



2025 Agri-Food Strategy Strategic Environmental Assessment

*BirdWatch Ireland Submission to the
Department of Agriculture, Food and the Marine*

May 2015

Compiled by:

Alex Copland, Siobhán Egan, Sinéad Cumins & Oonagh Duggan, BirdWatch Ireland

Address for correspondence:

BirdWatch Ireland Midlands Office, Crank House, Banagher, Co Offaly, Ireland
Phone: 05791-51676 Fax: 05791-51951 e-mail: acopland@birdwatchireland.ie

Headquarters:

BirdWatch Ireland, Unit 20, Block D, Bullford Business Campus, Kilcoole, Co. Wicklow
Phone: 01-281-9878 Fax: 01-281-9763 email: info@birdwatchireland.ie

Introduction

BirdWatch Ireland welcomes the commitment from the Department of Agriculture, Food and the Marine (DAFM) to undertake this formal Strategic Environmental Assessment (SEA), including an Appropriate Assessment (AA), adhering to EU Regulation 2001/42/EC. The lack of this regulatory requirement was identified by BirdWatch Ireland, and many other environmental groups, as a serious deficiency within Food Harvest 2020 (FH2020). This concern was all the greater given that delivery of FH2020 recommendations had been identified by a (largely inadequate) Environmental Analysis of Scenarios as likely to be damaging the environment. This recognition of the need to place the Agri-Food Strategy 2025 (AFS2025) within a sound environmental framework represents a fundamental and welcome break from FH2020, where the claims associated with environmental sustainability lacked credibility.

BirdWatch Ireland believes there can be huge benefits from increasing the value of Irish agricultural produce, and is supportive of action to achieve this through raising the environmental credentials and credibility of Ireland's agri-food sector. There is a recognised demand from consumers to buy produce that deliver a range of environmental quality objectives. This is reflected by statements from Bord Bia that "sustainability is key to brand agenda" and other industry driven initiatives such as Bord Bia's Origin Green and Glanbia's Sustainability Programme to brand Irish produce as being environmentally sound. However, with Ireland having among the poorest record in Europe for compliance with environmental law and key environmental indicators including declines in many farmland bird species¹, significant concerns exist about environmental sustainability claims.

It is logical that AFS2025 builds upon and develops the objectives and actions arising from FH2020. FH2020 was authored by a committee consisting of a wide range of stakeholders representing a cross-section of interests in the agri-food sector, and is based on three equal pillars: Smart, Green, Growth. These pillars are stated as being equal in importance. However, it is clear from the outset that these pillars do not have equal importance, neither in the development of the vision or in its delivery.

In the original terms of references, the FH2020 Committee was tasked with designing and presenting a strategy for the agri-food sector that maximised the potential for growth within the sector and maximised the smart economy – green (sustainable and/or environmental) criteria were never a consideration. This is further reflected within the original FH2020 committee which comprised of some 30 members. Of these, just two specifically represented environmental interests; the EPA and BirdWatch Ireland/Environmental Pillar. However the Pillar was brought in to the process late and thus participation was limited. The extent to which environmental considerations were incorporated in to the development of the FH2020 strategy was also limited given that there were only two environmental representatives among a very large group of agribusiness interests. Engagement at that time was based on the premise that a Strategic Environmental Assessment (SEA) would be carried out under the SEA Directive on the FH2020 targets to ensure that all relevant environmental considerations would be properly accounted for in all efforts and actions pursued to achieve targets arising from FH2020. **The commitment to undertake a formal SEA for AFS2025 is therefore very welcome, and a substantial improvement on FH2020.**

However, the lack of environmental representation continues, with just two environmental representatives on the AFS2025 committee. Furthermore, the FH2020 High Level Implementation Group, which is chaired by the Minister for Agriculture, the three activation groups (Dairy, Beef and Horticulture) and the Environmental Analysis Steering Committee contained representation from the state, industry and producers, with no environmental NGO representatives on any of these bodies. If AFS2025 is to enshrine environmental sustainability, and if it to actually deliver on this objective then there needs to be **full engagement with environmental stakeholders at all levels within the development, delivery and implementation of AFS2025.**

The FH2020 vision made 215 recommendations for the sector, of which just 23 (10.7%) are related to protecting (or minimising damage to) the environment. If the vision of Ireland's agri-food sector (which will presumably be shared by the AFS2025) is that of a sustainable sector, then substantial work needs to be done to address the increasing deficit of actions in delivering environmental measures. At present, the representation of FH2020 being "Green" is fake, undermining not just the FH2020 vision, but Irish agriculture in general, which relies on its "Green" image to enhance market opportunities, particularly in a competitive export market with many other countries competing for an edge to increase market share. **AFS2025 must not only recognise and accept the impact of productive agriculture on the environment, but also seek to address these impacts through concrete action.** These considerations must be at the core of the SEA on AFS2025.

¹ Colhoun K. & Cummins, S. 2013 Birds of Conservation Concern in Ireland 2014-19. *Irish Birds* 9:523-544

Farmland birds and agriculture in Ireland

Ireland's biodiversity is facing very severe threats, as evidenced by declining populations of many farmland birds¹ and the loss in extent and quality of many semi-natural habitats in the mosaic of Ireland's farmed landscapes. In 2014, national reporting under Article 12 of the Birds Directive² highlighted the extent of the declines for many farmland birds including priority species such as the Corncrake and Curlew. Throughout Europe, many birds that use farmland habitats that were previously common have suffered major population and range declines since the 1970's³. While Ireland has been farmed for millennia, farming practices existed alongside healthy ecosystems. In recent decades we have drastically changed the way we farm. It is well-documented that many modern, intensive farming practices leave little space for birds or biodiversity⁴. **Many birds that use farmland habitats that were previously common have suffered major population declines since the 1970's.** In Ireland, these include Kestrel, Stock Dove, Skylark and Yellowhammer, with Corn Bunting (a tillage-specialist) becoming extinct, with the last confirmed breeding in Ireland in the 1990s⁵.

Declining bird populations often indicate declining health of the natural environment. Birds are indicators of the health of the countryside. Like the "canary in the coalmine", birds can provide early warning systems for the degradation or loss of ecosystems, and the services such ecosystems provide. Birds satisfy many of the criteria of effective indicators, are often used as an early-warning system to detect emergence of environmental problems, and have been widely used to inform decision making and land use management policy including within agricultural ecosystems⁶. **The decline in farmland bird populations is telling us that we need to do more to maintain a healthy balance of nature across Irish farmland.**

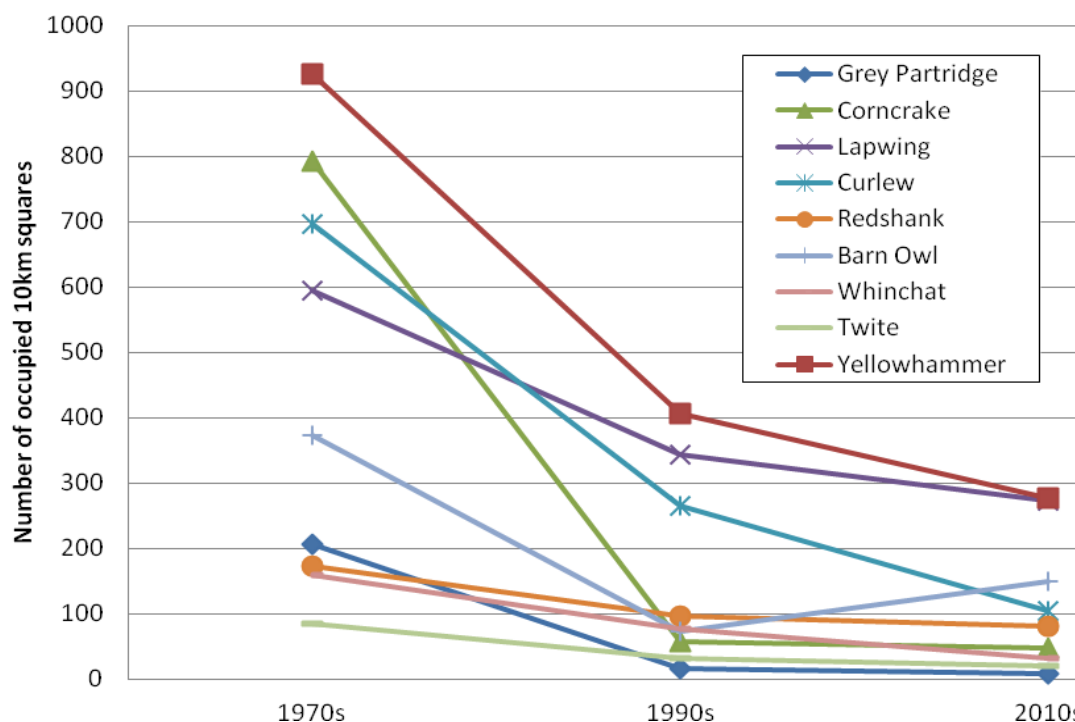


Figure 1: Range (number of occupied 10km squares) in 1970, 1990 and 2010 breeding bird atlases of Red-listed lowland farmland bird species in Ireland

² Full details on Ireland's (IE) Reporting under Article 12 (as required under the Directive) on Bird Species' Status & Trends for the period 2008-12 was submitted in February 2014. The report covers 196 species, and can be found at the following link: http://cdr.eionet.europa.eu/Converters/run_conversion?file=ie/eu/art12/envuesya/IE_birds_reports-14328-144944.xml&conv=343&source=remote

³ Donald, P.F. Green, R.E. & Heath, M.F. 2001. Agricultural intensification and the collapse of Europe's farmland bird populations. *Proceedings of the Royal Society of London B* **268**: 25-29.

⁴ Newton, I. 2004. The recent declines of farmland bird populations in Britain: an appraisal of causal factors and conservation actions. *Ibis* **146**: 579-600.

⁵ Lynas, P., Newton, S.F. & Robinson, J.A. 2007. The status of birds in Ireland: an analysis of conservation concern 2008 – 2013. *Irish Birds* **8**: 149-166.

⁶ Gregory, R. D., A. van Strien, P. Vorisek, A. W. Gmelig Meyling, D. G. Noble, R. P. B. Foppen and D. W. Gibbons. 2005. Developing indicators for European birds. *Philos. T. R. Soc. B* **360**: 269-288.

Birds associated with farmland in Ireland have shown dramatic declines, as evidenced by a series of survey regimes. In Ireland, the Countryside Bird Survey (CBS) monitors farmland bird populations (as well as the populations of other bird species occurring in the wider countryside)⁷. CBS data is used to evaluate impacts of agri-environmental policies in Ireland through the Farmland Bird Index. However, the CBS was established in 1998 and as such was arguably too late to pick up many of the more dramatic or long term declines that have taken place in farmland species, many of which occurred prior to this period, and especially from the 1970s onwards. These earlier declines in Ireland have been illustrated by the three bird atlases. Figure 1 shows the breeding season range (as expressed by the number of occupied 10km squares in Ireland where breeding was either confirmed or considered probable) from the three breeding bird atlases undertaken in Ireland (around 1970, 1990 and 2010) for the nine lowland farmland bird species that are Red-listed in the Birds of Conservation Concern in Ireland (BoCCI)¹. For all nine species, their range has at least halved since 1970.

Existing commitments for protecting priority species

Although some protection of birds (and other habitats) is afforded within protected areas through the Birds and Habitats Directives, Ireland has struggled to deliver the conservation requirements for most species within protected sites due to lack of implementation of this legislation. The Habitats Directive, also applicable to the Birds Directive, outlines a hierarchy of avoidance of adverse impacts, followed by mitigation of those impacts. Mitigation measures are measures which avoid or reduce the impact of the (proposed) activity or activities to the point where the plans or proposals no longer have a risk of an adverse effect. This procedure is laid out in Article 6 of the Habitats Directive and there is a body of guidance and case law which clarifies the requirements. An Appropriate Assessment (AA), which is being undertaken in parallel with the SEA, should address these threats to protected areas from AFS2025. Comments that there is difficulty in assigning specific threats from AFS2025 to specific sites should not be used as an excuse not to undertake a full AA covering all these issues where possible. Furthermore, where a detailed analysis cannot be satisfactorily completed, detailed monitoring must be established to determine impacts, with appropriate caveats contained with any actions to deal with the outcomes (positive or negative) of likely impacts arising from AFS2025 actions. In all cases, given the serious level of conservation concern many species and habitats are facing in Ireland, a precautionary approach must be adopted to avoid impacts.

In addition to direct and indirect threats to species and habitats within designated sites (SACs and SPAs), there are a number of requirements in the Birds Directive, the Habitats Directive, and the EIA and SEA Directives to protect species and habitats outside of designated and protected areas. In ECJ Ruling C418-04, the Court found that despite a requirement for Member States to “make a serious attempt at protecting those habitats which lie outside the SPAs” Ireland had not “transposed that provision fully and correctly by taking suitable steps to avoid pollution or deterioration of the habitats lying outside the SPAs. It is thus clear, in the present case that Ireland must endeavour to take suitable steps to avoid pollution or disturbances of the habitats”⁸. This case is still open.

Target 3(A) of the EU Biodiversity Action Plan states “By 2020, 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”⁹. The Overall Target of Ireland’s National Biodiversity Plan is “that biodiversity loss and degradation of ecosystems are reduced by 2016 and progress is made towards substantial recovery by 2020.”¹⁰ Ireland’s Biodiversity Action Plan also has a specific target for biodiversity in the wider countryside to “optimise use of opportunities under agricultural, rural development and forest policy to benefit biodiversity.” Internationally, Ireland has obligations for biodiversity conservation at a European level (preventing biodiversity loss is a priority for the Europe 2020 strategy)¹¹ as well as globally¹².

⁷ Crowe, O., Coombes, R.H., Lysaght, L., O’Brien, C., Choudhury, K.R., Walsh, A.J., Wilson, J.H. & O’Halloran, J. 2010. Population trends of widespread breeding birds in the Republic of Ireland 1998-2008. *Bird Study* 57: 267-280.

⁸ JUDGMENT OF THE COURT (Second Chamber) 13 December 2007; Paragraphs 179-181 of C418-04.

⁹ Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions: Our life insurance, our natural capital: an EU biodiversity strategy to 2020. July 2011.

¹⁰ Department of Arts, Heritage and the Gaeltacht, 2011. *Actions for Biodiversity 2011-2016: Ireland’s National Biodiversity Plan*. Department of Arts, Heritage and the Gaeltacht, Dublin.

¹¹ European Commission. 2010. *Europe 2020: A strategy for smart, sustainable and inclusive growth*. Communication COM(2010) 2020 final, European Commission, Brussels. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF> (accessed January 2013).

¹² Convention on Biological Diversity. 2010. *Strategic Plan for Biodiversity 2011-2020*. <http://www.cbd.int/decision/cop/?id=12268> (accessed August 2012).

In addition to the delivery of national and international commitments on biodiversity conservation, and the recognised need to integrate actions toward this end into agriculture and other sectors, sustaining biodiversity also has many positive benefits for farming in itself. These are often under-estimated and under-valued even by the agri-food sector, and include pollination, predator control, maintenance of soil fertility and structure and water management services¹³. According to Bord Bia and others in the agri-food sector, the perceived green image of Ireland gives us a significant competitive advantage when marketing our products abroad. If we are to maintain this image, we need to move urgently to proactively support biodiversity and ecosystem services in the farmed landscape and implement measures where species and habitat losses are most pressing.

The SEA of AFS2025 must recognise the substantial impacts of the Irish agri-food sector on biodiversity, accepting that it drives biodiversity declines and the loss of vulnerable habitats, and identify actions and mitigation measures that can fully address these negative effects. Whilst publically funded agri-food supports, such as those available through the Rural Development Programme, can assist in providing added value to the agri-food sector in achieving environmental objectives enshrined within the EU regulatory framework, mitigation measures that seek to address environmental damage arising from AFS2025 actions must be funded from the agri-food industry itself. The use of public money must adhere to the “polluter pays principle”, which is the standard principle for environmental protection adopted within EU¹⁴.

The need to address these basic requirements has been a struggle for FH2020 and appears to be so again for AFS2015, and yet the rhetoric of both strategies is frequently identifying an ambition to move beyond basic compliance towards providing added value, and ‘working with’ or enhancing nature. A significant body of work is required to achieve compliance let alone make this progression.

Basic consideration for an AA and SEA of the Agri-Food Strategy 2025

Recent threats to food safety tend to have arisen through a drive to lower prices at the expense of quality production, and increased reliance on external inputs to production systems (such as chemical fertilisers and pesticides). Improving the quality associated with food being produced and taking the emphasis away from solely seeking to drive down production costs, requires a substantial change in the mind-set of the Irish agri-food sector. However, through proper controls, regulation and compliance monitoring, to include enforcement and penalties as required, would be essential to ensure resilience in the system.

AFS2025 actions must be coherent with other policies and programmes operating nationally (e.g. recommendations from CERDA, National Biodiversity Plan, etc.) and from the EU (particularly those regulatory requirements from CAP, as well as the Nature Directives). As a guiding principle, **all actions within a new agri-food strategy must be tested to ensure they are economically, socially and environmentally sustainable**. Where any of the pillars of sustainability cannot be met, the action must be re-designed or rejected. Such an approach would improve the credibility of the sector in addition to the economic, social and environmental prosperity of Ireland.

To maintain environmental credibility, a full and rigorous Strategic Environmental Assessment (SEA) must be undertaken on AFS2025. This must be undertaken at the start of and throughout the programme, much as is required for other national policies and programmes, such as the Rural Development Programme (RDP). Where negative environmental impacts are foreseen, the programme must be amended to address such damage. If mitigation measures are proposed, these must be funded through the agri-food sector, in accordance with the Polluter Pays principle, and not left for the public to pay for (as was proposed for FH2020 mitigation measures within the RDP). Specifically, the analysis needs to include a regional scale assessment of sectoral proposals and their impact on priority habitats, species and sites.

As an integral part of the SEA, an Appropriate Assessment (AA) is essential. Again, full assessment of sectoral proposals on the conservation objectives of priority habitats and species is required, and the lack of information on these is not a sufficient basis for ruling out impacts; in fact, the onus is on the proposer to show no adverse effects on priority habitats and species. Of particular concern is dealing with cumulative impacts of sectoral proposals, as well as the need to ensure that species/habitat requirements outside of areas that have been designated for them are also taken into account.

¹³ National Rural Network. 2011. *Biodiversity as a Resource in Agriculture and Rural Development*. http://www.nrn.ie/wp-content/uploads/2011/08/swig2_biodiversity_as_a_resource_in_agriculture.pdf (accessed August 2012).

¹⁴ European Community. 2004. Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage (Environmental Liabilities Directive).

The SEA/AA process should assess how different plan options (reasonable alternatives) contribute to Ireland's greenhouse gas targets, and determine how each of them would potentially lead to Ireland not meeting its international climate change obligations. If possible this should be linked to modelled impacts on EU protected species and protected habitat ranges, or sea-level rise etc., with associated implications for Natura 2000 site deterioration.

Farm level considerations

The agri-food sector is likely to be driven by consumer sentiment, and these need to be reflected at all stages in the food chain. It is likely that the greatest environmental impacts of AFS2025 will occur at the primary producer (farm) level. Although improvements further down the food chain can benefit resource efficiency, maintenance of water quality and reduction in greenhouse gas emissions, the greatest impacts on biodiversity, climate change, soil, water and air quality are likely to be delivered at the individual farm level.

Agri- environment-climate

Specifically at the farm-level, and in relation to Ireland grass-based production systems, **preventing the ploughing-up of carbon-rich soils and increasing periods between re-seeding for grassland would make a substantial contribution to greenhouse gas emissions and sequestration as well as deliver biodiversity benefits.** Similarly, for tillage enterprises **wider adoption of minimum tillage practices** would be of benefit, as would **wider use of lower-emission slurry-spreading rather than higher.** For these latter two, which are currently operated in Ireland through agri-environment-climate schemes, **mainstream them into production agriculture** (possible included within certification schemes), would be beneficial, especially where sectoral efficiencies can be demonstrated. **Protection of wetlands on agricultural land and other natural habitats (including peatlands) with carbon capture capacity, rather than an assumption that monoculture plantation is an appropriate mitigating measure.**

Existing (RDP-funded) agri-environment climate schemes (such as GLAS), due to their voluntary nature, are unable to deliver uniform actions across all farms. Although such schemes are important for the protection of certain priority species and habitats, where effort can be well-defined and targeted and their impacts can be fully monitored and evaluated, these must be seen outside of AFS2025. **As the RDP is publically-funded, any policy to increase the profitability of the agri-food sector must be financed by the agri-food sector.** This could be delivered through new initiatives that internalise the financial costs associated with maintaining (or enhancing) the environment, mitigating or off-setting any damage from the drive to increase profitability.

Chemicals & pesticides

Reducing dependency upon external inputs such as chemical fertilisers and pesticides, is also essential. Again, this can be done through appropriate legislation and enforcement, not least by enshrining integrated pest management obligations from the Sustainable Use Directive within Irish legislation and policies. Further improvements in this area, from enhancing the legislative baseline required, could add further value and efficiency, whilst reducing reliance on and exposure to such inputs.

Broad-scale measures

Aside from agri-environment-climate actions to address specific biodiversity issues, some **broader-scale conditionality must be introduced to protect habitats and halt biodiversity declines.** In addition to the methods already discussed, **the safe use of pesticides,** including rodenticides, should be enshrined within basic legislation and requirements for all agri-food producers. Similar basic measures should include the **control of invasive species on every farm.** The use of existing policy frameworks should be explored in meeting environmental requirements within the agri-food sector. In particular, **conditionality attached to the Basic Payment Scheme, which could be operated through cross-compliance measures** within the Horizontal Regulation or the green payments in the Direct Payments Regulation, may offer appropriate mechanisms to address environmental issues. However additional requirements, funded through the industry itself, must also be developed and delivered to meet environmental sustainability standards. These could include not just the protection of hedgerows, but promote appropriate management to ensure the hedgerows network can deliver maximum benefits for the range of environmental and ecosystem services they provide.

Efforts to improve ecological functioning

Efforts must be taken to improve ecological functioning within production systems. This would be partly addressed by meeting obligations under the Sustainable Use Directive, but efforts to ensure ecosystem services are recognised and preserved must go further than basic legislative requirements. A healthier environment produces more resilient and healthier food. Furthermore, such an approach reinforces the environmental quality associated with Irish food production that the agri-food sector should be seeking to exploit to maintain

a competitive edge in national, European and global markets. These could include the provision of buffer zones for either important ecological sites (such as designated areas) or to protect ecological functioning within the farmed landscape (such as protection of watercourses and hedgerows).

Fisheries & aquaculture considerations

Both fisheries and aquaculture should be in line with achieving environmental objectives. A significant reduction of green house gas emissions can be achieved by switching from fuel-intensive techniques such as dredging, bottom trawling and beam trawling, to alternative techniques that use less fuel. A change in fishing methods and gears can be promoted by removing environmentally harmful fuel subsidies and phasing out fuel tax exemption for fisheries, while at the same time providing financial and other incentives for alternative fishing techniques. The fishing industry can lower its fuel costs, reduce its greenhouse gas emissions, and decrease the damage it inflicts on marine ecosystems. Reducing the carbon footprint of fisheries fuel use (and consequently greenhouse gas emissions) varies considerably depending on the fishery. Fishing on depleted fish stocks requires more fuel per kilo landed fish than fishing on abundant fish stocks, because low fish abundance forces fishers to search longer and use heavier gear to catch the fish. If fish stocks were allowed to recover, less fuel would be needed to catch the same amount of fish. In addition, enhancing fish abundance will allow fish populations to become more resilient to the impacts of climate change.

Overfishing continues to be the norm for a number of Irish fish stocks with significant impacts ecological, social and economic. Even in the context of a reformed Common Fisheries Policy, Ireland's position to allow and support fishing at levels that do not allow stock to recover are not sustainable. The status of fish stocks in Irish waters indicates that much remains to be done in this area – Ireland's current position on sea fisheries is not sustainable.

In terms of fin fish aquaculture, there are no species that are sustainable as such. The sustainability of a species depends on its feeding and lifecycle habits, as well as the farming operation. Only species that are plant eaters, who can breed in captivity, and whose farming does not produce high levels of nutrient output can be cultivated sustainably. In the case of wild fisheries stocks fished only at levels that allow fish stocks to recover and use ecologically friendly fishing gear and tools including protected areas in line with requirements of the Common Fisheries Policy.

Unsustainable aquaculture can negatively impact our oceans and the environment and on local people's food and security. Such impacts include the extraction of marine species from oceans, including wild juveniles vital for future stock growth, increasing the burden on wild fish stocks and having major food security implications; the release of organic wastes (which can act as plant nutrients for harmful algal blooms) and toxic effluents into the oceans; the destruction of coastal ecosystems, displacement of coastal communities and depletion of fresh water sources to build aquaculture ponds.

In the case of shell fish aquaculture, compliance with environmental objectives including licensing and environmental assessment and assisting with achieving conservation objectives of Special Protection Areas should be included as a basic ambition of FH2025.

Support for Innovation

The Agri-food sector should seek to provide more balanced support for research looking at the development of various strategies associated with the sector, and not just those linked to increasing production or economic output. The critical mass developed within the Irish agri-food sector in dealing with emissions needs to be continued, but diversified into other aspects of environmental sustainability (such as supports for research into ecosystem functioning).

The focus of research into increasing efficiency in the sector, particularly in relation to carbon emissions and resource exploitation, appears to have developed a strong critical mass in Ireland, and this must continue to be supported if further benefits are to be realised. Research into impacts of resource (soil, water or biodiversity) depletion and potential measures to address and avoid depletion of resources is now required as a matter of urgency. In particular, win-win scenarios for production and sustainability (including achieving environmental or ecological objectives) need to be more fully explored, and the value of such actions demonstrated (e.g. calculating the economic value of ecosystem services in food production in Ireland) and publicised. This has to be done within the sector to ensure it realises the intrinsic value of such actions as this will foster continued support for progress, as well as sustaining investment in developing such approaches. Additionally, these values must also be promoted to consumers to ensure they are aware of what the Irish agri-food sector is offering.

Support for Knowledge Transfer

Although innovation is essential to maintaining a competitive edge in the market, one of the most critical deficits identified in the Irish agri-food sector is the limited scope and impact of knowledge transfer actions. This is probably most evident in the primary production area, but applies throughout the whole sector at varying levels. Educational supports, including life-long learning opportunities for farmers and continued, professional development for processors must continue to be explored and developed. Successful techniques, such as discussion groups or peer-to-peer learning supports for farmers, or mentoring actions for processors, should be promoted and expanded. Improved training and advisory actions for farmers would be a major component in improving competitiveness in the sector. By its nature, farmers tend to maintain traditional (familiar) production systems, and these may not always offer the best returns for the sector, where new technologies and methods, particularly those where there is increased efficiencies, could be applied.

One of the most appropriate ways to achieve the FH2020 targets (as identified through the environmental analysis) was through an improved training and advisory programme. This holds true for AFS2025 delivery, as such a programme, if delivered correctly, would not only enhance the benefit of actions under AFS2025, but also help deal with environmental risks from the AFS2025 actions. Once risks are identified, appropriate measures can be taken to either avoid potentially damaging actions, or better deliver mitigation measures to avoid them. Such a training and advisory programme must include environmental expertise to ensure damage is minimised and positive benefits for the environment, and the associated benefits this has for the agri-food sector, can be maximised