

Food Wise 2025 Year 2 Summary Report

Total Actions in 2017: 368

A: Target Achieved (24) (Actions 2, 7, 23, 31, 54, 84, 85, 87, 119, 144, 179, 182, 195, 198, 206, 231, 252, 316, 341, 344, 358, 360, 408 & 412) (7%)

B: Substantial action undertaken and ongoing (144) (39%)

C: Action commenced and progressing (182) (49%)

D: Action at commencement stage (10) (Actions 97, 130, 157, 187, 189, 308, 337, 355, 369 & 415) (3%)

E: Action not yet commenced (8) (Actions 258, 311, 336, 340, 351, 354, 363 & 364) (2%)

Action 1: DAFM to finalise a sectoral plan for agriculture and forestry to inform the National Mitigation Plan under the National Climate Action and Low-Carbon Development Bill.

Substantial action undertaken and ongoing

Agriculture and forest sector mitigation measures were forwarded to DCCAE for inclusion in the NMP. The NMP was submitted to Government for approval in June. Publication of the National Mitigation Plan is imminent.

Action 2: At EU level continue to promote and seek agreement on an Agriculture, Forestry and Other Land Use (AFOLU) approach to the treatment of the land sector in UN climate change negotiations and continue to support discussions on agriculture under the Convention's Subsidiary Body for Scientific and Technological Advice (SBSTA).

Target achieved (Year one).

Action 3: DAFM to continue active participation in multi-stakeholder 'Global Alliance for Climate Smart Agriculture' which is promoting the application of climate smart approaches to agriculture production systems.

Action commenced and progressing

- Further positive peer review received end 2016.
- Through financial support and participation in the work of the Global Alliance for Sustainable Livestock (GASL) and LEAP Partnership, the Department is actively promoting the work of sustainable livestock production.

- DAFM continues to actively participate in GACSA and attended the strategic committee meeting in June.

Action 4: DAFM to continue to work closely with DCENR, as part of National Bioenergy Plan discussions, to assess supply side issues related to the potential of bioenergy from the agriculture and forestry sectors and develop farm-scale renewables. DAFM will continue to support afforestation and mobilisation measures under the Forestry Programme 2014-2020 and encourage the innovative use of animal by-products (ABP) for energy production.

Action commenced and progressing

DAFM continuing to liaise with DCCAE and is actively participating on the group which is assessing the Cost benefit analysis of biogas & biomethane where consideration of potential surplus grass is a consideration. The final report is in the process of finalisation.

DAFM is contributing to the Interdepartmental group lead by DoT which is considering the preparation of a National Policy Statement on the Bioeconomy.

The COFORD Wood Mobilisation working group is updating supply/demand balance for wood biomass and other assortments. The work is expected to conclude with the issuing of an updated supply/demand balance by end July.

Mid-term review of the Forestry Programme is currently underway, including forestry-for fibre measure under afforestation scheme.

Action 5: As part of EU Climate and Energy Framework (CEF) 2030 negotiations DAFM will continue to seek acknowledgment of realistic ambition for agriculture and clarity on the role of other land uses as a mitigation tool in Ireland and in particular its role in contributing to the achievement of overall emissions targets to 2030.

Action commenced and progressing

DAFM continues to engage on issues related to the ESR and LULUCF both at home as part of the whole of government approach and at EU level. DAFM attendance at informal LULUCF workshop and reviewing and analysing MS's proposals and attending Council Working Party when dealing with LULUCF Proposal and inputting comments on the Proposal. DAFM participated in 10th WG5 meeting on LULUCF.

Action 6: DAFM in conjunction with other agencies should maximise their use of scientific expertise to actively engage in international networks and research groups to find new ways to account for and reduce emissions.

Substantial action undertaken and ongoing

In quarter 1 2017, DAFM hosted an international review panel meeting of full proposals submitted

to the European Research Area Network (ERA-NET) Co-fund Call for Monitoring & Mitigation of Greenhouse gases from Agri- and Silvi-culture.

Five projects that aim to better account for and reduce emissions and which have Irish partner participation were approved for funding.

Action 401: When the National Mitigation Plan is finalised ensure that sectoral mitigation measures are developed based on requirements in National Plan.

Action commenced and progressing

The National Mitigation Plan was presented to Government in June. DAFM has contributed agriculture and forest sector mitigation measures and a number of actions to progress these measures are included in the Plan. It is due for publication imminently.

Action 402: Adaptation and Resilience of Agri-food sector to future climate effects should be considered in policy development.

Action commenced and progressing

The Draft adaptation plan was open for public consultation until the end of January 2017.

DAFM engaging with DCCAE on the National Adaptation Framework which they are currently developing.

Action 7: Continued updating on an annual basis of Teagasc National Farm Survey sustainability indicators, including further development of a wider spectrum of appropriate indicators and activity data to more accurately measure environmental sustainability and contribute to development and enhancement of GHG and ammonia inventories.

Target Achieved.

Teagasc National Farm Survey is finalised and will be published early summer.

Action 8: Review and update key agri-environmental indicators, the accuracy of which are crucial to a) understanding trends in how nutrient losses to water and to air are partitioned, and, b) to assisting the cost-effective targeting of mitigation measures.

Action commenced and progressing

Work progressing.

Action 9: Update Teagasc's Marginal Abatement Cost Curve for Irish agriculture on a more frequent basis to ensure the latest technological developments help inform an assessment of a wider range of GHG mitigation measures that could be rolled out at farm level.

Substantial action undertaken and ongoing

MACC2 is being finalised and was sent to peer review the end of quarter 2.

MACC2 was used as the basis for the Teagasc submission to the Draft National Mitigation Plan.
<https://www.teagasc.ie/media/website/publications/2017/Teagasc-response-to-the-NMP.pdf>

Action 10: Continue to enhance and roll out at farm level the Carbon Navigator Initiative which provides online software to assist farmers in understanding how their farms produce GHG emissions, identify mitigation capacity and to set targets and a pathway to reduce emissions. Teagasc in conjunction with other stakeholders to examine whether the navigator tool could be used to measure other important environmental parameters such as biodiversity.

Substantial action undertaken and ongoing

Update of Carbon Navigator will be available on publication of MACC.

Dairy Carbon Navigator continues to be used for the KT schemes project.

An upgrade project for existing and additional enterprises based on MACC2 is being planned.

Action 11: Bord Bia to further develop the range and depth of sustainability information collected for beef, dairy and other primary agricultural sectors using its auditing infrastructure.

Substantial action undertaken and ongoing

The new Sustainable Beef and Lamb Assurance Scheme (SBLAS) was launched in April and will be introduced on a phased basis as each farm is audited over the next 18 months. The scheme includes an increased focus on sustainability criteria and also includes a close-out period and a Bord Bia help-desk to assist farmers prepare for their audit. Some 15,000 dairy farmers are certified members of the Sustainable Dairy Assurance Scheme (SDAS). Revisions of the Pig QAS and Poultry QAS are progressing steadily with a number of meetings having taken place with industry stakeholders on the revised schemes.

Action 12: Seafood sector to adapt and enhance the existing independent third party verified standards such as BIM's Quality Assurance Programmes, Marine Stewardship Council (MSC), Aquaculture Stewardship Council (ASC), organic certification and green manufacturing to facilitate measurement of its environmental credentials.

Substantial action undertaken and ongoing

A formal launch of the Responsibly Sourced Seafood Standard (RSS) took place at the Galway Skipper Exhibition in March 2017 at which the first vessel owner to gain certification was presented with his certificate. BIM will provide a series of workshops on the certification process at coastal

locations during 2017.

Positive feedback has been received from INAB in respect of the revised Responsibly Sourced Seafood Standard (RSS) and pending a shadow audit will be formally accredited by INAB by the end of quarter 2.

Initial testing of the new Data Capture and Document Management System is complete and BIM is currently piloting the system on a number of vessels. Instructions in the use of the 'app' based system will form part of the RSS workshops.

Following the third surveillance audit for the all-island bottom grown mussel MSC Certification BIM retain the certification for this important fishery.

BIM have tendered for the completion of MSC pre-assessments on the *Nephrops*, whitefish and Albacore tuna fisheries. These pre-assessments are actions under the Fishery Improvement Projects being developed by BIM (refer to Action 37).

BIM published the audit report titled 'Marine Stewardship Council 3rd Surveillance Report for the Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery and the linked Northern Ireland Bottom Grown Mussel (*Mytilus edulis*) Fishery' now available on the MSO website (<https://fisheries.msc.org/en/fisheries/ireland-bottom-grown-mussel/@assessments>). All other assurance programmes have been successfully maintained over the period and industry participation remains at a high level.

Action 403: Further research and analysis of the potential sustainable production output levels associated with the Sustainable Growth scenario proposed by Food Wise 2025

Substantial action undertaken and ongoing

Updated MACC taking account of the sustainable growth scenario is due to be published shortly. The general outline was made available in the Teagasc submission to NMP consultation.

Action 404: Monitor trends in water quality, in biodiversity and climate related parameters (GHG, ammonia, nitrous oxides etc.). DAFM and its agencies will work with responsible monitoring authorities in the development of indicators for environmental sustainability.

Action commenced and progressing

Ongoing through work of Environmental Sustainability Committee. Cross departmental/agency group established to look at this issue.

Action 13: DAFM to work with Bord Bia and other stakeholders on the future evolution of the Origin Green Programme and to further develop and enhance its effectiveness as watermark brand and key marketing tool of the Irish Agri-food sector's environmental sustainability credentials

based on a suite of quantitative measures. Investment in science and technology must continue to support the ambition of the Origin Green Programme to ensure it remains underpinned by a strong scientific evidence base.

Substantial action undertaken and ongoing

Bord Bia continues to participate in the DAFM Environmental Sustainability Committee, the DAFM Water Forum, and the National Dairy Sustainability Forum to ensure Origin Green continues to address relevant issues and is understood by the scientific community. Ongoing collaboration with Teagasc continues on the development and revision of carbon footprinting based tools at farm level.

Action 14: Examine how monitoring and measurement in areas such as soil health, nutrient management, biodiversity, animal health, herd performance and welfare and sustainable sources of animal feed can be used to enhance effectiveness of Origin Green.

Action commenced and progressing

The pilot study of 200 farms to better understand the measurement of biodiversity was completed by Bord Bia in conjunction with Teagasc. Participating farmers are due to receive a feedback report and biodiversity map by late June following the study. Collaboration with the National Biodiversity Data Centre to develop a set of Farm Pollinator Guidelines commenced in April with the guidelines due to be launched in quarter 3.

Action 15: Improve knowledge transfer and exchange to farmers by developing a network across all State agencies and relevant advisory bodies to deliver clear, coordinated science-based advice on how farmers can adopt sustainable practices that deliver both environmental and economic benefits.

Action commenced and progressing

The ConnectEd programme has been set up and has established a credible client base of almost 500 users in the first full year.

Teagasc is an active co participant in multiple EIP operational group submissions for stage 2 evaluation.

Teagasc maintains regular contact with all stakeholders. A seminar and workshop were held on 30 May to engage with all our stakeholder groups to address Brexit and environmental challenges.

Action 16: Ensure ongoing funding is made available through national programmes to assist in securing farmer engagement with sustainable practices. This should build on RDP schemes such as Beef Data Genomics and Knowledge Transfer Groups.

Substantial action undertaken and ongoing

As at 16 May 2017, 50,222 herds/flocks were certified under the Bord Bia Beef & Lamb Quality Assurance Scheme, up 469 on 30 January 2017. INAB accreditation issued in April for the revised Sustainable Beef and Lamb Assurance Scheme and 2,012 audits were conducted to this standard. A Helpdesk facility (Farm Relief Services) was also appointed to support producers in preparing for audit and in closing out any non-compliance raised at audit.

Action 17: Develop a messaging programme to communicate the benefits of Origin Green membership to farmer stakeholders to ensure greater adoption and engagement with the programme.

Action commenced and progressing

Bord Bia messaging created in quarter 1 was communicated by Bord Bia broadly to farmers in Ireland through direct marketing materials, media partnerships and advertorials with national print media.

Bord Bia developed a proposal for a messaging programme to communicate Origin Green to dairy farmers specifically.

Action 18: Prioritise the process of bringing fishermen into the Origin Green programme using BIM's responsible fishing standards and other environmental programme as an entry point.

Action commenced and progressing

Nineteen vessels from Greencastle, Downings, Castletownbere and Rossaveal have been prepared for audit against the Responsibly Sourced Standard. However, the unavailability of auditors has meant there has been a delay in moving these vessels through the certification process. BIM are working with the Certification Body that provides the auditors to rectify the above.

Technical assistance has been provided to seven in relation to their raw material sourcing policies and targets as part of their Origin Green annual review. Vessels supplying to these companies are amongst the applicants that have applied to be certified under the RSS.

Two meetings have been held of the BIM/Bord Bia technical working group during quarter 2 2017. This group was set up to develop and strengthen linkages between sustainability initiatives being carried out by BIM and Origin Green. A planned meeting of the Market Advisory Group has been rescheduled to quarter 3 2017.

Action 19: Highlight farm profitability measures that can be achieved from participation in Origin Green programme.

Substantial action undertaken and ongoing

- Dialogue continues with ICBF to streamline feedback to farmers.

- Collaboration continues with DAFM to support the completion of the carbon navigator for farmers participating in the Beef Data Genomics Programmes (BDGP).
- A Carbon Navigator tool for the pig sector is expected to be piloted at the beginning of quarter 3 in conjunction with the new Pig QAS.
- Work is ongoing with the Carbon Trust in the development of a carbon navigator tool for the Egg/Poultry Sector.

Action 20: Continue to develop and enhance the quality assurance standards required for Origin Green.

Substantial action undertaken and ongoing

The new Sustainable Beef & Lamb Assurance Scheme has now been launched. Revisions of the Egg QAS and Pig QAS continues to progress following ongoing consultation with industry stakeholders. A revision of the Horticulture QAS is also progressing and due in quarter 3. The Feed Quality Assurance Scheme continues its steady uptake following its launch to industry.

Action 21: Leverage Origin Green to drive real efficiencies/improvements in respect of energy usage, waste water and food and packaging waste.

Substantial action undertaken and ongoing

The 2016 Origin Green Report was published in February detailing the progress made to date. Membership of Origin Green continues to increase steadily with a total of 257 verified members representing 90% of total food and drink exports.

Action 22: Increase direct engagement and support offered to companies developing their sustainability plans in order to achieve the target of 450 verified members. Recruit additional Origin Green advisors to ensure the required level of engagement is delivered.

Substantial action undertaken and ongoing

Two Origin Green Development Managers continue to work with 160 companies who have submitted sustainability plans. Monthly workshops are taking place to assist companies to progress. In late June, a knowledge sharing visit took place where a number of seafood processors visited a poultry processor to share learnings and best practice insights on sustainability.

Action 23: Continue to build on the corporate social responsibility on the sustainability elements of Origin Green with particular focus on health and wellness.

Target Achieved

Health & wellness has now been incorporated into a significant majority of verified members' Origin Green sustainability plans. All members will have completed this task by the end of quarter

3.

Action 24: Industry to play its part in delivering appropriate messaging and promotion of Origin Green to producers and suppliers.

Substantial action undertaken and ongoing

Bord Bia messaging created in quarter 1 was communicated by Bord Bia broadly to farmers in Ireland through direct marketing materials, media partnerships and advertorials with national print media.

Bord Bia developed a proposal for a messaging programme to communicate Origin Green to dairy farmers specifically.

Bord Bia is encouraging the industry through a Public Awareness Campaign for Origin Green in Ireland to co-market Origin Green to stakeholders. The new Public Awareness campaign was developed and produced in this quarter, and new campaign toolkits and coaching have been designed to support the verified member communication of Origin Green to their producers and suppliers.

Action 405: Maximise participation in Origin Green Programme by producers and processors to ensure an enhanced level of environmental performance is delivered by all actors in the sector.

Substantial action undertaken and ongoing

257 companies are now verified members of Origin Green. There are now six verified members at the retail & foodservice level of the programme.

Action 25: Sustained and intensive monitoring of the interface between agri-economic growth and agri-environmental sustainability through continuation and enhancement of the DAFM-funded Teagasc Agricultural Catchments Programme.

Action commenced and progressing

On-going implementation of phase 3 of the Agricultural Catchments Programme.

Action 26: DAFM to work closely with all stakeholders to ensure that the scientific findings from the Agricultural Catchments Programme are integrated fully and appropriately into agri-environmental policies.

Action commenced and progressing

Third Nitrates Action Programme (NAP) review is ongoing; it takes into account the ACP findings in

the preparation of the draft fourth NAP for 2018-2021.

Action 27: DAFM to continue close cooperation with Department of Environment, Community and Local Government (DECLG) and the EPA on the delivery of the Water Framework Directive, in particular on development of the second phase River Basin Management Plans.

Action commenced and progressing

DAFM has ongoing close cooperation with DHPCLG and the EPA in the delivery of the second draft RBMP, which will be launched early March with a six months public consultation.

Action 28: Teagasc to develop and rollout a Nutrient Management software tool to enhance cost-effective use of feed, fertiliser and slurry to minimise nitrogen (nitrate, ammonia and nitrous oxide) and phosphorus losses.

Substantial action undertaken and ongoing

NMP Online is now fully functional and operational.

Action 29: Introduce knowledge transfer programmes to improve and broaden awareness levels on the efficient use of nutrients on farms, thereby reducing losses of valuable and costly nutrients to water and to air, so providing for economic and environmental sustainability goals.

Substantial action undertaken and ongoing

In-service training has been provided to all advisers on improving nutrient management at farm level and on utilising NMP Online. Soil Fertility is one of the key focus areas of the Grass10 campaign. A focus through media, advisory events and advisory services on lime is having an impact on levels of lime usage in 2016 and this focus continued into 2017.

Plans are in place to increase the usage by advisers of NMP plans prepared to influence practice change.

Teagasc is working with IDIA to get NMP plans incorporated into sustainability initiatives.

Phase two of NMP development is being planned with a focus on improving communications from NMP Online to farmer users.

Action 30: The feasibility of mainstreaming environmental resource efficiency into a mandatory component of minimum agriculture qualifications to be examined.

Substantial action undertaken and ongoing

The new agricultural awards were published by QQI in December 2016. A mandatory environmental module has been introduced to the Teagasc Specific Purpose Certificate in Farm

Administration programme. The organisation is now in the process of validating this new programme with QQI. Validation should be complete in the autumn of 2017, at which point this module will be delivered on all Teagasc agricultural courses.

Action 31: Teagasc to develop soil specific advice for both organic and inorganic manure use to take account of mineralisation across soils to help inform optimal fertiliser application rates and timing.

Target Achieved.

The new 'Green Book' was published, containing soil specific nutrient advice. Further research is needed to further refine soil specific nutrient advice and this work will be conducted over the coming years subject to funding availability.

Action 32: Teagasc to carry out a soil nutrient census to track soil fertility trends.

Substantial action undertaken and ongoing

The 2016 client soil fertility statistics have been compiled. This data indicates the continuing decline in national P and K soil fertility with 62% (60% in 2015) samples low in P and 55% samples (50% in 2015) low in K in 2016. The proportion of samples submitted through Teagasc in 2016 with P or K Index 1 (v. low), 2 (low), 3 (target) and 4 (high) are shown in the Table below

Percentage samples in each soil fertility index in 2016		
Index	P	K
1	35%	15%
2	27%	40%
3	22%	26%
4	16%	19%

(n = 65,699 samples)

Soil pH levels have shown some improvement with a larger proportion samples within the optimum soil pH range (>6.2) compared with previous years.

NMP online monitoring of soil fertility is ongoing. The fertiliser use survey 2005 to 2015 was published at the end of quarter 2 2017. This report highlights the continuing decline in fertiliser use and soil fertility. https://www.teagasc.ie/media/website/crops/soil-and-soil-fertility/Wall-Dillon-et-al-Fert-Use-Survey_FAI-Kildalton-2017.pdf

Action 33: DAFM to work closely with responsible agencies to monitor potential localised/regionalised impacts of dairy herd expansion on water quality and to develop mitigation measures, in conjunction with the scientific findings from the Agricultural Catchments Programme.

Action commenced and progressing

Ongoing as part of second draft RBMP which details measures and supports for the protection of water quality.

DAFM is participating in relevant EPA working groups.

Action 34: Teagasc to enhance PastureBase Ireland tool as a resource to help improve grassland and nitrogen management and increase grass utilisation.

Substantial action undertaken and ongoing

PastureBase Ireland was relaunched on 5 January 2017 with new functionality, including a new landing page and improvements to the functionality of the wedge and cover.

Action 35: Following on from engagement and adoption of the Origin Green programme at farm level, participants in the Bord Bia Quality Assurance Schemes to work to deliver improvements in their carbon footprint, added to the subsequent calculation of improvement on these farms at a macro national level.

Substantial action undertaken and ongoing

The carbon navigator continues to be driven at farm level for dairy and beef. Bord Bia is working to finalise carbon footprinting models for other schemes as they are being revised.

Action 36: Seafood Development Programme 2014-2020 (SDP) to provide a framework to take action against the decline of fish stocks through improved fisheries management and the focused implementation of landings obligation requirements.

Action commenced and progressing

BIM plan to carry out a detailed analysis in 2017 of the potential uses, for unwanted catches, generated by the landing obligation. The e-tender for the desk study was launched in April and closed in early May. The evaluation of the tenders is now underway and it is scheduled to have a contract agreed for this study by early June. The study is due to be completed within six months.

Additionally under the Sustainable Fisheries Scheme, four applications have been received from collectives for grant aid to support the development of facilities to handle and store unwanted catches generated by the landing obligation and also to add value to catches of species subject to the landing obligation. These applications represent a total investment of around €3 million. They are currently under evaluation.

The SFPA continue to work with industry through regional workshops and seminars undertaken by SFPA staff in conjunction with DAFM staff to highlight the requirements of the LO in relation to retention of obligated species, retention of <MCRS fish and the correct handling and stowage of

these catches.

Naval Service inspectors are also conducting last haul analysis inspections to provide data to the ongoing assessment by EFCA of catch profiling of the fisheries being undertaken in IRL EEZ.

On the 7 June 2017, the Marine Institute (MI) hosted an Irish Fisheries Science Partnership (IFSRP) workshop on *Nephrops* to discuss the sustainable exploitation of the resource with skippers. MI and BIM highlighted the key issues facing the industry. Adaptation to the landings obligation through the use of more selective gears was a key focus of the discussions. Protection of vulnerable stocks through spatio-temporal measures was also discussed.

This is being supported through the EMFF Sustainable Fisheries Scheme, the Inshore Management and Development Scheme, the Data Collection Multi Annual Plan and the Marine Biodiversity Scheme.

Action 37: DAFM, SFPA and Industry to develop a suite of measures to promote changed behaviour which will minimise juvenile catch and protect vulnerable stocks.

Action commenced and progressing

Meetings of the Brown crab, *Nephrops* and whitefish Fishery Improvement Projects took place in March, May and June 2017. Technical meetings have been held with individual processors and Fishermen's co-ops to explain the FIP concept and to discuss the respective work plans. A presentation of the Brown crab was given to the South east RIFF.

A first meeting of the Fishermen's Forum was held on the 20 May. Representatives from the four POs, the NIFF/RIFF and non-affiliated participants attended. The next meeting is provisionally scheduled for the end of June to coincide with Seafest.

The issue of avoidance of juvenile species in routine catches has not been reflected in the landing reports from the majority of vessels with very little <MCRS fish being recorded. The local area industry meetings and SFPA interaction with the Ministerial Consultative Committee continue to promote and advise of the regulatory necessity of retaining and recording and landing all such catches taken.

Landings obligation Workshops were held in Donegal Town (21/04/2017) and Dunmore East (12/06/2017) involving DAFM, SFPA, MI and BIM. The focus of these workshops is to promote compliance and adaptation to the Landings obligation and to minimize by-catch of juveniles and vulnerable stocks.

This is being supported through the EMFF Sustainable Fisheries Scheme, the Inshore Management and Development Scheme, the Data Collection Multi Annual Plan and the Marine Biodiversity Scheme.

Action 38: BIM, with support from MI and in collaboration with the SFPA, to intensify its

programme of gear selectivity and technical conservation measures, particularly to fulfil landing obligation requirements.

Action commenced and progressing

BIM published a study titled “A general catch comparison method for multi-gear trials: application to a quad-rig trawling fishery for Nephrops” in the ICES Journal of Marine Science in January. The study’s new approach to statistical methodology will provide industry with the best available advice on minimise unwanted catches. The study is available to download on the BIM website.

In addition BIM produced a report on a gear trial of the SELTRA sorting box. The box permits fishing vessels, targeting Nephrops, to minimise unwanted fish catches while maintaining Nephrops catches. The report found that vessels which predominantly aim to catch Nephrops can benefit from using a SELTRA with reduction of unwanted catches between 24% and 81% demonstrated. BIM provide grant-aid for the SELTRA sorting box and to date two vessels have invested in the gear.

BIM produced a report and trade press article on a gear trial conducted in the Celtic Sea in March 2017 to reduce catches of quota limited cod. Key findings included: The raised fishing line is a relatively inexpensive gear modification which generally increases catches of targeted demersal fish species while reducing unwanted catches. Under a fully implemented landing obligation scenario, the raised fishing line postponed choking on cod from eight to over eleven hauls but had little effect on haddock. Major scope exists to further develop the raised fishing line approach with relevant gear modifications eligible for grant aid under the BIM sustainable fisheries scheme. The report is available at www.bim.ie/our-publications/fisheries/

BIM conducted a further trial in the Irish Sea in April 2017 which aimed to achieve reductions in catches of small whiting in the SELTRA selectivity device. Initial observations suggest that this modification negatively affected the performance of the SELTRA and is unlikely to be a viable solution. Other gear options may assist in addressing this issue and it is planned to conduct a further trial in this regard during 2017.

BIM presented its work on gear selectivity and technical conservation measures - alongside DAFM, MI and the SFPA at a landing obligation workshop in Donegal town on the 19 April.

Action 39: Deliver enhanced stock knowledge and sustainability through the €40m funding allocated to marine science through the SDP.

Substantial action undertaken and ongoing

Enhanced fish stock knowledge and sustainability are delivered through the Data Collection Multi Annual Plan (DCMAP), funded under the EMFF. In quarter 2 2017, the evaluation of the fishing sector in Ireland continued under the DCMAP through the collection of

- a.) economic variables based on economic surveys and sentinel vessel programmes
- b.) transversal variables (capacity, effort, landings) based on fleet registers and logbook declarations;
- c.) biological variables which comprised fleet related variables and stock related variables for 67 fish stocks exploited by the Irish fleet.

The Annual Report on Ireland's activities under the DCMAP for 2016 was submitted to the EU in May 2017.

The Cost Statement on Ireland's DCMAP for 2016 was submitted to DAFM in May 2017.

Preparations for the delivery of the 2017 Stock Book to DAFM commenced in May 2017. This outlines the latest scientific advice and a sustainability assessment on over 60 stocks exploited. A comprehensive report on the fishing activity of the Irish fleet in UK waters was completed for DAFM in quarter 2. This work will be ongoing and will provide key information for Brexit negotiations.

Action 40: Take actions under the SDP to improve the environmental sustainability of the inshore fisheries sector.

Action commenced and progressing

The general Inshore Fisheries Conservation Scheme launched at the Skipper Expo in March 2017 has received applications directly with further applications referred from the FLAG programme

National Inshore Fisheries Forum

Following the meeting of NIFF with the BIM Regional Facilitators and DAFM in February a number of administrative issues were actioned, particularly the development of a protocol for the (re) appointment of members to the RIFFs after the expiry of their three year term. A meeting of NIFF was held on the 10 May with the development of an Inshore Fisheries Strategy with support from the EMFF at the top of the agenda. Draft Terms of Reference were developed and will be signed off shortly. A procurement process will then be initiated and completed by mid-quarter 3 with the Strategy completed by year end 2017.

Action 41: DAFM and Horticulture growers to consider the establishment of an industry and government supported fund to enable relevant research data to be obtained to allow a greater range of more environmentally efficient plant protection products to be authorised for use on various horticultural crops grown in Ireland.

Action commenced and progressing

DAFM already actively engage with relevant stakeholders to ensure as wide a range as possible of plant protection products are available to the horticultural industry. A number of meetings have been held with Bord Bia and Teagasc to develop strategies to further enhance the range of activities on-going in this area. DAFM also participate in the EU Minor Use Co-Ordination Facility, which commenced activities in 2016, and aims to increase the availability of crop protection solutions for minor crops such as horticultural crops across the EU. DAFM will host the next meeting of the EU Minor Use Co-Ordination Facility in Dublin in November 2017. DAFM continue to fund a number of research projects to evaluate IPM strategies and develop best practise guides for a number of specific crops and pests. DAFM have approved or re-registered 441 plant protection product/crop combinations since the start of 2016 for the horticulture sector.

Action 406: Where additional biodiversity threats are identified, such as decline in farmland birds, develop new or amend existing measures to mitigate such threats.

Action commenced and progressing

On-going interaction with NPWS on agri-environment measures as required. For example ongoing work on the development of the agriculture and forestry actions as part of the threat response plan for the hen harrier.

Action 42: EU Environmental Aid Scheme 2014-2020 to be targeted at supporting Agri-food companies to invest in initiatives which aim to deliver improved environmental and energy efficiency, increase their uptake of renewable energy technologies and environmental protection systems and research alternative possibilities in relation to energy efficiencies and technologies.

Action commenced and progressing

Two pipeline projects as of 23 May 2017.

Action 43: As part of the Europe 2020 strategy, BIM will introduce schemes in compliance with the EMFF to support investments in equipment or in fishing or aquaculture vessels aimed at reducing the emission of pollutants or GHG and/or increasing energy efficiency. This may include support for the modernisation and replacement of fleet engines.

Action commenced and progressing

BIM launched a scheme, aimed at providing support for fishing or aquaculture vessels to reduce CO2 emissions and increase fuel efficiency by end of quarter 1 2017 following approval of the scheme at the last OPMC meeting.

The implementation process is ongoing in quarter 2 2017.

Action 44: At SME level increase the level of environmental awareness relating to regulatory

compliance and development of basic management systems related to environmental performance through EI GreenStart programme.

Action commenced and progressing

Two pipeline projects as of 23 May 2017.

Action 45: Enterprise Ireland will develop the capability of food company managers to drive environmental efficiencies and achieve improved sustainability, through customised management development programmes and through the Green Plus element of Enterprise Ireland Business Process Improvement Grants.

Action commenced and progressing

Two pipeline projects as of 23 May 2017.

Action 46: Enterprise Ireland to invest in in-company innovation processes, R&D and NPD development programmes, and to support the human and capital infrastructure requirements of that absorptive capacity.

Action commenced and progressing

Five companies approved as of 23 May 2017 (11 Projects).

Three pipeline companies.

Five prospect companies.

Action 47: Policies and measures to support the mitigation benefits of forest-based biomass and

Substantial action undertaken and ongoing

Forestry KTG meetings taking place on a pilot basis (launched at Limerick/Tipperary FOG on the 1 March 2017).

Meetings with Forestry Groups in Cork and Clare to promote forestry KTG's and certification.

Certification project on target but development of follow up measures need attention. Some initial work taking place as part of forestry programme midterm review.

Action 48: Demand side and supply chain mechanisms should be developed to ensure biomass crops including forest and wood products are brought to market and full market returns realised however demand side measures must not over incentivise particular end users as it may distort market competition.

Substantial action undertaken and ongoing

Renewable Heat Incentive - Design Options and Implementation Consultation published in January 2017. DAFM considering supply side options and working with COFORD Wood Mobilisation and Production Forecasting Group. DAFM is considering options to bridge the short term supply gap in indigenous biomass and is continuing efforts to mobilise forest biomass.

Action 49: Horizon 2020 is a key source of vital funding and scientific benchmarking for Irish researchers and companies. EI with DAFM to increase the level of participation of Irish companies in the programme.

Action commenced and progressing

As of end March 2017, eight Food Companies are involved in ten H2020 projects: AgroCycle, REFUCOAT, AgriChemWhey (two companies), PROTEIN2FOOD, AtlantOS, PeptiEUForce, WATERPROTECT, NanoPack, FUNGUSCHAIN and BIOrescue.

Action 50: Uptake of GLAS should be maximised to help enhance the natural environment through, *inter alia*, retaining carbon stocks in the soil, margins/habitat preservation and improving water quality to ensure compliance with the Water Framework Directive. Uptake on other RDP initiatives such as, organic farming, priority freshwater pearl mussel catchment sites and the Burren farming for conservation project should also be maximised as separate key RDP enabling instruments to achieve environmental objectives.

Substantial action undertaken and ongoing

Approval of GLAS Tranche 3 applicants has brought participation in GLAS to in excess of 50,000 farmers, exceeding the target of 50,000 GLAS participants by end-2018 set in the RDP ahead of schedule.

An additional 100 farmers accepted into the Burren Programme.

Tenders for HH and FWPM schemes received and being assessed.

Over 100 projects submitted under first call of the Locally Led Schemes

Organic Farming Scheme has met all targets set for the RDP period and is closed to new applications.

Action 51: Invest in evidence-based monitoring and research of agri-environment measures to demonstrate the environmental outputs and identify areas for improvement and/or additional measures.

Action commenced and progressing

An environmental consultancy is conducting longitudinal (5-year) evaluation of the effectiveness of

GLAS actions in relation to biodiversity, climate change and water quality.

Fieldwork on a baseline survey of biodiversity actions commenced in August 2016 and will continue throughout summer 2017 having regard to the monitoring schedule and the deadline for the completion of various scheme actions. The contribution of GLAS actions to climate change and water quality objectives is being evaluated through a modeling approach currently being developed by the contractor with input data on Irish conditions.

Action 52: Ongoing research, development and validation of green technologies by research bodies to deliver practical solutions to improve water quality.

Action commenced and progressing

Two research projects are ongoing in relation to agri-food and dairy production and management of wastewater.

Relevant stakeholders were engaged to examine the optimum approach to progress this action and inform how best this type of research can be progressed.

Action 53: Promote widespread uptake of on-farm capital investment grants as part of RDP 2014-2020 especially for low emission slurry spreading equipment, farm nutrient storage and animal housing which will help lower emissions and improve water quality.

Substantial action undertaken and ongoing

To date, 12,000 applications have been received under TAMS II. Over 850 of which were in relation to low emission slurry spreading equipment and 4,650 in relation to farm nutrient storage and animal housing. A seventh measure – the Tillage Capital Investment Scheme was launched in March 2017. Approvals continue to issue for all measures on a tranche by tranche basis. The online payment claim facility is open and payments are issuing on an ongoing basis to approved participants who have completed works approved under the suite of seven measures.

Action 54: Aim to maximise the number of suckler farmers participating in the Beef Data and Genomics Programme which will help raise awareness of and mitigate GHG emissions from the sector, improve production efficiency and herd quality for suckler sector which will deliver climate

Target achieved (Year one).

Action 55: Maximise uptake of allocated funding for the Forestry 2014-2020 Programme to help increase afforestation levels to capture carbon, and sustain the production of forest-based biomass to meet renewable energy targets.

Substantial action undertaken and ongoing

- Meeting with Teagasc on their promotion plans for 2017 took place in February 2017.
- Promotional event took place in Balla, Co Mayo on the 20 February 2017.
- Promotion event for CPD in Wicklow.
- Launch of KTG's in Tipperary and national promotion of afforestation as part of Timber 2017 event at Stradbally.

Action 56: With appropriate wider stakeholder involvement, identify any critical gaps in current funding programmes that are blockages to the achievement of key environmental objectives to help optimise the structure of future alternative funding programmes.

Action commenced and progressing

The ex-post evaluation of the 2007-13 RDP has been completed and feedback has been received from the Commission. The final report is now available on the Departments website.

The report of the ex-ante assessment on Financial Instruments is currently being finalised and the Department will consider the next steps once it is completed.

The 2017 Enhanced Annual Implementation Report of Ireland's 2014-2020 RDP contains a specific evaluation piece based on expenditure made to the end of 2016. This was completed by 30 June 2017.

An expenditure review of the Targeted Agricultural Modernisation Schemes II will be carried out in conjunction with the Department of Public Expenditure and Reform.

Action 57: In relation to the LIFE programme, DAFM will maintain close contact with DECLG, DAHG and other relevant stakeholders to ensure that any biodiversity, climate or water quality actions are appropriately targeted and implemented.

Action commenced and progressing

Ongoing interaction with the KerryLIFE project. Outcomes will feed into the forthcoming Freshwater Pearl Mussel Locally-led Schemes.

Action 58: Agri-food research funding to prioritise research which:

- Provides evidence base to quantify the economic, social and environmental sustainability of Irish food production systems and to assess the vulnerability of these systems to climate change.
- Support strategies and technologies to reduce the impact of food production on water

quality.

- Identifies and evaluates tailored measures which impact positively on biodiversity.
- Develops and assesses existing and emerging technologies for reducing ammonia and GHG emissions and carbon sequestration in Ireland's soils, biomass and agricultural systems.
- Informs a policy review to be initiated on the effects of ammonia restrictions on future increases in livestock numbers and on the demography within the national herd.
- Develops a holistic approach to data capture, modelling and sustainability assessment of Irish farming and aquaculture systems, including the provision, utilisation and exploitation of verifiable data on the environmental impact and sustainability of grass-based food production and aquaculture in Ireland.
- Supports the health and nutrition benefits of seafood and grass-based food production.
- Provides scientific advice and strengthens coherence between public programmes and to inform policy decisions on the benefits of bio-economy solutions.
- Strengthens environmental measurement and monitoring capacity in particular the potential for sensor and other new emerging technologies.
- Investigates the ability of a wide range of land use options to sequester carbon.
- Develops sectoral farm management tools and management systems that optimise on-farm resource use efficiency. These should be aimed at translating the principles of sustainable intensification into tangible practices and at providing the knowledge base for many of the aforementioned recommendations on "Improvement of environmental footprint of the sector".

Substantial action undertaken and ongoing

Consideration was given to remaining research gaps under this action to inform future DAFM Research Call's, in lieu of the extensive areas under this action that were addressed in the €28 million of funding allocated to 43 projects in DAFM's 2016 Research Awards.

Action 59: As part of the 2025 implementation phase DAFM will work closely with relevant agencies to ensure appropriate monitoring across all sectors of the agri-food industry on the environmental impacts of 2025 strategy including possible impacts at regional level. This implementation process will include evaluation and assessment of the delivery of sustainability and mitigation actions set out in the strategy report.

Substantial action undertaken and ongoing

The Environmental Sustainability Committee have considered a number of key sustainability issues

and identified actions to be taken in the year ahead including holding an annual workshop with stakeholders in quarter 3.

Action 60: DAFM and all state agencies involved in the Agri-food sector will enhance their collective coherence with wider Government policy in respect of implementation of measures, such as RDP measures and Origin Green, to address environmental and sustainability issues.

Substantial action undertaken and ongoing

Bord Bia released their second sustainability report on Origin Green in February.

Nutrient Management Plan online has been launched by Teagasc.

Action 407: As part of the 2025 implementation phase, DAFM will work closely with relevant agencies to ensure appropriate monitoring across all sectors of the agri-food industry on environmental impacts of 2025 strategy including possible impacts at regional level. This implementation process will include evaluation an assessment of the delivery of sustainability and mitigation actions set out in the strategy report.

Action commenced and progressing

Refer to Action 59.

Action 408: Generate an annual report analysing performance and uptake of Origin Green programme.

Target Achieved.

The 2016 report was published in early February.

Action 409: Undertake an annual review of EPA water quality monitoring results to identify trends in nutrient loading and biological water status with regard status required under WFD in following sectors Dairy, Beef, Sheep, PCF, Forestry and Seafood. DAFM will work with EPA to monitor and identify trends at regional level, interpreting as much as feasible, sectoral impacts.

Action commenced and progressing

On-going interaction with EPA in identifying water quality trends and participation in working groups. Latest monitoring results have been presented to DG Env in the first bilateral in negotiations of a new NAP.

Action 410: Introduce catchment/regional monitoring where increased livestock numbers are anticipated by working with EPA, to ensure appropriate monitoring in areas of potential livestock increases through on-site monitoring, modelling etc.

Action commenced and progressing

- DAFM continues to participate in various Water Framework Directive (WFD) related interdepartmental/ agency Working Groups related to Water quality.
- An external stakeholder Water Forum took place in March 2017.
- DAFM participation in EPA catchment Characterisation Workshops.

Action 411: Carry out a review of EPA/Teagasc agricultural catchment assessments to monitor changes in nutrient loading.

Action commenced and progressing

- Phase 3 of the ACP is ongoing. The monitoring parameters will be considered for any emerging trends, as they become available.
- Ongoing interaction with EPA and Teagasc.
- Refer also to Action 410.

Action 412: Generate an annual report detailing the results of analysis of GHG emissions arising from agriculture, including sectoral emissions and identification of trends.

Target Achieved

Ireland's greenhouse gas emissions for 2015 published in April 2017.

Action 413: Annual report on disposal of animal carcasses and identify any capacity issues in waste facilities.

Substantial action undertaken and on-going

DAFM is satisfied that there are no capacity issues at present in relation to disposal of sheep (or indeed other species') carcass by-products from processing plants.

Action 414: Annual report on changes in cropping pattern and permanent pastures to monitor trends.

Action commenced and progressing

The Department prepares a report for the Commission on changes in cropping patterns and permanent pastures. Work ongoing to collate and process the necessary data from the 2017 BPS applications to allow report be completed by year end.

Action 415: Organise an annual workshop of relevant state agencies and stakeholders to discuss any impacts arising from intensification/expansion of agricultural activities and development of

mitigation measures.

Action at commencement stage

The Environmental Sustainability Committee proposes to hold a workshop in quarter 3.

Action 416: Review of landscape character on a five year basis which should include a review of LCAs undertaken by local authorities.

Action commenced and progressing

LCA to be progressed via tendering process to appoint a project team, but process not yet finalised.

Action 417: Annual assessment of wood processing facilities industrial emissions licences to identify impacts and recommend improvements where required.

Substantial action undertaken and ongoing

EPA has completed and finalised the monitoring report for 2016 on wood processing facilities industrial emissions. The inspection and enforcement documents (including Annual Environmental Reports) are also available from the EPA (<http://www.epa.ie/licensing/>).

The available reports and documentation are available on request from Economics and Planning Division.

Action 418: DAFM in consultation with other relevant government departments and state agencies to consider any emerging impacts/trends on Natura 2000 sites impacted by changes in agricultural practices.

Action commenced and progressing

Curlew task forces set up in February. DAFM represented by NBE, AES and Forest Service Divisions.

Second meeting of the task force in April 2017. On-going engagement with curlew task force on agricultural related actions.

Action 419: DAFM to develop suitable monitoring programme in line with proposals under RDP 2014-2020 (GLAS) to monitor and report on the impact of RDP measures on biodiversity, Climate and water quality.

Action commenced and progressing

Task 1 complete. Task 2 - field work is ongoing with a view to completion of baseline report in mid-2017.

Action 61: A review of existing level 5 and 6 further education awards and curricula in agriculture

and associated curricula should be undertaken. Teagasc will undertake this review under the auspices of Quality and Qualifications Ireland (QQI), in consultation with a wide body of stakeholders to ensure that they are both fit-for-purpose and to future proof them in terms of emerging industry needs.

Substantial action undertaken and ongoing

Teagasc programmes to meet the revised QQI level 5 and 6 awards will be submitted to QQI for validation in quarter 3 2017.

Action 62: This review should identify for each career step the essential skill sets for different roles and produce a competency matrix which identifies the skillsets and the education and training requirements to reach them.

Substantial action undertaken and ongoing

Profiling of farm occupation competency requirements, career steps and associated education pathways were/are a significant aspect of stakeholder consultation for the Teagasc Education Strategic Vision project.

Action 63: Teagasc to seek delegated authority to make education awards as part of new Quality and Qualifications Ireland (QQI) structure. This would allow more flexible and responsive development of future agricultural education programmes.

Action commenced and progressing

Teagasc (in line with all further education providers) must complete a quality assurance re-engagement process with QQI.

This process will not be completed until spring 2018. However, the re-engagement will complete a prerequisite step for Teagasc to apply for delegated awarding authority later in 2018.

Action 64: Review and further develop eligibility criteria for agricultural education programmes to allow for more flexible access for young non-agricultural graduates to agriculture education programmes.

Substantial action undertaken and ongoing

Appropriate education pathways for future entrants to farming and the land-based sector were a significant theme of the Teagasc Education Vision consultation process. Teagasc Education Strategic Vision Project will complete its report later this year.

Action 65: Teagasc to continue to calibrate its education function to match the needs of industry, for example through the development and introduction of customised short training programmes

along the lines of the recently introduced milking skills training for operatives.

Action commenced and progressing

Teagasc Education Strategic Vision Project has consulted with stakeholders in regard to life -long learning and CPD needs.

Customised short training courses and operative training requirements are being explored under the Teagasc Education Vision consultation process.

Teagasc is currently engaging with dairy industry stakeholders in regard to dairy operative training needs.

Action 66: Continued Professional Development of Professional Agricultural Advisors to ensure that the most up to date environmental and sustainability science-based knowledge and best practice underlie the operation of Schemes.

Action commenced and progressing

Teagasc continues to provide training and support to advisers and consultants in NMP and Carbon navigator through the ConnectEd network and support desk. ConnectEd delivers substantial CPD opportunities in both technical and methodological training and development. For example, advisers and consultants can now complete the Certificate for Consultants in European Rural Areas (CECRA) side-by-side with farm advisers from all over Europe.

Action 67: Continued Professional Development for Agricultural Advisors to include knowledge transfer, specific to water quality protection and improvement, from the Agricultural Catchments Programme.

Action commenced and progressing

The re-grading issue has now been resolved. The Agricultural Catchment Programme interviewed in June 2017 for the appointment of a new specialist environment adviser to specifically provide KT support from the ACP.

Action 68: Consideration of innovative methods for agricultural education delivery, such as using participatory training methods such as on-farm placement modules, e-learning and other best practice as part of the entrant and adult programmes.

Action commenced and progressing

Study trips conducted to Scotland, Denmark and the Netherlands to observe approaches in peer education institutions.

Future approaches to teaching and learning have emerged as an overarching theme from the Teagasc Education Vision consultation exercise.

Action 69: Increase enrolments in Level 6 Advanced Dairy Programme and Professional Diploma in Dairy Farm Management and seek to fast track entry to the latter in association with UCD.

Substantial action undertaken and ongoing

Applications were taken in quarter 2 for the next intake to the Prof Diploma in Dairy Farm Management.

Teagasc, through the Teagasc Education Vision process and through other stakeholder consultation activities, is actively looking at measures to address the potential workforce and skills shortages in the dairy sector.

Recovery in other areas of the economy is, however, expected to impact on enrolments to full-time agricultural courses.

Action 70: Explore the possibility of developing an applied leaving certificate course in agriculture.

Substantial action undertaken and ongoing

A draft agricultural science course for the Leaving Cert was open for public consultation with a closing date of the 1 April 2016. The syllabus is 40 years old as it currently stands. The new syllabus is planned to be deliverable in September 2017. An applied certificate course in agriculture may be developed after the new syllabus is in place.

Action 71: Certification system to be introduced to cover crew training and qualification on board fishing vessels.

Action commenced and progressing

A meeting was held with NMCI (Cork Institute of Technology) to evaluate potential for Higher Certificate in Maritime Studies.

Further meetings are being planned with MSO DTTAS to progress Safety Training additions and day Skipper training.

Action 72: Maintain an effective, independent, national advisory service providing a locally-based contact point for all farmers through farmer education, consultation and a wide range of communication and influencing activities, using appropriate mechanisms to optimize service delivery to farmers.

Substantial action undertaken and ongoing

Teagasc has rolled out a comprehensive training programme CECRA through the ConnectEd programme. Four modules were delivered to 50 advisers in 2016. Up to 20 modules are planned

for 2017 focused mainly on facilitation skills.

Strategic use of subcontractors has allowed Teagasc to maintain a strong presence in leading the development of sustainable primary production. It has leveraged its reduced advisory staff numbers and offices to maintain and even increase its impact. Through this action, Teagasc has been successful in freeing up advisors' time to deliver more technology transfer activities in an efficient and effective manner. The organisation has contracted out over 3,000 BPS applications this year.

Action 73: Full implementation of Knowledge Transfer measures of RDP 2014-2020 to up skill producers and agricultural advisors including:

- Development of Knowledge Transfer Groups to optimise producer productivity and profitability in the beef, dairy, equine, poultry, sheep and tillage sectors;
- Support for European Innovation Partnership Operational Groups to strengthen linkages between the results of research and innovation and their implementation at farm level;
- Supports for Continuous Professional Development of professional advisors on an ongoing basis to further develop their knowledge base;
- Targeted On-Farm Advisory Service to deliver specific advice to farmers on important animal health and welfare issues; and
- Provide specific advice on environmental, bio-diversity and climate change issues to help contribute to the development of a more sustainable agri-sector.

Substantial action undertaken and ongoing

- **Development of Knowledge Transfer Groups to optimise producer productivity and profitability in the beef, dairy, equine, poultry, sheep and tillage sectors;**

Substantial action undertaken and ongoing

Over 1,100 Knowledge Transfer Groups comprising almost 20,000 farmers are now established. Over c7,000 Knowledge Transfer Meetings have taken place to date. Facilitators and Vets have interacted with over c2,000 and c1,250 herds respectively on the Farm Improvement Plan system to date.

- **Support for European Innovation Partnership Operational Groups to strengthen linkages between the results of research and innovation and their implementation at farm level;**

Action commenced and progressing

117 proposals were received in response to the open call in quarter 4 2016. 23 proposals have now been selected to progress to the next phase, and will now be funded to develop a detailed project plan for their projects. A number of these proposals will then be selected to move forward to the full implementation phase.

- **Supports for Continuous Professional Development of professional advisors on an ongoing basis to further develop their knowledge base;**

Action commenced and progressing

Training on carbon navigator, meeting facilitation and Health & Safety Training is largely complete.

- **Targeted On-Farm Advisory Service to deliver specific advice to farmers on important animal health and welfare issues;**

Action not yet commenced

For roll out in year 2.

- **Provide specific advice on environmental, bio-diversity and climate change issues to help contribute to the development of a more sustainable agri-sector.**

Action not yet commenced

For roll out in year 2.

Action 74: Teagasc to prioritise the development of a new Dairy Expansion Service to deliver one to one services to support dairy farm businesses in planning and monitoring their dairy expansion operations.

Substantial action undertaken and ongoing

Dairy Grow continues to deliver on-farm, one-to-one advice for expanding and new entrant farmers. There is an increasing interest from beef and tillage farmers in looking to explore the option of converting their farms to milk production. Dairy Grow continues to collaborate closely with Teagasc advisers, all of the banks and a number of accountancy organisations to ensure that sustainable development plans are prepared for the participating farmers.

Two Dairy Start-up courses were completed in 2016. The participants on these courses have now progressed to the Greenfield Academy (meeting once per month for 52 participants). Three 'Focus Days' (lameness, cash flow management, 2nd unit establishment) were held at the Greenfield farm, Kilkenny during 2016.

One Dairy Start-up course has commenced in 2017 (based around the Shinagh Greenfield Farm, Bandon, Co, Cork), with a second course planned for later in 2017 (based at Greenfield Farm,

Kilkenny). The Greenfield Academy continues with three groups (52 participants). Three 'Focus Days' are planned for later in 2017.

A Dairy Step-up training course was delivered in December 2016 (25 participants; most of whom are involved in a share farming, partnership or leasing arrangements). The course focused on improving people skills and was delivered with the support of Macra Skillnet funding. Feedback was extremely positive. It is planned to run a similar course in the second half of 2017.

Action 75: Expansion of the current discussion group model to provide access to up to date research and information, in the areas of grassland and soil management; genetics and breeding; financial management/business planning and price volatility management; animal health and welfare; environment and farm safety. This should to be backed by a number of commercially operated beef demonstration farms.

Substantial action undertaken and ongoing

The majority of meetings for year 1 of the programme have now been held, including the mandatory veterinary and health and safety meetings. All advisers have received the mandatory health and safety work plan training and are completing work plans for each participant in the programme. Profit Monitors for year 1 have been completed for most participants. Advisers are finalising the different elements of the Farm Improvement Plan for each participant. While the online recording system for recording the Farm Improvement Plans has been made available to advisers to upload the information from those participants in the Beef KT groups, there are a number of problems with it not being available to advisers for long periods of time. This is delaying the inputting of data considerably. It is also not yet available at this point for farmers in other groups such as dairy, sheep, equine, etc.

Action 76: Implement a third phase of the Teagasc/Farmers Journal BETTER Farm Beef Programme with an emphasis on transferring best practice in management and breeding to the maximum number of farms.

Substantial action undertaken and ongoing

The third phase of the Teagasc/Farmers Journal BETTER Farm Beef Programme was launched on 30 January 2017. All staff are now in place and working on the programme. One of the major objectives within this programme is to improve management and breeding on these farms and to transfer the lessons learned on them to the wider population of beef farmers.

All 27 farms in the new Teagasc/Irish Farmers' Journal BETTER Farm Beef Challenge are measuring grass and recording it on PastureBase Ireland. They have all had a Nutrient Management Plan completed for their farm along with a Herd Health Plan. Their advisers are currently working on having a farm plan completed for each farm over the coming months. There is now a substantial amount of coverage of the progress of these farms in the national press and through social media.

Action 77: Develop specialised Knowledge Transfer programmes to upskill farmers who are employing extra labour units in areas such as improving current farm practices; employing staff; responsibilities as an employer.

Action commenced and progressing

Labour efficiency and labour management were prioritised as focus areas in the 2017 Dairy Advisory Programme. Dairy Advisers will facilitate discussions around health and safety – including work organisation - at dairy discussion groups and will facilitate a one-to-one discussion on work organisation/ health and safety as part of the Dairy KT Groups programme.

Teagasc held a one day conference- “Employing People: getting the basics right” on 15 June. As part of the conference, a new “Employing People” manual, specifically aimed at dairy farmers employing people on their farms, will be launched. Teagasc is also in the process of developing a range of KT activities to highlight both labour efficiency and people management, to be delivered in H2 2017.

One of the villages at the Moorepark 2017 Open Day is devoted to “Improving Productivity Through People”; Teagasc staff in this village will address a number of people-related issues including labour saving ideas and employing people.

A one day workshop “Training the Employer” is planned for the Greenfield Dairy Farm Kilkenny on 18 October 2017.

Our dairy advisers continue to facilitate discussions around health and safety – including work organisation - at our dairy discussion groups and will facilitate a one-to-one discussion on work organisation/ health and safety as part of the Dairy KT Groups programme.

Teagasc has recently developed a report “People in Dairy” which highlights the changing structure of Irish dairying and outlines six strategic actions required by the industry to tackle the people challenge.

Action 78: Develop targeted extension campaigns on financial fitness dealing with volatility management, business planning and investment planning.

Action commenced and progressing

Updates delivered to Teagasc advisors regarding the new SBCI Cash Flow Support initiative.

Training course for advisors being developed in the area of financial management.

Proposal prepared for a PhD study on farmer financial literacy and the development of farmer financial courses.

Action 79: Further development of simple software tools to support financial and business planning at farm level to encourage uptake in usage of these tools which support budgeting, viability and financial decision making at farm level.

Action commenced and progressing

Training provided for staff involved in certifying completion of My Farm My Plan workbook. This certification will allow farmers to avail of the following tax reliefs:

1. Stock Relief for Young Trained Farmers.
2. Young Trained Farmer Stamp Duty Relief.
3. Succession Farm Partnership Tax Credit.to avail of the three new tax reliefs.

Teagasc Profit Monitor training provided to 80 private consultants that will enable them to deliver Profit Monitor reports to their clients.

Action 80: Teagasc to continue to develop its 'Options Plus' programme for improving off-farm income generation of farmers and to link farm families with the variety of learning opportunities provided by other agencies including the ETBs, LEOs, LDCs, third level institutions and Social Welfare including the development of a communication tool which contains a calendar of skills training opportunities on a regional basis.

Action commenced and progressing

Expand Your Horizons meetings completed in 28 locations around the country in conjunction with the National Rural Network to promote the diversification options and possible Leader funds available to farmers.

Action 81: Teagasc to establish a pig farm manager course.

Substantial action undertaken and ongoing

Modules now approved by QQI. It is hoped to start the pig managers' course in September 2017. Course content for each module needs to be developed in the coming months.

Action 82: Consider the development of a Poultry advisory and research service, in partnership with industry to support poultry farm management.

Action commenced and progressing

Teagasc is currently engaged in filling an advisory vacancy in Cavan with a person who has competence in poultry. It is expected that this adviser will be available to poultry farmers in Cavan and Monaghan and will also deliver a poultry module in Ballyhaise College.

Action 83: Enhance hill farming systems by promoting greater integration with lowlands sheep producers through the formation of joint hill/lowland knowledge transfer groups.

Action commenced and progressing

Knowledge Transfer Programme ongoing.

Action 84: Launch a knowledge transfer measure with an emphasis on promoting and developing the use of Integrated Pest Management principles in the tillage and horticultural sectors.

Target Achieved.

The KT Tillage scheme includes a IPM survey of participants with a view to promoting the associated principles within the sector. IPM is also a suggested meeting topic.

Action 85: Establish knowledge transfer groups for malting barley growers.

Target Achieved.

Facilitators from the malting barley sector have been approved to run KT Tillage Groups. The KT Tillage scheme provides for applications from malting barley growers.

Action 86: Teagasc to develop a Technology Outreach Service to support rural-based agri-professionals in delivering services to farmers.

Action commenced and progressing

284 companies from across the agri-food sector and supporting professions are members of Teagasc ConnectEd. 1,700 training places were provided to industry via the ConnectEd Programme during 2016.

The ConnectEd Programme has delivered advisory skills training to over 100 advisers through the CECRA Training Programme. The programme also supported the training of over 450 KT facilitators in farm health and safety.

Action 87: Request the Expert Group on Future Skills for Industry update the report on Future Skills Needs in the Food and Drinks sector at management, financial, innovation and operational levels.

Target achieved.

The report was launched jointly by the Ministers of Jobs, Enterprise & Innovation and Agriculture, Food and the Marine in April 2017. The report is available at:

<http://www.skillsireland.ie/Publications/2017/Update-on-Future-Skills-Needs-in-the-Food-and-Drink-Sector-2017.pdf>

Action 88: DAFM, through its research funding programmes (Stimulus, FIRM and CoFoRD), to

continue to support the development of the new thought and technology leaders for the agri-food sector through supporting agri-food Masters and PhD students on suitable scientific and impactful research projects.

Substantial action undertaken and ongoing

It is planned that the next DAFM Research Call will provide further substantial funding towards the achievement of this goal to build on the direct employment for 83 post graduate research opportunities in the form of PhDs (66) and Masters degrees (17) that will arise from the 43 projects funded in the 2016 Call Awards.

Action 89: The DAFM funded Agri-Food Graduate Development Programme to be used as a platform to develop a model to deliver continuous professional development to graduates in agri-food companies through short themed modular courses and work placed Masters and PhD programmes.

Substantial action undertaken and ongoing

A training module in Next Generation Food Formulation was planned by the Agri-Food Graduate Development Programme in quarter 1 to progress young researchers' expertise in this area. Registration opened in quarter 2 for a further four new modules in the Agri-Food Graduate Development Programme that will launch in the second half of 2017.

Action 90: To ensure food clients have the essential capabilities and capacity in place to support ambitious international growth strategies Enterprise Ireland will continue to develop customised management programmes around key themes of Leadership and Management Development, Operational and Manufacturing development capacity, International Sales and Marketing, Innovation and Entrepreneur Development, to inspire ambitious business leaders and equip them with the tools and techniques to grow their businesses. These programmes include Leadership for Growth, Innovation for Growth, Platform for Growth, Business Processing Offer, Foodworks and Competitiveness Improvement Programme.

Action commenced and progressing

L4G – CEO Leadership Development – the IESE programme has completed its third module in New York. The Insights Day for Senior Management teams took place in March 2017 and the programme finale and submission of company's growth plans took place in April. Third module is closed and the programme has had its finale. Now recruiting for a new programme to take place in September.

In place of **P4G**;

The update for the new DCU Management Team Programme is:

- Recruitment with sectors commencing in mid Feb.

- DCU to showcase programme benefits to EI Das in mid-March.
- Application process will open in early March and close by end of March.
- Assignment of places on first programme in April.
- Programme 1 launches on 10th May.

A second programme will launch in October-November 2017 with a third programme launching in March-April 2018.

Foodworks: The most recent iteration of the Foodworks Programme finished in January 2017.

In February we commenced introductory meetings for the next iteration. For the next few months, we will invite all interested companies to an introductory meeting with the agencies. Following this, the formal application process will open. Eligible candidates will be chosen to attend a boot-camp, from which a number will be invited to be on the programme, kicking-off later in the year.

International Selling Programme: In January 2017 there was 1 module: Culture & Negotiation and a Cohort Group Meeting

In February there were 2 modules: Digital Business Strategy and Presentation frameworks

In March there was a meet the buyer simulation day – 9 March and three modules on personal resilience, Lead Generation and Finance.

Further modules will be held in April and May and recruitment for the next programme will commence later in the year.

Brexit: Brexit continues to feature as a high priority in the design and delivery of all leadership and management development programmes including L4G, ISP, I4G and P4G.

Attracting and retaining talent programme: One successfully completed, three food companies participated. A second intake took place in June.

Another intake of ISP will take place in quarter 3 2017. Recruitment will take place in summer 2017.

Action 91: Enterprise Ireland to develop a portfolio of business-focused executive development programmes in partnership with the third level sector which include a focus on building specialist business and leadership capability at middle-management level in order to support the development and retention of future leaders within the agri-food sector.

Action commenced and progressing

The middle management need is being responded to via the new DCU management team programme for EI client SMEs with the first of multiple programmes launched in May 2017.

Go Global 4 Growth (has replaced P4G) launched its first iteration on the 10 May 2017 in DCU. 20 client companies/60 C level managers participated representing all sectors. Four food

companies/12 C Managers participating. Another programme will launch in October 2017.

Action 92: Enterprise Ireland to develop Leadership for Growth (L4G) Alumni Master Classes that are tailored to address the need of clients.

Action commenced and progressing

Stanford did not progress with the alumni event. L4G Alumni participated in an Enterprise Ireland SME community members event in December 2016. Enterprise Ireland are currently scoping out an L4G refresher for L4G alumni.

Action 93: Enterprise Ireland will promote and develop Gradhub's Graduate Business Growth Initiative (Graduate Placement) to assist indigenous food and drink SMEs to scale and grow their businesses through the introduction of graduate talent.

Action commenced and progressing

No approvals registered to date.

Action 94: To increase innovation capability and absorption capacity across the sector Enterprise Ireland, in association with the relevant research institutions will design and develop a Food Innovation Fellowship programme to increase and embed technical capability within food companies.

Action commenced and progressing

Enterprise Ireland have reviewed DIT's food science and nutrition programmes, engaged with their senior food team, discussed work placement opportunities and next step is to follow up with EI's Client Management Development Division.

Action 95: Enterprise Ireland's Innovation 4 Growth programme will support companies to implement innovation practices, processes and culture with a focus on market led innovation.

Action commenced and progressing

Phase III of the second programme iteration is now closed. Enterprise Ireland are reflecting on this action.

Action 96: Expansion of the competency and professional development of small businesses through the evolution and strengthening of structured platforms such as Food Academy, Food Works, Vantage.

Action commenced and progressing

Food Works is currently in the process of recruiting for the 5th iteration of the programme. The Food Works team (Enterprise Ireland, Bord Bia and Teagasc) endeavors to meet all eligible

companies prior to the formal application process opening in June 2017 (44 companies met so far), with Introductory Meetings being held in Dublin, Shannon, Dundalk, Galway and Cork. Following an industry led selection process in September, the programme will commence in October 2017.

Action 97: Teagasc will develop an industry-based Walsh Fellowship Postgraduate scheme to enhance the scientific absorption capacity of the food SME sector.

Action at commencement stage

Action has not progressed due to resource constraints.

Action 98: Industry to explore formal opportunities to transfer learnings from food and drink production to new sector entrants via mentoring, training and skills transfer by Industry, Skillnets, universities, schools and Agri Aware.

Substantial action undertaken and ongoing

Refer to Action 87.

Action 99: Enterprise Ireland and Bord Iascaigh Mhara (BIM) to continue to develop a series of tailored executive development programmes in the Seafood sector to prioritise leadership and management development, technical development (including safety and green manufacturing), and sales and marketing.

Action commenced and progressing

As part of the broader Seafood Industry Future Skills & Training Roadmap, BIM is investigating potential demand, content and delivery model for executive development programmes for the seafood sector.

This may include partnerships with Enterprise Ireland, Bord Bia, UCD Smurfit School of Business and leading domestic and internal service providers in this sector. Options include utilising existing successful programmes and tailoring these to the seafood sector. This will also enable the seafood sector to benefit from cross sectoral learning. Potential options being reviewed include three distinct tiers as follows:

a) Technical and Professional Training

BIM's will design and deliver additional industry relevant, sector specific, technical and professional training programmes and supports that address emerging priorities in key areas including business, leadership, marketing, health & safety etc.

b) Executive Development

An executive development programme will provide the platform to develop and nurture senior management and those who wish to progress their careers in the industry.

c) Future Leaders

The future leaders programme is aimed at those who clearly demonstrate their ability to be future leaders – with vision and are passionate about the industry. High caliber individuals with strong leadership skills and entrepreneurial spirit.

BIM will continue to develop this project and potential delivery models to upskill the sector.

During quarter 2 2017, BIM completed a comprehensive review of its training programmes and supports as provided to the seafood sector.

The process included an assessment of international marine related training and a thorough review of industry's needs. The review encompassed the entire pipeline of talent – from new entrants to those already working in the industry.

Following this review process, 16 new training programmes, two new traineeships, two new apprenticeship programmes and two new cadetship programmes have been proposed with a recommendation that all BIM's current training provision be accredited to nationally recognised standards.

As part of this suite, an Executive Development and Future Leaders Programme will provide relevant mentoring and supports to senior management and CEOs. The aim of this programme is to assist in the development of world class, sustainable and competitive businesses.

An implementation plan will be put in place following the eminent approval of the draft report on the outcome of the review.

Action 100: Greater capacity must be developed around marketing and branding with a focus on increasing the number of international marketing graduates employed in the sector. Explore opportunities for industry co-funding/sponsorship to significantly increase these resources on the ground and extend the sector's market reach.

Substantial action undertaken and ongoing

Recruitment for the 9th cohort of Marketing Fellows and third group of Origin Green Ambassadors was completed in late April 2017. The Marketing Fellows commenced the programme in early June with the new group of Origin Green Ambassadors due to start in late summer.

The final structure for the Market Placement Programme, which will see experienced graduates placed in the operations teams of key customers, is being finalised with a view to recruitment commencing in July.

The duration of the Marketing Fellowship programme is changing and is increasing from 12 to 18 months with the number of client assignments being reduced from four to three. This will help increase the benefit delivered by the Fellows to client companies and allow the Fellows to gain

stronger commercial experience to ensure a strong retention rate in the sector after completion of the programme.

Action 101: Continue to build on the Bord Bia 'Marketing Fellowship' and 'Food Marketing Graduate' programmes to deliver high quality talent to the food industry.

Substantial action undertaken and ongoing

The retention rates for both the Marketing Fellows and Food Marketing Graduates in the food sector following completion of their studies remains high at around 80%.

Changes in the structure and duration of the Fellowship programme aim to ensure that graduates offer real skills that can help client companies grow their export business.

Action 102: Build on the Origin Green Ambassador programme to engage with targeted customers to build awareness and understanding of Ireland and the Origin Green programme.

Substantial action undertaken and ongoing

The recruitment of the third cohort of Origin Green Ambassadors was completed in late April 2017 with the 'new' ambassadors commencing the 23 month programme in late summer.

The programme continues to be successful in building strong relationships with key organisations globally around the issue of sustainability and has established Ireland as a thought leader in this area. To date Ambassadors have been placed with over 30 organisations across the globe.

Action 103: Communicate benefits of working in the food and drink industry throughout school, undergraduate and postgraduate programmes.

Substantial action undertaken and ongoing

Bord Bia's communication programme through our third level partners and its social media networks continues on an ongoing basis to inform students of the opportunities to build a career in the agri-food sector. To date this year, Bord Bia has taken part in the following events:

- Annual Agricultural Science Careers Day in the UCD School of Agriculture, which was attended by over 200 students
- Agri-food careers day organised by the Irish Farmers Journal, which had an attendance of almost 1,000.
- Agricultural Science Association career evening, which was attended by more than 120 members.

Action 104: Bord Bia to establish a Market Placement programme which assigns Irish graduates to global target customers. The programme will create a group of graduates skilled in best practice which they will bring back to Irish industry upon their return. The placement will also serve to raise

awareness and understanding amongst host companies of Ireland and its industry capabilities.

Action commenced and progressing

Engagement with key target customers and client companies continued in quarter 1 to gauge interest levels. Securing buy-in from customers is the main challenge facing the proposed programme. A series of meetings with key targets will be completed by the end of April.

The final structure for the Market Placement Programme, which will see experienced graduates placed in the operations teams of key customers, is being finalised with a view to recruitment commencing in July. It is hoped that participants will commence the programme during quarter 3.

Action 105: Enterprise Ireland and Bord Bia to collaborate with industry on the development of a pilot support programme for agri-food companies to support overseas business development initiatives.

Action commenced and progressing

Four Market Access Grants were approved to date and one further project in the pipeline for approval.

Action 106: BIM to build market scaling of companies through its co-opetition programme

Action commenced and progressing

BIM'S Scaling and New Market Development Scheme has been relaunched with a vision to enable Collectives to invest in market development and through incentivised market penetration to become self-financing.

The China Council collectives met on 15 February 2017 to:

- Review the market potential in China for Dublin Bay Prawns identifying USP'S and a premium market position.
- Evaluate the findings to identify the optimal cooking process for once cooked crab to create a consistency in the process that will allow a standardisation of the cooked offering.

BIM's specialist panel of advisers established in late 2016 has been further developed to include Deloitte in quarter 2 2017. Deloitte will provide business expertise in relation to the Brexit challenge. The panel's advisers enable companies to explore the area of Mergers & Acquisitions and joint-ventures.

Under BIM'S Scaling and New Market Development Scheme we are working with seafood collectives in the areas of synergies in market intelligence, logistics and commercial structures in the Chinese market. BIM'S scheme was relaunched in early 2017 with a vision to enable

‘Collectives’ to invest in market development and to become self-financing through incentivised market penetration.

Action 107: DAFM, Teagasc and the Health and Safety Authority to continue to support educational initiatives supporting behavioural change at farm level in respect of safety in particular as part of knowledge transfer groups and level 6 (green cert) education.

Action commenced and progressing

Training of KT group facilitators on farm Safety commenced in March 2017. This will enable farmers to complete the Farm Safety element of the farm Improvement Plan. Revised Second Level Agriculture Curriculum has been completed which now includes a module on Farm Safety.

Training of KT Group facilitators on farm safety was completed on 22 May 2017. All farmers can now complete the Farm Safety element of the Farm Improvement Plan by the end of July 2017. The Farm Safety element in the green cert (level 6) has been updated as part of the overall revision and the revised curriculum is due to commence in September 2017.

Action 108: Engineered solutions to safety, such as those available under the Farm Safety scheme, to remain a priority in grant aided investment programmes, where available.

Substantial action undertaken and ongoing

The sixth tranche of the Animal Welfare, Safety and Storage Scheme closed on 7 April 2017 with 1,089 applications made under this tranche. Issuing of approvals is occurring under the first 5 tranches. The range of safety items has been increased to include tyre inflation cages and wheel changing crates.

Action 109: BIM to provide an enhanced programme of training for crew of fishing vessels with a strong focus on safety at sea.

Action commenced and progressing

No update as BIM are in ongoing discussions with the MSO and DTTAS.

BIM issued 66 Personal Flotation Devices (with Personal Locator Beacons) to Irish registered fishing vessel owners, skippers and crew members during quarter 2 2017.

Action 110: Bord Bia to implement the undergraduate Language Bursary Programme to improve the language proficiency of graduates coming from degree programmes strategically important to the food and drink industry such as Agricultural Science, Food and Nutritional Sciences and Food Marketing and Entrepreneurship.

Substantial action undertaken and ongoing

Bord Bia is partnering with the Agricultural Science Association to roll out a joint promotional programme for a revised Language Bursary programme. The revised programme will be rolled out with the UCD School of Agriculture for the 2017/18 academic year.

Action 111: Consider better engagement with existing young Irish diaspora living in foreign markets as a potential source for recruiting talent and skills through better harnessing of networks and data from Irish Embassy networks.

Action commenced and progressing

DAFM attended an Interdepartmental meeting on 30 March 2017, chaired by the Minister for Diaspora Affairs. DAFM are also looking at having this issue progressed in the context of DFAT's proposed strengthening of Embassy input to trade-related activities in the context of Brexit.

Action 112: Processors should prioritise the development of fixed price contract arrangements and other volatility management tools for their suppliers to mitigate against the impacts of price volatility on both producers and processors.

Action commenced and progressing

DAFM has ensured that measures are in place to help alleviate the pressures of income volatility:

- Direct payments, estimated by Teagasc at an average of over €17,000 per farm, provide a valuable source of farm income support and act as a hedge against price volatility.
- The adjustment in Budget 2017 to the income averaging scheme for tax purposes will allow farmers to avail of an opt-out in an exceptional year.
- The 'Agriculture Cashflow Support Loan Scheme', developed by DAFM in cooperation with the Strategic Bank Corporation of Ireland (SBCI), make €150 million available to farmers throughout Ireland at low-cost interest rates of 2.95%. This is supported by €25 million being provided by DAFM, including €11 million in EU aid.

Glanbia, in association with their partners (including ISIF), have launched their 'MilkFlex Fund'. This is an innovative loan product for milk suppliers with loan repayments which can vary according to movements in milk price, helping protect farm incomes from the impact of dairy market volatility.

Action 114: DAFM and industry to progress development of producer organisations in beef and horticulture sectors.

Action commenced and progressing

There are currently two PO's operating within the Horticulture sector representing over 30% of farm gate output (excluding potatoes). DAFM held a successful Horticulture stakeholder consultation meeting in April, with representatives from EU commission, Teagasc, Bord Bia, IFA, Producers Organisations and growers in attendance. The purpose of the meeting was to inform and

guide stakeholders in the development of their submissions on a new National strategy for sustainable operational programmes in the Fruit and Vegetable sector. Ongoing engagement with stakeholders is continuing with a New National Strategy and Environmental Framework to be place by the autumn.

Action 115: DAFM and industry to explore mechanisms to improve transparency around pricing and costs.

Action commenced and progressing

The December Agriculture Council requested the Commission to undertake an impact assessment with a view to proposing an EU legislative framework or other non-legislative measures to address Unfair Trading Practices. This followed an examination of the DGAGRI Market Task Force report. The majority of MS favored legal action. The High Level Forum on the food chain met in December and set a work agenda for a Sherpa group on 6 March 2017.

The Commission provided an update to the Sherpa group on 20 June 2017.

Action 116: DAFM to review the possibility of developing a mechanism to minimise risk for processors and give farmers confidence regarding price including possible mutual funds such as a reinsurance scheme.

Substantial action undertaken and ongoing

The Minister for Agriculture, Food and the Marine announced, as part of Budget 2017, a “three pillar strategy” to alleviate the pressures of income volatility through:

- Lower Cost Finance (see Action 127).
- Tax Measures (see Action 117).
- Farm Payments: Rural Development Programme spending of €601 million in 2017, including a new €25 million sheep welfare scheme and increased participation in GLAS, BDGP & TAMS. This is on top of €1.2 billion paid through the Basic Payments Scheme.

Action 117: The Agri-taxation Working Group to continue to examine and consider new actions which will help deliver:

- Increased land mobility and productive use of land.
- Improved farm succession including intergenerational partnerships.
- On wider agriculture policies and schemes, such as supporting investment to assist new entrant young trained farmers, environmental sustainability, on-farm renewables, alternative farming models such as farm partnerships, leasing, contract farming and responses to increasing income volatility.
- Scope for an energy efficient SEAI scheme for non-incorporated farm businesses.

- Assistance to farmers to deal with the consequences of price volatility such as income averaging.

Substantial action undertaken and ongoing

The Finance Act 2016 delivered the agri-taxation measures announced in Budget 2017, which are now operational.

The Succession Farm Partnership Scheme was launched on 1 June 2017 and is now open for registration.

Action 118: Department of Finance and DAFM to improve dissemination of information on taxation incentives including engagement with advisors, tax consultants and accountants.

Substantial action undertaken and ongoing

The Department continues to work with Teagasc, professional bodies and representative bodies on raising awareness of taxation measures.

Action 119: DAFM and Department of Finance to undertake a review of capital, taxation and other incentives available to the seafood sector and to make initial recommendations by end 2015.

Target Achieved.

The Marine Taxation Review was completed and published with Budget 2016. The Finance Act 2016 introduced the “Fisher tax credit” of €1,270, which is now available to those actively working on sea-fishing as employees, owner-operators or in a share-fisher capacity. It is similar to the seafarers’ tax allowance available to other maritime sectors. It is designed to assist in attracting and retaining essential crew and delivers on the commitment to support jobs in rural communities.

Action 121: DAFM should continue to take account of formally recognised collaborative farming arrangements in the design and implementation of its schemes and supports to ensure individuals are not disadvantaged by participating in these models of farming.

Substantial action undertaken and ongoing

At the end of quarter 2 2017, there are 1,750 registered farm partnerships. The Succession Farm Partnership register has been established. Communication between the farm partnership division and scheme payment divisions is ongoing to mitigate against the risk of anomalies on payments under other schemes.

Action 122: Explore greater use of joint approaches with DAFM, Teagasc, industry and professional stakeholders in engaging with the farming community to embrace longer-term leasing and collaborative farming arrangements to help resolve land mobility challenges.

Substantial action undertaken and ongoing

The Succession Farm Partnership Scheme was launched on 1 June and is now open for registration.

Action 123: Improve the use of genomic technologies and better breeding to improve the sustainability of the National herd, including by:

- Increasing the level of data recording at farm level.
- Increasing the use of breeding indices in purchase decisions.
- Increasing the level of genotyping across the national herd to allow for robust, genomics based breeding indexes.
- Application of commercially focused breeding indices and sexed semen to increase the beef characteristics of the increased output from the dairy herd and thereby ensuring these animals best meet market specifications.

Substantial action undertaken and ongoing

The BDGP was re-opened in April 2017 for new applicants who are not currently within the BDGP. The scheme will be called BDGP II and will run for six years. The actions required will be the same as in BDGP but with the Training and Carbon Navigator elements being brought forward to year one. Payments also continue to be made for BDGP.

Action 124: Teagasc and other research providers to develop measures such as improved grazing management practices, increase soil fertility and sward renewal to increase grass utilisation by 2t/ha on livestock farms.

Action commenced and progressing

Teagasc Grass10 campaign was launched in January 2017. It is a new initiative to increase grass production and utilisation across grassland farms in Ireland. A campaign manager has been recruited. This is a four year grassland utilisation campaign and is backed by DAFM and other stakeholders.

Action 125: Teagasc, other research bodies and industry to develop the use of precision technologies applicable to pasture based production.

Action commenced and progressing

Teagasc has worked on the grasshopper, which is now compatible with PastureBase Ireland. PastureBase Ireland can now be accessed by phone when completing grass covers. A Twitter feed from PBI is ensuring grass DM is being communicated to the grassland industry daily. The Grass Q project is endeavouring to measure grass DM and crude protein *in situ* in the field.

Action 126: BIM to bring forward strategies/programmes to address irregularity in the supply of seed mussels into the bottom grown mussel sector. Continued research into the development of

indicators for HNV farming that would allow targeted support for such farming systems.

Action commenced and progressing

Due to bad weather and slower than expected growth rates it was not possible to harvest the stock mussel which had been transplanted. It has still not been possible to gather all of the required growth data associated with the transplantation trial. It is anticipated that this process will be completed by end quarter 3 2017 and the report will be forthcoming at that point in time.

Action 127: DAFM will continue to explore additional innovative funding mechanisms and financial instruments, specific to the Agri-food sector, to complement existing mechanisms such as ISIF, SBCI and EIB, with a view to improving further competition in relation to credit provision. Appropriate delivery and distribution mechanisms will be considered including the potential for a dedicated Agri-food sector fund.

Substantial action undertaken and ongoing

The Agriculture Cashflow Support Loan Scheme, developed by DAFM in co-operation with the Strategic Banking Corporation of Ireland (SBCI), makes €150 million available to farmers at interest rates of 2.95%. The Scheme was launched on 31 January 2017 and provides farmers with a low cost, flexible source of working capital, allowing them to pay down more expensive forms of short-term debt, ensuring the ongoing financial sustainability of viable farming enterprises. The SBCI has reported that €60.2m has been drawn down by farmers to the end of April. The banks advise that all of the remaining €150m is committed and is in the process of being drawn down.

The 'Financial Instruments' (FIs) ex-ante assessment is close to completion.

Action 128: DAFM to encourage the EU Commission to review State Aid Regulations in the context of the development potential of the Irish agri-food sector and the sector's strategic importance to the Irish economy.

Substantial action undertaken and ongoing

The Agriculture Cashflow Support Loan Scheme, launched in January 2017 by Minister Creed, has been fully subscribed. Regular and ongoing communication is maintained by DAFM with the Commission on all State Aid matters.

Action 129: In the light of its current fragmented structure and low financial capacity, EI and BIM to develop a financial model for seafood sector which provides funding opportunities that both increase scale and deliver commercial return. These will be tailored to meet the specific needs of the seafood sector.

Action commenced and progressing

BIM is working with DAFM have increased the funding available to companies and the flexibility of

the Capital investment scheme to better address the requirement of small-medium sized projects.

In relation to larger projects for SMEs and larger Seafood enterprises; BIM are supporting the development of financial instruments which will reduce the risk and financial cost of new investments in the region of €10 million plus. It is envisaged that the Strategic Investment Fund (ISF) will be the agent for routing financial instruments.

Action 130: Industry to consider how best to optimise use of the processor asset base and all forms of rationalisation including possibilities for collaboration in processing, joint ventures, product specialisation.

Action at commencement stage

Refer to Actions 140 and 156.

Action 131: To drive entrepreneurship, Enterprise Ireland will create a new funding offer to incentivise a small number of scalable food and beverage start-ups.

Action commenced and progressing

There are two project approved feasibilities to date as at 23 May 2017.

Action 132: To develop scale Enterprise Ireland will develop a new client engagement model that is focussed on scaling ambitious companies. This model will be: company-led, focussed on the leadership team, benchmarked against best-practice, to indicate key areas of focus, and will be implementation focussed, with advisers, mentors and peers working together.

Action commenced and progressing

The programme has been positioned with 20 companies:

- 13 diagnostics are complete.
- Three diagnostic are scheduled and we are waiting for two companies to revert with dates.
- Two more companies will undertake diagnostics in quarter one in 2017.
- Growth plans are still a draft part of the process to be finalised fully by end of quarter 2 for all diagnostics complete.

The prepared consumer foods team has completed 17 diagnostics and undertook the first diagnostic with a large company recently. The team is progressing through the actions with the companies and are collaborating with Bord Bia on the sales and marketing actions arising.

Action 133: Enterprise Ireland will continue to develop customised management development

programmes to develop in-company capability to ensure that they have the Leadership, Management and operational skills to capitalise on growth opportunities and scale internationally.

Action commenced and progressing

Five key persons approved for five food companies as of 23 May 2017.

Action 134: EI will continue to work with Development Capital Funds/Banks/Alternative sources of finance to ensure that scaling businesses are adequately funded.

Action commenced and progressing

EI has continued to develop relationships with a number of equity and debt providers to ensure that its clients can access the capital they require to fund their growth. Specifically:

- EI's Banking relations and growth Capital team continue its Finance for Growth programme which aims to increase the capability of SMES to access the finance they require. In 2016 over 1,000 SMEs attended these workshops.
- Enterprise Ireland continued to work the Independent Financial Providers of Ireland which is a newly established umbrella group for alternate debt providers. The Independent Finance Providers Ireland (IFPI) is a group that was established to promote and represent providers of finance to Irish businesses that are not already part of the domestic banking industry. IFPI members all have a presence in Ireland and are currently operating in the market.
- In addition, Enterprise Ireland has continued to work with the three Development Capital funds. To end of 2016, €175m was invested into established companies with strong growth potential.
- EI met with ISIF recently to discuss funding opportunities for the food sector.

Action 135: To develop scale and export capability in the seafood processing sector, BIM, Bord Bia and EI to work collaboratively to scale up companies in the pelagic, whitefish and shellfish sectors and to bring a number of companies to PLC level.

Action commenced and progressing

The second round of applications under the modified Capital Investment Scheme is due in quarter 2 2017.

The Scheme was modified by BIM in early 2017 to allow for bi-monthly investment calls to better suit industry's financial requirements.

Action 136: DAFM and industry to pursue solutions to cost competitiveness issues for Irish Agri-food sector specifically energy, waste, regulatory costs, in National Competitiveness Council.

Substantial action undertaken and ongoing

DAFM senior personnel attend NCC meetings. DAFM engage with NCC on cost competitiveness

issues associated with the agri-food sector.

Action 137: To build competitiveness Enterprise Ireland will continue to promote and develop the Lean Business offer to help agri-food companies to adopt world class manufacturing standards and to drive productivity growth through skill development and Lean re- engineering.

Action commenced and progressing

As of 23 May 2017: three Lean starts approved, eight LEAN plus approved and one LEAN Transform approved.

Action 138: Enterprise Ireland to promote its competitive fund for SMEs to support a strategic initiative focusing on capital and technology acquisition leading to productivity and competitiveness.

Action commenced and progressing

One company approved to date in 2017, seven applications under evaluation.

Action 139: EI and IDA will cooperate to target a select number of multinational clients for large mobile investments.

Action commenced and progressing

Currently being reviewed by EI Austin Office with IDA USA.

Action 140: EI to explore FDI opportunities via partnerships and Joint Venture approaches between Irish processors and MNCs in particular in areas such as life-stage nutrition

Action commenced and progressing

FDI/R&D event China February 2017. Ireland Dairy *Nutrition R&D and Investment Seminars* planned for China-Shanghai, Beijing, target audience 150 Dairy & Nutritional companies.

R&D seminars in China have been completed with very strong feedback from Irish participants and research community.

Minister DJEI participated in a Chicago Food Innovation lunch in March with the Agricultural Counselor (Washington DC), APC and UCD Food Science Department. Fifty attendees from USA/Irish Food & food science industry attended.

The FDI team participated on the Bord Bia stand at Boston Seafood show in March and presented at the Department of Agriculture Dairy seminar on Food FDI, EI supports for Dairy Industry.

Significant FDI and Agtech meetings / events added to Saudi and UAE Trade Mission by Minister Creed in early March, EI FDI participated on Bord Bia stand at Gulf Food in Dubai.

El met with TINE in Stavanger Norway in March 2017 to advance discussions on proposed Jarlsberg Manufacturing Project for Cork

In April 2017, Enterprise Ireland and Food Drink Ireland (FDI) welcomed the visit of the board of FoodDrinkEurope, the EU organisation for the food and drink industry, to Dublin. The meeting of top European agri-food CEOs, followed an invitation by Enterprise Ireland. The two-day itinerary includes meetings with An Taoiseach, Minister for Jobs, Enterprise and Innovation and Minister for Agriculture, Food and Marine, as well as with the leaders of many Irish and global food companies and food R&D organisations.

Action 141: DAFM, as part of interdepartmental and stakeholder initiatives such as the National Competitiveness Council, to promote the need to develop rural broadband, port, road and airport infrastructure development.

Substantial action undertaken and ongoing

Refer to Action 136.

Action 142: Industry to conduct a study into improving transportation and logistics links with the UK market for Irish Agri-Food and beverage companies to identify opportunities to increase supply chain efficiency and reduce costs.

Action commenced and progressing

Brief for economic study drafted and submitted to Prepared Consumer Foods Council for approval.

Prepared Consumer Foods Council has established a Brexit Taskforce which will review the economic study brief and other impacts of Brexit including trade transit and facilitation.

Action 143: Teagasc 'Options' programme to continue to support on-farm diversification measures and programme impacts to be monitored and measured.

Action commenced and progressing

Plan to run Options courses for farmers in autumn 2017 in locations around the country.

Action 144: DAFM to roll out female entrepreneur development programme.

Target achieved (Year one).

Action 145: To complement the current Marine Leisure and Tourism schemes, DAFM in conjunction with stakeholders to develop an agri-food tourism measure with an emphasis on food, beverage and eco-trails pairings.

Action commenced and progressing

A provisional allocation of €500,000 to agri-food tourism schemes in rural areas has been suggested for 2017 from the overall budget allocation of €1.5m for the Rural Innovation and Development Fund (RIDF) under the CEDRA process. The RIDF (CEDRA) scheme 2017 proposals by DAFM were approved in quarter 2 2017. The Request for Tenders (RFT) is in preparation and it is intended that procurement of these services via the RFT will now take place in early quarter 3 2017.

The agri-food element of the RIDF is intended to focus on longer-term, wider impacting proposals, such as business and skills training, network development, initiation and development of inter-county agri-food tourism schemes/trails and especially those schemes that are linked to existing or developing local authority tourism/agri strategies. The fund will be managed through Local Authorities (LA) and Local Enterprise Offices (LEO).

Further information and/or documentation is available on request from Economics and Planning Division in the Department.

Action 146: DAFM, Bord Bia and EI to explore synergies and priorities for the deployment of human resources in specific markets, including possibilities for relocation, new posts and new offices based on market prioritisation which considers growth possibilities, consumer insights, political stability of regions/countries and the market access regulatory environment.

Action commenced and progressing

A competition for attaché positions in London and Paris was concluded in early June 2017. The successful candidates will be in situ from September.

Three Bord Bia market advisors have been appointed in Africa (one in North, West and South Africa) to act as Bord Bia's representatives in the region. This is part of a wider Bord Bia review of market resources.

EI are exploring possible opportunities in South America and the Middle East.

There are regular meetings and communications between DAFM, Bord Bia and Enterprise Ireland. Bord Bia and Enterprise Ireland interact with the relevant Irish embassies to assist food client companies in overseas markets.

Action 147: DAFM and agri-food state agencies to enhance linkages with other government agencies including Department of Foreign Affairs and Trade embassy network, IDA, DJEI – Tourism Ireland and leverage the resources in these agencies to support the Irish agri-food sector in accessing new markets.

Substantial action undertaken and ongoing

DAFM continues to liaise with DFAT, most recently at Export Trade Council meetings in February and June 2017. DAFM participated in the International Trade and Co-Ordination meeting in May

2017, which focused on Brexit. DAFM assisted in the arrangements of several high level inwards visits, including Chinese Minister Zhi Shuping and his officials in April. There is regular contact with DJEI through the weekly TPC meetings. DAFM also utilised their strong ties with Irish Embassies abroad in arranging the Trade Mission to the Gulf States in March and to the USA and Mexico in June.

Action 148: DAFM to review and assess the assignment of Agri-food Attaché posts in the context of supporting industry trade development opportunities and priorities.

Substantial action undertaken and ongoing

A competition for attaché positions in London and Paris was concluded in early June 2017. The successful candidates will be in situ from September.

Action 149: Bord Bia to increase market presence in emerging markets with particular focus on Asian and African countries.

Substantial action undertaken and ongoing

A review of resources in Asia and Africa was completed during the first quarter to feed into the development of a business case for additional resources in these regions.

Updated strategies are being finalised for both regions, which among other things will focus on the resource needs to help optimise Bord Bia activities in both regions to help drive growth in exports. Three market advisors have been appointed in Africa (one in North, West and South Africa) to act as Bord Bia's representatives in the region. This is part of a wider Bord Bia review of market resources.

Action 150: Bord Bia to continue to build Ireland's reputation and raise the awareness of Ireland with key customers globally through the Origin Green Ambassador and Market Placement programmes.

Substantial action undertaken and ongoing

Since the start of the Origin Green Ambassador programme placements have been completed with more than 25 leading food and drink companies and thought leading organisations across the globe. This has been instrumental in building the reputation of the Irish food and drink sector and securing last relationships with such leading organisations.

The programme continues to be successful in building strong relationships with key organisations globally around the issue of sustainability and has established Ireland as a thought leader in this area. To date, Origin Green Ambassadors have been placed with over 30 organisations across the globe.

Action 151: Establish mechanisms to support market prioritisation strategies and market decision making through provision of consumer insights in specific regional and country markets including by exploring the feasibility of establishing a Centre for Consumer Insights.

Substantial action undertaken and ongoing

Consumer insight studies have been completed in Iran and India.

An agency has been appointed in the Kingdom of Saudi Arabia to undertake fieldwork in July. Bord Bia also undertook ethnographic research on Irish pigmeat in Japan in April 2017.

Action 152: Bord Bia to continue to invest in innovative buyer contact initiatives and inward buyer visits across all existing markets and introduce into emerging markets.

Substantial action undertaken and ongoing

Ongoing focus across all market teams.

Bord Bia ran six inward buyer events from existing markets and a few from the emerging markets in quarter 2. Because of the distances involved the latter tend to be longer projects which further adds to the cost of undertaking them.

Action 154: Bord Bia to enhance its lead generation programme across all regions to deliver market and business prospects.

Substantial action undertaken and ongoing

Ongoing focus across exciting and new market teams.

Bord Bia continued to implement lead generating presentations on behalf of individual Irish food companies across all markets in which it has representation.

Action 155: DAFM to optimise the use of strategic trade missions to emerging markets to ensure market entry conversion.

Substantial action undertaken and ongoing

Minister Creed led a series of trade missions in the last 12 months including; China and Singapore, Vietnam and South Korea in September 2016, Morocco and Algeria in November 2016, Kingdom of Saudi Arabia and United Arab Emirates in February/March 2017, and the USA and Mexico in June 2017.

Action 156: Industry to pursue and seek joint venture/partnership opportunities to enhance market access opportunities.

Action commenced and progressing

- FDI Third Country Access Group established – particular focus on national regulatory requirements in third countries
- Information dissemination - FDI Brexit and Regulation Seminar, May 2017 included HSE presentation on Third Country Export Certification for Food of Non-Animal Origin
- Skills development – Food Drink Ireland Skillnet to run Post Graduate Certificate in International Selling for the Food and Drink sector

Action 157: Establish an interdepartmental group to develop complementary approaches across Government agencies to promote 'Ireland' in emerging distant markets and to promote synergies between Irish tourism, agri-food and culture.

Action at commencement stage

DAFM attended the Export Trade Council meetings in February 2017.

Action 158: Develop promotional marketing material to sell Ireland's - positive green environmental credentials, modern young well educated economy, research capacity, food environment (high quality, food safe) including positive imagery, social media and videos.

Substantial action undertaken and ongoing

As at 16 May 2017, 220 food and drink companies representing over 85% of food and drink exports were verified members of Origin Green.

An EU funded €3.7 million Bord Bia campaign to promote EU beef and lamb in China, Japan and Hong Kong will commence in February.

Action 159: DAFM to explore with relevant state agencies measures to better link in the agri-food sector with the experience of tourists, including the promotion of food, beverages and marine trails.

Action commenced and progressing

In December 2016 Minister Creed launched an Irish Whiskey Tourism strategy, which has been developed on an all-island basis by the Irish Whiskey Association. Regional launches of the Irish Whiskey Tourism Strategy took place in Tullamore, Antrim and Middleton in this quarter.

Action 160: Build on the success of marketing Irish Whiskey and beers internationally by demonstrating the linkages of these products to the wider agri-food sector.

Action commenced and progressing

Bord Bia and stakeholder work is ongoing to identify further opportunities and develop messaging.

Action 161: Bord Bia to develop a messaging programme to communicate, in partnership with industry, the benefits of Origin Green membership to producer stakeholders to ensure greater adoption and engagement with the programme by producers across all agri-food production sectors.

Action commenced and progressing

Bord Bia messaging created in quarter 1 was communicated by Bord Bia broadly to farmers in Ireland through direct marketing materials, media partnerships and advertorials with national print media.

Bord Bia developed a proposal for a messaging programme to communicate Origin Green to dairy farmers specifically.

Bord Bia is encouraging the industry through a Public Awareness Campaign for Origin Green in Ireland to co-market Origin Green to all their stakeholders including producers and suppliers. Bord Bia's new Public Awareness campaign was developed and produced in this quarter, and new Bord Bia campaign toolkits and coaching have been designed to support the verified member communication of Origin Green to their producers and suppliers.

Action 162: Bord Bia to develop a mentoring programme to work with verified members to help them articulate their sustainability efforts to key customers and stakeholders and to gain recognition in the marketplace

Action commenced and progressing

Bord Bia reached a milestone of 258 members receiving individual inductions by the end of this quarter.

Bord Bia has developed a plan for the verified member communications of Origin Green via Marketplace 2018.

Action 163: Bord Bia to enhance the Origin Green Ambassador Programme building ongoing relationships with targeted customers to increase awareness and understanding of Origin Green and drive a preference for Ireland as a sustainable source of supply.

Substantial action undertaken and ongoing

The recruitment of the third cohort of Origin Green Ambassadors was completed in late April with the 'new' ambassadors commencing the 23 month programme in late summer.

The programme continues to be successful in enhancing the reputation of the Irish food and drink industry as a source of highly quality, sustainably produced food and drink.

Action 164: Bord Bia to expand scope of programme to include retail and food service sectors by developing charters relevant to each sector.

Substantial action undertaken and ongoing

Two national retailers and four national foodservice operators are now verified members of Origin Green. Work is ongoing with other significant industry players at with further members anticipated in quarter 3.

Action 165: Provide further funding for consumer insight to identify and understand how consumer differences across geographical markets will impact on Origin Green messaging around sustainability to allow the brand to transition from B2B to B2C.

Action commenced and progressing

Bord Bia Consumer Insight Team has planned for quarter 3 2017 consumer research in the Chinese market.

Action 166: DAFM, in consultation with stakeholders, to formulate a National Farmed Animal Health Strategy for Ireland which will provide the framework for an evidence based, co-ordinated and collaborative approach to animal health matters in support of on-farm productivity, processor efficiency and export markets.

Substantial action undertaken and ongoing

Submissions reviewed. The design and printing of the Strategy is underway with a view to its launch in the immediate future.

Action 167: DAFM and industry to build on the recent substantive progress towards the eradication of bovine Tuberculosis, by setting an ambitious target of eradicating tuberculosis from the cattle herd in Ireland by 2030.

Substantial action undertaken and ongoing

Herd incidence in 2016 continued to fall and at year end stood at 3.27%.

Herd incidence in 2017 marginally up on 2016 equivalent period.

Action 168: Reflecting the need for strong leadership and involvement by all stakeholders in sustaining such progress and pursuing this objective, a high level national industry forum will be put in place to provide coordinated industry leadership in support of the DAFM executive team. The

forum composition will represent the interests of farmers, industry, and government. Its role will be to review the strategic programme on an ongoing basis, facilitate agreement on appropriate new programme measures and targets and ensure the constructive participation by all parties in sustaining progress towards eradication.

Action commenced and progressing

A decision has been made to hold the TB forum into the wider Farmed Animal Health and Welfare Strategy. Whilst the background briefing material for the forum has been drafted the identification of participants has not yet commenced.

Action 169: Industry and state agencies continue to enhance support for Animal Health Ireland and agree equitable sustainable funding model that will sustain the organisation over the next ten years

Substantial action undertaken and ongoing

Ongoing. DAFM examining the issue of adding pig expertise to AHI 's list of functions.

Action 170: AHI and relevant stakeholders to address already identified animal health related production inefficiencies associated with endemic disease on Irish farms by:

- Completing the BVD eradication programme within an established timeframe.
- Maintaining progress on the SCC Cellecheck programme and achieving the programme objective target of continuing to improve milk quality.
- Evaluating the results of the Johnes' Disease Pilot programme with a view to putting in place a sustainable voluntary Johnes' Disease control programme.
- Evaluating benefit/cost of initiating programmes and, where appropriate, develop and bring forward strategies/programmes aimed at addressing the current levels of
 - 1.Calf mortality
 - 2.Dairy cow lameness
 - 3.Fertility rates in suckler herds
 - 4.Sheep genetics and breeding

Substantial action undertaken and ongoing

- **Completing the BVD eradication programme within an established timeframe.**

Substantial action undertaken and ongoing

- A series of enhanced programme measures were introduced for 2017 including increased size

and scope of financial supports for PI removal; reduced time periods for which supports are available; removal of tissue tag option for confirmatory testing and testing of dams of PI calves; automation of herd restrictions and neighbour notifications where PI calves are retained for more than 5 weeks; compulsory investigations for all herds with positive results. The continued downward trend in the numbers of PI calves born, and increased rate of removal (both documented below) indicate that these measures are working.

- Continued reduction in the prevalence of PI births in 2017 (0.09% to week 23) relative to 2016 (0.17%), 2015 (0.33%) and programme commencement in 2013 (0.67%)
- Reduced prevalence, combined with an increased rate of removal of PIs has resulted in significant reduction in the number of PI animals alive at w23 of Q2 (267) relative to same point in 2016 (856).
- Reduction in the number of herds retaining PI animals at w23 of Q2 (32) relative to same point in 2016 (221).
- Increase in the number of herds with Negative Herd Status at w23 of Q2 (67,553) relative to same point in 2016 (58,520). The total number of breeding herds is approximately 83,500.
- Studies ongoing on the effectiveness and proportionality of measures to prevent the movement of pregnant dams carrying PI calves.
- 1,153 herd investigations to be conducted under the Targeted Advisory Service on Animal Health (TASAH) logged, of which 562 (48%) completed. Time to complete investigations markedly shorter than in 2016.
- A subgroup of the BVD Technical Working Group is continuing to work on post-eradication surveillance strategies and an opinion on the feasibility of introducing additional testing strategies in advance of eradication.

Maintaining progress on the SCC CellCheck programme and achieving the programme objective target of continuing to improve milk quality.

Substantial action undertaken and ongoing

- Continued engagement with the CellCheck Implementation Group, primarily focussed on the challenges associated with: a) intramammary use in the dairy sector, and b) herds with evidence of chronic mastitis issues.
- In consultation with DAFM, Teagasc and Dairy KT Group Facilitators, scheduling of Phase 2 of CellCheck Farmer Workshops delivery as part of the Dairy KT programme has been completed. An estimated 140 workshops will be delivered in Q3 and Q4 to over 2,000 dairy farmers.
- A scientific paper on “The use of national-level data to describe trends in intramammary antimicrobial usage on Irish dairy farms during 2003-15” submitted for peer-review has been accepted for publication in the Journal of Dairy Science .
- Work is on-going on the development of the next phase of Service Provider Training – the Stage 2 Advanced workshop.
- Work is on-going on the development of a Mastitis Investigation Tool, to analyse milk recording data to support on-farm problem solving.
- AHI continues to liaise with DAFM on the collation and subsequent analysis of national SCC data for the 2016 supply year.

Evaluating the results of the Johnes’ Disease Pilot programme with a view to putting in place a

sustainable voluntary Johnes' Disease control programme.

Substantial action undertaken and ongoing

- An AHI-led consultation process on the future of JD control in Ireland continues, with agreement by all relevant stakeholders on programme objectives and in-principle agreement on the key elements of the programme by the majority of the stakeholders.
- A meeting of the funding parties is scheduled for 14/06/17, with the objective of agreeing details of the funding arrangements.
- Work has commenced on the development on the ICBF database of a Johnes' disease dashboard for veterinary practitioners (to complement those already developed by AHI for BVD and Beef HealthCheck).

Evaluating benefit/cost of initiating programmes and, where appropriate, develop and bring forward strategies/programmes aimed at addressing the current levels of

- 1.Calf mortality
- 2.Dairy cow lameness
- 3.Fertility rates in suckler herds
- 4.Sheep genetics and breeding

Action not yet commenced

Action 171: DAFM to support the carrying out an economic appraisal by Teagasc of the benefit/costs of implementing a compulsory national IBR eradication programme for consideration by AHI and its stakeholders with the expectation that if the outcome shows a favourable return on resource deployed that a national eradication programme will be initiated by 2019.

Substantial action undertaken and ongoing

DAFM is awaiting the final Teagasc report.

Action 172: DAFM and industry to progress and improve the return to producers and their advisors relevant data arising from ante and post mortem inspection at meat plants, in support of optimising on-farm productivity, through improved animal health.

Action commenced and progressing

Procedural and technical issues continue to prevent commencing the roll out of the action to familiarise main users of the system. Once issues are sorted roll out can commence.

Action 173: Recognising global societal concerns relating to the threat to human and animal health of anti-microbial resistance, and in that context, the need to ensure prudent use of anti-microbials

in animal production systems, DAFM will, in consultation with stakeholders, continue to advance its action plan and develop implementation strategies for veterinary practitioners and farmers in relation to anti-microbial usage.

Action commenced and progressing

Work during the first three months of 2017 focussed on two main areas; delivering presentations on AMR at Animal Health Ireland Calf Care Events (13 events covered) and preparing a One Health National Action Plan on AMR. The AHI Calf Care Events involved DAFM veterinary staff giving a 20 minute presentation highlighting the importance of AMR for farmers. The presentations also highlighted 5 keys actions that could be taken by farmers to address AMR, thereby acting to inform farmers and also to stimulate discussion on the topic. The presentations were given to small groups of up to 50 farmers with 4 presentations being given at each event, so a target audience of nearly 2000 farmers attended these events nationwide. The One Health National Action Plan on AMR is being developed jointly by DAFM and the Department of Health, in consultation with all major stakeholders.

Completion of One Health National Action Plan at final stages of completion and due for presentation to Government in quarter 3.

Action 174: DAFM should encourage industry stakeholders to enhance existing systems for surveillance of animal diseases to facilitate early detection of new/emerging and exotic disease and to provide a more robust evidence base substantiating marketing claims about the animal health and welfare status of the national herd/flock and supporting disease control at farm level.

Action commenced and progressing

Further progress has been made in addressing the major recommendations of the National Animal Health Surveillance Strategy. An implementation plan has been drawn up. The early warning surveillance working group continues to developing a prioritisation process for modifications to the early warning surveillance system. A communications consultative process has been established to review the methods of dissemination of surveillance information to various stakeholders. A review of what needs to be done to optimise the value of existing databases has commenced.

Three expert elicitation workshops took place to identify modifications to the early warning system for the detection of new / emerging and exotic diseases in cattle. A further two workshops are to take place in quarter 3 2017. These have focused on Bluetongue, Foot and Mouth disease and Antimicrobial resistance. Each workshop involves the preparation of material for distribution to the eight selected experts, the facilitation of a day long workshop for each topic and the production of a report outlining the findings of the report. These reports will feed into the deliberations of an early warning working group.

A communication strategy is being developed to communicate the importance of surveillance to the industry, and enhance the dissemination of surveillance information to various stakeholders.

The preparation of the All Island surveillance report has commenced.

Action 175: MI to support actions that promote an expanded range of treatments for pests in salmon fisheries.

Substantial action undertaken and ongoing

In 2008, the Department of Agriculture, Fisheries and Food (DAFF) published “*A strategy for the improved pest control on Irish salmon farms*”. The strategy outlines a comprehensive range of measures to provide for enhanced sea lice control and was developed by a joint DAFF, Marine Institute and Bord Iascaigh Mhara workgroup in response to difficulties experienced by farms in achieving the low levels of infestation required by the national control programme. These measures draw on the on-going Single Bay Management (co-operative management plans between farms sharing the same waterbody) process and, through a comprehensive action plan and list of recommendations, seek to advance the suite of tools necessary for improved sea lice control on farms. The pro-active approach of farms by carrying out regular on-farm sea lice checks has allowed efficient on-site management which facilitates early intervention resulting in better sea lice control generally. Notably, the Single Bay Management plan has helped to coordinate efforts to reduce lice levels among sites within bays.

Alternative approaches to complement medicinal treatments, coupled with a rigorous pro-active regulatory oversight, meant that sea lice levels in Ireland during 2016 have generally been managed well. There is a growing trend in the use of cleaner fish with anecdotal evidence to suggest they are working at reducing numbers of egg bearing female lice. Their use is becoming more widespread in Ireland; in fact, their presence was noted at 50% of all salmon farm sites in Ireland in 2016.

For Amoebic Gill Disease (AGD) that affects salmon but we have funded a PhD project for which one of the objectives is to allow early, sensitive and non-lethal testing for *N.perurans*—the causative organism of AGD. The molecular test that Jamie Downes has devised allows such early detection using gill swabs. Such testing has allowed the amoeba to be detected at an early stage of infection so that timely treatments can be carried out. The test is also used to assess the efficacy of bath treatments, thereby helping in the overall control of the disease on marine sites where the molecular testing is carried out routinely. Testing continues in quarter 1 of 2017.

In addition, we provide advice to the Veterinary Medicines Section of DAFM in relation to the provision of special licenses for the use of treatments on Irish aquaculture sites. These treatments will not have a full Marketing Authorisation in Ireland but the MI provides background information to DAFM to allow them to assess whether such products should be given ‘special’ licenses to treat conditions where the fish health or welfare considerations warrant such support.

MI is partnering with industry in research on cleaner fish control of sea lice infections.

Action 176: DAFM and agencies to promote the development of new medicines and measures to

strengthen control of sea lice on salmon farms.

Update: Substantial action undertaken and ongoing

Stocks of lumpsucker (cleaning fish) were transferred from the NUIG facility in Connemara to various marine salmon sites as planned and early indications are that they are having a significant positive impact on the control of sea lice infestations on these sites.

BIM food safety team travelled to Sligo at the end of April 2017 to deliver the second regional Seafood HACCP workshops in 2017. There was wide interest in this workshop from across the seafood industry with representatives from the catching, aquaculture, processing and retail sectors.

The workshop provided an opportunity for participants to review their existing HACCP plan with guidance from a member of BIM's food safety team. Other participants from start-up businesses were given an opportunity to start developing a food safety management system specifically tailored for their own business.

SFPA coordinated three regional breakfast information events to date in 2017, following on from three such events in the latter half of 2016. These breakfast information events were specifically for industry, growers, buyers and regulators. Presentations on shellfish were given at all information events covering specific shellfish related topics as:

- Legislation and Food Business Operator responsibilities
- Overview of the Industry
- Ireland's National Classification and Biotoxin Monitoring programmes
- Pre Harvesting Requirements for producers and buyers
- Traceability and Documentation

In May 2017, the Marine Institute hosted the 11th International Conference on Shellfish Safety. The SFPA chaired a number of the workshops which focussed on Virus testing – new approaches, and changes to regulations.

The Marine Institute (MI) continues to work with SFPA, FSAI, BIM and Shellfish Industry in promoting and providing shellfish biotoxin and shellfish microbiological food safety advice. As part of this the MI hosted the 11th International Conference on Molluscan Shellfish Safety in Galway between 14 and 20 May with over 230 international shellfish safety experts in attendance. Also in May, the MI were awarded two Interreg Atlantic Area Research awards as partners to study innovative toxicity alert systems for safer seafood products and to predict the risk and impact of harmful events on the aquaculture sector. These two awards amount to a total of almost €0.5M to both consortia of European partners and are worth over €944,000 to the MI.

Action 177: DAFM and State agencies to continue to advance shellfish safety monitoring and

science.

Action commenced and progressing

BIM provided a two day workshop to assist seafood processors in implementing or updating their HACCP system on 14-15 March 2017 in Wexford. BIM food safety team travelled to Sligo at the end of April to deliver the second regional Seafood HACCP workshops in 2017. There was wide interest in this workshop from across the seafood industry with representatives from the catching, aquaculture, processing and retail sectors. The workshop provided an opportunity for participants to review their existing HACCP plan with guidance from a member of BIM's food safety team. Other participants from start-up businesses were given an opportunity to start developing a food safety management system specifically tailored for their own business.

From a seafood trade compliance / market access perspective, SFPA continues to work as normal with Bord Bia, BIM, DAFM International Trade and Industry on certification and market access issues for Third Countries. Countries on which technical advice work is being carried out at present include China, Hong Kong, Singapore, South Korea, Vietnam, Cameroon, Australia and Saudi Arabia / UAE.

An exploratory project is currently underway in conjunction with BIM on microbiological water testing of selected classified production areas that may benefit from an eventual EU coordinated technical equivalence agreement on reciprocal trade of LBM's between USA and individual MS, including Ireland.

Action 178: DAFM, FSAI and industry to combine resources and intelligence gathering capacity to improve monitoring and predictive capacity which will result in more timely responses to food safety threats which may arise and ongoing communication.

Action commenced and progressing

DAFM is discussing data sharing arrangements with FSAI and is separately proposing to develop in-house data analytics capability.

Action 179: Review laboratory capacity to ensure effectiveness to address potential disease outbreak or food scares.

Target Achieved.

A final report was agreed by cross-divisional working group in September 2016. The report is currently being considered by the Minister.

Action 180: Prioritise research to ensure the development of state of the art methodologies to identify and assess the risks with biological and chemical contamination of food and develop the

controls to mitigate against these risks.

Action commenced and progressing

DAFM Laboratories continue to engage on an ongoing basis with other State-funded laboratories to identify opportunities for inter-laboratory collaboration. The Laboratory Service is party to a number of successful applications for funding to support this capability.

Action 181: Prioritise research to ensure that the Irish food industries have the best available technologies and systems that will assist in identifying and controlling risks arising from microbial and chemical contaminants.

Substantial action undertaken and ongoing

€28 million in research grants was awarded by DAFM recently to 19 different national institutions and organisation to undertake work across 43 projects. On foot of €3.7m of funding provided by DAFM in its 2016 Research Call Award five new projects that covered the scope of this action commenced work.

Action 182: Bord Bia to explore with industry the potential for development of a Centre for Consumer Insight which should provide consumer insight to inform future investment in research and development by Irish agri-food research bodies. This may include:

- Investment in a physical space that is creative and inspirational, and accessible to international visitors and consumers who will be involved in the consumer research.
- Invest in the technology that underpins the Centre for Consumer Insight and partner with private enterprise that will support the initiative with their intellectual expertise, share their global connections and innovation experiences so that it is a state of the art, outward looking, and world class facility.
- Increase the number of marketing specialists in areas of qualitative research, data mining and analysis, brand and innovation specialists.
- Communicate benefits to all stakeholders to maximise engagement.

Target Achieved.

Since the launch of The Thinking House in September 2016, there has been a significant uplift in client company engagement and number of projects initiated across insight, branding and innovation work. The Thinking House, Bord Bia's Insight Centre, continues to work across the food, drink and horticulture industry on insight, branding and innovation projects. It works with individual client companies as well as international and domestic research for industry. The increased awareness and engagement with the Centre since its launch in 2016 has led to the Consumer Insight Team reaching maximum capacity.

Action 183: Bord Bia to continue to partner with major domestic retailers on supplier development programmes including Taste Bud and Food Academy initiatives.

Substantial action undertaken and ongoing

13 companies are currently participating on the Food Academy Advance programme (3rd wave) which began in February 2017. Four workshops and two general mentoring sessions per company were held in Q1 in addition to a half day finance mentoring session.

In quarter 2, elements of the programme included three further group days, two of these take the form of formalised workshop sessions. One of these incorporated an in-depth SuperValu store visit, with the group meeting several members of store management to understand their operations and systems and a similar visit to Musgraves distribution centre in Cork, again ensuring that the group fully understand its operations. Companies will also have one final mentoring session and two meetings with the SuperValu Food Academy team to discuss their joint business plans with the retailer. Companies have had an opportunity to extend their reach with the retailer through the programme with two 'Go-Live' dates within the programme time-line: May Go-Live in quarter 1 and September Go-Live in quarter 2. The programme is scheduled to conclude in October 2017. The final group session will extrapolate key findings from the programme with the group and outline next steps for them. This day also incorporates a formal graduation, photography and lunch for all participants on the Food Academy Advance 2017 programme together with the wider stakeholder group (SuperValu, Bord Bia and LEOs).

Taste Buds participants from the last cohort enjoyed an additional round of one to one mentoring sessions on the 26 April. Bord Bia continued to meet with Tesco took place to review the programme and its place in Tesco's strategy.

Action 184: Centre for Consumer Insight to inform market validation of future publically funded research investments.

Substantial action undertaken and ongoing

Bord Bia has ongoing involvement with the DAFM Competitive Research Committee.

Action 185: The primary production research activities of national research bodies, including Teagasc and academia, to be focussed on grass land productivity, animal breeding/genetics, soil nutrient usage, animal health improvements, crop production, economic analysis of Irish agriculture, food ingredient, product and process innovation.

Substantial action undertaken and ongoing

€28 million in research grants was awarded by DAFM recently to 19 different national institutions

and organisation to undertake work across 43 projects. Five projects in particular were funded in the 2015 call with topics in the scope highlighted in this action.

Consideration was given to remaining research gaps under this action to inform future DAFM Research Calls, to build upon the 5 relevant projects in this area that were funded in the 2016 Call Awards.

Action 186: Teagasc in collaboration with relevant HEIs and others to research emerging precision technologies, data analytics, sensor technology, DNA technology and possibilities for mining big data to improve decision making, availing of existing resources and capabilities.

Action commenced and progressing

Refer to Action 421.

Action 420: The primary production research activities of national research bodies, including Teagasc and academia, to be focussed on grass land productivity, animal breeding/genetics, soil nutrient usage, animal health improvements, crop production, economic analysis of Irish agriculture, food ingredient, environmental sustainability practices, monitor effects of seafood production on European designated sites, product and process innovation.

Substantial action undertaken and ongoing

€28 million in research grants was awarded by DAFM recently to 19 different national institutions and organisation to undertake work across 43 projects. Many of these projects include within their scope topics highlighted in this action.

Consideration was given to remaining research gaps under this action to inform future DAFM Research Calls, to build upon the relevant projects in this area that were funded in the 2016 Call Awards.

Action 421: Teagasc in collaboration with relevant HEIs and others to research emerging precision technologies, data analytics, sensor technology, DNA technology and possibilities for mining big data to improve decision making, availing of existing resources and capabilities.

Action commenced and progressing

Full applications for research funding for significant initiatives in this area have been made to the Department of Agriculture, Food and the Marine and the Centres' Programme of Science Foundation Ireland. SFI did not have sufficient funds to fund all the Centres it wished to fund, and it is now seeking additional funding for these including the Teagasc-led proposal called FutureMilk. Teagasc and its partners are awaiting the outcome of the application to DAFM. The Tyndall Institute, the TSSG Group in WIT, and the Insight Group in UCD are among the partners in

these proposals.

Teagasc partnered with Science Foundation Ireland in a themed call as part of SFI's 2016 Investigators Programme. The Themed call aims to link agri-food researchers with other STEM researchers in projects focused on the five technology areas highlighted in the Teagasc Foresight Report, two of which are Digital Technologies and Plant and Animal Genomics and Related Technologies. Results are expected in July/August 2017.

Teagasc hosted a workshop of the FoodNexus group in Amsterdam at the end of March 2017 focused on development of new projects under the theme "Towards a smart food system: An integrated data driven approach to quality and safety". The project ideas arising from that day are now being developed and suitable funding mechanisms are being sought

Action 187: Establish a high level core team to review current Agri-food sector innovation capacity, the utilisation of this capacity and to better market the Irish agri-food sector's innovation capabilities.

Action at commencement stage

Enterprise Ireland and DAFM are progressing this action with the aim of announcing the composition of the team in quarter 3.

Action 188: DAFM, Enterprise Ireland and other research funders to work collaboratively to implement SHARP with oversight from National Agri-food Research and Innovation Group (NAFRI).

Substantial action undertaken and ongoing

A selection of the priority research and innovation areas identified across the thematic areas in SHARP were incorporated into the topics of DAFM's 2015 Research Funding Call and thus heavily informed the content of the majority of the 43 projects that emerged successfully from the Call process and were awarded €28 million in funding recently.

Consideration was given to remaining priority research and innovation areas identified across the thematic areas in SHARP that were not funded in the 2016 Call Awards to inform future DAFM Research Calls.

Action 189: NAFRI to review coordination of agri-food research technology centres to ensure resources are applied most efficiently including exploration of how best to join up existing centres of excellence - Food Health Ireland, Nutramara, Dairy Processing Technology Centre, proposed Meat Technology Centre and the potential centre of excellence for PCF, Beverage and Horticulture sectors while maintaining consistency through EI Technology Centre programmes.

Action at commencement stage

A meeting of NAFRI that was scheduled for early quarter 2 2017 had to be deferred but will be reconvened in due course to progress this Action.

Action 190: DAFM through the FIRM programme to further collaborate with Enterprise Ireland and other research funding providers to ensure the required spectrum of agri-food research activity is funded to develop the underlining technologies and capabilities which can be leveraged to create commercial outputs and facilitate involvement in externally funded initiatives notably the EU Horizon 2020 RTD programme.

Action commenced and progressing

DAFM is a funding partner of a SUSFOOD (Sustainable Food Production and Consumption) - a EU Cofund European Research Area-Network Call. A pre-proposal selection meeting of applications to this Call took place in Madrid in late quarter 2

DAFM continues to work with EI and others through various forums (H2020 Network, High Level Group & Strategic Proposals Group; NCP Network; DJEI Innovation 2020 Implementation Group; EI R&D and IRCC grant clearing committees) to progress the leveraging possibilities referred to in this Action.

Action 191: Continue to promote and increase joint industry and public sector investments in research projects which will improve the commerciality of research outputs.

Action commenced and progressing

Following conclusion of the evaluation phase of applications to DAFM's industry co-funded, Agri-food and Bioeconomy Innovation Platform Call a sizeable grant award stemming from this is now under active consideration.

Action 192: Create a virtual multi- campus centre of excellence for seafood development in Ireland, including BIM's Seafood Development Centre, Teagasc's Ashtown facility and third level institutes, to provide a co-ordinated, seamless product development experience for seafood entrepreneurs.

Action commenced and progressing

BIM signed the MoU with NOFIMA in December 2016 regarding the multi Campus Centre of Excellence. In addition plans with Teagasc and NOFIMA are underway for the research and development of marine ingredients with an intention to place a call for R&D projects during March/April 2017.

BIM's discussions with Teagasc and NOFIMA for the research and development of marine ingredients are ongoing with a call in quarter 2 2017 to develop an expert panel of Research Provider Organisations (RPO). The RPOs will enable industry led, BIM funded R&D projects to be developed over the period 2017 - 2020.

Following the signing of a MoU with NOFIMA in early 2017 regarding a multi Campus Centre of Excellence the CEO of NOFIMA will provide a keynote address on Innovation and R&D at the BIM annual Seafood Conference in June 2017. NOFIMA is a business oriented research institute working to develop the aquaculture, fisheries and food industry in Norway.

Action 193: DAFM in conjunction with state agencies and industry partners to develop a “SMART NAUTRIENTS” research programme to support high value products from seafood.

Action commenced and progressing

The Nutramara report is ready for publication pending minor edits. The National Marine Research and innovation strategy has been completed and is pending approval for publication.

BIM’s work with the seafood bio-ingredient processor is ongoing through BIM’s Capital Investment Scheme. In addition an innovation project to develop specialist animal feed ingredients from seafood is underway.

The EMFF Seafood Innovation and Business Planning Scheme and the Seafood Processing Capital Investment Scheme enable seafood SMEs to apply to BIM for funding support to progress high value emerging ingredient opportunities.

BIM supported three specific projects in 2016 focusing on ingredient opportunities from by-products. BIM is also currently engaging with seafood SMEs, Research Performing Organisations (RPOs), including Teagasc, Nofima, and various 3rd level institutes to define market led focus areas in high-value emerging areas and will roll out defined project calls in 2017 under the EMFF Processing and Business schemes seeking category management projects submissions.

Action 194: DAFM, Marine Institute and Industry to develop further research programmes on the potential of marine species of fish, shellfish and seaweed as possible high value sources of pharmaceutical, cosmetic and renewal energy products.

Substantial action undertaken and ongoing

BIM’s proposed category management calls for 2017 (refer to Action 193) will allow RPOs and seafood SMEs to apply for funding support to progress opportunities in high-value emerging ingredient markets.

The Blueshell project funded under the second call of the ERA net on Marine Biotechnology, is underway. The MI funded NMBLI project (National Marine Biodiscovery Laboratory for Ireland) has commenced and completed recruitment. Work on this project is also underway and it is expected that this project will interact with the recently SFI funded BEACON bioeconomy center.

A project based award on marine Biodiscovery has been awarded and work on the project led by NUIG has commenced. This project will run and develop a National Marine Biodiscovery Laboratory

in Ireland (NMBLI), based at the Marine Institute, Oranmore. This laboratory will play a central role to foster the development of Marine Biodiscovery in Ireland.

Action 195: Teagasc to develop proposals for a Food Innovation Hub at its Moorepark campus to promote greater collaboration between industry and public research, and deliver a step change in innovation activity in the food industry.

Target Achieved.

Proposal under review by DPER.

Action 196: Teagasc will lead research in collaboration with other research institutions and industry to derive applications from the significant state investment in foods for health. This will build on initiatives such as the APC, FHI, and Nutramara.

Substantial action undertaken and ongoing

NIHAM Foods Post-doc was recruited and commenced at the end of quarter 2.

Fermented food human study was completed and analysis is on-going. Fermented food obese mouse study has been completed and analysis of samples collected is ongoing (and a further study has been completed). Fermented food mental health study is nearing completion and sample analysis will take place in quarters 3 and 4.

Cheese has been prepared for human feeding trials, which will take place in the coming months

Action 198: Enterprise Ireland will create an FDI and Innovation Portal to improve connectivity across the Irish innovation system for Food and beverage companies.

Target Achieved.

The website has been successfully launched and is available at www.smartfoodireland.com.

Action 199: Enterprise Ireland to continue to support the evolution of FHI and DPTC to allow the centre to realise long term full potential.

Substantial action undertaken and ongoing

A winning tender has been offered to review FHI. This was processed in quarter 2 2017.

DPTC operating capacity with full complement of staff in position with projects making good progress. It is gaining momentum in sector with new partners.

Action 200: Enterprise Ireland to develop the Meat Technology Centre initiative in association with

meat industry, DAFM, Teagasc and academia, with a view to launching in early 2016.

Substantial action undertaken and ongoing

Meat Technology Ireland (MTC) launched on the 13 April 2017. MTC is an €8.1 million five-year research and innovation programme, developed by industry and co-funded by Enterprise Ireland and a consortium of nine beef and sheep meat processing companies.

Action 201: Enterprise Ireland will continue to engage with Industry, DAFM, research providers and other relevant stakeholders to establish a food/test incubation technology centre of excellence to support PCF, Beverage and Horticulture sectors with a focus on pilot stage production, packaging innovation, product reformulation and be a portal to global best practice research data of interest to these sectors.

Substantial action undertaken and ongoing

Meetings with DAFM and agency stakeholders have taken place and an analysis of the facilities in place and available to industry is currently underway.

Action 202: Industry and EI should continue to drive an industry-led network of Irish Agri-food companies which access Research Bodies in a collaborative/partnership manner on specific innovation/research challenges.

Substantial action undertaken and ongoing

Targeting multi-company Innovation Partnerships that have benefits across the sector.

One example is IP 2015 0380 '*Origin Green Micro Surveillance- Protecting the Next Generation*'. This involves seven companies and aims to develop a state of the art food safety and quality decision making toolset to mitigate the risk of contamination in the food supply chain.

Another example, Project IP 2014 0474 '*Smart APPI - Advanced prediction for production and processing innovation*' involves Glanbia and Dairygold. The project's objective was to use a combination of modeling techniques, predictive analytics and advanced data mining to help minimise the uncertainty around expected milk production at the processor level.

Three new Innovation partnerships

1. Marigot Limited work with Shannon ABC in IT Tralee

This Innovation Partnership project will look at the extraction of functional ingredients from a seaweed species called *Fucus vesiculosus* commonly known as Bladder Wrack – which is found extensively on the coast of Ireland and Scotland.

2. Naringtech Limited and DCU

This IP is addressing the market demand for high quality non-GMO yeast for European animal feed applications and want to avail of first mover advantage utilising dairy waste streams as a cost effective growing media.

3. Oriel Seasalt company and DCU

This IP is to demonstrate the efficacy of mineral formulation and will enable it to understand its mode of action for skin and joint health, wound healing, vascular and food and beverage applications.

Action 203: The DAFM funded Agri-Food Graduate Development Programme to continue to upskill agri-food graduates for employment through enhancing industrial knowledge, business and personnel management, leadership, communication and advanced research and innovation skills.

Substantial action undertaken and ongoing

A training module in Next Generation Food Formulation is planned by the Agri-Food Graduate Development Programme for quarter 1 to progress young researchers' expertise in this area. Registration opened in quarter 2 for a further four new modules in the Agri-Food Graduate Development Programme that will launch in the second half of 2017.

Action 204: DAFM to continue to partner with the Irish Research Council's employment-based Research Programme to facilitate the placement of post-graduate research students in agri-food enterprises.

Substantial action undertaken and ongoing

DAFM has agreed to continue to partner with Irish Research Council's in the 2017 employment based Research programme and is awaiting the outcome of the Call.

Action 205: All milk producers should be strongly encouraged to carry out grass measurement as the efficient use of grass is one of the key advantages of the Irish dairy sector.

Action commenced and progressing

DAFM and relevant stakeholders are working on a year-long programme of events for 2017 that will focus on improving grassland management, use and profitability. It will celebrate and build on Ireland's comparative advantage in sustainable grass fed production.

Efficient grassland management will continue to form part of the core advisory services for dairy farmers from Teagasc.

Action 206: Strategies should be developed to increase the fertility of Irish grassland soils in order

to address deficiencies in P, K and lime.

Target Achieved.

Soil fertility is one of the central pillars for Grass10. Advisors continue to be provided with in-service training on soil fertility. To date in-service training has been delivered to FRS advisors (95 people), Teagasc grassland advisors (Carlow: 44 people, Moorepark: 48, Athenry: 72 and Grange 69) and Teagasc Tillage advisors during Jan/Feb 2017. Three presentations by Teagasc staff (D. Wall, R. Hackett and G. Courtney) were delivered to 155 people (industry and farmers) at the Fertiliser Association of Ireland spring meeting in Horse and Jockey, Co Tipperary on 7th Feb 2017 and a joint FAI-Teagasc fertiliser supplement was published in The IFJ in February. The popular press is being used to communicate messages to all farmers. Soil fertility is being discussed on Teagasc Better Farms and in Discussion groups.

Action 207: Dairy farmers should set a target of increasing grass utilisation to 10 tonnes / ha.

Action commenced and progressing

Teagasc launched a four year, multi-enterprise (dairy, beef and sheep), industry-wide knowledge transfer campaign on grassland management in late January 2017. A number of industry stakeholders – AIB, Grassland Agro, FBD Trust, Irish Farmers Journal and DAFM – are partners to this campaign.

The new PastureBase Ireland website went live during January 2017 and is being actively promoted by Teagasc Advisers; all Teagasc Dairy Advisers were trained in the usage of the website during January.

A series of 19 “Early Spring Grazing Farm Events for Dairy Farmers” were held during late January and February. These events focussed on reminding dairy farmers of the key principles around spring grassland management.

A Grass10 campaign manager is now in place and will drive campaign activities. A ‘Grassland Farmer of the Year’ competition has been launched.

One of the demonstrations at the Moorepark 2017 Open Day will relate to mid-season grassland management, while one of the Grass10 villages will address issues relating to the Pasture Profit Index (PPI), benefits of white clover, optimum sticking rate and new developments in nitrogen fertiliser. Further Grass10 events will be held later in 2017.

A number of Teagasc specialists and advisers were integral to the delivery of the recently held IGA grassland reseeding event in Co. Tipperary and the ASA organised grassland master classes (January in Moorepark with a dairy focus and May in Athenry with a drystock focus).

Action 208: Continue to leverage the benefits of genomic technology to help maintain the rate of genetic improvement in the dairy sector to maximise resource use efficiency and lower emissions.

Action commenced and progressing

Work is continuing on these resource use efficiency traits, with a particular focus on lameness and mastitis, which are traits of increasing economic cost on dairy farms. In turn these traits impact emissions output from the dairy herd through having poorer survival rates on farmers. Expectation of having test proofs for industry later this year, ahead of official release in 2018.

New genomics for dairy females service was launched in Spring 2017, with goal of significantly ramping up ahead of next years calving season.

Action 209: Industry stakeholders (lead is ICBF) need to ensure that sexed semen continues to be rolled out to Irish dairy farmers and that continued research in the technology is undertaken.

Action commenced and progressing

Discussions with Irish industry partners and ST (Sexing Technology's) are continuing with expectation of field trial for Spring 2018 still in place.

Action 210: Increase the number of farmers that complete profit monitors or other cost management tools.

Action commenced and progressing

Teagasc Profit Monitor training provided to 80 private consultants that will enable them to deliver Teagasc Profit Monitor reports to their clients. There are now 4,524 non-Teagasc clients registered to use the Teagasc Profit Monitor.

Action 211: An increased awareness among milk producers and others in the dairy sector in relation to the key issues surrounding fixed price contracts and financial management skills should be facilitated, including an increased use of cash flow budgeting and monitoring tools to help cope with milk price volatility.

Action commenced and progressing

On-going support of the use of Cost Control Planner tool and other online to facilitate cash flow management and completion of profit monitor.

Updates delivered to Teagasc advisors regarding the new SBCI cash flow support initiative.

Action 212: Processors should prioritise the development of fixed price contracts and other volatility tools for their suppliers. Equally dairy exports should develop fixed price contracts from

the customers back to the exporter

Action commenced and progressing

Refer to Action 112.

Action 213: The issues around the possibility of developing a mechanism including mutual funds such as a reinsurance scheme should be examined to minimise risk for processors and give farmers confidence regarding price.

Action commenced and progressing

Refer to Action 116.

Action 214: The Government will ensure that the tax system as it specifically applies to farmers should remain under review to establish if there is further scope to take account of income volatility faced by dairy farmers.

Substantial action undertaken and ongoing

Further to the Budget announcement, the adjustment to the farmers' 'Income Averaging' system is in operation.

It is available for the most recent tax year, thereby having an immediate positive impact on cash flow.

Action 215: Engagement by processors, producers and the Department with the Milk Market Observatory should be enhanced.

Action commenced and progressing

The Department will continue to adhere with the regulatory reporting requirements. Discussions with other key stakeholders will continue with a view to improving the timeliness of reported data and the provision of estimates where hard data is not yet available. Industry efforts in respect of indices that would underpin futures market development and counter-volatility measures is ongoing.

Action 216: Origin Green will be a key marketing tool and should be fully supported at all levels of the industry within an ambitious time frame. The verifiable sustainability credentials of Irish dairy products will be a key marketing advantage under this programme and Ireland will be positioned as a leading supplier of sustainable dairy products across all markets.

Action commenced and progressing

Bord Bia's plan for Origin Green marketing communications in two European Markets is

progressing.

Bord Bia has formally reviewed its Digital Awareness Campaign in China for Origin Green Dairy.

Bord Bia developed a proposal for a messaging programme to communicate Origin Green to dairy farmers specifically.

Action 217: Industry will continue to focus on the development of value added products whilst ensuring, insofar as possible, that the maximum value possible is retained indigenously.

Action commenced and progressing

The Bord Bia Dairy seminar is now planned for September 2017 to debrief the industry on ethnographic research undertaken in India and Iran.

The Bord Bia Consumer Insight team has in-field a foresight study exploring the future of dairy in China.

The Bord Bia Consumer Insight team has planned for September a consumer research project in the Middle East that will explore foodservice trends and opportunities for Irish producers.

Action 218: In line with the findings of the Report on Smart Ageing which was presented to Government in April 2015, opportunities for the development of dairy based foods in this sector will be examined.

Substantial action undertaken and ongoing

A follow up to the Bord Bia Smart Ageing project which looked at consumer attitudes and behaviours in relation to ageing is planned for quarter 1 2018.

Action 219: Ireland's success in added value sectors such as farmhouse, artisan and higher end cheeses and butters will continue to be recognised, developed and encouraged.

Substantial action undertaken and ongoing

Cheese Institute Advanced commenced in November 2016 with six companies and will run for 12 months. Providing technical expertise to improve the operational capability. It will also assist owners to develop and acquire the management skill necessary in transitioning towards businesses of a larger scale. It will be delivered through practicals and lectures and one-to-one mentoring.

Quarter 2 saw the commencement of the one-to-one marketing support from Bord Bia for the six programme participants. Each has an allocation of four days marketing support.

Action 220: The scope for continuous efficiency improvements must be continuously pursued by

industry against competitive benchmarks.

Substantial action undertaken and ongoing

The Department continues to provide funding to Enterprise Ireland to assist companies in (i) lean manufacturing (ii) CEO and senior management leadership development (iii) training and (iv) innovation through vouchers (€5,000) to commission research by universities, Teagasc and Institutes of Technology to test innovative ideas new product development or resolve problems.

Action 221: The response to environmental challenges in areas such as emissions, water quality and biodiversity must be centrally co-ordinated and must highlight Ireland's key leadership role in balancing more intensive production with environmental concerns.

Action commenced and progressing

DAFM actively participating in responding to climate issues including inputting to the NMP, Clean Air Strategy etc. A draft clean air strategy is scheduled for public consultation

The Water Network held an inter-agency water forum in December 2016. A stakeholder forum was held in March 2017 to facilitate close cooperation between DAFM and all stakeholders involved in water related activities.

DAFM inputted to the NMP and the National Clean Air Strategy.

On-going discussion with NPWS on the agricultural actions within the 3rd National Biodiversity Plan which is currently being finalised.

Action 222: The Sustainable Dairy Assurance Scheme (SDAS) must include all dairy farmers as an immediate priority.

Substantial action undertaken and ongoing

Bord Bia had certified 14,802 dairy farms from a total of 17,142 applications at the beginning of June. The rate of application has slowed as the final 15% of farms are entering the scheme. Nationally 83% of all dairy farms are certified with two co-ops having all of their suppliers certified. It is expected that all farms will be certified by year end.

Action 422: Cost benefit analysis in relation to mitigation measures for ammonia emissions should be undertaken.

Action commenced and progressing

NECD was finalised in late December 2016.

DAFM and Teagasc have made a submission to DCCAE on the National Clean Air Strategy in relation

to agriculture issues in May 2017.

Action 223: Increase fertility levels and decrease calving intervals in suckler herds.

Action commenced and progressing

Teagasc continues to work with its suckler farmer clients to encourage and develop best practice in all areas of suckler herd fertility and management. This is done through KT groups with individual beef farmer clients. The use of ICBF breeding reports is a big part of this. The breeding plans being completed at present for the Beef KT Groups Farm Improvement Plans are focusing on herd fertility and calving intervals on farms.

Action 224: AHI to facilitate the rapid operationalisation of all aspects of the *Beef HealthCheck* programme, including batch-level, herd-level and geographic reporting.

Substantial action undertaken and ongoing

- All meat plants involved in the Beef HealthCheck programme are providing information to the ICBF database.
- AHI officially launched Beef HealthCheck Online. Farmers and their veterinary practitioners can now view and analyse the Beef HealthCheck information from abattoirs online through the ICBF website. This facility is free of charge.
- A Step by step guide to guide farmers to access, interpret and share the online information with their veterinary practitioner is available on the new Beef HealthCheck Online section of the Animal Health Ireland website.
- AHI met with DAFM to discuss the paper on data sharing from the Beef HealthCheck programme. AHI will make a further submission to DAFM to progress the wider sharing of data from the Beef HealthCheck programme.
- A scientific paper “A protocol to identify and minimise selection and information bias in abattoir surveys estimating prevalence, using *Fasciola hepatica* as an example” has been published by Preventive Veterinary Medicine <http://dx.doi.org/10.1016/j.prevetmed.2017.05.019>
- Five events for beef farmers on animal health, jointly organised by AHI, Teagasc and Meat Industry Ireland, have been scheduled for June and July.
- Animal Health Ireland has submitted a further response to DAFM on issues relating to the sharing of data from the Beef HealthCheck programme.

Action 225: Facilitate the further development of resources and information to encourage livestock producers to place an economic value on the biosecurity of their holdings.

Action commenced and progressing

Ongoing.

Action 226: Leverage the benefits of the recent adoption of genomics technology in the beef sector to improve the genetic quality of the national breeding herd though inter alia, maximising participation in the Beef Data and Genomics Programme, to help lower emissions and improve farm competitiveness.

Substantial action undertaken and ongoing

Payments continue to be made to BDGP participants for completion of actions related to the scheme. €91m paid put under the scheme to date.

The BDGP was re-opened in April 2017 for new applicants who are not currently within the BDGP. The scheme will be called BDGP II and will run for 6 years. The actions required will be the same as in BDGP but with the Training and Carbon Navigator elements being brought forward to year one. Payments also continue to be made for BDGP.

Action 227: Exploit potential of genomics to add value at farm level by improving breeding and at processing level in areas such as meat quality and meat tenderness (**Lead ICBF**).

Action commenced and progressing

New Meat Technology Ireland was launched with ICBF a key stakeholder and service provider. Initial work to identify 7.5k animals for detail carcass and meat eating quality assessment underway, with an expectation that data collection on these animals will commence in quarters 3 and 4.

Action 228: Further develop the potential use of sexed semen for breeding selection and improving genetic profile and profitability of the proportion of the beef herd coming from the dairy sector (**Lead ICBF**).

Action commenced and progressing

Refer to Action 209.

Action 229: Intensify the level of research aimed at informing the formulation of the breeding indexes used in the sector and the distribution of the traits therein.

Action commenced and progressing

Update of breeding indices continuing on an ongoing basis by the ICBF. Most recent update was in May 2017.

Action 230: Focus on net margin per hectare as a measure of profitability and kilograms of beef produced per hectare as a suitable measure of efficiency.

Action commenced and progressing

Ongoing.

Action 231: Increase the number of livestock farmers in Knowledge Transfer Programme.

Target Achieved.

Over 5,000 Teagasc beef clients and over 2,000 sheep clients have now been approved in the KT Programme and are in groups that are being facilitated by Teagasc advisers.

Action 232: Develop infrastructure through knowledge transfer programmes and farmer education to ensure improved grassland management. This will include increasing the proportion of grassland farmers participating in weekly grass measurement from 1,250 today to 3,000 by 2020 and 5,000 by 2025.

Substantial action undertaken and ongoing

Teagasc has launched the Grass10 Campaign. Grass10 is a four year campaign to promote sustainable grassland excellence for Irish livestock. It aims to increase grass utilisation on Irish livestock farms. Its objective is to increase the number of grazings per paddock to 10 and the amount of grass utilised to 10 tonnes grass dry matter per hectare. Grass10 incorporates the roll-out and promotion of the re-launched PastureBase Ireland online grassland database. Livestock farmers can use this platform to record their grass covers, and easily monitor their performance in relation to the Grass10 targets of a number of rotations and grass utilised.

The Teagasc Grass10 campaign is supported by AIB, FBD Trust, Grassland Agro the Department of Agriculture, Food and the Marine and the Irish Farmers' Journal.

Action 233: Support research efforts and knowledge transfer tools to better utilise the beef output from the dairy bred calves in a systemised manner.

Substantial action undertaken and ongoing

On-going with Teagasc Green Acres Calf-to-Beef Demonstration farms. Monthly articles in the Farming Independent report on the progress of the farmers in this programme. Teagasc ran a very successful Open Day on one of these farms in April with a large number of farmers in attendance (>150).

Teagasc has also launched a new Dairy Calf to Beef Page on its website which gives farmers and industry a significant amount of technical information on operating and running successful calf to

beef enterprises on farms (<https://www.teagasc.ie/animals/beef/dairy-beef/>)

Action 234: Review mechanism for linking the knowledge developed on Teagasc/Farmer's Journal BETTER Farm Beef Programme and the new Suckler Cow demonstration farm in Athenry with widespread application at farm level.

Action commenced and progressing

The new Teagasc/Farmers' Journal BETTER Beef Programme Phase III which was launched on the 30 January 2017 has a number of new methods for transferring the knowledge learned on these farms out to the wider population of beef farmers. This includes a much wider use of social media alongside the written articles and farm events that were common in the Phase II of the programme.

Discussion groups are being encouraged to visit the Newford Herd in Athenry. There are also weekly updates published for the Newford Herd for farmers to follow.

Action 235: Develop a uniform approach to the supply of clean cattle underpinned by research in this area.

Substantial action undertaken and on-going

Following publication of Sheep CLP in February, focus has moved to implementation/awareness issues on both sheep and bovine policies, in collaboration with key stakeholders.

Action 236: Increased level of communication and engagement with and between processors and producers in terms of marketplace developments (**Lead Processors**).

Action commenced and progressing

Ongoing.

Action 237: Explore options to increase data availability on traded volumes by channel across the whole supply chain, to increase transparency and better inform stakeholder understanding of market returns (**Lead Processors**).

Action commenced and progressing

The report of the EU Commission DGAGRI Markets Task Force was discussed by Council in December 2016 and the Commission is considering next steps. The Commission updated the Sherpa group on 20 June.

Action 238: Increase and expand contractual supply arrangements between producers and processors.

Action commenced and progressing

Approval for funding for the provision of advice to prospective Beef Producer Organisations was received from the European Commission in quarter 1. Formal tender for the approval of advisors in development within DAFM. Expected to be published the end of quarter 2.

Action 239: Focus on assisting the production of the market required carcass specification and production systems which are designed to maximise return both to the farmer and the processing industry (**Lead Farm Advisory Services**).

Action commenced and progressing

One of the challenges within the new Teagasc/Farmer's Journal BETTER Farm Beef Programme is to get farmers to focus on meeting the market requirements for carcass specification. This challenge will be targeting farmers within the programme who are slaughtering cattle to reach a higher % of their carcasses that fall within the highest specification.

Teagasc is currently working with the DAFM and the meat industry to produce Knowledge Transfer materials that Teagasc will publish in 2017 to give farmers and others guidelines on how best to meet the requirements from the Clean Livestock Policies for both cattle and sheep.

Action 240: Engage with retail customers to develop a partnership approach to the production of Irish beef, ensuring a harmonised and collaborative approach to market specifications, price points and farm management practices.

Action commenced and progressing

This is an ongoing issue and any such action will be considered jointly with all relevant stakeholders.

Action 241: Develop sectoral indicators, analysis and service delivery models which differentiates the sector in terms of farm size/labour requirement of farmers in the industry.

Action commenced and progressing

Methodology proposed for calculation of a measure of incomes arising in agriculture after accounting for imputed cost of owned labour and owned land based on Teagasc NFS data.

Work on implementing agreed approach continuing.

Meeting held with IFA. Below the line indicators of costs after accounting for owned labour as part of enterprise results to be published in July 2017.

Working paper on indicators to be published in quarter 3 in advance of full NFS results.

Action 242: Develop further and build a strong brand image for Irish beef capable of securing a

significant price premium at retail and food service.

Action commenced and progressing

Bord Bia has completed exploratory brand image consumer research in Great Britain, following the completion of comprehensive consumer insight work in Germany and Italy and similar work is currently underway in The Netherlands. All of this will feed into “brand” positioning that will help secure premium pricing.

Action 243: Develop markets for fifth quarter products through enhanced marketing capabilities and through enhanced market access.

Action commenced and progressing

Further documentation regarding the approval of pork offal has been forwarded to the Vietnamese authorities via Embassy Hanoi. Correspondence with Namibian authorities in connection with market access for bovine tripe.

Greater access secured for beef and beef offal to Saudi Arabia.

Approval for beef and beef offal secured with the Egyptian authorities in quarter 1 2017.

Secured an agreement with the South African authorities to remove the age-related BSE-testing requirement from the agreed certificate for the export of beef and beef offals to South Africa.

A questionnaire has been completed for the Mexican authorities in connection with market access for pigmeat and was handed over by the Minister during the trade mission he is leading to the US and Mexico the middle of June 2017.

Action 244: Dedicated and adequately resourced DAFM beef market access team to identify, develop, reinforce and secure new third country markets as well as supporting the trade in live exports.

Action commenced and progressing

DAFM currently considering some re-formatting of its market access priorities.

Continued with a number of other third countries to secure additional beef access.

Hosted an audit visit from Japanese Ministry of Health, Labour and Welfare in connection with the retention of market access for beef and beef offal.

Participation in and support to Ministerial Trade Mission to the Gulf in February/March 2017 in pursuit of additional market access for Irish meat and meat products.

An additional staff member started in the market access unit in quarter 2 and work is ongoing in relation to various actions of the Minister's seven point action plan on market access and exports.

DAFM hosted an audit inspection from the Ministry of Food and Drug Safety (MFDS) in Korea in connection with our efforts to gain access to the Korean market for Irish beef.

An additional two plants were approved for the export of beef (intact cuts) to the USA while a further plant was approved for beef intended for grinding (BIFG).

Action 245: Defend interests of the Irish beef sector in international trade agreements pursued by the EU, particularly in light of competitive threat posed by the US and Mercosur.

Action commenced and progressing

DAFM continues to monitor TTIP, with no new rounds currently scheduled due to a natural pause following the election of President Trump. Continued monitoring of Mercosur is required, with a new round likely before end of summer 2017. Through the weekly TPC meetings DAFM maintains its strong stance on beef in relation to, for example, the Mercosur and Japan FTA negotiations, as well as any emerging new FTAs.

Action 246: Investigate and develop viable alternative markets for the additional prime cattle arising from dairy herd expansion.

Action commenced and progressing

Refer to Actions 243 and 244.

Action 247: Building on the launch of Irish beef into the US, implement a strategy for the premium positioning of Irish beef as sustainable and grass fed resulting in a growth of exports into high end retail and foodservice outlets.

Action commenced and progressing

Export volumes are progressing with consignments regularly shipped. Almost all companies that have export approval have invested in executives situated in the market to develop business. Progress has been made on access for manufacturing beef but there are still some outstanding technical issues.

Shipments have resumed, following progress on the 'Beef Intended For Grinding' requirements, which has opened the way for the trialing of Irish beef in premium markets. A USDA audit of the Bord Bia PVP claims and systems took place in early June and a swift response from this is expected. A positive outcome will allow for further development of the premium Irish beef offer with trade and consumers.

During Minister Creed's trade mission to the USA in June, the USDA announced that Irish beef sold

in the US from Bord Bia approved plants can carry the USDA quality mark, which guarantees that it has been raised on more than an 80% grass diet; out to pasture for six-eight months a year, on a sustainable, fully traceable family quality-assured farm; and has been raised without the use of growth hormones; and that the use of antibiotics have been treated responsibly.

Action 248: Investigate opportunities for including animal welfare standards and human health benefits of grass fed beef in the marketing messages for Irish beef.

Substantial action undertaken and ongoing

Inward buyer and media visits have concentrated on the animal welfare standards of Irish beef production including detailed presentations on research done at Teagasc Grange to highlight the science supporting these claims as well as visits to Irish beef farms.

Marketing campaigns have been developed in key export markets that have researched consumer insights about animal welfare and human health.

Messaging on this is being built into new campaigns and online communication by Bord Bia in Germany, Holland and Italy. A workshop with Swiss Chefs and Professor Frank Monahan was also trialed in February which will form the basis of further activity. Further trade and journalist visits are scheduled by Bord Bia over the summer months. The development of science based nutritional facts on grass based facts suitable for the Chinese and Japanese markets is progressing.

Action 249: Explore options for increased returns from meat and bone meal, and tallow through industry and agency R&D.

Action commenced and progressing

A well-attended industry workshop on this subject took place in Ashtown in quarter 1 2017 and a number of actions arose to continue to collaborate with industry.

Discussions are ongoing between Teagasc and the meat industry regarding research on this topic. Teagasc Meat Technology staff attended the 17th congress of the European Fat Processors and Renderers Association Conference in June 2017 and met with Irish industry members.

Action 250: Develop early warning/surveillance systems, vaccines and intervention strategies for the rapid recognition, prevention and control of livestock diseases.

Action commenced and progressing

DAFM is engaging with stakeholders on this issue.

Action 251: Explore options for alternative funding models for research in the sector, including contributions from the industry.

Action commenced and progressing

Following conclusion of the evaluation phase of applications to DAFM's industry co-funded, Agri-food and Bioeconomy Innovation Platform Call a sizeable grant award stemming from this is now under active consideration.

Action 252: Complete the establishment of the Meat Technology Centre.

Target Achieved.

The Meat Technology Centre was re-branded as Meat Technology Ireland and successfully launched on the 13 of April by Minister for Jobs, Enterprise and Innovation and Minister for Agriculture, Food and the Marine. The MTI team prioritised the MTI launch, recruitment, outreach visits and new project submissions during quarters 1 and 2 of 2017.

Action 253: Explore research projects on the advantages of Irish grass fed beef systems in comparison with other production systems with regards to animal welfare, health and taste along with any other relevant areas. This should include a consideration as to the definition of 'grass fed'.

Substantial action undertaken and ongoing

The MTI team is commencing research work on the advantages of Irish grass fed beef systems in comparison with other production systems.

A Teagasc research project on sensory aspects of grass fed beef is starting in quarter 3 2017.

Action 254: Consider the merits of developing a standing national resource with expertise in the field of animal health economics and disease modelling.

Action commenced and progressing

The appointment of an economist to focus on animal health matters is imminent.

Action 255: Ensure the availability of the appropriate skills throughout the supply chain, including providing adequate training in butchery skills to the processing sector (**Lead DoE**).

Action commenced and progressing

FDII Skillnet continues to work with its member companies to support training for assessors and employees. In quarter 1 2017, three new assessors were trained and 19 trainees have now achieved award level certification. 65 other candidates have registered across three plants with training commenced, verification is planned for the end of July and September time.

Taste4Success Skillnet plans to run an Advanced Technical Knife Skills programme for 16 employees to address new cut requirements for the Asian market towards the end of June 2017. The network

has plans to run a job Seeker Support Programme in Pork Butchery Skills once they have identified jobseekers for interview, they are working in conjunction with the Department of Social Protection to recruit. It is proving difficult to identify suitable candidates on the live register.

Action 256: Seek to maintain support for suckler producers in the current CAP arrangements and prioritise that support in future negotiations on the post 2020 policy.

Action commenced and progressing

The BDGP scheme was re-opened in April 2017. BDGP II commits to six years of payments (up to 2022) for suckler producers who complete actions aimed at improving the genetic quality and environmental sustainability of the national herd.

As regards CAP post-2020, the Commission's public consultation process on the modernisation and simplification of the CAP closed on 2 May. The Commission will now hold a stakeholder conference in Brussels on 7 July. DAFM is continuing its detailed analysis of future CAP policy, and is committed to ensuring that suckler producers will be prioritised in future discussions on the CAP post-2020.

Action 257: Any increased support for suckler cow production should be conditional on quantity and technical efficiency improvement.

Action commenced and progressing

The BDGP was re-opened in April 2017 for new applicants who are not currently within the BDGP. The scheme will be called BDGP II and will run for 6 years. The actions required will be the same as in BDGP but with the Training and Carbon Navigator elements being brought forward to year one.

Action 258: Competitive financing packages required for acquisitions to improve foreign market presence.

Action not yet commenced

Refer to Action 127.

Action 259: Seek to ensure origin labelling requirements across all sectors reflect the appropriate balance between consumer demand and increased cost to consumers and industry.

Substantial action undertaken and ongoing

No comments or observations received during TRIS notification period. Response to WTO comments sent by DAFM.

Action 260: Seek to minimise the impact of mandatory labelling requirements on the

competitiveness of Irish exports on EU markets.

Action commenced and progressing

Ongoing monitoring of legislation being introduced in other Members States and Third Countries as well as input into forthcoming EU legislation to be introduced under FIC regulation.

Action 261: Increase farmer participation in Beef and Lamb Quality Assurance Scheme (BLQAS) to 90% in terms of proportion of output by 2025.

Action commenced and progressing

Ongoing.

Action 262: Develop strong reputation for quality and environmental sustainability of Irish beef with customers, competent authorities in target markets and NGOs building on the Sustainable Beef and Lamb Assurance Scheme (Origin Green) and optimise the use of this brand reputation in the market place.

Substantial action undertaken and ongoing

A new promotional campaign for beef and lamb, focused on environmental sustainability, was launched in Germany by Minister for Agriculture, Food and the Marine, and An Taoiseach, during March and April. The German campaign is a pilot and following initial awareness building in 2017, will start to layer in more specific details on environmental sustainability actions and Origin Green. Activities and impact will be reviewed, to consider similar approaches in further markets.

Action 423: Explore research into the potential reduction of methane generation arising from cattle and roll-out appropriate mitigation.

Substantial action undertaken and ongoing

DAFM hosted in quarter 1 2017 an international review panel meeting of full proposals submitted to the European Research Area Network (ERA-NET) Co-fund Call for Monitoring & Mitigation of Greenhouse gases from Agri- and Silvi-culture.

Three projects that cover the scope of this action and which have Irish partner participation were approved for funding in the European Research Area Network Co-fund Call for Monitoring & Mitigation of Greenhouse gases from Agri- and Silvi-culture (ERA-Gas).

Action 264: Work collaboratively with processors, Bord Bia, Teagasc and Sheep Ireland to modify the very seasonal nature of Ireland's sheepmeat supply, and maintain our presence, and access to markets throughout the year.

<p>Action commenced and progressing</p> <p>Ongoing.</p>
<p>Action 265: Increase farmer participation in Beef and Lamb Quality Assurance Scheme (BLQAS) to 90% in terms of proportion of output by 2025 (Lead Farmers).</p> <p>Substantial action undertaken and ongoing</p> <p>Bord Bia continues to promote the SBLQAS through the monthly Irish Farmers' Journal advertorial page and producer meetings. Current certified sheep farms total 11,559 whereas beef farms come to 48,156.</p>
<p>Action 268: Increase sheep farmer participation in Knowledge Transfer Programmes.</p> <p>Action commenced and progressing</p> <p>KT groups running.</p> <p>Scheme is closed to new entrants. On-going consultation with DAFM re issues.</p>
<p>Action 269: Enhance hill farming systems by promoting greater integration with lowland sheep producers.</p> <p>Action commenced and progressing</p> <p>Sheep Welfare Scheme in operation. Over 21,000 flockowners have applied. Hill and lowland options available.</p>
<p>Action 270: DAFM to continue to support and engage with Sheep Ireland on their work to drive better genetic gain for the flock.</p> <p>Substantial action undertaken and ongoing</p> <p>Ongoing.</p>
<p>Action 271: Underpin and further improve Ireland's sheep traceability system.</p> <p>Action commenced and progressing</p> <p>Discussions continuing with stakeholders on feasibility of introducing EID.</p>
<p>Action 272: Teagasc to undertake a review of their sheep research and advisory programmes.</p> <p>Substantial action undertaken and ongoing</p>

The Teagasc Sheep programme was reviewed in November 2016 by a panel of experts. Management has developed an Action Plan to implement the recommendations.

Action 273: Improve the consumer perception of lamb with the younger demographic as a healthy, convenient protein choice.

Action commenced and progressing

Bord Bia has intensified its promotional focus under the European co-funded campaign 'Lamb – tasty, easy, fun' on digital/social media platforms as they are the preferred communication channels for the younger demographic (24 – 45yrs).

Action 274: Build a strong brand for Irish lamb based on its sustainable grass based production to secure outlets and price premium.

Action commenced and progressing

Bord Bia has promoted Irish lamb at both consumer and trade customer engagement initiatives i.e. in-store tastings, inward study visits, on-pack consumer promotions in key target markets - Belgium, France, Germany and Sweden.

Action 275: Implement generic promotion of lamb across France, Belgium and Germany and compete for further EU funding post 2017.

Action commenced and progressing

A proposal for a new €10.5m EU co-funded generic lamb promotion (2018-2020) in Ireland, France, Germany and the UK was submitted to the Commission in April 2017. This joint application was submitted by Bord Bia in association with AHDB (UK) and Interbev (France).

Action 276: Develop a Carbon Navigator tool for sheep producers

Action commenced and progressing

To be developed in quarter 3.

Action 277: Develop strong reputation for quality and environmental sustainability of Irish beef with customers, competent authorities in target markets and NGOs building on the Sustainable Beef and Lamb Assurance Scheme (Origin Green) and optimise the use of this brand reputation in the market place.

Substantial action undertaken and ongoing

Refer to Action 262.
<p>Action 424: Policy development should include a focus on managing overgrazing particularly in areas of ecological importance and in areas where water bodies are sensitive.</p> <p>Action commenced and progressing</p> <p>Action linked to developments under Actions 25 and 33.</p>
<p>Action 278: Investment in pig production facilities particularly energy efficiency to reduce input costs.</p> <p>Substantial action undertaken and ongoing</p> <p>Applications, approvals and payments are issuing on an ongoing basis under the Pig and Poultry Investment Scheme under TAMS II.</p>
<p>Action 282: Engage further with non-intensive sector to ensure standards of bio-security are understood and implemented.</p> <p>Action commenced and progressing</p> <p>Ongoing interaction with the Irish Pig society on this issue and related issues. Significant funding (€60,000) was given to the Irish Pig Society in 2016 to support a three year strategic plan for the sector drawn up by the society. This funding was on foot of a submission from the IPS requesting funding under the direct aid package agreed at EU level in September 2015 providing for temporary exceptional aid to farmers in the livestock sectors.</p>
<p>Action 283: Explore extension of country of origin labelling to loose and processed products.</p> <p>Substantial action undertaken and ongoing</p> <p>DAFM monitoring extension of origin labeling rules through FIC as per Art 26.3 due to come into force in 2019. Consultation with stakeholders on this and any further legislative developments will continue.</p> <p>Update on loose products as per Action 259.</p>
<p>Action 285: Agreement on and implementation of revised Pig Salmonella Control Programme.</p> <p>Action commenced and progressing</p> <p>DAFM continuing to work on revised PSCP including engaging with industry through the Pig Implementation Strategy Group.</p>

Action 287: The industry to scope out an effective marketing message with Bord Bia.

Substantial action undertaken and ongoing

Bord Bia phased out the Bacon and Ham advertising campaign during the first quarter of 2017 and replaced it with a new campaign during the second quarter that promotes Pork and Bacon through TV advertising, digital advertising and social media activity. This new campaign highlights the versatility of both meats and is being wrapped around the theme of 'true comfort food' where the importance of quality assurance is emphasised to reassure consumers on the standards and provenance of this meat.

Action 288: Invest and strengthen the position of the Quality Mark on the domestic market positioning pigmeat as a versatile, healthy option with consumers.

Substantial action undertaken and ongoing

During quarter 2 2017, Bord Bia has developed a new creative platform for its "Your Food is Our Passion" QMark advertising campaign for Pork and Bacon with a new TV advert and digital content under "True Comfort Food".

Action 289: Roll out a carbon footprinting assessment and improvement programme for pigs.

Substantial action undertaken and ongoing

Three TAC meetings have been undertaken for the development of a new Pig QAS and a carbon navigator is being finalised in collaboration with Teagasc.

The CF calculation model has been finalised. Bord Bia will convene the TAC again in the coming months to finalise the standard which will incorporate the collection of CF data for pigs.

Action 290: Opening of upgraded pig research facility in Moorepark with prompt dissemination of research findings to the industry.

Substantial action undertaken and ongoing

New facility fully operational and was officially opened on 19 May 2017 by Minister for Agriculture, Food and the Marine. Annual research dissemination days took place on 29 May in Cavan and 31 May in Moorepark.

Action 292: Improved animal health, welfare and bio-security awareness and implementation through on-farm investment and training.

Action commenced and progressing

KT programme meetings underway (13 groups and c. 250 participants to date). Work commenced on Farm Improvements Plans.

Action 293: Investment in poultry production facilities particularly energy efficiency to reduce input costs.

Substantial action undertaken and ongoing

The first five tranches have now closed. The sixth tranche is now open and will close on 7 April 2017. To date 136 applications have been received for the Pig and Poultry Investment Scheme. 96 approvals have issued. Further tranche openings will be announced in Spring 2017.

Applications, approvals and payments are issuing on an ongoing basis under the Pig and Poultry Investment Scheme under TAMSII. 153 applications have been received under this measure to date.

Action 294: Exploit the opportunities afforded by country of origin labelling.

Action commenced and progressing

Irish produce is held in high regard internationally for its quality and safety. Bord Bia's Origin Green campaign focus on the sustainability credentials of Irish food giving it a premium position in markets throughout the world.

The uptake in the Bord Bia Retail Butcher Assurance Scheme remains low. The extension of loose products under Country of Origin Labelling (COOL) legislation was expected to materialise by the end of April. However, this change in legislation has been delayed and the latest indications from the DAFM suggests that the timeline is being pushed out until late summer for agreement. Once loose products are included under COOL, the appeal of joining the Bord Bia Butcher Assurance Scheme should increase and this should be reflected in an increased uptake in the scheme.

Action 300: Provide funding under the Rural Development Programme to up-grade existing buildings and funding to support the construction of new housing including the siting of new housing to avoid environmental effects, and ensure animal welfare and safety.

Substantial action undertaken and ongoing

Applications, approvals and payments are issuing on an ongoing basis under the Animal Welfare, Safety and Nutrient Storage Scheme under TAMS II. Over 4,600 applications have been received under this measure to date.

Action 301: Examine the extension of country of origin labelling to loose products

Action commenced and progressing

Refer to Actions 259, 283 and 294.

Action 302: Invest and strengthen the position of the Quality Mark on the domestic market.

Action commenced and progressing

The QMark sponsors Neven's Food Trails on RTE1. TV Advertising (supported by Digital Marketing) for Ham and Bacon takes place in this quarter. Strategic, Creative and Preproduction planning for a new Pork and Bacon campaign is completed in this quarter.

Bord Bia carried out extensive marketing of the QMark at Bloom 2017. In addition separate Quality Assured Pork and Bacon, Lamb and Eggs campaigns were developed and run to support the Quality Mark on the Domestic Market, on TV, print and digital channels.

Action 303: Incorporate sustainability criteria under the Origin Green programme into the Poultry Products Quality Assurance Scheme (PPQAS)

Action commenced and progressing

Three Poultry TAC meetings have been convened by Bord Bia with two sub-committee meetings dealing with specific modules of the draft standard i.e. hatcheries and breeder/rearers.

Action 304: Roll out a carbon footprinting assessment and improvement programme for poultry.

Action commenced and progressing

A meeting between Bord Bia and the Carbon Trust, to progress the calculation model, takes place in June. The revised poultry standard will incorporate the collection of data to enable the CF for poultry to be calculated on farms.

Action 308: Increase production of protein crops annually to provide source of native traceable protein for feedstuffs.

Action at commencement stage

Priority areas identified at Tillage Forum. Outcome of Commission discussion of protein coupled payment scheme will inform next steps.

Action 309: Increase the use of rotations and break crop production in response to meeting CAP greening requirements and to developing domestic and export markets (oats, oilseed and pulses).

Action commenced and progressing

DAFM invited to sit on steering group of new Teagasc led research project on 'Optimising

production technology in Ireland for break crops’.

Action 310: Form partnerships with intensive livestock producers to avail of organic manures to reduce fertilizer costs, improve biological activity and improve soil fertility.

Substantial action undertaken and ongoing

Approvals for T1, T2, T3, T4 and T5 being finalised. Payments have commenced for all measures.

Action 311: Continue to examine whether the likely development of the sugar and ethanol markets would justify farmer and industry investment in the redevelopment of a sugar beet industry in Ireland.

Action not yet commenced

Action 315: Expand crop variety evaluation programmes to identify high yield varieties of malting barley, wheat, oats and protein crops to support farmer and industry actions.

Substantial action undertaken and ongoing

New trials on milling wheat commenced in 2017.

Action 316: Promote the use of superior crop varieties through the seed certification system. This will ensure that seeds of the highest quality are available to growers.

Target achieved (Year one).

Action 318: Identify break crop opportunities and ensure their development by putting in place a cohesive development plan for growers, industry research and technology transfer and policy makers.

Substantial action undertaken and ongoing

Teagasc 2017 research programme continuing in this area. KT Tillage measure in TAMS now fully operational.

Action 319: Establish a new industry grouping to ensure achievement of targets for protein crops, break crops and oilseed rape.

Substantial action undertaken and ongoing

Further work on this action will be included under Actions 308 and 309.

Action 320: Examine the feasibility of expanding the seed potato production sector to take

advantage of national high-health status and increase exports of seed.

Substantial action undertaken and ongoing

Group has been established and met on two occasions. Group continuing to develop its strategy.

Action 425: To promote minimum tillage.

Action commenced and progressing

TAMS II Tillage measure is now open for applications.

Action 322: Producers to support and fund the Horticulture Industry Forum actions (**Lead Horticulture Industry Forum**).

Action commenced and progressing

A meeting of the Horticulture Industry Forum and DAFM was held in quarter 2. An offer from Bord Bia to fund HIF work until the end of the year was accepted.

Action 333: To develop Bloom further as the major showcase of Irish Horticultural production, landscape design and construction.

Substantial action undertaken and ongoing

Bloom took place over five days on the June bank holiday weekend. There was a record attendance of 120,000 visitors. The show featured over 35 plant exhibitors between the plant pavilion and plant village; 22 show gardens designed by established and new garden designers (who were supported by the garden construction sector) and over 110 food companies exhibited in the Food Village. Visitor satisfaction was recorded at 97% with exhibitor satisfaction at 98%. There was extensive coverage of the show across all media channels in the run up to and during the show providing a high profile promotional platform for the food and horticulture industry.

Action 335: Develop a strategy to maximise opportunities in relation to supplier relations, import substitution and below cost selling in the retail horticultural market.

Action commenced and progressing

The Competition and Consumer Protection Commission is examining 22 compliance reports which were submitted to them at the end of March 2017 by large supermarkets and wholesalers in compliance with the regulations.

Action 336: Establish an industry funding mechanism (levy) to promote horticultural products.

Topic for discussion with Horticulture Industry Forum and other stakeholders at the first meeting

scheduled to take place towards the end of quarter 1.

Action not yet commenced

The Horticulture Industry Forum plans to compile a strategy and “vision” for the horticulture industry.

Action 337: Review the Terms and Conditions of those employed in the horticultural sector.

Action at commencement stage

The horticulture sector was discussed at a Food Wise 2025 workshop on skills needs at farm level held in April 2017. The recommendations from this work shop and the recommendations of the 2017 Report on Future Skills Needs in the Food and Drinks Sector will be progressed in the second half of this year.

Action 338: Explore the potential for expanding evidence informed 'food in schools' programmes.

Action commenced and progressing

The Report of the UCD evaluation of the (i) long-term impact of the Food Dudes intervention in 2010-2011 and the impact of the Food Dudes Boost Programme in (ii) senior classes in February-March 2016 and (iii) in junior classes in September-October 2016 , which was submitted to the EU on 28 February 2017, provided positive evidence of Food Dudes’ long-term impact and useful data for a six year Schools Scheme strategy for school fruit/veg and for milk/milk products, as well as considering further measures.

Work progressing on six year school fruit/vegetables and milk strategy for submission to the EU Commission by 1 August 2017.

Action 339: All companies to sign up to Origin Green initiative.

Substantial action undertaken and ongoing

Over 95% of Irish food and drink exports are produced by Members of Origin Green. There are 82 verified companies in the PCF sector with an additional 135 companies with submitted plans.

Action 340: Increase industry expenditure on R&D and innovation by setting a target of a 10% increase in funding per annum.

Action not yet commenced

In the absence of baseline data on R&D expenditure at overall food industry and sectoral level, research is required to identify potential sources and suitable data gathering methodologies. The UK Brexit referendum makes innovation and market diversification ever more important but makes it more difficult to resource increased investment in R&D.

Action 341: Government agencies in consultation with the industry to align the definition of PCF and co-ordinate their approach accordingly.

Target Achieved.

The highlighting of the PCF definition in Bord Bia Performance and Prospects 2015-2016 provided a keynote start to 2016. Trade data is now available on a timely basis to facilitate timely analysis and focus on the various categories making up the PCF sector.

Action 342: Develop a sectoral strategy for food and drink SMEs, which sets out supports, targets and best practice for the entry, development and progression of these companies to 2025.

Action commenced and progressing

The sectoral strategy development cross-agency group has been appointed and has met to establish the project outputs and timelines.

Action 343: Continue to work directly with indigenous companies to identify new export market opportunities and develop services and supports for companies to facilitate export growth.

Substantial action undertaken and ongoing

A further four market missions took place in quarter 2 2017 with just under 50 participants. A Ministerial Trade Mission to the United States & Mexico took place in June with a focus on meat, dairy and beverages. A total of six trade shows were completed in quarter two with over 50 companies participating.

Action 344: Implement the Competition and Consumer Protection Bill when enacted.

Target Achieved.

The Competition and Consumer Protection Act 2014 came into operation on 31 October 2014. The Consumer Protection Act 2007 (GROCERY GOODS UNDERTAKINGS) Regulations 2016 were signed into law by the Minister for Jobs, Enterprise and Innovation on 27 January 2016 and entered into force on 30 April 2016.

Action 345: Drive greater participation by the sector in the Innovation Voucher and Innovation Partnership Programmes.

Action commenced and progressing

55 vouchers issued so far in 2017 to companies in the food sector.

Three Innovation partnerships approved to date in 2017.

Action 346: Continue and expand the Employment and Investment Incentive Scheme (Enterprise Ireland) and Seed Capital Scheme to encourage more investment in small PCF companies (**Lead DoF**).

Substantial action undertaken and ongoing

The Minister for Finance announced in Budget 2017 that the “Start Your Own Business” tax relief is being extended for two years until the end of 2018. These are now operational.

The “Employment & Investment Incentive” (EII) and “Seed & Venture Capital Scheme” (2013 – 2018) are in place. Take-up of these schemes will be assessed in the second half of this year.

Action 347: Bord Bia to maximise the use of Origin Green and their Quality Assurance programmes to differentiate Irish produce.

Action commenced and progressing

There is no Quality Assurance Scheme relevant to Prepared Consumer Foods, however all trade shows which Bord Bia participate at are under the Origin Green banner demonstrating Ireland’s continued commitment to sustainability. One of the largest prepared consumer foods show in quarter 2 was PLMA.

Action 348: Continuation and possible expansion of the Foreign Earnings Deduction (F.E.D.) (Lead DoF).

Substantial action undertaken and ongoing

The Finance Act 2016 extended the FED until the end of 2020, added Colombia and Pakistan as qualifying countries and reduced the minimum number of days for travel to 30 per annum. These budget changes are now operational.

Action 349: Establish discussion groups for malting barley growers to include environmental and sustainable practices knowledge transfer.

Action commenced and progressing

KT groups are now established and fully active since July 2016.

Tillage KT groups implementing relevant measure activities for all crops.

Action 350: All companies to sign up to Origin Green initiative.

Substantial action undertaken and ongoing

There are 28 verified companies in the beverage sector with an additional 33 companies who have

submitted plans.

Action 351: Increase industry expenditure on R&D and innovation by setting a target of a 10% increase in funding per annum.

Action not yet commenced

In the absence of baseline data on R&D expenditure at overall food industry and sectoral level, research is required to identify potential sources and suitable data gathering methodologies. Following the UK Brexit referendum, innovation and market diversification are even more important, however it may be more difficult for companies to resource R&D investment.

Action 352: Industry to continue to highlight the value of the national economy of the drinks sector and work to reduce the fiscal and regulatory burden.

Action commenced and progressing

Budget 2017 maintained the cap on excise relief for microbreweries at 30,000 hl a year but enlarged the definition of microbrewery to 40,000 hl a year, allowing microbreweries to expand production and exports without losing excise relief. Industry welcomed the enlargement of the definition of micro-brewery to 40,000 hl a year, which has enabled some companies to proceed with investment plans.

Action 353: Industry and state agencies to work collaboratively to develop an Irish Whiskey and food pairing trail as a major tourist attraction and to differentiate Irish food and drink produce.

Action commenced and progressing

Bord Bia is progressing work with industry on a strategy for pairing Irish Whiskey and food. In December 2016 Minister Creed launched an Irish Whiskey Tourism Strategy developed by the Irish Whiskey Association. Regional launches of the Irish Whiskey Tourism Strategy took place in Tullamore, Antrim and Midleton in this quarter 2017.

Action 354: Develop fiscal and other revenue generating initiatives which will enable the Irish Whiskey industry to fund the minimum three year maturation.

Action not yet commenced

Companies are adopting varying strategies from buying in product matured for three years to sourcing investment including FDI.

Action 355: Industry to work with D/ECLG and EPA to improve waste recycling levels, facilities, implementation and to measure change on an ongoing basis.

Action at commencement stage

D/ECLG Food Waste Forum in March 2017 will be followed by a formal arrangement between stakeholders to improve waste recycling levels and develop a means for measuring change.

Action 356: Assist development of new industry entrants by structured knowledge transfer systems including mentoring, training and skills transfer.

Action commenced and progressing

The Irish Whiskey Association mentoring programme: three of the programmes four stages up and running with seven distilleries at the advanced stage, which pairs new distilleries with master distillers from leading distilleries such as Bushmills and Irish Distilleries. The programme gives participants a unique insight into production, routes to market, warehousing and technical requirements.

Action 358: Develop a sectoral strategy for food and drink SMEs, which sets out supports, targets and best practice for the entry, development and progression of these companies to 2025.

Target achieved.

Bord Bia has had a strategy for alcohol beverages to 2025. The Bord Bia support services have been focused on supporting the implementation of this strategy. There is no perceived need to revisit and substantially amend this at present.

Action 359: Continue to work directly with indigenous companies to identify new export market opportunities and develop services and supports for companies to facilitate export growth.

Substantial action undertaken and ongoing

14 client companies exhibited on Bord Bia's participation at the Wine & Spirits Wholesalers of America (WSWA) in Orlando in April 2017; these clients were also showcased to the 18 control states at the North America Beverage Control Association conference in May.

17 client companies participated in the Ireland Drinks Expo Moscow on the 8 June 2017.

24 client companies took part in the Ministerial Trade Mission to the USA & Mexico in June 2017.

Action 360: Facilitate the growth of the premium drinks categories by providing market knowledge for the US market.

Target achieved (Year one).

Action 361: Continuation and possible expansion of the Foreign Earnings Deduction (F.E.D.).

Substantial action undertaken and ongoing

Refer to Action 348.

Action 362: The CSO/DJEI survey to track the Business Expenditure on R&D (BERD) performance of the PCF sector.

Action commenced and progressing

The Department has been in contact with CSO. More work needs to be done on this. Detailed information will be available for quarter 3 2017.

Action 363: Creation of civic and festival markets similar to the English Market in Cork and Harvest Festival in Waterford in our major cities and towns.

Action not yet commenced

Action 364: Expansion of Dublin Food Chain initiative to other cities.

Action not yet commenced

Action 365: Create a pipeline of companies growing beyond Artisan/Small Food Business definition via the introduction of both bespoke 1:1 and group multi-level supports across strategic planning, marketing and marketing finance (for example Ascent, Superbrands and Step Change Fund).

Substantial action undertaken and ongoing

The review process for Bord Bia's Ascent programme supported by PwC has concluded. A revised model is being developed to extend both its reach and the development offer for companies. The roll-out date for the next programme is to be confirmed pending an internal Bord Bia review of company supports and services. This is likely to be completed by the Autumn.

Bord Bia's Step Change Programme (SCP) was launched on a pilot basis in 2015. The objective of the SCP is to assist small and medium sized food, drink and horticulture companies to fund significant new projects which have the potential to impact strongly on the companies' growth levels. The Step Change funding of €180,000 will stimulate overall marketing spend in excess of €450,000 and is expected to achieve additional turnover and export growth of approximately €5 million for the five companies concerned by end of December 2018.

Two companies participated in consumer insight focus groups in Bord Bia's Thinking House in May as part of the Superbrands programme.

Action 366: Introduce a new support programme for Direct to Consumer producers aimed at enabling producers to extend their local and regional business reach and resulting in a pipeline for new entrants to the Artisan Food Market at Bloom.

Substantial action undertaken and ongoing

Building on success of last year and demand for further training, workshops took place in Dublin, Cavan, Donegal and Kerry in quarter 1.

Action 367: Increase the opportunity for successful meet the buyer occasions through market focused relationship development with distributors, specialist retailers, and other retail and foodservice buyers on the domestic and international markets.

Substantial action undertaken and ongoing

Inward buyer meetings:

US specialty retailer **Dean & DeLuca** opened their first European store in London in June 2017. Meeting with that the CEO of Dean & DeLuca was hosted in Ireland and they met with 13 Irish companies. Meeting scheduled for 1 March to discuss the Irish products they intend to stock for their store opening.

Spinney Dubai – Met with 20 Irish companies on a visit to Ireland in February.

Thailand – Central Food Retail Group Inward Buyer Visit

Central Food Retail visited Bord Bia Dublin in March to meet with 15 Irish Food companies looking to explore opportunities in the Thai retail market. Central Food Retail is the largest retailer in Thailand with over 210 stores in a range of different formats.

At Bloom 2017, over 200 buyers from Irish retail and foodservice attended the trade event on Friday the 2 June to meet 100 Irish producers, including 33 who were new to Bloom this year. The purchasing power of the retail buyers on the Irish market is €10 billion. Additionally, 11 international buyers, mainly from the UK, were in attendance.

In May 30 German foodservice operators from a Bavarian business network travelled to Dublin to meet 10 Irish companies in Bord Bia. This coincided with the publication of Bord Bia's foodservice market entry guide to Germany.

In June, retail buyers from Albert Heijn are due to have a supplier podium day in Bord Bia at which over 20 companies will have the opportunity to present their products to the Dutch retail giant.

Action 368: Annual investment in and delivery of small business specific consumer and market insights.

Substantial action undertaken and ongoing

The Local Food research has been further shared and disseminated to industry including a debrief in Bord Bia's Thinking House to approximately 30 companies at the end of March, as part of the Food Academy Advance programme in April 2017 and in a meeting with representatives of the Local Enterprise Office network, also in April.

Action 369: Formal opportunities to transfer learnings from craft food and drink production to new sector entrants via food apprenticeships and placements.

Action at commencement stage

Some scoping work has been initiated.

Action 371: Sustainably manage the forest resource, including genetic resources through the introduction of a national forest management planning system and state support for seed stand management and the establishment of seed orchards thereby ensuring the provision of a full range of timber and other benefits.

Action commenced and progressing

Scheme subject to review as part of mid-term review of the 2014-2020 Forestry Programme.

Action 373: Increase the roundwood harvest to 4.6 m cubic metres by 2025. Produce a new all Ireland roundwood production forecast. Develop a flexible and environmentally responsible roundwood supply chain to enhance the competitiveness of the processing sector and the

Action commenced and progressing

COFORD Wood Mobilisation and Production Forecasting Group tracking recommendations in *Mobilising Ireland's Forest Resource*.

Action 426: Consider the development of bird Forest Sensitivity Maps

Action commenced and progressing

The FS-DAFM to complete its study of the report, which will be carried out by the end of quarter 2 2017.

Action 380: Commission an independent review of existing aquaculture licensing system involving all stakeholders, to identify the current shortcomings and bottlenecks (legislative, resource and logistical), to report by early 2016 and implement necessary changes to the aquaculture licencing system as a matter of priority.

Substantial action undertaken and ongoing

The Minister launched a review of the aquaculture licensing process on 20 December 2016. This

review was undertaken by a three person independent group who were appointed by the Minister due to their expertise and specialisation.

The Independent Review Group carried out a public consultation, which closed on 10 February 2017. The Group is currently meeting some stakeholders and reviewing submissions. The duration of the review was four months.

Following a request from the Independent Aquaculture Licensing Review Group (IALRG), BIM submitted a substantial report to support the work of the IALRG in February 2017.

The Independent Review Group presented its report to the Minister on 31 May 2017. The report is currently being considered.

Action 381: Develop a strategy to expand shellfish and aquaculture production taking account of the carrying capacity of bays.

Action commenced and progressing

Work on the preparation of a carrying capacity for shellfish cultivation for Kilmacillogue and Ardgroom, Co Kerry is well advanced. It is anticipated that a draft will be ready by quarter 3 2017.

Action 382: Develop and initiate practical and competitive measures to attract additional landings into Irish ports and continue to invest significantly in necessary infrastructure at the Fishery Harbour Centres.

Action commenced and progressing

Investment in the six Fishery Harbour Centres continues to be administered by the Departments Fishery Harbour and Coastal Infrastructure Capital Program. €27.5 million has been allocated in 2017 for this purpose.

Poseidon is currently amending the draft report following BIM's internal review. Consultations are being arranged with relevant stakeholders to discuss the report findings and associated proposed roadmap. Following the external review, an implementation strategy will be developed to progress opportunities. This next phase of the strategy will require significant industry input and multi-agency coordination.

Action 383: Develop a strategy with practical and implementable actions to deliver scale in the key seafood sectors, including food ingredients.

Action commenced and progressing

Refer also to Actions 129 and 384.

Action 384: Develop a strategic plan with practical and implementable actions to significantly increase the quantity of seafood added value across all main species groups. This strategy should complement the strategic plan to deliver scale in the key seafood sectors, including food ingredients and should, at a minimum reduce the level of produce sold in commodity form from 70% to below 50%.

Substantial action undertaken and ongoing

Eaton Square Consultancy was appointed in quarter 3 2016 to develop for a strategic plan to deliver value-adding and innovation in the seafood sector. The work included an assessment of the international seafood landscape with a view to developing new innovation opportunities and to bench mark the Irish sector against international peer organisations. Following the conclusion of the assessments process in early 2017 the Innovation Plan was submitted and is currently under review by BIM.

Action 385: Progress participation and engagement of Origin Green with seafood companies with the aim of bringing all seafood companies under the programme by 2016.

Substantial action undertaken and ongoing

Bord Bia continues to work with seafood processors as they progress towards full verification. 40 seafood companies are now fully verified.

Castletownbere Fisherman's Co-operative Society won the top accolade 'Green Business of the Year' at the prestigious Green Awards 2017 beating off stiff competition from a range of well-known successful Irish companies including Flavahan's, Kerry Group and Glanbia. Ireland's largest co-op based at Dinish Island, Castletownbere, West Cork were also the proud recipients of the 'Green Seafood Business Award' sponsored by BIM demonstrating the positive environmental and sustainability credentials in the Seafood Sector.

BIM's Green Programme in conjunction with Bord Bia have organised a *Sustainability Knowledge Sharing Trip* to Silver Hill Farm in June 2017. BIM see this as an opportunity for the seafood processing sector to gain valuable insights and learnings from this highly successful Irish company. This Industry Visit is open to seafood processors who are verified members of Origin Green with a reciprocal visit to Island Seafood's to be arranged in 2017.

BIM has assisted three seafood processors to gain verification under Origin Green in 2017 to-date. In total, 51 seafood enterprises have gained certification and BIM is progressing work with a further three companies on their planned applications.

49 seafood companies are now fully verified, an additional nine companies this quarter after strong engagement with the sector. In addition, a further 29 seafood companies have submitted their plans for verification.

Action 386: Improve the environmental sustainability of the sector including fishermen gear sensitivity and replenishment of depleted inshore stocks.

Action commenced and progressing

Final analysis of the 2016 BIM Lobster V-notching Scheme show that 20,500 lobsters were released back to sea to breed through the provision of €320,000 grant aid. A similar number of lobsters were released in the previous year. The 2017 programme is now opened to applications.

The introduction of a minimum size for velvet crab following the conclusion of the public consultation process was the other significant agenda item at the meeting of NIFF on 10 May. Based on the submissions received it was felt that this process was not representative of the inshore sector. Accordingly the NIFF have reiterated their recommendation to DAFM for the minimum size introduction.

In order to facilitate a review of the V-notching programme data for all v-notching events under the two previous Operational Programmes for fisheries (FIFG & EFF) are being entered for analysis. It is expected that this process will be completed by the end of June.

A total of 29 applications have been received to date under the 2017 V-notching Programme representing a total investment of €360,000 and grant aid of €266,320.

Action 387: Give renewed priority to R & D into seafood based new product development, food ingredients and functional foods. This research should also include both harvested wild and farmed seaweeds and their by-products.

Action commenced and progressing

The following commercially focussed R&D projects were completed in quarter 1 2017:

- Clean label extended shelf life technology for whitefish, pelagic and salmonids.
- Project to extract chitosan from crab shell waste.
- Whitefish and pelagic by-product ingredients for pet food application.

A new ingredients project call was made in March/ April 2017.

In line with Action 192, BIM has gone to tender to develop an expert panel of Research Provider Organisations (RPOs) to develop customer led seafood ingredients. This expert panel will be available to BIM and industry to develop the commercial opportunities from seafood by-product and underutilised species.

Action 427: Continue screening, assessment, monitoring and reporting measures for sea-fisheries and aquaculture in compliance with EIA, Birds, Habitats and Marine Strategy Framework Directives In the case of new inshore fisheries, proposals will be developed through the multi-stakeholder

Regional Inshore Fisheries Forums and the National Inshore Fisheries Forum.

Action commenced and progressing

11 AA Conclusion Statements have been prepared by the Licensing Authority for Aquaculture (i.e. the Minister) to date.

The appropriate assessment of a new Fisheries Natura Plan (2016-2023) for mussel seed fishing in Castlemaine Harbour is being finalised. If approved by the Minister, a fisheries Natura declaration will be introduced to provide the legal framework necessary to implement the plan.

During 2016 the process of public consultation on a draft Risk Mitigation Plan (prepared in consultation with the SE RIFF) for scallops off the Wexford coast was completed. On foot of this a fisheries Natura declaration is being drafted. If the Minister approves the Declaration then a number of fisheries management measures identified in the Risk Mitigation Plan will be implemented in the sensitive habitats surrounding the Hook Head and Saltee Islands SACs.

Progress towards development of management plans for new inshore razor clam fisheries on the west coast is continuing. Surveys of numerous areas were completed in 2016 and continue in 2017 to inform the Regional Inshore Forums bivalve sub-group.

Annual survey of cockles in Dundalk Bay SAC and SPA completed and TAC advised in relation to five year cockle management plan.

Being supported through the EMFF Sustainable Fisheries Scheme, the Inshore Management and Development Scheme, the Data Collection Multi Annual Plan and the Marine Biodiversity Scheme.

Appropriate assessment of the Fisheries Natura Plan for Castlemaine Harbour is concluded. Drafting is underway on the Fisheries Natura Declaration for the Hook Head and Saltee Islands SACs.

Additional Actions for National Women's Strategy 2017- 2020:

Action 1: Improve statistics and reporting on women's involvement in the agri-food sector.

Action at commencement stage

This action was discussed at the Agricultural Statistics Liaison Group, involving DAFM, Teagasc, Bord Bia and CSO, in May 2017. All agencies agreed to progress collection and reporting of gender statistics, and to push for a greater focus on gender statistics at EU level.

Action 2: Clarify any perceived taxation barriers to registering farms in joint ownership, and publicise outcomes.

Action commenced and progressing

DAFM is engaged with the Department of Finance and Revenue on this issue.

Action 3: Provide support for rural female entrepreneurs at start-up stage, e.g. through the 'ACORNS' programme.

Substantial action undertaken and ongoing

The ACORNS programme, sponsored by DAFM, addresses the skills, enterprise and capability gaps of rural start up female entrepreneurs. It provides participants with the knowledge, support and networking opportunities to meet and even exceed their business goals. The demand for the programme was very strong with 185 applications for 48 new places in 2015 and 174 applications for 57 new places in 2016. The 2016 programme also included a further development phase for those who successfully completed the 2015 programme.

Action 4: Encourage female involvement in decision making and leadership in all parts of the agri food sector, especially through mentoring and positive case studies.

Substantial action undertaken and ongoing

As a result of the culture engendered by the ACORNS programme, "STRIVE" a network and mentoring event was hosted by three of the 2015 ACORNS participants in October 2016 to support rural business people.

Dozens of case studies from the ACORNS participants have been circulated publicly to promote the ACORNS programme and also to encourage female involvement in the agri food sector.