates the EP and Council to establish the ‘provisions necessary for the pursuit of the objectives of the common agricultural policy’.
76 Pe’er et al (n 6) 1090.
77 Direct Payments Regulation (n 1) Preamble (44).
78 Ibid, Article 46(4)(a).
79 Ibid, Article 46(4)(b).
80 Ibid, Article 46(7).
four are currently opting to implement this exemption (Estonia, Finland, Latvia and Sweden).81

Farms that are not covered by the aforementioned exceptions are thus, in principle, obliged to dedicate 5 per cent of their arable land towards the establishment of EFAs.82 However, this requirement is further qualified by detailed rules setting out the parts of the holding that may be counted as part of the EFA, as well the types of land use practices that may be carried out on them. Indeed, it may be recalled that both the EP and Council sought successfully to expand these and other options during the course of the negotiations. Thus, with a view to allowing for implementation to be adapted to national and regional considerations, the enacted rules, provide MSs with numerous options that can be made available to farmers to fulfil their EFA obligation.

In order to more comprehensively discuss the practical implementation and expected outcomes of the current measure, it is therefore necessary to first consider the main options offered to – and pursued by – MSs under the current framework.

For those holdings to which the EFA measure does apply, an initial matter of consideration pertains to the specific parts that may be counted towards this end.83 Article 46(2) lists ten standard element that MSs may make available to farmers to fulfil their EFA obligation on arable land. These include the following:

(a) land lying fallow;
(b) terraces;
(c) landscape features;
(d) buffer strips;
(e) hectares of agro-forestry that receive, or have received, support under the rural development regime;
(f) strips of eligible hectares along forest edges;

81 European Commission (n 65) 14. For useful data on forest area, see, eg, World Bank, Forest Area (Percentage of Land Area) (available at http://data.worldbank.org/indicator/AG.LND.FRST.ZS, last accessed on 27 June 2017) (revealing, for example, that in 2012 69.2 per cent of Sweden was ‘forest area’). 82 Direct Payments Regulation (n 1) Article 45(1).
83 Whereas the proposed regulation provided for five of these, namely; land left fallow, terraces, landscape features, buffer strips and afforested areas. See, Proposed Direct Payments Regulation (n 18) Article 32(1).
(g) areas with short rotation coppice where there has been no use of mineral fertiliser and/or plant protection products;
(h) afforested areas which had given a right to payment under the Single Payment Scheme in 2008 and which had received rural development support;
(i) areas with catch crops, or green cover established by the planting and germination of seeds (but subject to weighting factors); and
(j) areas with nitrogen-fixing crops.\textsuperscript{84}

The delegated act provides additional criteria aimed at qualifying a number of the above listed features and areas in counting towards the fulfilment of the EFA requirement. With regards to the first of these, for instance, Article 45(2) of the delegated act specifies that, where the option to include land laying fallow is used by MSs, production should not be carried out on such land, although the Preamble adds that this ‘should not exclude voluntary actions such as the seeding of wildflower mixtures with a view to improve the biodiversity benefits’.\textsuperscript{85} Moreover, land laying fallow for more than five years for the purpose of fulfilling the EFA obligation, shall remain as arable land pursuant to the same Article.

The delegated regulation also lists the landscape features that may count as part of the holding’s EFA. These cover landscape features protected under GAEC 7, SMR 2 or SMR 3 as referred to in Annex II to Regulation 1306/2013 as well as the following features:

(a) hedges or wooded strips with a width of up to 10 meters;
(b) isolated trees with a crown diameter of minimum 4 meters;
(c) trees in line with a crown diameter of minimum 4 meters. The space between the crowns shall not exceed 5 meters;
(d) trees in group, where trees are connected by overlapping crown cover, and field copses of maximum 0.3 ha in both cases;
(e) field margins with a width between 1 and 20 meters, on which there shall be no agricultural production;

\textsuperscript{84} Direct Payment Regulation (1) Article 46(2).
\textsuperscript{85} Ibid, Recital 49.
(f) ponds of up to a maximum of 0.1 ha. Reservoirs made of concrete or plastic shall not be considered ecological focus area;

(g) ditches with a maximum width of 6 meters, including open watercourses for the purpose of irrigation or drainage. Channels with walls of concrete shall not be considered ecological focus area.

(h) traditional stone walls.\textsuperscript{86}

For MSs that choose to offer the possibility of including buffer strips as part of the EFA element, Article 45(5) of the Delegated Act specifies that these include those required under GAEC 1, SMR 1 or SMR 10 as referred to in Annex II to Regulation (EU) No 1306/2013, as well as other buffer strips. In particular, the provision requires that these qualifying buffer strips ‘shall be located on or adjacent to an arable field in such a way that their long edges are parallel to the edge of a water course or water body’.\textsuperscript{87} Such an approach is supported by the Commission on the basis that buffer strips located ‘near the border of arable fields along water courses or within fields higher upon a slope, are beneficial for the purpose of reducing runoff to surface waters of pollutants’.\textsuperscript{88} Moreover, in the interest of delivering benefits for biodiversity, the provision further precludes production from taking place on buffer strips that are counted as part of the EFA.\textsuperscript{89}

As regards strips of eligible hectares along forest edges, on the other hand, MSs wishing to include this element are allowed to determine whether or not to allow production on such areas of the holding.\textsuperscript{90} That said, it should be noted that the Preamble to the regulation clearly supported the prohibition of production on the basis that ‘such a requirement will provide a higher value of ecological focus area which should be reflected in a differentiated value for the weighting factor for this type of area’.\textsuperscript{91} In the case that MSs decide not to permit production to be carried out, they may, however, ‘allow grazing or cutting, provided the strip remains distinguishable from adjacent agricultural land’.\textsuperscript{92} The width of these strips may be established by the

\textsuperscript{86} Commission Delegated Regulation (n 24) Article 45(4).

\textsuperscript{87} Ibid, Article 45(5).

\textsuperscript{88} Ibid, Preamble (52).

\textsuperscript{89} Ibid, Article 45(5). See also, Preamble (52).

\textsuperscript{90} Ibid, Article 45(7).

\textsuperscript{91} Ibid, Preamble (54).

\textsuperscript{92} Ibid, Article 45(7).
MSs, but should not exceed ten metres or be less than one metre. When setting further conditions under which agro-forestry may qualify as part of EFAs, MSs should ‘take the biodiversity objective into account…for receiving support for the establishment of agro-forestry systems in their rural development programmes’.93

The delegated regulation also provides detailed rules pertaining to the option to allow areas with short rotation coppice to be counted towards the establishment of EFAs. In particular, MSs are required to draw up a list of species that are most suitable from an ecological perspective, with a view to excluding non-indigenous species.94 Pursuant to the above mentioned preclusion of the use of mineral fertiliser and/or plant protection products MSs are also required to ‘establish the requirements as regards the use of mineral fertilisers and plant protection products, keeping in mind the objective of ecological focus areas in particular to safeguard and improve biodiversity’.95

With regards to the option to count land covered by catch crops or green cover, Article 45(9) specifies that this includes areas established under SMR 1 as referred to in Annex II to Regulation (EU) No 1306/2013 and other areas under catch crops or green cover, ‘on the condition that they were established by sowing a mixture of crop species or by under-sowing grass in the main crop’. In particular, this option was included with a view to utilising the capacity of catch crops and green cover to effectively absorb residual nitrogen and avoid bare soil and diffuse pollution of groundwater.96 Consequently, MSs are required to draw up a list of mixtures of crop species and establish a period – extended no later than 1 October – for the sowing of catch crops or green cover, as well as additional conditions relating to production methods.97 This should, however, ‘not include areas under winter crops which are sown in autumn normally for harvesting or for grazing’.98

93 Ibid, Article 45(7); Preamble (53).
94 Ibid, Article 45(8). See also, Preamble (55). Under Article 4(2)(c) of the Direct Payments Regulation (n 1), MS are required to define the tree species qualifying for short rotation coppice (according to the definition in Article 4(1)(k) of the same regulation) and set out the maximum harvest cycle in respect of those tree species, regardless of whether they have chosen to implement the element or not. For a recent judgment on this issue, see, Case T-622/14 Lauritzen Holding v EUPO - DK Company (IWEAR) [2017] OJ C 129.
95 Commission Delegated Regulation (n 24) Article 45(8).
96 Ibid, Preamble (56).
97 Ibid, Article 45(9).
98 Ibid, Article 45(9).
Lastly, the option to include areas with nitrogen-fixing crops has been further qualified to ensure its uniform implementation. In particular, MSs are required to establish a list of nitrogen-fixing crops that are considered to contribute to the objective of improving biodiversity. Farmers may then choose to include areas covered by the listed crops on their EFA, provided that these crops are present during the growing season. Moreover, MSs must also specify the parts of the holding on which nitrogen-fixing crops may be grown in order to avoid their cultivation on areas that would lead to increased nitrogen leaching or deteriorated water quality.

In addition to choosing which of the above mentioned elements to recognise for the purpose of implementing the EFA measure, it should be noted that a further degree of flexibility was added by the ability of MSs to make use of the conversion and/or weighing factors, set out in Annex X of Regulation 1307/2013, when calculating the total hectares of arable land dedicated to the EFA. These were specified by the Commission in Annex II of Delegated Regulation 639/2014, which provides a table indicating how each of the EFA elements shall be counted as part of the obligation to designate 5 per cent of the arable land on affected holdings. In particular the use of conversion and weighing factors is intended to reflect the varying levels of importance that the different options have for biodiversity.

5.3.3.1 Implementation of the EFA Measure: The Main Elements

Given the range of selection enjoyed by MSs for the purpose of implementing the new EFA measure, the details of its application were only appreciated following notification of their choices to the Commission in late 2014. These notifications revealed that a range of options had been chosen by MSs and will thereby be available to farmers when seeking to comply with the obligation to devote 5 per cent of their arable land to the establishment of EFA. It should, however, be noted that the number of elements chosen by each MS varies considerably, with some, including Germany and France, implementing all available options (17 and 18 respectively),

---

99 Ibid, Article 45(10).
100 Ibid, Preamble (77). According to Hart the application of weighing factors had its origin in the French system where such mechanisms were applied to GAEC. See, Hart (n 68) 13.
101 Pursuant to the Direct Payments Regulation (n 1) Article 46(8).
102 European Commission (n 65).
while others such as the Netherland and Spain have opted to include as little as four.\textsuperscript{103} Moreover, following the Commission’s one year review of implementation, it is clear that three of these options – the cultivation of nitrogen-fixing crops, land laying fallow and catch crops – have thus far accounted for almost 95 per cent of the land devoted to the EFA obligation.\textsuperscript{104} Consequently, the way in which these options are implemented will be particularly important for determining the impacts of the EFA measure. In order to explore the extent to which meaningful outcomes for biodiversity might be expected, it is therefore necessary to consider some of the detailed rules relating to the implementation of the aforementioned elements, as well as others that have enjoyed uptake by farmers. In this light, a number of key observations may be offered.

First, it should be reiterated that the enacted legal provisions have considerably reduced the application the proposed EFA measure, with basic threshold of 15 hectares entailing that almost half (48 per cent) of the EU’s UAA will automatically be exempt from fulfilling the specific requirements attached to this aspect of the greening component. Some estimates indicate that this may include up to 94 per cent of holding in newer MSs, where the average farm size is notably smaller than that of the EU-15, while the corresponding figure for holdings across the EU-28 is said to be around 88 per cent.\textsuperscript{105} This is, however, partly due to the fact that EFAs are calculated based on the arable area of agricultural holdings, thereby excluding areas consisting of eg permanent pasture and grasslands. And, the overall amount of farmland covered has been further affected by the activation of the forest exemption, which seeks to reduce the greening obligations for farmers in afforested areas where there is a significant risk of land abandonment and been adopted by Estonia, Finland, Latvia and Sweden.\textsuperscript{106} In addition, the recognition of equivalent measures have been approved for France, Austria, the Netherlands, Poland and Ireland, which has

\textsuperscript{103} Hart (n 68). In the case of the UK, five of the ten options have been implemented ‘Available options’ refers to those elements that are applicable to individual MSs. Thus, given the territorial and climatic differences of the EU-28, the options available may differ accordingly. For instance, the option to include terraces is not likely to be relevant to MSs such as Sweden and Finland where natural conditions entail that such features are virtually non-existent in connection with agricultural practices.

\textsuperscript{104} European Commission (n 46) 8.

\textsuperscript{105} Pe’er et al (n 6) Supplementary Materials, 4.

\textsuperscript{106} European Commission (n 65) 14.
provided further scope for farmers in these MSs to qualify for the greening payment without undertaking novel obligations to this effect.\footnote{Ibid, 3.}

Secondly, even in cases where the EFA requirement does apply, the enacted measure arguably provides considerably greater scope for production to be carried out on designated areas than initially proposed. As noted in the previous Chapter, this condition had partly been imposed during the negotiations due to the general political opposition to the introduction of agri-environmental measures that had the potential to impact upon agricultural output. Moreover, the ability to carry out production was also central to distinguishing the new measure from previous set-aside schemes, which were criticised, at the time of the negotiations, for their potential effect on productivity.\footnote{See, eg, Commissioner Cioloș, SPEECH/12/112, Meeting the Challenge, Birmingham, 21 February 2012.} It is thus somewhat unsurprising that, of the options listed under Article 46(2), a number of them allow production to take place to some extent or another.

The most popular choice by MSs has been to include areas with nitrogen fixing crops as part of the EFA, with all but Denmark opting to implement this element against a weighing factor of 0.7.\footnote{The original weighing factor of 0.3 was listed in Annex II of the Commission Delegated Regulation (n 24) and amended by Commission Delegated Regulation (EU) 1001/2014 of 18 July 2014 amending Annex X to Regulation (EU) No 1307/2013 of the European Parliament and of the Council establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy, [2014] OJ L281/1).} For the purpose of determining which particular crops to count, MS were able to choose from a list of 24 species, including common crops such as chickpeas, soybeans, lentils, peas and various types of beans amongst others.\footnote{European Commission (n 65) 34 (Table A:12).} Consequently, some of the major agricultural states have opted to approve a high proportion of these crops including Italy and France, which currently recognise 19 and 18 crops respectively. Likewise, with regards to newer MSs, Bulgaria, the Czech Republic, Hungary and Poland have opted to include arable land covered by one or more of 14 nitrogen-fixing species chosen by each of them respectively.\footnote{For a comprehensive and accessible survey of the choices of Member States, see R. Henke et al, Implementation of the First Pillar of the CAP 2014-2020 (European Parliament, Directorate-General for Internal Policies - Policy Department B: Structural and Cohesion Policies, Brussels, 2016) Table 1.13.}

The uptake of the nitrogen-fixing crop option has been remarkable and was estimated to have covered almost 40 per cent of all land subject to the EFA obligation
in 2015, after weighing measures were taken into account.\textsuperscript{112} According to the
Commission this land use has been accompanied by a 4.4 per cent increase in the
output of protein crops across the EU in 2015, with this figure being significantly
higher in some MSs.\textsuperscript{113} Consequently, a number of environmental benefits could
potentially result from such expansion including reduced CO2 emissions (due to
reduced fertiliser application) and improved soil structure.\textsuperscript{114} However,
notwithstanding these and other benefits of growing nitrogen-fixing crops – not least
if they are accompanied by shifts in consumer behaviour towards replacing
historically high intakes of animal protein with that of plants – important questions
remain surrounding the impact of such production on biodiversity following
implementation by the MSs. In particular, it may be noted that a number of MSs have
not explicitly banned the use of nitrogen fertilisers on areas cultivated by these crops,
and many also fail to prohibit the use of ‘plant protection products’.\textsuperscript{115} Moreover, this
measure has the potential to overlap with VCS in cases where MSs have opted to link
such payments to the production of protein crops. These aspects will be further
discussed below in relation to ex-post analyses of the VCS regime and the
environmental outcomes that may be expected under the new direct payments
framework.

Additional scope to carry out production is possible for farmers in the 20 MS
that have chosen to recognise areas used to cultivate short rotation coppice as
fulfilment of the EFA obligation.\textsuperscript{116} Accordingly, these MSs have had to draw up
individual lists of suitable species, as well as the rules relating to the use of mineral
fertilisers and pesticides, with the latter being generally prohibited on areas belonging
to the designated EFA. However, following the notifications made to the Commission,
it is clear that implementation will differ with regards to both the number and types
of species that MSs have opted to include. For instance, while Sweden and Estonia
have respectively only chosen to recognise one specie, Denmark and Ireland have

\textsuperscript{112} European Commission (n 46) 8.
\textsuperscript{113} Ibid, Annex 4, 15. Sweden, for instance, experienced an increase in output of about 19 per cent in
some regions. See, http://www.jordbruksverket.se/webdav/files/SIV/Amnesomraden/Statistik\%20fakta/Vegetabiliepro
duktion/JO19/JO19SM1602/JO19SM1602_kommentarer.htm (last accessed on 27 June 2017).
\textsuperscript{114} A. Bues \textit{et al}, The Environmental Role of Protein Crops in the new Common Agricultural Policy,
(European Parliament Directorate General for Internal Policies Policy Department B: Structural and
\textsuperscript{115} Hart (n 68) 28-29.
\textsuperscript{116} European Commission (n 65) 33 (Table A:11).
settled for ten each. Of the chosen species, the most popular are Willow (chosen by all 20 MSs), Poplar (17 MSs), Alder (14 MSs), Birch (11 MSs) and Ash (11 MSs), which is largely reflective of the status quo of the EU-28 where these species are widely cultivated.\textsuperscript{117} This is an important aspect of implementation, as one of the main criteria for this element is the need to ensure that listed species are native to MSs in order to obtain the greatest benefits for biodiversity, including supporting birds of open range wooded habitats.\textsuperscript{118} Thus, Hart has cautioned that these objectives may be undermined if non-native species are added to the list, as was for instance found to be the case with regards to the inclusion of Black Locust by Romania – despite its invasive tendencies in open habitat.\textsuperscript{119}

Production may also be carried out on EFAs covered by catch crops and/or green cover, following implementation of this element by a total of 19 MSs. As required under Article 45(9) of the delegated regulation, these MSs have therefore had to specify; the mixtures of crop species that can be used; the period for sowing for catch crops and/or green cover and; additional conditions relating to production methods can be identified.\textsuperscript{120} With regards to the first of these, notable variations may be observed, with Germany having opted to include the greatest number of species (84), while Latvia has included one species and Sweden only allows green cover to be counted as part of the EFA obligation.\textsuperscript{121} Permitted sowing dates, are not significantly different, although they do vary.

The same cannot, however, be said about the conditions for production, which have been almost entirely determined by the MSs and, consequently, differ considerably. In particular, it should be noted that, while only Germany has explicitly prohibited the use of both mineral fertilisers and pesticides.\textsuperscript{122} This undoubtedly raises important questions about the potential impacts of this production, as it implies that intensive farming of protein crops could, in theory, be carried out using powerful herbicides and still be in compliance with the EFA obligation in a number of MSs.\textsuperscript{123}

\textsuperscript{117} Hart (n 68) 20.
\textsuperscript{119} Hart (n 68) 20.
\textsuperscript{120} Commission Delegated Regulation (n 24) Article 45(9).
\textsuperscript{121} European Commission (n 65) 32 (Table A:10).
\textsuperscript{122} Ibid, 32 (Table A:10).
Thirdly, even with regards to options that do not allow production, the current framework arguably provides a degree of flexibility that has the potential to impact upon the quality of the environmental goods delivered by the EFA measure. Importantly, the level of choice has resulted in a form of menu model that the Commission had explicitly argued against in its Impact Assessment on the basis that ‘such an approach would very much water down the greening effect, especially if the payment does not match the efforts required by farmers, leading them to choose the measures with which they comply already or the measures with the least cost, thus bringing less environmental benefits’.  

Following the implementation by MSs, it would appear that these concerns were, at least to some extent, well-founded. Indeed, a recent case study published by the EEA has suggested that the range of choice has not only allowed measures to be tailored according to national and regional ecological conditions, but has also been a potential means of ensuring a ‘soft’ impact for farmers. In other words, by offering a wide range of options some MSs have instead enabled compliance to be easily fulfilled, with little effort being required on the part of latter in many cases. Crucially, this lack of ambition has been compounded by a failure to ensure that the choices made at farm level are aimed at obtaining the best possible outcomes for biodiversity. Rather, farmers have been offered notable discretion in determining which areas of their arable land to designate as part of the EFA obligation.

For instance, the second most popular element, selected by 26 MSs (all except the Netherland and Romania), has been to allow land laying fallow to count towards fulfilment of the EFA measure. And, following the application of weighing factors, the Commission estimates that 38 per cent of the area devoted to EFA by EU farmers in 2015 was made up of land devoted to fallow. As already noted, a number of potential benefits for biodiversity, as well as soil and water resources may be attained by taking land out of production for a prolonged period. Indeed, notwithstanding the slightly larger coverage of land under cultivation of nitrogen-fixing crops, the Commission explicitly recognised that ‘the share of fallow land appears more important’. However, the importance of prolonged and consecutive periods of

---

125 European Commission (n 46) 8.
126 Hart (n 46) 9.
127 European Commission (n 46) 8.
reduced production is arguably not reflected under the current rules, which merely requires that farmers refrain from production on the designated land for specified periods on an annual basis. Hence, there is no way of ensuring continuity (i.e., that the same areas are designated in consecutive years) or that the most suitable parts of the holding are designated as fallow.

In particular, it should be noted that, despite the general ban on production specified under Article 45(2) of the delegated act, MSs have enjoyed wide discretion in setting additional criteria for the establishment of fallow land. Consequently, the details of the final rules diverge between the MSs and regions that have chosen to support this measure in a number of material ways. Some of these differences, such as those relating to the periods during which land must lay fallow, may be expected due to variations in cropping conditions across the EU. The rationale behind other differences may, however, be less clear. For instance, the rules pertaining to the level of activity that may be carried out on designated fallow land vary, while still complying with the ban on production. Thus, while Hungary allows such areas to be grazed and cut—grass and green cover count as fallow land in Northern Ireland where it may also be cut, but not removed during the specified fallow period. Moreover, implementation in other parts of the UK, especially, has allowed areas sown with wild birdseed mixes to be counted as fallow. Again, the extent to which these and other practices may be translated into ecological benefits, will largely depend on the individual choices made by farmers. In order to safeguard these positive outcomes it is, therefore, crucial to ensure that the land being put to fallow is not simply the least productive piece of land, but that it holds some environmental merit based on defined standards and objectives.

Similar concerns may also be submitted regarding the implementation of landscape features, which is the third most popular element, having been selected by a total of 24 MSs. Some of these features were already protected under cross-compliance for their potential environmental benefits, although a number of MSs have chosen to expand this list to include ‘other landscape features’ as well. This has

---

128 Commission Delegated Regulation (n 24) Article 45(2).
129 Hart (n 68) 9.
130 A comparison may, in this respect, be drawn to the early set aside schemes, which reduced its ecological potential by imposing rotational arrangements. See, eg, Commission Regulation (EC) No 658/96 of 9 April 1996 on certain conditions for granting compensatory payments under the support system for producers of certain arable crops, Article 7.
131 European Commission (n 65) 16.
provided farmers with a wide range of options that may be counted towards fulfilment of the EFA measure. Importantly, however, the current rules do not require minimum levels of management of these features. Moreover, with regards to features already protected under cross-compliance, it is not clear what incentive the EFA requirement offers for maintaining them than would otherwise be the case.

Additional overlap with cross-compliance standards is also evident pertaining to the choice to enable buffer strips to be counted as part of the area devoted to the EFA requirement. This option was activated by 17 MSs, of which ten have further elected to recognise ‘other buffer strips’ in addition to those required under cross-compliance.132 As already noted, the potential ecological benefits of buffer strips are numerous, including for biodiversity, soil and water quality. Indeed, the Commission initially envisaged that their inclusion could serve as ‘natural water retention measures’ and thereby contribute towards the creation of a type of ‘green infrastructure’ capable of meeting the objectives of the WFD.133 However, Dick et al have pointed out that, although these features may certainly contributed towards improved water quality, it is less clear how this option provides benefits for wildlife and biodiversity more broadly.134 Either way, this measure is currently of limited importance, as buffer strips constituted less than two percent of land devoted to EFA in 2015.

Fourthly, and lastly, it may be noted that an innovative element of the EFA measures is the ability of MSs to allow farmers whose holdings are in close proximity of each other to implement the measure collectively, provided that at least 50 per cent of the area subject to the obligation (2.5 percent of the total arable land) is devoted to the common EFA.135 This option was added to the framework during the legislative negotiations by the Dutch and Danish Council representatives and allows for adjacent and continuous areas to be designated as a single collective entity.136 Notwithstanding the potential benefits that could be derived from the establishment of extended and uninterrupted areas dedicated to producing environmental public goods, only the

132 Ibid.
135 Direct Payments Regulation (n 1) Article 46(6).
136 Hart (n 68) 10.
Netherlands and Portugal have chosen to allow for collective implementation. Certainly, there may be administrative, and other, reasons for choosing not to add additional elements to the national and regional implementation under the current programming period. However, given its positive potential there would appear to be significant scope to expand the premise of this obligation in the future.

5.4 Voluntary Coupled Support: Ex-post Review of the new Framework

An aspect of the Cioloș reforms that received surprisingly limited attention during both the inter-institutional negotiations and subsequent implementation process, relates to the continuation of VCS schemes during the 2013-2020 programming period. That said, as already indicated, it was not possible to fully appreciate the extent to which such support would be implemented, given the wide discretion enjoyed by MSs to allocate funds, within pre-established limits, in order to support specific types of production and agricultural sectors. Thus, it was not until the end of 2014 (following the submission by MSs of their notifications by 1 August of the same year) that it was conceivable to gauge the level of uptake and implementation of VCS payments. Before exploring the outcomes of these decisions, it is first necessary to consider the legal basis of the reformed VCS framework.

5.4.1 The Basic Framework

As previously noted, a number of coupled payments remained in place following the conclusion of the Health Check in 2008, including payments for sheepmeat, goatmeat, veal and beef, inter alia.137 These were further extended under Article 52(2) of Regulation 1307/2013, which listed the following 21 sectors and productions that would be eligible for support from 2015:

\[\text{cereals, oilseeds, protein crops, grain legumes, flax, hemp, rice, nuts, starch potato, milk and milk products, seeds, sheepmeat and goatmeat,}\]

137 Council Regulation (EC) 73/2009 (n 49) Article 68.
beef and veal, olive oil, silkworms, dried fodder, hops, sugar beet, cane and chicory, fruit and vegetables and short rotation coppice’. 138

For the purpose of implementation, Article 52(3) specifies that support for these measures ‘may only be granted to those sectors or to those regions of a Member State where specific types of farming or specific agricultural sectors that are particularly important for economic, social or environmental reasons undergo certain difficulties’. Moreover, Article 52(5) provides that coupled support should only be granted ‘to the extent necessary to create an incentive to maintain current levels of production in the sectors or regions concerned’. In particular, these limitations were included to ensure that the measure would fall within the so called ‘Blue Box’ of the Agreement on Agriculture, thereby avoiding that they would be subject to the reduction commitments otherwise required of payments falling within the ‘Amber Box’. 139

The financial provisions are set out under Article 53 and allow MSs to use up to eight per cent of their annual direct payments budgets to fund the implementation of the VCS measures. In addition, MS are able to use up to a maximum of 13 per cent of their annual net ceiling provided that until 31 December 2014 they: (i) applied the single area payment scheme laid down in Title V of Regulation (EC) No 73/2009; (ii) financed measures under Article 111 of that Regulation (suckler cow premium) or; (iii) are covered by the derogation provided for in Article 69(5) or, in the case of Malta, in Article 69(1) of that Regulation. 140 Alternatively, the 13 per cent maximum could be secured by MSs if they used more than five per cent of their direct payments budget to fund coupled payments (excluding the crop specific payment for cotton) during at least one year between 2010-2014. 141 This may be compared to the Commission’s original proposals, which would have allowed MSs to maintain a basic rate of five per cent for VCS payment, with the possibility of raising this to a maximum of eight per cent of their national envelopes. 142

Furthermore, MSs choosing to operate a system of VSC post-2014, have the option of allocating an additional two percent of their annual ceilings to support the

---

138 Direct Payments Regulation (n 1) Article 52(2).
139 See, Commission Delegated Regulation (n 24) Preamble (5).
140 Direct Payments Regulation (n 1) Article 52(2)(a).
141 Ibid, Article 52(3)(b).
142 European Commission (n 18) Article 38.
production of protein crops.\textsuperscript{143} In particular, this payment was intended to support livestock production and to ‘maintain the protein based autonomy of the breeding sector’.\textsuperscript{144} Finally, for those MSs that used more than ten per cent of their direct payments budget to fund coupled support payments during at least one year in the period 2010-2014 there would be scope to extend the allocation beyond the 13 per cent maximum (excluding the payment for protein crops) upon approval by the Commission.\textsuperscript{145}

5.4.2 Implementation of VCS Payments

As of 1 January 2015, the new framework for VCS has been implemented with respect to various sectors, and at widely differing levels, by a total of 27 MSs (all except for Germany).\textsuperscript{146} For instance, while Denmark, Luxembourg, Ireland and Sweden have opted to support a single sector each, other MSs – some of which have significant agricultural sectors – such as Romania and Italy have chosen to support 12 and 11 sectors, respectively.\textsuperscript{147} Likewise, while the Netherlands, Ireland and Luxembourg have each transferred less than one per cent of their annual budgets to fund VCS measures, other MSs have opted for significantly higher rates.\textsuperscript{148} In total, nine MSs chose to allocate less than eight per cent of their national direct payments budgets for 2015, while 11 MSs have opted to transfer the maximum 13 per cent,\textsuperscript{149} and nine of these (all except for Slovakia and Sweden) making a further two per cent available for supporting the protein crop sector.\textsuperscript{150} To put this into perspective, this is roughly equivalent to half of the entire spending on the new greening component in these MSs,

\begin{itemize}
\item \textsuperscript{143} Direct Payments Regulation (n 1) Article 53(3).
\item \textsuperscript{144} Ibid, Preamble (49).
\item \textsuperscript{145} Ibid, Article 53(4).
\item \textsuperscript{146} In the UK context it may be noted that only Scotland has chosen to implement VCS schemes (for beef, sheep and goat sectors).
\item \textsuperscript{147} European Commission, Voluntary Coupled Support: Decisions Notified to the Commission by 1 August 2014 (available at https://ec.europa.eu/agriculture/sites/agriculture/files/direct-support/direct-payments/docs/voluntary-coupled-support_en.pdf, last accessed on 27 June 2017), 8. The other 21 MSs implemented support for the following number of sectors: Austria (2), Belgium (3), Bulgaria (5), Croatia (6), Cyprus (3), Czech Republic (8), Estonia (4), Greece (10), Hungary (7), Finland (9), France (10), Malta (4), The Netherlands (2), Latvia (9), Lithuania (5), Poland (10), Portugal (5), Slovakia (6), Slovenia (5), Spain (10) and the UK (2).
\item \textsuperscript{148} Ibid, 7.
\item \textsuperscript{149} Ibid. These Include: Bulgaria, Czech Republic, France, Greece, Hungary, Latvia, Lithuania, Poland, Sweden, Slovenia and Slovakia.
\item \textsuperscript{150} European Commission (n 65) 8.
\end{itemize}
which, as will be recalled, accounts for 30 per cent of the direct payments budget since 1 January 2015.

In addition, it should be noted that three MSs successfully sought the Commission’s approval to exceed the maximum threshold of 13 per cent, plus the additional two per cent for protein crops. Thus, Belgium, Finland and Portugal respectively devoted 17, 20 and 21 per cent of their direct payments budgets, towards funding coupled support measures in 2015. Also, Malta exercised its right to derogate from these provisions by spending three million Euro on VCS, which amounted to just over 57 per cent of its direct payments budget for the same year. In total, Matthew estimated that the budget for coupled payments has risen from 6.8 per cent of the direct payments budget in 2013 to 10 per cent in 2015, and although this overall increase is not reflected by all MSs, it arguably marks a clear shift from the previous programming period and the general trend towards decoupling. It follows that while some MSs such as Austria, Greece and Portugal have actually reduced national levels of coupled support, others have increased theirs dramatically. For instance, Finland has increased the level of coupled support from 9 per cent in 2013 to 20 per cent of its direct payments budget in 2015, while Slovakia has gone from 3.3 to 13 per cent during the same period. Most dramatically, Sweden increased its level of coupled support from 0.6 per cent to the maximum level of 13 per cent in 2015.

However, the VCS measure is mainly of relevance to the current thesis and discussion given the sectors that have ultimately been supported under the new framework. In particular, it should be noted that 82 per cent of the funds used to provide coupled support were devoted to animal sectors and production in 2015. This included 41 per cent of the total VCS envelope for beef and veal, which was by far the most popular sector and chosen by 24 of the 27 MS that have opted to implement VCS. The second most popular support sector was milk and dairy, accounting for 20 per cent of the VCS budget in 19 MS, followed by support for sheep

151 Ibid, 9.
152 Ibid, 9. See, also Regulation 73/2009 (n 49) Article 69(1).
154 Ibid.
155 European Commission (n 147) 9.
156 European Commission (n 65) 9.
and goat meat in 22 MS. Thus, given the sectors that MSs have chosen to support, implementation of the VLC measure clearly has the potential to impact upon the environment given the climate ‘footprint’ of the supported sectors.

Indeed, as outlined above, MSs enjoy broad discretion in choosing whether or not to implement the VCS measure under the new framework, with the Commission having very limited input in cases where this support does not extend beyond the 13 per cent maximum.157 Not least, MSs enjoy significant power to determine whether support for a particular sector or production is justified for ‘economic, social or environmental reasons’. In other words, the Commission does not have the mandate to question or evaluate if a particular sector is objectively in need of additional support on any of these grounds, unless the above limit is transgressed.158 Likewise, the measure does not take into account the fact that support for certain types of production may have socio-economic benefits, but may nonetheless also contribute to externalities that are far from ideal. Not least, this is reflected by the unprecedented increase in coupled support that has been directed to meat and dairy farmers without the need for MSs to assess the environmental implications of these payments; and despite the ecological impacts that livestock production continues to have on a global scale. As is further discussed below, this certainly raises pertinent questions about the coherence between the new framework for coupled support and the overarching climate and environmental EU objectives.

Finally, there would also appear to be scope to caution of the potential for double funding of protein crops, which is currently being implemented by 16 MSs. In particular, it may be noted that each of these MSs have also chosen to allow the cultivation of nitrogen-fixing crops to be counted as part of the EFA obligation. This is arguably of some significance, given the range of protein crops – from soybeans and chickpeas to grain and forage legumes – that are currently eligible for support under the EFA measure. And, of explicit concern, is the fact that producers of these crops would appear to be eligible to receive coupled support, as provided for in Article 53(3) of the Direct Payments Regulation. At least, the regulation does not specifically preclude coupled support for protein crops from applying to crops that have been

157 Direct Payments Regulation (n 1) Article 55(1).
158 European Commission (n 147) 5.
cultivated for the purpose of satisfying the EFA obligation.\textsuperscript{159} This raises questions about the possibility of receiving the greening payment for cultivating nitrogen-fixing crops, while at the same being eligible for the additional coupled support available for the production of those very same protein crops. Thus, given the increases in output that have been recorded for a number of such crops since 2015 (four per cent across the EU),\textsuperscript{160} it would seem pertinent to clarify the legal framework so as to prevent the double funding of crops that have specifically been cultivated and accounted for under the EFA measure. Failure to do so would risk further depleting this measure which, as discussed below, is already expected to provide limited environmental outcomes.

5.5 Expected Outcomes for Biodiversity and Climate Change

As outlined above, the 2013 CAP reform especially aimed at improving the management of ecological resources in order to ensure greater links between direct payments and practices of benefit to the environment and climate. Thus, in order to complete the analysis of the measures introduced by the Direct Payments Regulation, it is necessary to consider the extent to which these are expected to meet central objectives relating to biodiversity and climate mitigation, as expressly referred to in both key policy documents and the enacted regulations.\textsuperscript{161} For this purpose, it may therefore be noted that a growing body of literature and research has been published on the environmental impacts of the post-2014 framework. However, considering the very recent implementation of these measures it is also important to stress that it is still premature to draw definitive conclusions about their outcomes. Moreover, it may be highlighted that, of the studies that have so far been carried out, a number of them focus disproportionately on implementation in a small number of northern MSs and consequently provide limited insight into the EU-wide status quo.\textsuperscript{162} Notwithstanding these and other caveats, a few concluding observations may nonetheless be offered,

\textsuperscript{159} Although the regular provision on double funding may be found in the regulation under Article 52(8) which provides that ‘coupled support granted under this Article shall be consistent with other Union measures and policies’.

\textsuperscript{160} European Commission (n 46) 15.

\textsuperscript{161} See the discussion above, at 4.2 and 4.3.

drawing on the preceding discussion of the formulation and implementation of the main elements of the new direct payments framework.

5.5.1 Biodiversity: Can the Post-2014 Direct Payments Framework Provide Meaningful Protections?

5.5.1.1 Addressing the Main Targets and Objectives of EU Conservation Policy

The need for the EU to make greater efforts to ensure the protection of biodiversity was definitely underscored by its failure to meet the previous objective of halting biodiversity loss by 2010.\textsuperscript{163} And, it may be recalled from the discussions in Chapters 2 and 3 that this was replaced by a new headline target for biodiversity in March 2010 intended to ‘halt the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, restore them in so far as feasible, while stepping up the EU contribution to avertin global biodiversity loss’.\textsuperscript{164}

Given the shortcomings of past policy responses, the aim of not only halting negative trends, but also restoring degraded ecosystems by 2020, is consequently no minor feat and is currently pursued by six mutually supportive and inter-dependent targets responding to the revised headline objective.\textsuperscript{165} Although most of these targets are not exclusively aimed at farming sectors, several have significant implications for agriculture and forestry (as supported under the second pillar),\textsuperscript{166} with target 3A being specifically framed to ‘maximise areas under agriculture across grasslands, arable land and permanent crops that are covered by biodiversity-related measures under the CAP so as to ensure the conservation of biodiversity and to bring about a measurable improvement in the conservation status of species and habitats that depend on or are affected by agriculture and in the provision of ecosystem services as compared to the EU2010 Baseline, thus contributing to enhance sustainable management’.\textsuperscript{167}

\begin{itemize}
\item \textsuperscript{165} Ibid.
\item \textsuperscript{166} Ibid, 5. Arguably, the attainment of all six targets depend on the involvement of the farming sector to some extent.
\item \textsuperscript{167} Ibid, 6.
\end{itemize}
For the purpose of realising these objectives, EU institutions were called upon in 2011 to increase integration ‘through targets and action to enhance the positive contribution of the agriculture…to biodiversity conservation and sustainable use’.\textsuperscript{168} Hence, the Cioloş reform was seen as a key platform for delivering the instruments and framework necessary for attaining the ambitious targets set by the 2020 Biodiversity Strategy, as well as reinforcing the central role of the CAP for meeting them. In this light, the greening payment represented a primary mechanism for implementing these targets and furthering environmental integration during the 2014-2020 programming period. In order to determine the contributions made by this new component of the direct payments regime, the outlined objectives must therefore be assessed against its expected policy outcomes.

5.5.1.2 Expected Policy Outcomes

Definitely, each of the three greening measures were initially proposed with the intention of addressing the issue of biodiversity loss to one extent or another.\textsuperscript{169} And this express aim was carried forward and restated in the Preamble to the final Direct Payments Regulation,\textsuperscript{170} as well as the main accompanying Delegated Act.\textsuperscript{171} However, given the contents and design of the enacted instruments it has already been suggested that crop diversification and the protection of permanent grasslands are largely expected to have only nominal and indirect implications for the EU’s central aim of reversing negative trends and protecting the richness of species upon which robust and resilient ecosystems depend. For instance, with regards to the former, Dicks \textit{et al} have argued that there is little empirical or experimental evidence to support the claim that wildlife may benefit from the measure.\textsuperscript{172} Likewise, the implementation of the permanent grassland measure is unlikely to result in notable improvements for biodiversity.\textsuperscript{173}

\begin{thebibliography}{9}
\bibitem{168} \textit{Ibid}, 5.
\bibitem{169} European Commission (n 18) 3.
\bibitem{170} Direct Payments Regulation (n 1) Preamble (44-45).
\bibitem{171} For instance, the permanent grassland measures is intended to contribute ‘to the protection of the environment and in particular carbon sequestration, biodiversity and soil protection’. See, Commission Delegated Regulation (n 24) Preamble (43, 48).
\bibitem{173} Pe’er \textit{et al} (n 6) Supplementary Materials 5.
\end{thebibliography}
In particular, this would appear to affirm the concerns raised by numerous environmental NGOs during the course of the reform negotiations, which questioned the ability of the proposed measures to effectively meet the objectives of the 2020 Biodiversity strategy.\footnote{174} As concluded by such groups at that time, the EFA measure undoubtedly emerged from this process as the component with the greatest potential for improving biodiversity indicators because of its ability to provide much needed habitat within arable landscapes.\footnote{175} However, notwithstanding this formal step towards expanding the areas of arable land and permanent crops subject to biodiversity-related measures, important questions remain as to whether the current design and implementation will deliver the substantial improvements that are necessary for reversing negative trends by 2020. Bearing in mind the main aspects of implementation analysed above, a few further points may therefore be offered with regards to the specific implications for biodiversity.

First, as already indicated, the flexibility afforded to MS for the purpose of implementation, as well as the range of exemptions and equivalence options available has significantly reduced its application and thereby also the prospects of effectively maximising the total agricultural area subject to the EFA obligation. According to Pe’er \textit{et al}, the decision to set the threshold at 15 hectares of arable area has been particularly limiting given the exemption of small farmers and exclusion of non-arable land such as permanent pasture and grassland when calculating the area required to form part of the EFA.\footnote{176} Hence, they conclude that even under highly conservative scenarios, more than 88 per cent of farm holdings across the EU would be entirely exempt of the EFA requirement under the current framework, with this number being as high as 94 per cent in newer MSs.\footnote{177} In terms of comprehensive coverage, moreover, they calculate that these conditions amount to the exclusion of almost half of the EU’s UAA, with this figure most likely being significantly higher in practice.\footnote{178}

Secondly, even where the EFA measure is applicable, its potential has arguably been undermined by the range of options available at the national and

\footnotetext{174}{See the discussion above, at 4.6.2.} 
\footnotetext{176}{Pe’er \textit{et al} (n 6) Supplementary Materials 4.} 
\footnotetext{177}{\textit{Ibid.}} 
\footnotetext{178}{\textit{Ibid.}}
holding levels. The most important of these have been analysed above where it has been suggested that the decisions taken by MSs and farmers to date, have not necessarily entailed the optimal course of action in terms of biodiversity. Instead, they have reflected other pressing considerations such as the apparent desire to limit the impact of the EFA obligation upon farmers as well as maintaining levels of productivity. Not least, such criticism has been levelled against some of the most popular features to be implemented by MSs, including the growing of nitrogen-fixing crops, the biodiversity benefits of which remain ‘unconvincing’ in the view of environmental NGOs. Indeed, Pe’er et al have argued that while the cultivation of nitrogen-fixing crops may benefit soil quality in particular, it is unclear how it meets the stated objective to protect and improve biodiversity. Moreover, the European Commission has recently conceded that, together with catch crops, they generate ‘the lowest coefficient for biodiversity’, with figures for 2015 disclosing that only 26.9 per cent of the physical area of EFAs is effectively devoted to the most beneficial elements for the environment, such as hedges, trees, ponds, ditches, terraces, stone walls and other landscape features.

Concerns have also been raised about aspects of implementation that have the potential to deliver less favourable environmental outcomes if not carefully managed. For instance, with regards to catch crops and green cover, which cover 27.7 per cent to the land devoted to EFA, Hart has argued that while these types of land use may provide some benefit for biodiversity, primarily by way of winter cover and potential mitigation against the emission of nitrous oxide in winter, such outcomes must be considered in light of other related practices. In particular, she notes that there has been a tendency to use considerable amounts of herbicides to remove cover crops in MSs and regions where zero tillage techniques are practiced. This has the potential to impact on biodiversity by suppressing certain types of broad leaved weeds, which

181 Pe’er et al (n 6) Supplementary Materials 4.
182 European Commission (n 46) 8.
183 Hart (n 68) 24-25.
serve as sources of pollen and nectar for farmland insects. Thus, unless the use of such herbicides are properly reduced or eliminated on EFAs, they could even contribute to decreased water quality considering that diffuse pollution of agricultural herbicides continues to be a main source of such pollution.

Against this background, a promising and recent EU policy initiative has been to propose a general ban of the use of plant protection products on productive EFAs, with such a ban being specifically ‘considered a most effective requirement from the environmental perspective’. If implemented, the measure would constitute a considerable advance on the earlier position given that in 2015 only four MSs imposed environmental restrictions on catch crops and only one MS did so on nitrogen-fixing areas. Moreover, this would undoubtedly serve to create greater harmonization and coherence on the implementation of the EFA measure across the EU.

Thirdly, and lastly, the scope for improvement in terms of biodiversity would seem to be restricted by the evidence noted, which indicated that the 2013 CAP reforms have had little to no transformational effect in terms of how farmers farm their land. On the other hand, positive changes may be derived from an increased area of protein crops, which are the only crops expected to increase by more than 5 per cent. However, while these changes are beneficial for biodiversity, and are likely to be even more so if pesticide use is banned on nitrogen-fixing crops, the concrete improvements on the ground would appear to fall short of the ambition required to meet the concerns expressed in the 2015 The Mid-term Review of the EU Biodiversity Strategy to 2020, which observed that species linked to agricultural ecosystems continued to decline and called for greater efforts to address the resulting loss of biodiversity. Undoubtedly, these and other concessions would also serve to

---

187 The proposed legislation to amend Commission Delegated Regulation (EU) 639/2014 (n 24) has been issued: Document Ares(2016)6991856.
188 See also generally, eg, A. Matthews, What Biodiversity Benefits Can We Expect from EFAs? (11 October 2015) (available at http://capreform.eu/what-biodiversity-benefits-can-we-expect-from-efas, last accessed on 27 June 2017).
189 Ibid, 15.
affirm the main conclusion drawn by Pe’er et al, namely that the current design and implementation of the EFA measure is ‘unlikely to contribute to improving the status of farmland biodiversity given that the majority of farmers would not be required to perform any changes of current farming practices to comply with it’. 191

5.5.2 Addressing the Challenges of Climate Change: Does the New Direct Payment Regime provide a Viable Approach?

5.5.2.1 The Role of Agriculture for Meeting EU Climate Objectives

As extensively discussed in Chapters two and three, the link between agriculture and climate change is highly complex, with land management practices having the ability to contribute towards increased concentrations of GHGs in the atmosphere, as well as mitigating the effects of such emissions through management techniques that optimise the ability of land to sequester CO2. 192 A growing focus of EU policy-makers in recent years has therefore been on developing instruments relating to the management and use of agricultural lands, with a view to contributing towards the long-term goal of reducing anthropocentric GHGs emissions, as well as to mitigate against the expected effects of climate change. 193

As the first climate measure to be introduced under Pillar I, the new greening component may certainly be regarded as a landmark element of this process. 194 In particular, the proposed direct payments regulation saw all three greening elements as contributing to climate change adaptation, asserting that: ‘these payments will ensure that all farms deliver environmental and climate benefits through the retention of soil carbon and grassland habitats associated with permanent pasture, the delivery of water and habitat protection by the establishment of ecological focus areas and improvement of the resilience of soil and ecosystems through crop diversification’. 195 Similarly, the

191 Pe’er et al (n 6) Supplementary Materials 6; Dicks et al (n 172) 121.
194 Although the previous framework did refer to climate change. See, eg, Council Regulation (EC) 73/2009 (n 49) Preamble (9).
195 European Commission (n 18) Explanatory Memorandum, 3.
2011 Impact Assessment foresaw crop rotation/diversification as aiding, soil organic matter and structure so as to promote climate change mitigation and adaptation and biodiversity, with similar positive benefits flowing from land left fallow in EFAs.\textsuperscript{196} As has been observed, however, these expectations were tempered by the implementation of the final measures and the limited impact that the current crop rotation requirement, in particular, is expected to have for climate change mitigation.

Of the three greening measures, the maintenance of permanent grassland is clearly the practice that most directly attempts to provide outcomes beneficial for the climate, with both the Impact Assessment and the legislation itself underscoring the importance of permanent grassland to provide carbon sequestration.\textsuperscript{197} More specifically, the provision requiring MS to designate permanent grasslands that are environmentally sensitive in areas covered by Natura 2000 network, refers to the protection of peat and wetlands. Moreover, with regards to discretionary designation outside the areas covered by the network, there is additional mention of permanent grassland on carbon-rich soils.\textsuperscript{198}

The impetus to protect permanent grasslands should be viewed in light of the decreases in grasslands that have been recorded across the EU in recent decades. Indeed, these reductions have been especially prevalent in newer MSs where almost 12 per cent of grasslands are estimated to have been converted to other uses between 1993-2011,\textsuperscript{199} whereas the overall figure for the EU was around 6.4 per cent.\textsuperscript{200} As noted, such conversion is inevitably linked to the release of CO\(_2\) and is thereby likely to further exacerbate the climate change conundrum that must be addressed in order to ensure the sustainability of agricultural systems and long-term food security.\textsuperscript{201} Furthermore, grasslands provide vital support for, butterfly populations, amongst others, which may be used as structural headline indicators for biodiversity and are estimated by the EEA to have declined by up to 50 per cent in some parts of the EU.\textsuperscript{202}

\begin{footnotes}
\item[197] See, eg, Direct Payments Regulation (n 1) Preamble (42).
\item[198] Ibid, Article 45(1).
\item[199] Pe’er et al (n 6) Supplementary Materials 6.
\item[200] Ibid.
\item[201] See the discussion above, at 2.3.6.
\end{footnotes}
In response, the newly introduced permanent grassland measure aims at preserving the carbon sequestration capacity of existing grasslands, as well as pre-empting future conversion, which would not only reduce the overall ability of grasslands to mitigate against climate change but, as mentioned, would also have negative implications for biodiversity. Given these objectives it is necessary to assess the extent to which the permanent grassland measure may expected to improve the climate-related outcomes of the CAP framework.

5.5.2.2 Expected Policy Outcomes

A number of critical observations may be made in this regard. First, as already seen pertaining to the designation of sensitive grasslands, the measure will, in practice, provide limited protection for grasslands located outside of Natura 2000 areas, as only five MSs have opted to classify portions of such grasslands as environmentally sensitive, thereby protecting them from ploughing. That said, it may also be reiterated that the wide-scale designation of environmentally sensitive grasslands within Natura 2000 areas by a number of MSs are nonetheless expected to support some improvements, with initial data indicating that environmentally sensitive permanent grassland which must be designated amounts to 16 per cent of all permanent grassland, although the overall figure conceals significant variation between Member States. In particular, Hart has suggested that the ban on ploughing imposed on such land may deliver benefits for carbon and soil given that the protection of environmentally sensitive permanent grassland is now subject to a payment and therefore strict controls and a greater likeliness of compliance.

Secondly, with regard to the separate obligation of MSs to ensure maintenance of the ratio of permanent grassland as against the total agricultural area, the earlier cross-compliance regime has been strengthened in two respects, in that it may now also be applied at the sub-regional or even holding level, as opposed to just national or regional level; and the ‘margin of appreciation’ in terms of reduction of that ratio is now 5 per cent, as opposed to 10 per cent. Despite these improvements, however,

203 Smith et al (n 192) 811.
206 Hart (n 68) 46.
the formulation and design of the final measure entails that the protection of permanent grassland will, in most cases, only translate to tangible legal obligations if the total ratio of permanent grassland (at the specified regional, national or holding level) falls by more than five per cent, with only three MSs – Germany, Luxembourg and Portugal – choosing to implement systems of prior authorisation. In other MSs, the measure will, therefore, not require any positive action on the part of farmers, unless it is determined that the reference ratio of grassland to the total area of agricultural land for a given year has decreased by more than five per cent, in which case farmers that have been responsible for such conversion will be primarily be under an obligation to reinstate the corresponding area of grassland.

Thus, notwithstanding the aim of preventing future conversion of sensitive grasslands, the measure does little to address ecological losses stemming from previous conversions of grasslands into more profitable land uses. In this light, Mahé suggests that the formulation of the permanent grassland measures in its current form is regrettable and that it would significantly have benefited from the inclusion of an ‘incentive scheme to restore former grasslands that were converted to cultivation in order to access payment entitlements’. Moreover, its effectiveness is potentially further undermined by the lack of a clear distinction in the legislation between high-nature-value grasslands and re-seeded grassland, with the latter being less likely to have climate change and environmental benefits. Indeed, it may be underscored that benefits for biodiversity remain higher on existing, rather than converted, grasslands many years after conversion. Similarly, the focus on net area does not take into account the added value of, for instance, encouraging connectivity of designated permanent grasslands.

Thirdly, considering the pervasive impacts of climate change and the role of agriculture in perpetuating these changes, it is unclear how the relatively limited design of the new greening measure will be able to make a meaningful contribution to stemming agricultural GHG emissions and improving the carbon sequestration

---

209 Ibid.
211 Dicks et al (n 172) 121.
212 Pe’er et al (n 6) 1091.
ability of European grasslands. Moreover, the climate-related dimensions of the greening framework would appear to have been further downgraded by the implementation choices made by MS. For instance, this was acknowledged in the 2016 Implementation Report prepared for the European Commission, which concluded that ‘[o]verall, the choices made under all three greening measures are considered to be moderately relevant to address the priorities identified for GHG emissions, maintaining carbon stocks and/or increasing carbon sequestration’.

Not least, it should be noted that despite the introduction of the new greening payment in 2015, the EU has recently conceded that ‘no comprehensive quantified estimates of the impact of current and future actions under the first pillar of the CAP on greenhouse gas emissions are available’. Surely, this lack of data and accounting on the part of the EU significantly undermines the ability to assess and evaluate the anticipated outcomes of the greening measures against their stated climate objectives. And, given the broader implementation of the post-2014 direct framework this uncertainty is likely to be exacerbated by the significant recourse to VCS for animal sectors, which may have an adverse effect on CH₄ emissions.

Lastly, the choice by 27 MS to use their direct payments envelopes to support livestock and animal sectors entails that the EU has committed itself to directly funding some of the most environmentally taxing forms of agricultural production for the foreseeable part of the 2014-2020 programming period. In addition to significantly increasing previous levels of such support, the implementation of this framework may also be expected to have more long-term and structural implications that should not easily be overlooked. For instance, it may recalled that the Commission expressed optimism in its 2011 Communication over the growing export opportunities that are projected to arise as a result of increased food demand and changing global diets. Further, much of this growth is expected to take place within animal sectors, thereby, widening the prospects of finding new markets for the export

215 The environmental impacts of livestock production were highlighted above, at 2.3.6.
216 European Commission The CAP towards 2020: Meeting the food, natural resources and territorial challenges of the future COM (2010) 672, 4-5.
of EU meat and dairy products in particular. Consequently, the unprecedented expansion of coupled support for these particular types of food production has the potential to impact upon farm decisions, since, at least historically, these have tended to be ‘distorted by coupled subsidies towards subsidised activities and away from productivity-motivated activities’. In this light, the commitment of additional coupled payments for these producers could presumably incentivise them to make further investments and expansions based on the expectation of continued support and increased global demand.

---

217 Ibid.
Chapter 6

The Revised Rural Development and Cross-Compliance Frameworks

6.1 Introduction

The changes made to the rural development and cross-compliance frameworks under the 2013 CAP reform, were far less extensive than those relating to Pillar I and the direct payments regime. Indeed, as already highlighted, both the Commission’s initial proposals, as well as the institutional and public debates that took place as part of the subsequent negotiation process, overwhelmingly focused on the latter and the adoption of the new greening component in particular. Unsurprisingly then, there was a limited desire to undertake simultaneous and wide-scale restructuring of Pillar II, in particular, with the main outcome being that the fundamental architecture and rationale of the rural development policy remains largely intact following the Cioloș reforms.1

Notwithstanding these modest political ambitions, a number of changes were introduced that have the potential to impact upon the programming of RDPs, and thereby also the environmental outcomes that may be expected to stem from Pillar II measures during the 2014-2020 programming period.2 For instance, Regulation 1305/2013 (the Rural Development Regulation) has explicitly strengthened the climate dimension of these instruments by requiring that a minimum of 30 per cent of EAFRD contributions to each RDP be devoted to ‘climate mitigation and adaptation as well as environmental issues’.3 Likewise, with regard to cross-compliance, the regime has been further streamlined under the new Horizontal framework, inter alia, with a view to solidifying its application across both CAP pillars. In particular, these

---

and other changes reflected a continued commitment the process of EPI, with the Preamble to the Regulation 1305/2013 explicitly emphasising that ‘[t]he Union's priorities for rural development should be pursued in the framework of sustainable development and the Union's promotion of the aim of protecting and improving the environment’.4

Against this background, the current Chapter analyses the main novelties of the post-2014 rural development and cross-compliance frameworks, and the extent to which they may be expected to improve the quality of environmental governance and public goods delivered under each respective pillar of the CAP. It should, however, be noted from the outset that, given the voluntary nature of Pillar II measures in particular it is, at this point, still too early to draw definite conclusions about the outcomes of the 2013 reforms. Not least, it takes considerable time for the effects of these measures show through and research to this effect is only just beginning to be disseminated. Moreover, it might also be added that the ability to offer a detailed analysis of national and sub-national implementation is obviously curtailed given the sheer number of RDPs, a total of 118, that have been approved for the current programming period.

6.2 The Main Elements of the post-2014 Rural Development Framework

6.2.1 Strategic Objectives and the Continued Centrality of Sustainable Development

As outlined in previous Chapters, the concept of rurality is particularly multidimensional, with the rural development policy providing an essential platform for pursuing central EU objectives and strategies beyond that of farming and the CAP.5 In particular, rural development is part of the broader cohesion policy aimed at addressing structural and socio-economic disparities between the various regions and MSs, with the EAFRD being one of five European structural and investments funds (ESI).6 This is specifically underscored by the current mission statement set forth

---

4 Ibid, Preamble (5).
5 See above at 3.4.6
6 Article 174 TFEU. See also Matthews et al (n 1) 244.
under Article 3 of Regulation 1305/2013, which stipulates that the EAFRD shall ‘contribute to the Europe 2020 Strategy by promoting rural development throughout the Union in a manner that complements the other instruments of the CAP, the cohesion policy and the common fisheries policy’.

The coherence and coordination between these funds was further strengthened under Regulation 1303/2013, which established a common strategic framework to facilitate programming, as well as sectoral and regional coordination of measures supported through these funds during the 2014-2020 budgetary period. On the administrative level, for instance, this revised framework enables MSs to provide a single document, a so-called Partnership Agreement, containing the strategy for all ESI funds at national level, based on common standards for the programs defined therein. Moreover, on a broader strategic level, the need to strengthen the link between programming and the implementation of the EU’s sustainable development agenda was especially emphasised under the new framework. For instance, Regulation 1303/2013 provides that the objectives of the ESI funds should be ‘pursued in the framework of sustainable development and the Union's promotion of the aim of preserving, protecting and improving the quality of the environment as set out in Articles 11 and 191(1) TFEU, taking into account the polluter pays principle’. Furthermore, this required MSs to ‘ensure that environmental protection requirements, resource efficiency, climate change mitigation and adaptation, biodiversity, disaster resilience, and risk prevention and management are promoted’, as part of the preparation of national Partnership Agreements and programmes, as well as their implementation. And, in addition, there is now a more pronounced responsibility on the part of MSs to provide information, through established methodologies, of the specific support for climate change that is formulated under each of the structural and investment funds.

---

8 Ibid, Article 8
9 Ibid.
10 Ibid.
These changes have, likewise, been closely reflected under the newly revised rural development policy, the priorities of which are specifically required to ‘be pursued in the framework of sustainable development’.\textsuperscript{11} Similarly, Regulation 1698/2005 emphasised the central role of the second pillar for pursuing the strategic aims of the Göteborg strategy during the previous programming period.\textsuperscript{12} However, these priorities have arguably been somewhat expanded under the post-2014 rural development policy and the EU’s 2020 Strategy vision of ‘smart, sustainable and inclusive’ growth.\textsuperscript{13} Indeed, as impressed by the Commission’s main communication, the latter was particularly important for setting the overarching objectives of the 2013 reforms.\textsuperscript{14}

In the context of rural development, these objectives are restated under Article 4 of Regulation 1305/2013 and include (i) fostering the competitiveness of agriculture; (ii) ensuring the sustainable management of natural resources, and climate action; (iii) achieving a balanced territorial development of rural economies and communities including the creation and maintenance of employment. Thus, while the second of these provides the imperative for furthering the CAP’s environmental agenda, the first and third objectives largely reflect the socio-economic dimensions of rural development policy – although these goals certainly have the potential to overlap at various points.

\textbf{6.2.2 Priorities and Focus Areas}

Certainly, one of the main aims of the Cioloș reforms – as they related to rural development – was to improve the targeting and efficiency of measures funded under the second pillar.\textsuperscript{15} In doing so, the Commission had proposed the introduction of six guiding priorities, which were intended to replace the four thematic axes that

\textsuperscript{11} Rural Development Regulation (n 3) Preamble (5).
\textsuperscript{12} Council Regulation (EC) 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) (2005 Rural Development Regulation) [2005] OJ L277/1, Preamble (1). Moreover, ex-ante, mid-term and ex-post evaluations of national RDPs were required to take into account ‘sustainable development requirements’, as well the as environmental impact of Pillar II measures under Article 84(2) of that regulation.
\textsuperscript{13} Matthews \textit{et al} (n 1) 51.
underpinned programming during the 2007-2013 period. These priorities were subsequently agreed and adopted under Regulation 1305/2013, the complete list of which is set out as follows in Article 5(4):

(1) fostering knowledge transfer and innovation in agriculture, forestry, and rural areas;

(2) enhancing farm viability and competitiveness of all types of agriculture in all regions and promoting innovative farm technologies and the sustainable management of forests;

(3) promoting food chain organisation, including processing and marketing of agricultural products, animal welfare and risk management in agriculture;

(4) restoring, preserving and enhancing ecosystems related to agriculture and forestry;

(5) promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in agriculture, food and forestry sector;

(6) promoting social inclusion, poverty reduction and economic development in rural areas.  

It should also be underscored that each of these priorities are further subject to the cross-cutting objectives of innovation, environment and climate change mitigation and adaptation. 

For the purpose of implementation, MSs were required to draw up RDPs based on ex-ante evaluations of their specific funding needs, and which addressed at least four of the six guiding priorities under Regulation 1305/2013. In doing so, MSs have been able to choose any combination of EAFRD measures to pursue their chosen priorities, with Article 13 requiring each measure formulated under national and regional RDPs to ‘contribute specifically to the achievement of one or more Union priorities for rural development’. Moreover, each RDP must demonstrate appropriate consideration for environmental concerns and conditions, with the express

16 Rural Development Regulation (n 3) Article 5.
17 Ibid.
18 Ibid.
requirement that 30 per cent of the total EAFRD contribution to the rural development programme shall be reserved for measures focused on these issues.\textsuperscript{19}

The post-2014 measures are provided under Chapter II of the Rural Development Regulation and are further supplemented by an indicative list of their relevance to each of the aforementioned six priorities, set out in Annex VI of the same regulation. In total, the regulation lists almost 30 measures, without being beyond the scope of the current discussion to offer detailed analysis on each individual aspect. In order to provide a basic account of the new framework, however, it is necessary to consider each of the main priorities in brief, before focusing more closely on those measures that are specifically intended to address environmental objectives and provide public environmental goods.

The first priority aims at fostering knowledge transfer and innovation in agriculture, forestry, and rural areas, and has primarily been formulated to address the growing needs of small and medium size enterprises in the farming sectors to access an ‘appropriate level of technical and economic training as well as an increased capacity to access and exchange knowledge and information including through the diffusion of best agricultural and forestry production practices’.\textsuperscript{20} To this effect, knowledge transfers may be supported across a range of platforms comprising training, workshops, coaching and short-term farm exchanges, amongst others.\textsuperscript{21} Furthermore, Article 5(1) provides three main focus areas through which such actions may be pursued, namely: (i) fostering innovation, cooperation, and the development of the knowledge base in rural areas; (ii) strengthening the links between agriculture, food production and forestry and research and innovation, including for the purpose of improved environmental management and performance and; (iii) fostering lifelong learning and vocational training in the agricultural and forestry sectors.\textsuperscript{22} It follows that, although this priority does not have an environmental focus, per se, it is possible to fund measures targeting improved environmental management and performance as part of overall efforts to promote innovation and knowledge transfers between member of the farming community.

\textsuperscript{19} Ibid, Article 59.
\textsuperscript{20} Ibid, Preamble (12).
\textsuperscript{21} Ibid.
\textsuperscript{22} Ibid, Article 5(1).
There is also a degree of overlap with the second priority, which aims at enhancing farm viability and competitiveness across farm sectors, as well as promoting innovative farm technologies and the sustainable management of forests. Indeed, this directly reflects the first of the three overarching CAP 2020 objectives defined in the main Communication and is directed specifically at ‘improving the economic performance of all farms and facilitating farm restructuring and modernisation, notably with a view to increasing market participation and orientation as well as agricultural diversification’. In addition, this priority focuses on facilitating the entry of skilled farmers into the agricultural sectors, with a particular view to ensuring ‘generational review’. This includes the ability to providing extra support for young farmers under a number of Pillar II measures, with the Preamble to the regulation recognising that ‘in order to address problems of young farmers related to access to land Member States are…able to offer this support in combination with other forms of support, for example, through the use of financial instruments’. MSs may also provide specific support for young farmers, should they choose to adopt thematic sub-programmes to address specific needs of rural communities.

The third priority aims to promote food chain organisation, including processing and marketing of agricultural products, animal welfare and risk management in agriculture by; (i) improving competitiveness of primary producers and better integrating them into the agri-food chain through quality schemes, adding value to agricultural products, promotion in local markets and short supply circuits, producer groups and organisations and inter-branch organisations; and (ii) supporting farm risk prevention and management. Annex VI lists 8 measures that are of particular relevance to meeting these objectives, including payments to support the restoration of agricultural production potential damaged by natural disasters and catastrophic events and introduction of appropriate prevention actions, the

23 Ibid, Article 5(2)(a).
25 Ibid, Preamble 17. The meaning of ‘young farmer’ is defined in Article 2(1)(n) as ‘a person who is no more than 40 years of age at the moment of submitting the application, possesses adequate occupational skills and competence and is setting up for the first time in an agricultural holding as head of that holding’.
26 Ibid, Article 7(1)(a) Regulation 1305/2013. This reflects somewhat of a shift from Regulation 1698/2005 (n 12), which specifically required MSs to grant support to farmers under the age of 40, wishing to set up their first agricultural holding, provided that they possessed ‘adequate occupational skills’ and submitted a business plan (Article 22(1)).
27 Ibid, Article 5(3)(a) and 5(3)(b).
28 Ibid, Article 18.
establishment of producer groups\textsuperscript{29} and the provision of animal welfare services,\textsuperscript{30} amongst others.

The fourth priority is of particular relevance to the current thesis given its aim to support the restoration, protection and enhancement of ecosystems related to agriculture and forestry.\textsuperscript{31} More specifically, this priority is to be pursued with a focus on three main areas. The first of these pertains to the restoration, protection and enhancement of biodiversity ‘including in Natura 2000 areas, and in areas facing natural or other specific constraints, and high nature value farming, as well as the state of European landscapes’.\textsuperscript{32} As will be further discussed below, these objectives are relevant to several measures, including Natura 2000 payments for farmers and WFD payments,\textsuperscript{33} and payments to areas facing natural constraints.\textsuperscript{34} Moreover, the second and third focus areas are intended to address some of the most pressing agricultural externalities and aim at improving ‘water management, including fertiliser and pesticide management’, and ‘preventing soil erosion and improving soil management’, respectively.\textsuperscript{35} Likewise, the post-2014 framework provides MSs with a number of measures for the purpose of pursuing these objectives including the novel agri-environment-climate measure\textsuperscript{36} and the payment to support the organic farming,\textsuperscript{37} both of which will be considered in detail below.

Undoubtedly, the fifth priority also has a strong environmental emphasis, with its aim being to promote resource efficiency and support ‘the shift towards a low carbon and climate resilient economy in agriculture, food and forestry sectors’.\textsuperscript{38} As already noted, resource efficiency represents a cross-cutting theme under the post-2014 rural development framework and is largely reflective to the EU’s 2020 strategy.\textsuperscript{39} Hence, there are a number of measures under Regulation 1305/2013 that are of direct relevance to this priority, and as will be explored below, the establishment

\begin{thebibliography}{99}
\bibitem{29} \textit{Ibid}, Article 27.
\bibitem{30} \textit{Ibid}, Article 33.
\bibitem{31} \textit{Ibid}, Article 5(4).
\bibitem{32} \textit{Ibid}, Article 5(4)(a).
\bibitem{33} \textit{Ibid}, Article 30.
\bibitem{34} \textit{Ibid}, Articles 31-32.
\bibitem{35} \textit{Ibid}, Article 5(4)(b) and 5(4)(c).
\bibitem{36} \textit{Ibid}, Article 28.
\bibitem{37} \textit{Ibid}, Article 29.
\bibitem{38} \textit{Ibid}, Article 5(5).
\bibitem{39} \textit{Ibid}, Article 5 Regulation 1305/2013.
\end{thebibliography}
of the European Innovative Partnership Network is of particular interest to the current discussion.\textsuperscript{40}

The sixth, and final, programming priority under the current framework addresses the social disparities and challenges facing many rural communities by encouraging the ‘development of services and infrastructure leading to social inclusion and reversing trends of social and economic decline and depopulation of rural areas’.\textsuperscript{41} In particular, RDPs that include this priority are intended to focus on (i) facilitating diversification, creation and development of small enterprises, as well as job creation; (ii) fostering local development in rural areas and; (iii) enhancing the accessibility, use and quality of information and communication technologies in rural areas.\textsuperscript{42} And, in this context, it may be noted that the Leader program is expected to continue to play a dominant role, with MSs being required to reserve at least 5 per cent of their EAFRD contribution to promote this measure.\textsuperscript{43}

\section*{6.3 Measures with Environmental and Climate-Related Foci}

Following the dissolution of the axis regime, second pillar measures are not as clearly demarcated as was the case under Regulation 1698/2005.\textsuperscript{44} Indeed, as already indicated, the main body of Regulation 1205/2013 does not provide strict categorisations of the approximately 30 measures that are contained under Chapter II and which are each required to pursue one or more of the six priorities listed above. However, further clarification is provided by the indicative list of measures and their corresponding priorities in Annex VI of the regulation. In particular, the latter lists eight measures ‘of particular relevance to restoring, preserving and enhancing ecosystems dependent on agriculture and forestry, and promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in agriculture, food and forestry sectors’ (ie, priorities four and five).\textsuperscript{45} Four of these relate to forestry, and although there are clearly intersectional aspects between such

\begin{footnotesize}
\footnotesize
\textsuperscript{40} \textit{Ibid}, Article 53.
\textsuperscript{41} \textit{Ibid}, Preamble (19).
\textsuperscript{42} \textit{Ibid}, Article 5(6).
\textsuperscript{43} \textit{Ibid}, Preamble (31).
\textsuperscript{44} (n 12).
\textsuperscript{45} Rural Development Regulation (n 3) Annex VI.
\end{footnotesize}
measures and those relating to agriculture (especially with regards to climate change adaptation and mitigation), the current analysis is limited to measures focusing on the latter. These comprise agri-environment-climate measures, organic farming provisions, Natura 2000 and Water framework directive payments and payments to areas facing natural or other specific constraints.

In addition, the overarching objectives of the 2020 strategy and their focus on resource efficiency has furthered the establishment and development of networks aimed at implementing the EIP ‘Agricultural Productivity and Sustainability’, which is intended to address some of the main challenges to agriculture and productivity, as understood by the EU.\textsuperscript{46} Importantly, this instrument is inter-sectoral and relates to most of the six rural development priorities in some way. Thus, given its title it is perhaps not unexpected that the EIP also has the potential to impact upon the way in which ecological and climate-related protection measures are formulated during the 2014-2020 programming period. Some of the relevant aspects of this instrument will therefore also be analysed, before considering the changes made to the horizontal regime introduced under Regulation 1306/2013.

6.3.1 The Agri-Environment-Climate Measure

The agri-environment-climate (AEC) payment is set out under Article 28 of the basic regulation and requires MSs to include in their rural development programs measures to ‘preserve and promote the necessary changes to agricultural practices that make a positive contribution to the environment and climate’.\textsuperscript{47} This comprises payments aimed at encouraging practices that contribute to ‘climate change mitigation and adaptation and that are compatible with the protection and improvement of the environment, the landscape and its features, natural resources, and the soil and genetic diversity’.\textsuperscript{48} Consequently, it replaces the former agri-environment measures (Article 38 of Regulation 1698/2005) and is, according to the wording of the Preamble, expected to continue ‘to play a prominent role in supporting the sustainable development of rural areas and in responding to society's increasing demands for

\begin{itemize}
  \item \textsuperscript{46} \textit{Ibid}, Article 53.
  \item \textsuperscript{47} \textit{Ibid}, Article 28(1).
  \item \textsuperscript{48} \textit{Ibid}, Preamble (22).
\end{itemize}
environmental services’. As in the case of its precursor, payments for such services should cover income forgone, as well as additional costs associated with the undertaken commitment, but only to the extent that the remunerated actions go beyond the relevant mandatory standards and requirements, so as to comply with the polluter pays principle. In addition, the revised provision has added a number of elements that have implications for the way in which AEC measures are adopted and formulated within the context of national and sub-national RDPs.

First, AEC payments funded by the EAFRD must reflect the new legal baselines entrenched by the 2013 CAP reforms. According to Article 28(3) the services and commitments undertaken by farmers in exchange for remuneration must go beyond the standards established for cross-compliance under Regulation 1306/2013, the relevant criteria and minimum activity established pursuant to Article 4 of Regulation 1307/2013 and minimum requirements for fertiliser and plant protection use and other relevant mandatory regulatory requirements established by national law. More specifically, the minimum requirements for fertilisers must include, inter alia, the Codes of Good Practice introduced by the Nitrates Directive for farms outside nitrate vulnerable zones, and requirements concerning phosphorous pollution, while corresponding requirements for plant protection products use must include general principles for integrated pest management (under the Pesticides Directive).

However, the obligations relating to the greening measures are not explicitly mentioned the rural development regulation, with the effect that it would appear possible for double funding to arise as a source of potential conflict in cases where farmers are in receipt of the basic payment under Pillar I (and are thereby required to observe the greening obligations), as well as being remunerated for carrying out such services under the AEC measure. Indeed, it may be recalled that one of the main concerns voiced by environmental NGOs and academic commentators was the need to ensure that the payment for practices of benefit to the climate and the environment was not undermined by Pillar II measures supporting similar or identical services. This was, likewise, underscored in the Rural Development Regulation, and has

49 Ibid, Preamble (22).
50 Ibid.
51 Ibid, Article 28(3).
52 Ibid.
53 Ibid, Article 28(6).
subsequently been specifically addressed by the Commission in Delegated Regulation 807/2014, which requires additional costs and income foregone resulting from practices of beneficial for the climate and the environment, as well as equivalence practices, to be deducted from AEC payments in order to avoid double funding.\textsuperscript{54} Hence, the latter has clearly established that AEC payments may only be made in exchange for services that go beyond the greening obligations, in addition to the rules on cross-compliance and minimum activity noted above.

Secondly, as suggested by its title, the AEC measure is definitely intended to have a greater focus on climate change adaptation and mitigation than was previously the case.\textsuperscript{55} As outlined above, this is largely reflective of the 2020 Strategy and its focus on elevating resources efficiency across all EU policies in response to rising concerns over global climate change. Thus, the Preamble emphasises the need to encourage ‘farmers and other land managers to serve society as a whole by introducing or continuing to apply agricultural practices that contribute to climate change mitigation and adaptation’.\textsuperscript{56} With regards to mitigation, more specifically, it also provides that such ‘action should relate both to limiting emissions in agriculture and forestry from key activities such as livestock production, fertilizer use and to preserving carbon sinks and enhancing carbon sequestration with regard to land use, land use change and the forestry sector.\textsuperscript{57} This enhanced focus on climate measures has undoubtedly added a positive element to the new agri-environment-climate measure, and it might further be noted that Article 59(6) requires 30 per cent of the EAFRD budget to be spent on environment, climate and other related measures.\textsuperscript{58}

Thirdly, the new AEC payment allows for farmers to undertake the contractual duties of implementation on a collective basis. This represents a welcome addition to the previous framework, which merely enabled contractual undertakings at holding level, and has the potential to harness the many situations in which ‘synergies


\textsuperscript{56} Rural Development Regulation (n 3) Preamble 22.

\textsuperscript{57} Preamble, 4.

\textsuperscript{58} Ibid, Article 59(6). The new framework allows for these funds to be distributed between the measures listed in Articles 17, 21, 28, 29 and 30, according to the local needs and conditions. Thus, MSs could choose to invest that money in payments other than the AEC measure.
resulting from commitments undertaken jointly by a group of farmers multiply the environmental and climate benefit’.\(^{59}\) In this light, there is clearly a similarity between the aforementioned option and the ability to implement the EFA measure under Regulation 1307/2013 on a collective basis.\(^{60}\) It does, however, remain to be seen if this option will, in reality, be pursued by farmers during the course of the current programming period. For instance, with regards to EFA, only two MSs and Wallonia have so far even chosen to allow for such implementation, with the likely benefits and coverage of this measure being very limited.

Fourthly, and lastly, of the main elements added by the AEC measure, it should be noted that Article 28(4) requires MSs to ‘endeavour to ensure that persons undertaking to carry out operations under this measure are provided with the knowledge and information required to implement such operations’.\(^{61}\) In particular, the Preamble stresses that this is necessary ‘to ensure that farmers and other land managers are in a position to correctly implement the commitments they have undertaken’ and that MSs therefore have the obligation to ensure that such support is made available through, for instance, expert advice.\(^{62}\) The importance of this new requirement cannot easily be overstated and it is submitted that it represents a greater understanding on the part of the EU of the critical need to ensure that farmers and other land managers are up to the task of implementing AEC obligations in ways that contribute to their corresponding objectives. Indeed, as noted at various points above, given the complexity and intersectoral dimensions of climate change, biodiversity loss and other environmental challenges addressed by CAP measures, ensuring that farmers have appropriate knowledge and understanding of these processes may certainly enhance the way in which agricultural resources are managed and protected in the long-term.

The requirement for MSs to ensure that farmers receive the necessary support to comply with measures aimed at providing climate and environmental benefits that go beyond the legal baseline and the obligations linked to the greening measures is therefore particularly encouraging. Moreover, as will be further detailed below, it is

---

59 Ibid., 22.
61 Rural Development Regulation (n 3) Article 28(4).
62 Ibid, Preamble (22).
part of a wider and cross-cutting effort under the 2013 reforms to enhance the role and quality of farm advisory systems funded by the EAFRD and administrated at the national and regional levels. And, as specified in the Preamble this includes providing qualified advice ‘on climate change mitigation and adaptation, biodiversity, the protection of water, the development of short supply chains, organic farming and health aspects of animal husbandry’, amongst others.63

6.3.2 Organic Farming

Organic farming arose as an alternative to the conventional forms of high-intensive production and management practices that prevailed in Western Europe during the 1970s and 80s. At that time, it may be recalled, the EC was experiencing vast levels of overproduction of a number of staple products, with the more extensive methods of organic farming offering potential means of reducing surpluses, while also being more labour intensive and attracting premium market prices due to consumer demand and preferences.64 It was thus recognised for its potential to both reduce the negative impacts of production (compared to conventional methods), as well as adding much needed opportunities to drive rural economies and development.65

In order to ensure the proper functioning and cohesion of organic sectors, the EU has sought to harmonise this area by establishing common standards for the production and certification of organic products. This was first done with a focus on horticultural activity under Regulation 2092/9166 and was later expanded and amended to include livestock production chains, inter alia.67 Prior to these interventions, the total area of farmland devoted to organic production had been rising steadily on an annual basis. However, this rate increased significantly between 2000-2008, with the total area of land growing by 5.7 per cent on an annual basis in the EU-
15 and a considerable 20 per cent in the EU-12. The corresponding growth rate for the EU-27 during this period was 7.4 per cent per year over the same period.  

Yet, despite these early interventions, organic production was unable to keep up with the fast-growing demand for high-quality and responsibly produced food. For instance, in 2007 Gill highlighted the significant undersupply of locally produced organic foods in the UK context. Subsequently, the rules on organic farming were further consolidated under Regulation 834/2007, which sought to ‘provide a more explicit statement of the objectives, principles and production rules applying to organic farming and produce’, in addition to introducing novel requirements such as the use of a compulsory Community logo.

This framework remains in place today, with Regulation 834/2007 providing the main rules for organic production and certification. However, it should be noted that, although the regulatory harmonisation and standardised recognition of these processes has facilitated the expansion of organic markets, this framework has provided limited support in terms of dedicated payments to incentivise farmers to convert to, or maintain, organic practices. Likewise, such specific payments were largely absent during the previous programming period, with organic farming mainly being supported under the agri-environment measure introduced by Regulation 1698/2005.

Against this background, the 2013 CAP reform has enhanced the ability of MSs to support producers that undertake organic forms of production and certification pursuant to the rules established by Regulation 834/2007 in two main ways that are of particular relevance to the current discussion. First, it may be recalled that farmers that comply with the rules on organic production and certification automatically qualify for the payment for practices beneficial to the environment and climate, and thereby also the basic payment without having to adopt particular practices to comply

---

69 Jack (n 64) 132.
71 Jack (n 64) 133.
73 Regulation (EC) 1698/2005 (n 12) Article 38.
74 (n 74).
with the greening measures introduced by Regulation 1307/2013.\(^75\) Secondly, the introduction of a specific payment to support organic production under Article 29 of the rural development regulation represents a novel feature of the post-2014 framework and requires MSs to grant support, per hectare of agricultural area, to farmers or groups of farmers who commit to undertake, convert or maintain land under organic production, and who fulfil the requirement of active farmer defined in Article 9 of Regulation 1307/2013.\(^76\) And, with regards to this new organic farming provision, two further points may be highlighted.

First, it may be noted that, as general rule, Article 29(3) requires farmers to commit to the regular contracting period of between five to seven years, but also takes account of the broader processes related to organic production and the need ‘to avoid a large-scale return by farmers to conventional farming support should be given to both conversion and maintenance measures’.\(^77\) Thus, it provides that ‘where support is granted for conversion to organic farming Member States may determine a shorter initial period corresponding to the period of conversion’.\(^78\) Likewise, MSs may determine a shorter contracting period for farmers undertaking new commitments relating to the maintenance of organic farmland ‘that directly follow the commitment performed in the initial period’.\(^79\) In addition, MSs ‘may provide in their rural development programmes for annual extension after the termination of the initial period’ where support is granted for the maintenance of organic farming.\(^80\)

Secondly, the possibility to adopt this measure on a collective basis may be highlighted as a particularly positive feature of the organic farming measure. Indeed, as pointed out above, this approach has also been possible for the purpose of implementing other CAP measures, such as the AEC and EFA measures, and constitutes a promising initiative to enhance the ‘synergy in biodiversity, benefits delivered by the organic farming measure, collective contracts or co-operation between farmers’ by encouraging coverage across larger, adjacent areas.\(^81\)

---

\(^{75}\) Regulation 1307/2013 (n 60) Article 43(11). However, Pe’er et al have argued that ‘[w]hile organic farming does provide a range of environmental benefits, including some to biodiversity’ these are cannot be taken for granted as a matter of definition. See G. Pe’er et al, ‘EU agricultural reform fails on biodiversity’, (2014) 344 Science 6188 (Supplementary Materials) 5.

\(^{76}\) Rural Development Regulation (n 3) Article 29(1).

\(^{77}\) Ibid, Preamble 23.

\(^{78}\) Ibid, Article 29(3).

\(^{79}\) Ibid, Article 29(3).

\(^{80}\) Ibid, Article 29(3).

\(^{81}\) Ibid, Preamble (23).
particular, this added support was defended in response ‘to the increasing demand of society for the use of environmentally friendly farm practices and for high standards of animal welfare’.

Indeed, it may be noted that the area devoted to organic farming amounted to 6.2 per cent of the total UAA across the EU-28 in 2015, with the greatest proportions of this land being located in Spain, Italy, France and Germany, which are all defined by longstanding and established organic sectors. However, the national share of organic farmland differs significantly between MSs. Thus while Austria (19 per cent), Sweden (16 per cent) Estonia (13 per cent) and the Czech Republic (12 per cent) each had shares of over 10 per cent of the notational UAA devoted to organic production in 2015, other important agricultural producers such as Romania, Hungary, Poland and France devoted less than 5 per cent for this purpose.

Although it is, at this point, still too early to determine the extent to which the added element of financial support provided under Article 29 will be successful in continuing to support the conversion, maintenance and expansion of organic farming – the possibility to design tailor-made payments for this important sector certainly holds promising prospects for harnessing the benefits of such production during the current programming period. And, in this light, it should also be noted that further possibilities are offered under Delegated Regulation 808/2014, which provides for agri-environment-climate measures under Article 28, support for organic production under Article 29, animal welfare commitments under Article 33 and forest-environmental and climate commitments under Article 34 to be combined, provided that they are compatible.

### 6.3.3. Natura 2000 and Water Framework Directive Payments

The Natura 2000 and Water Framework Directive payment is set out in Article 30 of the Rural Development Regulation and is largely reflective of the corresponding measure previously introduced under Article 38 of Regulation 1698/200.

---

82 Ibid, Preamble (23).
84 Ibid, 10-11.
Consequently, this instrument is intended to continue to contribute to the effective management of Natura 2000 sites, by providing support to farmers (and forest holders) operating in these areas and who experience specific disadvantages as a consequence of the implementation of Directives 92/43/EEC and 2009/147/EC and the related obligations imposed thereunder. As suggested by the title, MSs are also required to provide support for farmers operating in areas that are included in river basin management plans pursuant to the WFD, in order to address disadvantages resulting from their implementation. In addition, it should be noted that a novel feature of the measure is to allow support to be provided for other ‘delimited nature protection areas with environmental restrictions applicable to farming or forests which contribute to the implementation of Article 10 of Directive 92/43/EEC, provided that, per rural development programme, those areas do not exceed 5 % of the designated Natura 2000 areas covered by its territorial scope’.

For the purpose of implementation, MSs must ensure that support pursuant to this measure is linked to practices that go beyond basic mandatory standards and requirements. Thus, with regards to Natura 2000 payments, these ‘shall only be granted in relation to disadvantages resulting from requirements that go beyond the good agricultural and environmental condition provided for in Article 94 and Annex II of Council Regulation (EU) No 1306/2013 and the relevant criteria and minimum activities established pursuant to points (c)(ii) and (c)(iii) of Article 4(1) of point (c) of Article 4(1) of Regulation (EU) No 1307/2013’. In addition, MSs are required to ensure that such payments do not amount to double funding of the greening measures following their introduction in 2015.

Likewise, these standards apply to payments pursuant to the WFD. However, in order to be eligible to receive such payment, a number of additional conditions must be satisfied under the new provision. First, payments linked to the WFD may only be made with regards to specific requirements that ‘were introduced by the Water Framework Directive, are in accordance with the programmes of measures of the river basin management plans for the purpose of achieving the environmental objectives of that directive and go beyond the measures required to implement other Union law for

---

86 Rural Development Regulation (n 3) Article 30(6)(a).
87 Ibid, Article 30(6)(c).
88 Ibid, Article 30(6)(b).
89 Ibid, Article 30(3).
the protection of water’.\textsuperscript{90} Secondly, as a clear expression of the ‘provider gets’ principle, MSs must ensure that these payments go beyond the level of protection of the Union law existing at the time the WFD was adopted, as laid down in Article 4(9) of that Directive.\textsuperscript{91} And, thirdly, WFD payments shall only be made in relation to specific requirements that ‘impose major changes in type of land use, and/or major restrictions in farming practice resulting in a significant loss of income’.\textsuperscript{92}

Undoubtedly, this measure has the potential to enhance the protection of Natura 2000 areas, as well as delivering support for farmers having to comply with specific requirements of river basin management programs, if prioritised by MSs. However, its implementation depends, not only on the willingness of MSs to fund it, but in the case of the WFD this also requires that MSs have, in fact, fully prepared the aforementioned management program or introduced horizontal management prescriptions through national legislation.\textsuperscript{93} Indeed, Birdlife International have noted that delays in the preparation of management plans, prevented the measure from being effectively implemented by a number of MSs during the previous programming period.\textsuperscript{94} Consequently, less than 1 per cent of total rural development expenditure was devoted to this measure from 2007-2013.\textsuperscript{95} And, as is further discussed below, the likeliness of significantly increasing these commitments are arguably undermined by the failure to include WFD obligations within cross-compliance, as the framework currently stands.

6.3.4 Payments to Areas Facing Natural or Other Specific Constraints

Of the measures listed in Annex VI as being of particular relevance to restoring, protecting and enhancing agricultural ecosystems, the fourth and last of these to be subject to analysis, relates to the payment to areas facing natural or specific constraints

\textsuperscript{90} Ibid, Article 30(4)(a).
\textsuperscript{91} Ibid, Article 30(4)(c).
\textsuperscript{92} Ibid, Article 30(4)(d).
\textsuperscript{93} European Court of Auditors, \textit{Integration of EU Water Policy Objectives with the CAP: a Partial Success, Special Report No 4} (European Court of Auditors, Luxembourg, 2014) paragraphs 56-59.
\textsuperscript{95} Ibid.
As outlined in Chapter 3, the underlying rationale for this payment is to provide support to farmers for natural or specific disadvantages that exist to farming in areas characterised by natural or specific handicaps, with the main purposes of such payments being to ensure the occupation of agricultural land, as well as preventing abandonment in those regions that are most at risk. More specifically, recital 25 of the Rural Development Regulation provides that ‘[p]ayments to farmers in mountain areas or in other areas facing natural or other specific constraints should, by encouraging continued use of agricultural land, contribute to maintaining the countryside as well as to maintaining and promoting sustainable farming systems’.

The basic elements of the ANC measure are set out in Articles 31 of the rural development regulation and largely reflect the rules established by Article 37 of Regulation 1698/2005. Accordingly, payments should be granted on an annual basis per hectare of agricultural area in order to compensate farmers for income foregone and additional costs linked to the disadvantage of the area concerned. For the purpose of establishing the level of payments, additional costs and income foregone should be calculated in comparison to areas that are not affected by such constraints. In doing so MSs may also opt to implement differentiated payments based on the severity of the natural or specific constraint affecting (i) farming activity and (ii) farming systems (for instance based on whether farming is carried out intensively or extensively).

In addition, implementation of the ANC measure depends on the designation by MSs of areas facing natural constraints or other specific constraints according to a number of criteria. These are detailed under Article 32 and introduce notable changes to the way in which this long-standing and controversial CAP measures is applied. Indeed, as discussed in Chapter 3, the ANC measure has been subject to a process of gradual reform in recent years, which has been aimed at fine-tuning and ensuring that

---

96 As noted above, the Annex also covers measures aimed at the forestry sector, but which are beyond the scope of the current discussion.
97 Direct Payments Regulation (n 3) Preamble (25).
98 Ibid, Article 31(1).
99 Ibid, Article 31(1).
100 Ibid, Article 31(1).
implementation is based on clearly defined and objective criteria. The latter is also highlighted in the Preamble to the regulation as crucial for ‘ensuring the efficient use of Union funds and equal treatment for farmers across the Union’.  

Under the new framework MSs are required to designate areas based on three categories; (i) mountain areas; (ii) areas, other than mountain areas, facing significant natural constraints; and (iii) other areas affected by specific constraints. With regards to the first of these, Article 31(2) provides that in order to benefit from the ANC payment mountain areas shall be characterised by a considerable limitation of the possibilities for using the land and by an appreciable increase in production costs due to:

(a) the existence, because of altitude, of very difficult climatic conditions, the effect of which is to substantially shorten the growing season;
(b) at a lower altitude, the presence over the greater part of the area in question of slopes too steep for the use of machinery or requiring the use of very expensive special equipment, or a combination of these two factors, where the constraints resulting from each taken separately are less acute but the combination of the two gives rise to an equivalent constraints.

Moreover, all areas north of the 62\textsuperscript{nd} parallel and certain adjacent areas shall be considered to be mountain areas for the purposes of the current framework.

Secondly, in order for areas other than mountain areas to be eligible for ANC support, at least 60 per cent of the agricultural area must meet one or more of the criteria listed in Annex III at the threshold value indicated if such agricultural areas are to be considered to be facing considerable natural constraints. Also, for the purpose of delimiting areas other than mountain areas, MS are required to ‘carry out a fine-tuning exercise, based on objective criteria, with the purpose of excluding areas in which significant natural constraints, referred to in the first subparagraph have been documented but have been overcome by investments or by economic activity, or by evidence of normal land productivity, or in which production methods or farming

\[102\text{ Direct Payments Regulation (n 3) Preamble (26).}\]
\[103\text{ Ibid, Article 32(1).}\]
\[104\text{ Ibid, Article 32(1).}\]
\[105\text{ Ibid, Article 32(1).}\]
\[106\text{ Ibid, Article 32(3).}\]
systems have offset the income loss or added costs referred to in Article 31(1)’. 107 Importantly, this obligation is intended to address the previous situation in which socio-economic criteria were interpreted liberally in order to extend coverage to ‘other less favoured areas’.

The third category of areas (iii) may be eligible for ANC payments ‘if they are affected by specific constraints and if it is necessary for land management to be continued in order to conserve or improve the environment, to maintain the countryside, to preserve the tourist potential of the area or to protect the coastline’. 108 Moreover, in the case of specific constraints, support may be granted provided that the relevant areas are similar and comprising less than ten per cent of the areas of any given MS. 109

Article 32 also allows for ANC payments to be made where at least 60 per cent of the agricultural area meets a minimum of two of the biophysical criteria listed in Annex III, provided that each of these fall within a maximum margin of 20 per cent of the indicated thresholds. 110 And similarly, this applies in instances where at least 60 per cent of the area is comprised of land meeting at least one criterion in the aforementioned Annex, as well as areas meeting two or more of these, provided that each of these fall within a maximum margin of 20 per cent of the indicated thresholds. 111

Clearly, the targeting of the ANC measure has been somewhat improved under the new framework, with the adoption of objective criteria being a particularly key aspect of this change. Moreover, the concept of fine-tuning entails that MSs are required to take into account the impact of technological progress and other forms of interventions that may allow for natural or specific disadvantages to be overcome. Thus, the application of these criteria will undoubtedly entail that certain areas that are objectively deemed to be suffering from handicaps will nonetheless be ineligible to receive support if they have successfully been overcome and productivity maintained. In other words, it will no longer be sufficient for areas to exhibit one or more of the biophysical criteria listed in Annex III of the rural development regulation in order to receive ANC payments.

107 Ibid, Article 32(3).
108 Ibid, Article 32(4).
109 Ibid, Article 32(4).
110 Ibid, Article 32(4).
111 Ibid, Article 32(4).
As already indicated, this was arguably one of the main contributions of the Cioloș Commission towards updating the rural development regime, given the long-standing sensitivity and reluctance on the part of EU MSs to address the shortcomings of the previous ANC indicators. However, it should be noted that although the new framework was originally intended to apply from the start of the current programming period in 2014, MSs have been given until 2018 to apply the revised ANC measure. Moreover, of the 98 RDPs that will be including these instruments, only 11 had included biophysical delimitation and fine-tuning, while the other 87 were in the process of doing so, by November 2016. Thus, the Commission has warned that the implementation of this measure could be even further delayed unless these plans are finalised as soon as possible.

Clearly, it is too early to appreciate how the new ANC payment will impact upon farming activity and systems in eligible areas, or the level of funding that will be devoted to its implementation. Indeed, it may be recalled that MSs are required to spend at least 30 per cent of their EAFRD budgets on the implementation of seven listed measures, including ANC payments, but are free to distribute this spending as they see fit. However, despite these funding arrangements and the specific aim to support ‘sustainable’ farming systems (as noted above), it is submitted that the ANC measure is still overwhelmingly focused on providing socio-economic relief to rural communities, rather than ensuring the provision or protection of particular ecosystem services in such areas. Thus, notwithstanding the introduction of more precise targeting and criteria, it is still highly unclear how these payments will enhance the level of environmental protection, given the continued focus on providing socio-economic support to rural communities in risk of abandonment.

112 A. Matthews, Designating new Areas with Natural Constraints (http://capreform.eu/designating-new-areas-with/ assessed on 17 May 2017)
114 Ibid.
115 Direct Payments Regulation (n 3) Article 59(6).
6.3.5 European Innovative Partnership

As outlined above, innovation and resource efficiency were formulated as central and cross-cutting themes of the 2013 reforms. Accordingly, these are encouraged to be reflected in national and regional RDPs as far as possible and may be pursued under a combination of measures and headings. Of particular interest to the current analysis is the introduction of the EIP on ‘Agricultural Productivity and Sustainability’, which is one of five EIPs tasked with delivering the targets of the EU’s 2020 Strategy for growth within the Union. In particular, the Commission’s 2012 Communication on the EIP ’Agricultural Productivity and Sustainability’ highlighted innovation as a necessary pre-requisite for overcoming the existing gap ‘between the provision of research results and the application of innovative approaches to farming practice’. Thus, the role of the EIP is broadly to provide ‘a bridge between science and the application of innovative approaches in practice’.

In the context of rural development, this means building bottom-up approaches and bringing ‘together all relevant actors at Union, national and regional levels, presenting new ideas to Member States on how to streamline, simplify and better coordinate existing instruments and initiatives and complement them with new actions where necessary’. In so doing, the Rural Development Regulation recites that the ‘EIP for agricultural productivity and sustainability should contribute to the achievement of the Europe 2020 objectives of smart, sustainable and inclusive growth’, with its aims being to ‘deliver a steady and sustainable supply of food, feed and biomaterials, including existing and new types’.

Against this background, the EIP on Agricultural Productivity and Sustainability was formally launched as part of the rural development framework under Title IV of Regulation 1305/2013. The primary purpose of its inclusion was to offer support for RDPs to develop and pursue ‘innovative actions promoting a

---

117 Ibid, 3.
118 Ibid.
119 Ibid, 1.
120 Rural Development Regulation (n 3) Preamble (41).
121 Ibid, Preamble (41).
122 Ibid, Article 55(1)(b).
resource-efficient, productive and low-emission agricultural sector’. More specifically, Article 55(1) provides that the aim of the EIP is to:

(a) promote a resource efficient, economically viable, productive, competitive, low emission, climate friendly and resilient agricultural and forestry sector, working towards agro-ecological production systems and working in harmony with the essential natural resources on which farming and forestry depend;
(b) help deliver a steady and sustainable supply of food, feed and biomaterials, including existing and new types;
(c) improve processes to preserve the environment, adapt to climate change and mitigate it;
(d) build bridges between cutting-edge research knowledge and technology and farmers, forest managers, rural communities, businesses, NGOs and advisory services.

Moreover, Article 55(2) provides that these objectives are to be pursued by way of three main approaches, namely: (i) creating added value by better linking research and farming practice and encouraging the wider use of available innovation measures; (ii) promoting the faster and wider transposition of innovative solutions into practice and; (iii) informing the scientific community about the research needs of farming practice.

In order to implement the aims of the agricultural EIP and the development of innovation projects, Article 56 requires support to be provided for organisational groups set up by interested stakeholders such as farmers, researchers, advisors, businesses and other actors concerned with innovation in the agricultural sector. However, it is up to MSs to determine, within the framework of their RDPs, the level of payments granted to support such groups. Despite the voluntary nature of the EIP framework, it had been implemented in no less than 26 MSs, under 96 RDPs, by

---

123 Ibid, Preamble 44.
125 Ibid, Article 56(3).
2016, and there would certainly be evidence to suggest its continued popularity.\textsuperscript{126} For instance Coffey \textit{et al} have suggested that the ‘EIP’s bottom-up and farmer-led approach is truly distinctive and highly appreciated by stakeholders’.\textsuperscript{127} That said, they have also identified aspects that may be improved so as to increase both the efficiency and impact of this instrument. Not least, it was suggested that there could be more effective dissemination of the lessons emerging from the Operational Groups with a view to engaging farmers and the broader rural community in EIP projects.\textsuperscript{128}

The need to ensure greater dissemination between groups was also reflected in the Rural Development Regulation, with Article 53 establishing a new EIP network aimed at facilitating the networking and coordination of operational groups, advisory services and researchers involved in the implementation of actions targeting innovation in agriculture.\textsuperscript{129} This is intended to provide a platform for ‘the sharing of expertise as well as the development of new and specialised expertise, services and products’.\textsuperscript{130} And, in doing so, aims at bringing ‘together all relevant actors at Union, national and regional levels, presenting new ideas to Member States on how to streamline, simplify and better coordinate existing instruments and initiatives and complement them with new actions where necessary’.\textsuperscript{131}

\section{6.4 The Cross-Compliance Framework}

As outlined in Chapter 4, the post-2014 horizontal framework was intended to lay down common rules on financing, the farm advisory system, management and control systems, clearance of accounts, as well as cross-compliance. And, of the four basic acts proposed by the Commission in 2011, the regulation on the financing, monitoring and management of the CAP was definitely subject to the least amount of amendments during the inter-institutional negotiation process, with the final framework largely

\begin{flushright}
\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{127} \textit{Ibid}.
\item \textsuperscript{128} \textit{Ibid}, xiii-xiv.
\item \textsuperscript{129} Rural Development Regulation (n 3) Preamble (42).
\item \textsuperscript{130} \textit{Ibid}, Preamble 29.
\item \textsuperscript{131} \textit{Ibid}, Preamble 41.
\end{enumerate}
\end{footnotesize}
\end{flushright}
reflecting the proposed regime outlined in Chapter 4. In order to avoid further repetition, the remaining part of the discussion therefore focuses on carrying forward the analysis of the main elements that have been added to the cross-compliance regime, following the implementation of the 2013 reforms.

6.4.1 The Main Elements of the Revised Cross-Compliance Regime

The primary ambition of the Cioloş Reform pertaining to cross-compliance was clearly to streamline and enhance the regime, with a particular view to ‘strengthening the climate change dimension within GAEC and ensuring consistency with the provisions of greening and of relevant environmental measures offered under rural development’. In doing so, the Preamble to Regulation (EU) 1306/2013 (the Horizontal Regulation) emphasises that cross-compliance is expected to continue ‘to contribute to the development of sustainable agriculture through better awareness on the part of beneficiaries of the need to respect…basic standards’. Importantly, moreover, these standards are intended to ensure that the CAP remains ‘compatible with the expectation of society through improving consistency of that policy with the environment, public health, animal health, plant health and animal welfare policies’.

Consequently, a number of changes have been made to the system of cross-compliance that was previously in place under Regulation 73/2009. Most of these have been formal in nature, although some may definitely be relevant to the substance of cross-compliance measures and the outcomes that are expected as a result of their

---

133 European Commission Proposal for a Regulation of the European Parliament and of the Council on the financing, management and monitoring of the common agricultural policy, COM (2011) 628. In addition, there was a proposal to address the application of direct payments to farmers for the transitional year of 2013: COM (2011) 630, Explanatory Memorandum 7.
135 Ibid.
implementation. For instance, with regards to the former, the most obvious change has been the inclusion of cross-compliance as part of the horizontal framework. In particular, this move underscores the role of cross-compliance for enforcing basic EU standards and the polluter pays principle under both pillars of the CAP. Thus, in addition to applying to most forms of direct payments (with a notable exception being the exclusion of the small farmers scheme), the framework now clearly and unequivocally applies to the majority of rural development measures, including the agri-environmental instruments covered above.

In keeping with the changes proposed by the Commission in 2011, Regulation 1306/2013 has also sought to simplify the structure of the SMRs and GAECs by including all relevant measures in a single list, under Annex II of the Regulation, rather than two separate lists as was previously the case. Accordingly, SMRs and GAECs are currently grouped based on nine defined issues relating to the areas of (i) environment, climate change, good agricultural condition of land; (ii) public health, animal health and plant health and; (iii) animal welfare. Thus, while the three original areas of cross-compliance remain largely unchanged, the focus issues, as well as list of SMRs and GAECs, have been organised in a more cohesive manner than was previously the case. In particular, it may be noted that the new framework reduces the number of applicable SMRs from 18 to 13 and GAECs from eight to seven, while also eliminating the optional GAECs that were included under Annex III of Regulation 73/2009.

In total, the new cross-compliance framework requires compliance with 25 specified standards and provisions under the following sub-themes and issues:

Environment, climate change, good agricultural condition of land:

(i) Water
(ii) Soil and Carbon Stock
(iii) Biodiversity
(iv) Landscape Minimum Level of Maintenance

Public health, animal health and plant health:

(v) Food Safety
(vi) Identification and registration of animals

---

137 *Ibid,* SMRs and GAECs were previously listed under Annexes II and III.
138 *Horizontal Regulation* (n 134) Annex II.
(vii) Animal Diseases
(viii) Plant Protection Products

Animal Welfare:
(ix) Animal Welfare.\textsuperscript{139}

This amounts to an increase in the number of specified sub-themes, which has risen to nine from six under Regulation 73/2009.\textsuperscript{140} And of primary relevance to the current discussion is the expansion of the environmental issues that are intended to underpin implementation of the post-2014 cross-compliance framework. Indeed, while Annex II of the Regulation loosely defines the ‘environment’ as a thematic focus area of SMRs, the new regime include four main issues aimed at implementing standards relating to the environment, climate change and good agricultural condition of land.

Certainly, these revisions have served to create greater consistency and coherence between the different elements of the cross-compliance framework. When contrasted with the initial objectives of the 2013 reforms, however, they have arguably added little in terms of substance. In order to appreciate the potential impact of these changes, a few key points may therefore be highlighted.

6.4.2 The Substantive Outcomes: A Substantial Retreat from Earlier Ambitions?

First, the cross-compliance framework was definitely adjusted to account for the introduction of the greening measures under Pillar I. For instance, the protection of permanent pasture was removed as a feature of GAEC and replaced by the permanent grassland measure under the Direct Payments Regulation.\textsuperscript{141} Moreover, the optional standards for crop rotation were superseded by the implementation of the crop diversification measure under Article 44 of that regulation. Importantly, as pointed out in Chapters four and five, the ability of the greening measures to enhance the CAP’s environmental performance was premised upon them going beyond the obligations and standards already imposed by cross-compliance.\textsuperscript{142} And, to this effect, 

\textsuperscript{139} Ibid.
\textsuperscript{140} Regulation 73/2009 (n 136).
\textsuperscript{141} (n 60).
\textsuperscript{142} Ibid, Preamble (37).
the Commission stressed that simplification of the scheme should take place ‘without watering down the concept of cross-compliance itself’. However, rather than reinforcing the system of cross-compliance, as was initially expected, the new crop diversification and permanent grassland measures appear to have added notably little to the framework that was already in place prior to the 2013 reforms.

Secondly, given the adoption of the greening measures and their focus on addressing biodiversity and the preservation of carbon-rich grasslands, the CAP 2020 reforms had initially emphasised the role of cross-compliance for improving the protection of water resources, as well as ensuring a minimum level of maintenance of landscape features. With regards to the latter, this was followed through by enhancing GAEC 7 for the protection of landscape features, which now includes an additional obligation to ban the cutting of hedges and trees during the bird breeding and rearing season, as well as an optional element to place restrictions on invasive species.

In the case of water protection, on the other hand, the final cross-compliance framework has left much to be desired. In particular, as noted in Chapter 4, the Commission initially proposed to include relevant provisions of the WFD and the Sustainable use of Pesticides Directive, once they had been fully implemented by the MSs. According to the timelines imposed by these directives, MSs were required to implement the relevant provisions applicable at farm level by 1 January 2013 and 2014 for the WFD and Sustainable Use of Pesticides Directive, respectively. Thus, the transposition of both directives into national legislation should have been completed by 1 January 2015, when the 2013 reforms were set to take effect. Yet, both regulations remains outside the cross-compliance regime, despite the continued role of agriculture in contributing to water pollution and the loss of biodiversity.

With regard to water management, the cross-compliance regime does continue to include a statutory management requirement in respect of the Nitrates Directive.

---

144 Horizontal Regulation (n 134) Annex II.
145 Ibid, Preamble (54-56).
147 Horizontal Regulation (n 134).
while there are also three ‘water-related’ GAECs.148 Moreover, as a novel feature, the Horizontal Regulation lays down detailed provisions on information in the field of the protection of water which is to be provided by the Farm Advisory Service.149 Notwithstanding these additional features, however, the failure to include obligations under the WFD and Sustainable Use of Pesticides Directive creates an obvious lacunae given that the EU is considered to be far from reaching its water policy objectives.150 Indeed, the EEA has recently highlighted that fertiliser run-off from agriculture remains a major sources of diffuse water pollution in Europe.151 Thus, ‘[w]hile there is relative clarity about the types of pressures encountered in river basins, there is less clarity on how these will be addressed and how measures will contribute to achieving environmental objectives’.152

In its 2014 report on the integration of water policy, the ECA drew particular attention to the weaknesses of the cross-compliance regime which, in its view, remained limited compared to the ambitious policy targets set for the CAP.153 For instance, the ECA found that the GAEC on authorisation procedure for irrigation had ‘little impact’, as it does not require MSs to establish such a procedure where none already exists.154 In other words, the measure has no bearing in MSs with weak authorisation procedures or in those that lack such a procedure altogether.155 And, overall, it noted that delays in implementing the WFD have hindered the integration of EU water policy into the CAP.156 This failure is of primary relevance to several Southern MSs where water-related issues are of pressing concern. Indeed, as noted in Chapter 2, in MSs such as Greece, Portugal and Spain, potential water shortages, falling aquifer levels and salt-water intrusion are often a result of agricultural

---

148 Ibid, Annex II.
149 Ibid, Article 12(3)(d) and Annex I.
151 Ibid, 67.
152 Ibid, 64.
153 European Court of Auditors (n 93).
154 Ibid, paragraph 38.
155 Ibid, paragraph 39.
156 Ibid, paragraphs 21-23.
production and irrigation practices. In addition, the implications of climate change are generally expected to increase these stresses.

EU water protection objectives are further undermined by the use of agricultural pesticides, which remain widely detected in surface and groundwater bodies across Europe. For this reason, the integration of the Sustainable Use of Pesticides Directive, and the principle of integrated pest management in particular, was originally intended to enhance the cross-compliance framework as part of the 2013 CAP reforms. This raised a certain level of optimism, with the ECA even suggesting that ‘[t]he expected inclusion in cross-compliance of certain requirements deriving from the WFD and from the directive on the sustainable use of pesticides ought to address the issues raised’ in its report. However, despite repeated assurances by the European Commission that ‘[n]ational, EU and global monitoring, reporting and review obligations will be improved and streamlined as far as possible with requirements under other environmental legislation, such as the Water Framework Directive’, these important elements have yet to be incorporated.

The reluctance on the part of the legislative institutions of the EU to implement and enforce water protection obligations at farm level, entails that pesticide use continues to be addressed by a single SMR, which does not impose mandatory limitations on the use of phosphorous or the application of pesticides in the immediate vicinity of water bodies. Rather, Regulation 1306/2013 merely goes so far as to include a Joint Statement by the European Parliament and the Council which invites the European Commission to monitor their transposition and implementation by the Member States and, ‘where appropriate’, to come forward with a legislative proposal once implementation by all Member States is complete and the obligations directly

---

157 During the reform process the EEA suggested that crop-specific support for cotton should be discontinued in such countries by reason that irrigation requirements are likely to hamper adaptation to water scarcity. See, EEA, The European Environment State and Outlook 2015: Synthesis Report – 6. Understanding the Systematic Challenges Facing Europe (EEA, Copenhagen, 2015), 28.


159 EEA (n 157) 64.

160 ECA (n 93) paragraph 37.


162 ECA (n 93) paragraph 35.
applicable to farmers have been identified.\textsuperscript{163} In response, the ECA expressed its concern that the timetable of that Joint Declaration ‘implies that the implementation of a very important policy decision could be very slow’.\textsuperscript{164}

\textsuperscript{163} Horizontal Regulation (n 134).  
\textsuperscript{164} European Court of Auditors (n 93) 27.
Conclusion

Definitely, food security has always been at the heart of the CAP. However, the way in which this objective has been pursued and formulated has changed considerably since the policy was first introduced in 1962. During this time, the European approach to food security has evolved from being primarily focused on ensuring high levels of food supply and internal price stability, to becoming increasingly responsive to the environmental implications of agricultural intensification. Thus, as the wider costs of intensive production have garnered heightened recognition, so too, has appreciation of the need to move towards ecologically sustainable forms of agriculture, as a prerequisite for securing long-term food security.

Early signs of this direction of travel were already signalled in 1985 with the adoption of the SEA, which required environmental protection to be integrated within EC policies, although primarily for the purpose of harmonising rules and eliminating environmental barriers to trade on the internal market. The integration of environmental concerns within the CAP was especially emphasised in the Community’s fifth Environmental Policy Assessment, *Towards Sustainability*, in light of mounting scientific and empirical evidence of pollution and habitat loss stemming from decades of intensive agricultural production and management practices. Importantly, the document impressed, along with others, the need to reduce the externalities linked to farming in order to ensure the long-term viability and sustainability of ecological functions and resources.

The principle of environmental integration was further elevated by the Treaty of Amsterdam and the inclusion of sustainable development as a general principle of EU law. And, as extensively discussed in Chapter 3, sustainable agriculture has subsequently been adopted as a key CAP objective and has provided an underlying rationale for the introduction of agri-environmental measures and obligations that have featured in every CAP reform package that has been implemented since the early 1990s.

Likewise, improved environmental governance was expressed as a central aim of the 2013 reforms. Thus, from the outset of this process, there was ample reason to expect that the policy was heading down a more sustainable path. In particular,
increased recognition of the need to safeguard natural resources and biodiversity and to mitigate against climate change were identified as primary objectives for ensuring long-term food security, with sustainable agriculture being at the core of this approach.\(^1\) Key amongst the proposed measures was the introduction of the ‘greening component’, intended to impose agri-environmental obligations upon farmers in exchange for their receipt of basic income support under the direct payment framework.\(^2\) The proposals also introduced changes to the rural development framework, as well as the rules on cross-compliance, although these were far less substantive than the ones related to greening.

The overarching aim of this thesis has been to explore the role of the CAP for ensuring food security, with a clear focus being on the ecological dimensions of production and land-use. Importantly, it has been argued that the unprecedented challenges to food security are such as to warrant significant reductions of the environmental impacts of agriculture itself. Indeed, considering indications that the bio-physical and chemical thresholds have already been transgressed with regards to biodiversity loss and climate change, as well as the global flows of nitrogen and phosphorous, failure to do so will likely further undermine the stability of these systems, with unknown consequences for food security.

Given the prominence of the CAP as a flagship EU policy, the way in which these challenges are addressed is likely to have significant implications for environmental governance in the years to come. For instance, the policy remains the most well-funded and wide-ranging, accounting for just under 40 per cent of the entire EU budget in 2015 and potentially affecting much of the almost 50 per cent of EU territory that is currently devoted to farming.\(^3\) This coverage, in particular, entails that agricultural land-use and management practices impact upon wildlife habitat, biodiversity, as well the quality of water resources and waterways more than any other sector. Thus, the imperative to improve environmental protection and the benefits delivered under the CAP framework, arguably remains as strong as ever.

---

The 2013 reforms provided a promising platform for taking renewed and
decisive action to respond to the environmental challenges that previous regimes had
failed to sufficiently address. For instance, the Commission acknowledged in 2013
that ‘agriculture has to improve its environmental performance through more
sustainable production methods’. And, as intimated throughout the thesis, this would
require the realisation of significantly improved benefits stemming from agricultural
land use, as well as notable efforts to reduce the negative and pervasive impacts of
production agriculture.

However, notwithstanding the Commission’s initial assertion that the new
framework would ‘accelerate the process of integration of environmental
requirements…and reinforce the ability of land and natural ecosystems to…address
major EU biodiversity and climate change adaptation objectives’, translating these
ambitions into reflective legal measures and instruments has arguably left much to be
desired. Not least, the potential scope and application of the greening measures were
significantly limited following inputs and amendments tabled by the Council and the
EP as part of the reform negotiations. Compared to the proposed measures, for
instance, the enacted framework reduced the proportion of EU farms subject to the
greening obligations, by both raising the thresholds for compliance and including a
number of exceptions to the rules and their applicability. Indeed, this was particularly
the case with regard to the EFA measure and the types of features and agricultural
uses that could be included to this end. Likewise, the introduction of equivalence
measures following the inter-institutional negotiations allowed for further digression
from the proposed framework.

In consequence, Bureau and Mahé argue that the tentative outlook for Pillar I
payments following the implementation of the greening measures is that they will

---

5 European Commission (n 1) 3.
6 Difficulties surrounding the process of turning ‘political slogans’ into legal rules has, eg, been highlighted by de Sadeleer. See N. de Sadeleer Environmental Principles: From Political Slogans to Legal Rules (Oxford University Press, 2002).
continue to ‘have barely any connection with public goods’. 9 This would appear to confirm early concerns raised by environmental actors, which questioned the ability of the greening measures to deliver benefits beyond those already generated under cross-compliance. And Erjavec et al have even gone so far as to suggest that the greening approach has resulted in ‘failure’, \textit{inter alia}, because of ‘[t]he use of exceptions, especially those that allow conventional farming of protein-rich crops in ecologically sensitive areas, deals quite a blow to the Commission’s initial logic’.

Given the weakened scope of the final instruments, there is no doubt that they have not generated significant benefits for biodiversity and contributing towards meaningful climate change mitigation. For instance, Pe’er et al have argued that despite EU policy-makers ‘announcing the new CAP as greener…the new environmental prescriptions are so diluted that they are unlikely to benefit biodiversity’. 11 They also observed that the greening measures have failed to fulfil the EU’s own target to ‘maximise areas…covered by biodiversity-related measures under the CAP’. 12 In terms of addressing climate change it is likewise doubtful whether the measures provide meaningful contributions, considering the ensuing and pervasive effects that this phenomenon is expected to have on productivity in the coming years. For instance, Mahé argues that the architecture of the permanent grassland measure in its present form is ‘regrettable’ considering that the obligation to maintain permanent grassland will only require direct action by farmers in the event that the ratio of these grasslands would fall by more than five percent compared to the 2015 reference level. 13 In other words, it is only once these grasslands have already been converted that MSs will be under an obligation to put in place measures to protect them.


\footnotesize 12 \textit{Ibid}.

Further, it has been submitted that the significant increase in coupled support for livestock sectors, pursued by 27 MSs, denotes a particularly deflating outcome of the 2013 reforms and seriously undermines the EU’s aim to address climate change as a matter of utmost urgency and priority. Indeed, it may be reiterated that the EU does not expect the mitigation measures introduced by the 2013 reforms to have measurable effect on climate change.\textsuperscript{14} Moreover, long-term projections and trends indicate that, while other sectors such as transport and energy are expected to significantly reduce their share of GHG emissions, agriculture is set to maintain current levels, thereby overtaking these sectors in terms the overall share of emissions.\textsuperscript{15}

Undoubtedly, the focus of much of the recent debate has been on the greening measures and the extent to which they may be expected to provide greater benefits under the new direct payments framework. This has been reflected in the current thesis, with a large part of the analysis considering the implementation and outcomes of these novel instruments. That said, the 2013 reforms have delivered a number of changes that provide reason to be cautiously optimistic about the potential for further improving the CAP environmental framework post-2020. For instance, a particularly promising element has been the ability to undertake collective implementation with regard to instruments under both pillars of the CAP. Indeed, in recognition of the synergies and enhanced environmental benefits that may be harnessed by such implementation, obligations relating to the agri-environment-climate measure, as well as the payment for organic farmers may be met on a join basis by two or more holdings. Likewise, it has been noted that collective implementation of the EFA measure has been permitted in two MSs, the Netherland and Portugal, as well as Wallonia notwithstanding the administrative implications that this may have. Hence, given the importance that added connectivity could have for supporting biodiversity additional MSs should be encouraged to adopt this option during the next programming period.

However, measuring the success of the 2013 reforms arguably requires almost equal recognition of what was accomplished, as that which was not. Not least, the

\textsuperscript{14} European Commission, ‘Sixth National Communication and First Biennial Report from the European Union under the Framework Convention on Climate Change,’ 374.

\textsuperscript{15} European Commission, A Roadmap for moving to a competitive low carbon economy in 2050, COM (2011) 112 final, 5.
failure to implement water protection and pesticide management measures within the cross-compliance framework represents a particularly disappointing outcome. Indeed, notwithstanding the original intention by the Commission to include the relevant provisions of the WFD and the Pesticides Directive, this was resisted by the Council and EP and ultimately removed from the main text of Horizontal Regulation. They have only gone so far as to issue a Joint Statement in which they invite the European Commission to monitor the transposition and implementation of these directives by the MS and, ‘where appropriate’, to deliver a legislative proposal to include the relevant provisions, once they have been implemented in all MS and the obligations directly applicable to farmers identified.\textsuperscript{16} In light of these outcomes, Burea and Mahé have argued that ‘the removal…of the Water Framework Directive from cross-compliance and its banishment to a vague declaration in an annex do not bode well for the expectation that member states will be firm when proposing measures ensuring a reversal of environmental damage’.\textsuperscript{17}

Considering that the EU is far from reaching its targets relating to the protection of waterways and resources, as well as biodiversity, there would therefore be ample reason to suggest that the revised environmental framework represents a severe mismatch between the stated objective of ‘enhancing the environmental performance’\textsuperscript{18} of the CAP and the actual outcomes that are expected to result from the implementation of these specific instruments. Indeed, Matthews has recently suggested that the process of reform has amounted to little more than ‘fine-tuning … rather than adding up to a great reform’,\textsuperscript{19} while Pe’er et al denote it as a lost ‘opportunity to design better guidelines to improve agricultural sustainability’.\textsuperscript{20}

Against this background, it is argued that the 2013 reforms have largely served to perpetuate the status quo, which has hitherto been incapable of bringing about the types of changes that are necessary for addressing the scale of current and projected challenges to food security. Thus, although the process of integration has served to


\textsuperscript{17} Bureau and Mahé (n 9) 123.

\textsuperscript{18} Direct Payments Regulation (n13) Preamble (37).


\textsuperscript{20} Pe’er et al (n 11) 1091.
drive the formulation and adoption of agri-environmental measures under both CAP pillars, it continues to fall short of sufficiently reducing the externalities of conventional agriculture and adapting to the rising ecological challenges to productivity. Moreover, it appears unlikely that this highly incremental approach to environmental integration will bring about the fundamental changes that are needed to transform agricultural systems and the underlying rational of the CAP in the context of future reform.

There is consequently a pressing need to take more decisive steps to ensure that agri-environmental objectives are formulated and implemented in ways that reflect the complex intersectional challenges to food security. Indeed, Baldock et al have highlighted that an ‘important priority for the future CAP and broader land use policy will be to ensure that both the overall approach and the more specific measures adopted complement those of a growing circle of related policy domains’.21 Likewise, the need for a broader vision has been articulated by the EEA and with reference to the greening measures, it stated that ‘a more ambitious and long-term approach would be needed to address the resource efficiency of the agricultural sector in terms of productivity, land take, carbon capture, water use, and dependence on mineral fertilisers and pesticides’.22

Moving forward, water protection and the implementation of the WFD and Pesticides Directive in particular, are likely to be of central focus. Not least, implementation of the WFD is set to take place in a series of steps reaching beyond 2020 and although this process will largely depend on the actions of MSs, it is likely to affect agricultural practices by constraining the use of certain techniques due to more demanding standards aimed at addressing and controlling the problem of diverse water pollution across the EU.23 Consequently, there remains a continued expectation that relevant provisions will become part of the cross-compliance framework so as to ensure that recipients of CAP funding comply with basic standards of EU environmental law. In the meantime, however, some balance may nonetheless have been achieved following recent actions taken at EU level. For instance, in recognition of the harmful effects of certain neonicotinoid pesticides on biodiversity, and

---

23 Baldock et al (n 21) 11.
pollinators in particular, the EU has limited their use. 24 Moreover, it may be reported that the EP narrowly voted in favour of banning the use of pesticides on EFAs, which will undoubtedly serve to enhance the environmental potentials of this measure.

It has been suggested that the objective of sustainable agriculture needs to be dramatically reconceptualised to meet the mounting challenges to food security. In doing so, moreover, the ecological and perpetual dimensions of food security need to be prioritised in order to inform the design of future policy and agri-environmental measures. For the CAP to maintain a meaningful role in the twenty-first century it is, therefore, imperative that the approach to sustainable agriculture be reoriented in ways that prioritise the long-term ‘common good’ over short-term socio-economic gains that stand to be made from appeasing a limited set of interests and considerations. This, undoubtedly entails pursuing an agricultural policy that, not only refrains from further damaging the ecological resources base, but which does its utmost to safeguard that this is handed down to coming generations in the best possible condition. In conclusion, agricultural policy needs to take on a more transformative, rather than reactive, role in addressing the unprecedented challenges facing future agriculture and food security.

Bibliography

Books


C. Daugbjerg, A. Swinbank, *Ideas, Institutions, and Trade: the WTO and the Curious Role of EU farm Policy in Trade Liberalization* (Oxford University Press 2009)


J. Golub, *Global Competition and EU Environmental Policy* (Taylor and Francis, 2002)


F. Levinson, *Morinda: An Economic Analysis of Malnutrition among Young Children in Rural India, Nutritional Policy Series* (Cornell/MIT International 1974)


**Chapters in Edited Volumes**


Journal Articles


M. Dilley, T. E. Boudreau, ‘Coming to terms with vulnerability: a critique of the food security definition’, (2001) 26(3) Food Policy, 229


J. A. Foley, ‘Can we Feed the World and Sustain the Planet? A five-step global plan could double food production by 2050 while greatly reducing environmental damage’, (2011) 305 (5) Scientific American November, 62


M. Glenmizt et al, ‘Can Short-Rotation Coppice Strips Compensate Structural Deficits in Agrarian Landscapes?’ (2013) 118 Aspects of Applied Biology, 153


A. Jordan, ‘Step Change or Stasis? EC Environmental Policy after the Amsterdam Treaty’, (1998) 7 (1) Environmental Policy, 227


D. Lazer, ‘The free trade epidemic of the 1860s and other outbreaks of economic discrimination’ (1999) 51 World Politics, 447


D. Tilman and M. Clark, Global Diets Link Environmental Sustainability and Human Health, (2014) 515 Nature, 3
I. Tomlinson, ‘Doubling food production to feed the 9 billion: A critical perspective on a key discourse of food security in the UK’ (2013) 39 Journal of Rural Studies, 82

R. B. Tranter et al, ‘Implications for food production, land use and rural development of the European Union’s Single Farm Payment: Indications from a survey of farmers’ intentions in Germany, Portugal and the UK’ (2009) 32 Food Policy, 656


Policy Reports


A. Buckwell *et al*, *Sustainable Intensification of European Agriculture*, (RISE Foundation, Brussels, 2013)


Court of Auditors, *Special Report No. 2/87 on the Quota/Additional Levy System in the Milk Sector [1987]* OJ C266/1


European Commission, *The Development and Future of the CAP*, COM (91) 100

European Commission, *Study on alternative strategies for the development of relations in the field of agriculture between the EU and the associated countries with a view to future accession of these countries*, Agricultural Strategy Paper prepared for the European Council, Madrid 15-16 December 1995 COM(95) 607


European Commission, *Tackling The Challenge of Rising Food Prices; Directions for EU Action*, COM(2008)


European Commission, *EU’s Response to the High Oil and Food Prices*, Memo/08/41 (European Commission, Brussels, 2008)


European Economic and Social Committee, *Opinion of the European Economic and Social Committee on ‘Food security and bioenergy’* (own-initiative opinion) (2013/C 341/04)


Food and Agricultural Organisation, *Crop Prospects and Food Situation: No 2*, April 2008 (FAO 2008)


K. Louhichi *et al*, *An EU-Wide Individual Farm Model for Common Agricultural Policy Analysis (IFM-CAP): First Application to Crop Diversification Policy* (Joint Research Centre, Seville, 2015), 60


Millennium Ecosystem Assessment, *Ecosystems and Human Well-being: Scenarios* (2005), Chapter 7


Millennium Ecosystem Assessment, *Drivers of Change in Ecosystem Condition and Services* (MEA, Scenarios, 2005), Chapter 7


Research Institute for Managing Sustainability, *Contributions of the Regional and Local Authorities to Sustainable Development Strategies* (European Union, Brussels, 2009)


S. Spratt, *Food Price Volatility and Food Price Speculation* (Institute of Development Studies, 2013)


The Environments Role in Averting Future Food Crises (UNEP 2009)


J. Wakefield, Common Fisheries Policy Reform and Sustainability (Swedish Institute for European Policy Analysis, Stockholm, 2012)


Online Sources


EIP-AGRI, Press Article, Farmers Looking for Partners to Set Up Innovative Projects (18 February 2014) (available at http://ec.europa.eu/eip/agriculture/sites/agri-


List of Abbreviations

2020 Strategy
AEC Agri-Environmental-Climate Payment
ANC Areas with Natural Constraints
CJEU The Court of Justice of the European Union
CMO Common Market Organisation
COMAGRI The Committee on Agriculture and Rural Development (European Parliament)
DG Agri Directorate General for Agriculture and Rural Development
EAP Environmental Action Plan
EEA The European Environmental Agency
EEB The European Environmental Bureau
EC European Communities
ECA The European Court of Auditors
ECJ European Court of Justice
EEC European Economic Communities
EESC European Economic and Social Committee
EIP European Innovative Partnership
EP The European Parliament
EPA Environmental Policy Assessment
EPI Environmental Policy Integration
ESI Fund European Structural and Investment Fund
EU The European Union
EAFRD The European Fund for Rural Development
EAGGF The European Agricultural Guidance and Guarantee Fund
GAEC Good Agricultural and Environmental Condition
GHG Greenhouse Gas
HNV High Nature Value
IEEP The Institute of European Environmental Policy
LFA Less Favoured Area
MEP Member of the European Parliament
MFF Multi-Annual Financial Framework
MS Member State
RDP Rural Development Program
SAPS Single Area Payment Scheme
SFP Single Farm Payment
SMR Statutory Management Requirement
TFEU Treaty on the Functioning of the European Union
UAA Utilised Agricultural Area
UN United Nations
VCS Voluntary Coupled Support
WFD Water Framework Directive