
Teagasc Rural Economy and Development Programme Peer Review 2016

Final Report

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1. Introduction

Teagasc is committed to conducting thorough peer reviews of its research and knowledge transfer activities on an approximate 5-year cycle. The purpose of each Programme review is to:

- Assess if an effective and balanced portfolio of scientific research is being undertaken that effectively fulfils the stated mission of the Programme and meets the needs of its stakeholders;
- Appraise the quality, relevance and impact of the research and knowledge transfer programmes;
- Identify how the research and knowledge transfer programmes could be improved to make best use of resources;
- Provide accountability for public funds expended.

This evaluation report presents the findings of a peer review of the Rural Economy and Development Programme (REDP) conducted from November 17-18 2016 under the auspices of the Teagasc Director of Research and the Teagasc Business Planning and Performance and Evaluation Department. REDP was last reviewed in 2009. A Peer Review Panel (PRP) comprised of the following members carried out the review: Krijn Poppe (Chairman), Ailish Byrne, John Curtis, Andrew Fearne, Tom Kelly, Kerri Wright Platais, Monique Raats and Frank Vanclay. Kevin Heanue, Teagasc Evaluation Officer, provided secretarial assistance to the PRP. Details on the panel are contained in Appendix 3.

The review considered management, research and knowledge transfer activities. The management assessment focussed on strategy and organisation, while the research and knowledge transfer assessment focussed on quality, relevance and impact as well as the programme's sustainability, vitality and feasibility. The review was both retrospective and prospective with an emphasis on arriving at recommendations that would help to achieve improvement in the future. The peer review assessment criteria are outlined in Appendix 2.

The review which included a 2 day series of meetings and presentations took place at Teagasc Ashtown, Dublin. Prior to that, the PRP had received a Programme Description and Self-Assessment document compiled by the Head of the RED Programme and Heads of its component Departments. This document provided an internal retrospective summary and appraisal of the Programme's structure, funding, staffing, performance and delivery over the period 2012-2016. Additionally, the PRP were provided with the Review Protocol that guided the Review Process, the REDP 2016 Business Plan, Teagasc's Technology Foresight Report (2016), Teagasc's 2015 Annual Report, Teagasc's Draft Statement of Strategy (2016-19) and FoodWise 2025, the government's agri-food strategy statement.

During the 2 days of the on-site visit, the PRP had scheduled meetings with REDP management and staff. Additional previously unscheduled meetings with REDP research and KT staff and post-docs were requested by the PRP. Also previously unscheduled, Jim Kinsella from UCD was invited to meet with the PRP to inform them of the operation of the Teagasc Walsh Fellowship programme, both PhD and Masters, from the university's perspective.

At the outset, the PRP received thorough scene-setting overviews of Teagasc and REDP from the Teagasc Director, Professor Gerry Boyle, Director of Research, Dr Frank O'Mara and Head of REDP, Professor Cathal O'Donoghue. This provided the PRP with insights into recent organisational change, the Irish policy landscape, staffing issues, funding levels and drivers for change. The role and remit of Teagasc in general, and REDP in particular, were outlined and it was noted that Teagasc's diverse responsibilities in agriculture and food research, agricultural extension and the education of young farmers, were all apparent in

REDP. The PRP were also alerted in broad terms to the importance of Food Wise 2025, Food Harvest 2020, Teagasc Technology Foresight 2016 and the Sustainable, Healthy Agri-Food Research Plan (SHARP).

2. Review of Teagasc RED Programme

2.1. Mission and objective

The mission of the REDP as outlined in its Programme Description and Self-Assessment document is to produce high quality social science research and policy advice to improve the competitiveness and sustainability of the Irish Agri-Food sector and wider bio-economy and to enhance the quality of life in rural Ireland, thus contributing to the achievement of Teagasc's key goals of Competitiveness and Innovation in the Agri-Food Sector, Sustainable Systems of Agriculture and Rural Viability.

The stated overall objective of the programme is to utilise advanced social science investigation and knowledge transfer tools to understand the linkages between the various forces affecting the Agri-Food sector and Rural Economy to improve the quality of life in rural Ireland. An important focus is placed on policy relevant research that will help policy makers to design and better implement public policy.

REDP has a wide variety of stakeholders across the value chain from farm, through processor, retailer and consumer and amongst the policy making community. Farmer stakeholders can be differentiated in relation to their needs and market orientation from viable to sustainable to vulnerable farms.

2.2. Structure and resources

The programme comprises 3 departments:

1. The Agricultural Economics and Farm Surveys Department combines agriculture and environmental economics research. The Department incorporates a Farm Surveys Unit which undertakes technical work in relation to the collection of the Teagasc National Farm Survey
2. The Agri-Food Business and Spatial Analysis Department encompasses a wide range of disciplines around a central mission related to translational research, i.e. using social science and computer based analytic tools to translate life sciences (e.g. production science, food science, spatial environmental information) into their behavioural, policy and institutional contexts.
3. The Farm Management and Rural Development Department combines the knowledge transfer areas of farm and financial management, buildings, partnerships, scheme support and rural development. The Rural Development Unit, given its different stakeholder base and role operates as a distinct unit within the Department.

Unsurprisingly, given its structure, REDP has multidisciplinary staff. In 2016 REDP comprised the following FTE staff:

- Manager: 3
- Permanent Researcher: 10.75
- Knowledge Transfer Specialist: 9
- Contract Researcher: 4
- Post Doc Researcher: 5
- Walsh Fellow (PhD): 24
- Administrator: 4
- Technologist: 1
- Technician: 16.5

The Budget of the Programme is €4.8m per annum, with total external income of about €1.5m generated from external research funding, contract survey work and training courses. The primary locations for the programme are Ashtown in Dublin and Athenry, Co. Galway.

2.3. Reflection on Quality

The PRP recognise that REDP has grown over the last years into an organisation with an impressive output in terms of quality and impact. It has put itself on the European map as a reliable research group with innovative contributions to policy and to the literature and its KT activities are extensive.

The PRP acknowledge that the output from REDP is clearly valued by their main Irish clients: the Department of Agriculture, Food and the Marine (DAFM), advisors and farmers, while recognising there is demand for additional output from REDP, for example, in relation to trade analysis and value chain issues.

The PRP noted that after a time of austerity in the Irish economy REDP staff is delivering even more with less. The loss of some highly experienced staff members in management or with critical expertise has led to concern among some staff about career opportunities for existing permanent and contracted staff and whether new talent can be attracted to REDP Athenry, given its location and career prospects.

In summary, the PRP considers the overall quality of REDP to be **very good**.

2.4. Reflection on Productivity

Publications

The PRP noted that the share of journal articles as a percentage of publications was at a relative low point but that this was partly a reflection of some projects coming to an end and also more emphasis on other outputs at specific times.

The PRP suggested that different disciplinary and institutional requirements around types of publications and co-authorship need to be considered. The PRP agreed that comparison with, for example, bio science metrics is not particularly fair for REDP as it has a policy remit. The PRP's view was that REDP needs to develop a clear view on its publication strategy and decide, for example based on the objectives of the organisation, whether to target a small number of quality publications that act as a signalling mechanism for funding or to target more such publications.

External Funding

The PRP heard that in terms of funding, there is a danger of not being strategically driven if external funding balance was greater. In terms of KT activity, there isn't a strong history of sourcing external funding for KT. It is supply led and there are not as many opportunities for funding but looking at possibilities such as EU INTERREG programmes.

The PRP noted that external funding in REDP have grown continuing a trajectory that begun some time ago. This is partly a reflection of the professional maturity and network building engaged in by what is still a relatively young staff. The PRP heard how REDP has attempted to influence the structure of funding calls through, for example, engaging in public consultation, but probably haven't been too successful with most social science funding calls being limited to 2 year desk studies. A strategy to get round this is by REDP partnering with Biosciences and Food programme, for longer term projects from these funders.

Client engagement

The REDP KT staff is extensively engaged in public events, training, the production of extension material for farmers and the running of targeted programmes around benchmarking, financial management and rural diversification, both on and off farm.

In summary, the PRP considers the overall productivity of REDP to be **very good**.

2.5. Reflection on Relevance and Impact

The PRP are satisfied that management and staff in REDP are aware of relevant national priorities and in many cases have inputted to the formation of those priorities.

The PRP meetings with stakeholders indicated a general satisfaction on behalf of stakeholders with the programme and a relationship with Teagasc which was positive and constructive. The PRP noted stakeholders' view that REDP provides a unique service in terms of research and policy advice, which if not provided by REDP, action would be needed to create such government departments to provide this input. In addition, in terms of KT, private consultants do not have the breadth of advice that Teagasc KT provide, so there would be a vacuum if Teagasc KT not active.

The PRP are of the view that based on a renewed mission and vision of REDP, a fuller set of KPI's should be developed and agreed upon with Teagasc senior management

- The PRP was concerned that in the absence of such a set of KPI's there is a danger of driving quantity instead of quality in competing for resources with other Teagasc programmes based on a KPI of number of publications only.
- The PRP is of the view that the high impact on government's policy decisions, and the role in executing them should be translated into KPIs and a Service level agreement with the relevant government departments that supports allocation of resources in Teagasc.
- The PRP suggest that data collection (e.g. NFS) within REDP should be seen as equivalent to a laboratory where scientists test their theories in an empirical setting: Good science needs good data.

The PRP suggest that this could help Teagasc management to realise the strategic value of REDP in keeping DAFM, the industry and other stakeholders satisfied.

In summary, the PRP considers the overall relevance and impact of REDP to be **good**.

2.6. Reflection on Sustainability, Vitality and Feasibility

The PRP had some difficulty understanding the coherence and organisation of the programme and are also of the view that the links between the three departments need strengthening in order to exploit the full potential and opportunities that exist.

The PRP acknowledge that although the mission of Teagasc is very much about supporting the competitiveness of the industry (often meaning 'farmers'), REDP should stress that it could be much more a node in a network, a node that is a research unit that:

- Supports interaction between government, farmers, supply chain partners, environmental groups (climate change, derogation Nitrate directive, water directive), the public, etc.
- Is (and is perceived to be) independent.
- Has a strong reputation as trusted partner (also in data management) based on quality.
- Supported by excellent partnership management with universities and European consortia in open software, data and model development.

The PRP noted that although the value chain is identified as a strategic priority in the Programme Description and Self-Assessment SWOT analysis, there is relatively little focus on it in REDP, although the PRP acknowledges the efforts REDP have made to develop this priority. An outcome of this is that the value chain is now a major theme in Teagasc Foresight Report (2016).

In summary, the PRP considers the overall sustainability, vitality and feasibility of REDP to be **good**.

2.7. Key Recommendations for REDP

REDP should develop a clearer vision of its role in Teagasc and Irish society (agriculture, food, rural) based on its strengths:

- In data (innovative NFS, spatial data and methods, E-profit monitoring).
- In access to high level policy making (output is a need to know for users and essential to run government policies, not only 'nice to promote competitiveness of an industry').
- In being part of Teagasc to complement its environmental and technical research.
- In being part of unique PhD program with links to universities and a large alumni network that is useful to develop REDP further.

It is important for Teagasc to ensure that its institutional framework for external networking is strong to facilitate continued partnerships (national and international) that go beyond individual informal networks and ensure partners on continuity and research planning. This is particularly important in light of staff departure or retirement.

Given its data strengths (NFS, Spatial Data) and developments in ICT (Electronic Data Interchange) and Big data trends, a data strategy should be developed based on Teagasc as a trusted partner.

For future reviews a category for 'Partnership and Innovation' should be included in order to fully capture how research is implemented and how new (and ground breaking) ideas are utilized.

REDP should strengthen and structure engagement with a wider group of stakeholders, to include value chain businesses and societal stakeholders.

Provide a more explicit statement of the purpose of the REDP programme in Teagasc and a statement of philosophy relating to knowledge transfer in terms of which topics need support and at what level.

As resources reflect priorities the important areas of research and delivery systems that Teagasc most values for the next 5 years should be identified and funded.

Taking into account the austerity measures of the past 10 years, it is now a critical time for Teagasc management to prioritize how to value and acknowledge staff with means and opportunities for career growth, flexibility and independence in order to not lose critical mass.

The retirement or departure of key staff should be seen as an opportunity for growth and a strategic time for reprioritization rather than generating anxiety and uncertainty.

Retaining post-docs within the current post-doc system is challenging and poses problems of talent retention that should be addressed.

3. Review of Agricultural Economics and Farm Surveys Research Department

AEFSD consists of the Teagasc National Farm Survey & FADN; Farm level economic research; sustainability and environmental economic research; agricultural sector level economic research.

3.1. Reflection on Quality

Balancing Outputs

The PRP recognised that a balance is required for AEFSD between its public policy service function and its delivery of scientific output.

The PRP recognised that AEFSD's economic policy analysis was highly valued and critical to policymakers but the PRP were of the view that in addition to being reactive to current issues, AEFSD should be leading national policy discussion, e.g. leading on visions/scenarios for future policy development.

The research produced by AEFS is considered accurate by stakeholders, nationally leading and they are the de facto economic analysis arm of DAFM.

Publications

The PRP noted that researchers in AEFSD feel that they do not always have academic freedom to publish as some of their policy-related research is negotiation sensitive and cannot be released at particular times. Relatedly, although national reports (R1's) were historically peer-reviewed, it is difficult to get reviewers.

The PRP acknowledge that the short-term forecasting work AEFSD is involved with, while not necessarily having a strategic benefit and partly done for historical reasons, is necessary due to the amount of public money supporting farmers' incomes; as a counter for policy-makers to the farmers' lobbying about income and also due to DG Agri and Eurostat requirements.

The PRP were impressed with the quality and possibilities of the NFS and acknowledged that it forms a concrete basis for much of the analysis elsewhere within AEFSD. It also has the potential to foster collaboration with other Teagasc departments.

Resources

It was the PRP's view that AEFSD was resource-challenged given the importance of the department's policy development work.

Overall, the PRP rated the quality of the work in AEFSD to be **Very Good**.

3.2. Reflection on Productivity

The PRP were impressed that AEFSD produced a lot of output with a relatively small, under pressure team. The staff has a particular role in relation to the Department of Agriculture, Food and the Marine (DAFM) where it essentially provides its economic analysis function.

Within the NFS team, retirements have shrunk the size of the team with the same output produced.

The PRP noted that publication output of peer reviewed journals, book chapters & national reports had increased over time and was comparable with peer institutions, with more National Report and book chapters compared to peer reviewed journal articles. The issue of the appropriateness of a KPI for AEFSD based mainly around peer reviewed journal articles was noted by the PRP.

Overall, the PRP rated the productivity of the work in AEFSD to be **Very Good**.

3.3. Reflection on Relevance & Impact

The PRP congratulates AEFSD for its recent positive evaluation by DG Agri's FADN unit. However, the PRP is of the view that AEFSD needs to consider the greater analytical and research opportunities with the NFS data.

The PRP noted that the relevance and impact of AEFSD is very high, it does the work that in several other countries is done within the Ministry. However, the PRP are of the view that AEFSD should capitalise more on two other advantages it has; 1) its strong data base, so as to increase its impact with advisors and working across Teagasc, and 2) to nurture its high level contacts within the Ministry.

The PRP acknowledge stakeholders comments on the independent, credible and trusted nature of the department's input to; policy, farm and trade analysis; sustainable growth scenarios; climate change targets and farm level cash flow and budgeting tools. The PRP also acknowledge the stakeholders comments that there were opportunities for AEFSD to contribute to Rural Development and CAP indicators; increased trade analysis; carry out strategic academic research (e.g. analysis of recent EU report on Agricultural Markets) if resources permitted.

The PRP noted a disconnect between the outputs AEFSD are producing and their ability to secure more resources.

Overall, the PRP rated the relevance and impact of the work in the AEFS Department to be **Very Good** on policy, longer term CAP level analysis and **Very Good to Excellent** in terms of NFS.

3.4. Reflection on Sustainability, Feasibility and Vision for the future

The PRP identified the strategic importance of the AEFS within REDP but were concerned about the strategic direction/leadership of the Department. The PRP are of the view that AEFSD should consider their data set (NFS) as an asset rather than a cost and strategize for that.

The PRP suggest that a service level agreement is needed with DAFM. Relatedly, the PRP wished to raise a flag as to the potential threat to the reputational independence of the AEFSD particularly in terms of challenges of water quality and climate change, where opinions in society are probably more diverse than on topics like CAP or trade and results might be discredited if not of the highest quality.

The PRP noted staff concerns about career progression within AEFSD and the budgetary freedom that exists to make decisions on where their research goes.

Overall, the PRP rated the Sustainability, Feasibility and vision for the future as **good**.

3.5. Recommendations

There needs to be a champion to sell the value of the possibilities of the AEFSD and secure necessary resources: Agricultural economics research is increasingly important at this time given the future needs for a robust unit in the context of grand societal challenges.

Teagasc should consider a more nuanced publication strategy appropriate to discipline and mission of the group/Department.

To protect reputation, independence & integrity, an internal review system for all reports/published output should be developed.

Based on its capabilities and expertise, the AEFSD vision should be to be a leader in national policy discussions.

The NFS should be used to strengthen the links with environmental and rural development research.

4. Review of Farm Management and Rural Development Department

The Farm Management and Rural Development Department (FMRDD) combines the knowledge transfer areas of farm and financial management, buildings, partnerships, scheme support and rural development. The Rural Development Unit (RDU) given its different stakeholder base and role operates as a distinct unit within the Department. Sub sections 4.1 to 4.5 below focus on the Farm Management activities - a Financial Management Programme; Collaborative Farming Programme and a Farm Buildings and Machinery Programme - of the Department and associated recommendations. The RDU's main activities and associated recommendations are the focus of sub sections 4.6 to 4.10.

4.1. Reflection on Quality

The PRP were impressed by the leadership displayed within Farm Management. The PRP was satisfied that the Department had a clear strategy in this area and the PRP was of the view that as a model, and taking into account its potential for branding, Farm Management is world leading from an extension perspective.

The PRP recognised the extensive engagement with clients on a variety of issues. The PRP noted the Impressive array of techniques, implemented as appropriate to the target audience. It was clear to the PRP that key current topics are being addressed by Farm Management although they were of the opinion that there was perhaps too much focus on the dairy sector at the expense of other sectors.

On the basis of the evidence received, the PRP judged the quality of Farm Management as **Excellent**.

4.2. Reflection on Productivity

The PRP were impressed by the output from Farm Management in terms of their extension activities; range of programmes; training provided and education needs served.

On the basis of the evidence received, the PRP judged the productivity of Farm Management as **Excellent**.

4.3. Reflection on Relevance and Impact

The PRP were of the view that new background research is needed to see if the KT model demonstrated by Farm Management could be implemented internationally.

The PRP noted that although growth in the use of electronic profit monitor (ePM) is good, it is still only used by about 25 per cent of Teagasc clients and the number of farmers using a cost planner is relatively low.

The PRP acknowledged that uptake of ePM's may be increased through KT groups as long as farmers can be convinced of the benefit from using ePM. It was clear to the PRP that in terms of impact, farmers using ePM had higher returns (profitability) and that there is a need for economic analysis of this data, by the AEFS, to better be able to sell the benefits of ePM. There is a need to focus on the value and analysis end of ePM. More generally, there are great research opportunities on the topic of decision making.

The PRP commented that all of the effort of Farm Management goes on cost containment rather than necessarily increasing output value.

The PRP observed that the vision for the future of Irish agriculture expressed by Farm Management is a continuation of the past with a focus on dairying, the most profitable sector, and less consideration given to drystock farming with its income challenges or opportunities with artisan food or the multifunctional character of farming.

The PRP questioned to what extent evaluation of the activities of Farm Management occurs and how do they know whether their activities are leading to outcomes on farms.

On the basis of the evidence received, the PRP judged the relevance and impact of Farm Management as **very good**.

4.4. Reflection on Sustainability, Feasibility and Vision for the future

The PRP were satisfied that there was evidence of good leadership and clear programme focus. However, the PRP noted that there was a lack of evidence of the use of Monitoring & Evaluation of Farm Management programmes.

Given the possible expansion in the number of farmers completing ePM's as a result of the KT Groups initiative of DAFM, the PRP are of the view that the team need to elaborate their strategy and plan for how they will handle this growth.

On the basis of the evidence received, the PRP judged the sustainability, feasibility and vision of Farm Management as **good**.

4.5. Recommendations

There should be some consideration of alternative futures for Irish farming in terms of the Food Wise 2025 scenarios for agriculture.

Relatedly, Farm Management should engage with a wider range of external stakeholders and there is a need to engage with all farmers (including sustainable and vulnerable), especially to promote new arrangements relating to increasing efficiency of land use (promoting new share-farming/leasing arrangements)

Farm Management needs to make more use of Monitoring & Evaluation tools so as to better understand the outcomes generated by their activities.

Relatedly, Farm Management should focus more on outcomes rather than activities in their planning processes.

There is a need to ensure that the Financial Management Programme reaches all farm sectors, including sustainable and vulnerable farms.

Farm Management should seek to develop and/or avail of IT innovations, especially in relation to ePM.

Review of Rural Development Unit

The Rural Development Unit's (RDU) main activities are an Equine Programme; an Organics Programme; the Options Programme; Goat Programme and Rural Business Programme.

4.6. Reflection on Quality

The PRP were impressed by the national visibility, breadth and quality of KT activity within this Unit. The RDU also plays a key role in Teagasc's engagement with target clients through the provision of information and training other advisors.

The PRP questioned whether the KT methods used were appropriate (heavy reliance on information provision). The PRP noted diverse quality and focus of materials and it was unclear whether this was deliberate or accidental. The PRP discussed whether there was enough critical reflection by this group on whether the KT methods they were using were appropriate/effective.

The PRP recognised the particular focus of this unit on the vulnerable sections of the farming population.

On the basis of the evidence received, the PRP judged the quality of the RDU to be **good**.

4.7. Reflection on Productivity

The PRP were impressed by the breadth and quality of KT activity within this Unit.

The PRP recognised that given staff reductions the repositioning and adaption with resulting outputs is commendable. Moreover, the commitment and passion of staff to the challenges in their areas is evident.

However, the PRP noted that critical research areas are not appropriately linked within REDP and the larger programme effort of Teagasc and its partners.

On the basis of the evidence received, the PRP judged the productivity of the RDU to be **very good**.

4.8. Reflection on Relevance and impact

The PRP acknowledge stakeholders comments on the impact of the RDU's activities supporting the uptake of the LEADER programme; contributions to strategy, education and advisory support to the Sport Horse sector; the bioenergy sector; organic farming; collaborative farming and discussion groups. The PRP noted that there might be unexploited opportunities in making connections among organic farming, climate change and collaborative farming.

As noted for other activities within REDP, the PRP observed that a lot of relationships between staff and stakeholders were informal, personal and not institutionalised. As a result the PRP were concerned that with changes in personnel, significant gaps in external linkages might occur.

On the basis of the evidence received, the PRP judged the relevance and impact of the RDU to be **satisfactory**.

4.9. Reflection on Vitality, Feasibility and Vision for the future

Consideration needs to be given to whether RDU activities are best positioned to lead, facilitate or implement key R and D initiatives.

Critical areas for economic growth and issues of global importance, (i.e climate, bioenergy, organic farming, equine and societal change) requires major leadership and strategic planning from Teagasc.

On the basis of the evidence received, the PRP judged the vitality, feasibility and vision of the RDU to be **good**.

4.10. Recommendations

Staffing issues need to be addressed in order for the RDU to fully perform at a productive and sustainable level.

Research and KT linkages need to be further developed and “tethered” to the appropriate institutional partners in order to grow.

Research and Advocacy for important national and international areas of future leadership including R&D and training need development.

5. Review of Agri-Food Business and Spatial Analysis Research Department

AFBSA focuses on market and consumer research, agri-innovation and learning, rural development research and spatial and environmental analysis. The PRP noted that there had been substantial growth in this department, individuals have done impressive things, external funding and publications have increased, but the PRP were of the view that AFBSAD needs to convey their story in a different way.

5.1. Reflection on Quality

The PRP were of the view that this department has an important role to play in:

- Identifying mechanisms for achieving national health and sustainability objectives (e.g. where in the value chain does behaviour need to change and where interventions should occur)
- Critically reflecting on the efficacy of current stakeholder engagement and KT practices along the value chain
- Extending the boundaries of research beyond the farm-gate and beyond the perceptions and behaviour of consumers, to include civil society and rural communities

For the PRP the role of the existing research undertaken was unclear. Was it feeding into existing KT practices (e.g. technology adoption) or answering specific research questions? The PRP were of the view that if it was the latter, then the driving force for the plan of work was not clear, given the lack of (external) stakeholder consultation. It appears that much of the research is driven by the (internal) need for social science input to existing biological and technical research.

The PRP found it difficult to judge the quality of output from this department and the department name did not seem to fit with its activities.

The PRP observed a disconnect with spatial analysis in this department and suggested that it perhaps needed a stronger connection with economics and with the NFS. The PRP is of the view that the spatial analysts are underselling themselves.

On the basis of the evidence received, the PRP judged the quality of the AFBSA Department to be **Good** with some areas of Excellence.

5.2. Reflection on Productivity

REDP researchers publish about 6 publications per researcher per annum. A challenge however remains to flatten the distribution, with a high number of publications concentrated amongst the highest performing researchers. All permanent researchers are research active, with virtually all hitting the target of 3 research papers per year. While research output, when measured solely in terms of journal articles is lower than in the bio-science research programmes in Teagasc, it is comparable in terms of overall publications, reflecting the greater focus on publishing in books and research reports in the Social Sciences and in Policy Relevant research.

On the basis of the evidence received, the PRP judged the productivity of the AFBSA Department to be **Good** with some areas of **Excellence**.

5.3. Reflection on Relevance & Impact

The PRP were not clear about the vision and objectives of this Department, a fact somewhat exacerbated by what was identified as a Department name that didn't adequately represent activities in the Department.

For the PRP there appeared to be somewhat of a polarisation of this departments focus, with activities focused on farmers and consumers but little focus on the middle of the value chain (although they acknowledged that the recent Teagasc Technology Foresight (2016) report put more emphasis on the value chain).

The PRP acknowledge stakeholders comments on the impact of AFBSA activities contributing to the Teagasc Food Programme's understanding of consumer and market aspects of supply chains. While the PRP acknowledged how, for example in the case of the Commission for the Economic Development of Rural Areas (CEDRA), the types of networks and stakeholders typical of this Department had led to capacity development in Government Departments, this is a type of impact that doesn't get measured.

The PRP also noted the absence of a clearly articulated stakeholder group. The PRP noted that a lot of relationships between staff and stakeholders were informal, personal and not institutionalised. As a result the PRP were concerned that with changes in personnel, significant gaps in external linkages might occur.

The PRP were of the view that AFBSA lacks coherence and clarity is needed as to its mission.

The PRP considered the relevance and impact of the work in AFBSAD to be **satisfactory**.

5.4. Reflection on Vitality, Feasibility and Vision for the future

The PRP noted the vitality and deep commitment exemplified by the management and staff of this department.

The PRP sees an opportunity for this Department to capitalise on its use of methods and level of analysis to redefine its role within Teagasc based on its multidisciplinary and the partnerships/networks it has/can develop. Perhaps the approach should be not so much problem focused as commonality around methodological approaches.

The PRP is of the view that this department needs to define their mission. The PRP recognised that the value added of the research carried out in this department is in the connectivity it could provide but this was not clearly presented to the PRP.

Formal engagement processes with stakeholders is desirable and should be embedded within an institutional framework.

The PRP was not clear about how research in this Department might contribute to the achievement of the UN Sustainable Development Goals in Ireland, but were of the view that this was important.

The PRP considered the vitality, feasibility and vision of the work in AFBSAD to be **satisfactory**.

5.5. Recommendations

The PRP strongly recommends that a formal more inclusive stakeholder group to include representatives of the entire value chain should be established for this department so that the demand-driven aspect of the sector can be considered.

Reflecting on the Technology Foresight Report (2016) there is an opportunity for AFBSA to build on the social and translational dimensions of technological change.

The branding of AFBSAD both within and outside Teagasc and the focus of its activities need to be revisited.

The impact of the department should be strengthened through the development of stronger collaborative relationships with research partners who provide complementary social science (theoretical/conceptual/methodological) expertise.

Competence in research to support more effective KT and science communication should be developed.

The department should instigate, lead and evaluate a 'responsible research and innovation' programme for all Teagasc.

Peer Review of the Teagasc Rural Economy Development Programme 2016

Action Plan for Implementation of Recommendations

Date: 24-05-2017

Submit to: Dr. Frank O'Mara, Director of Research

This action plan outlines the recommendations from the peer review report on the Rural Economy Development Programme 2016. To complete this action plan please specify the actions to be taken, if any, to implement the recommendations outlined, allocate responsibility for these actions and set a target date by which the recommendation is to be implemented.

1. Recommendations for REDP

No.	Recommendations	Actions to be taken	Person responsible	Date for completion
1	<p>REDP should develop a clearer vision of its role in Teagasc and Irish society (agriculture, food, rural) based on its strengths:</p> <ul style="list-style-type: none"> ▪ In data (innovative NFS, spatial data and methods, E-profit monitoring). ▪ In access to high level policy making (output is a need to know for users and essential to run government policies, not only 'nice to promote competitiveness of an industry'). ▪ In being part of Teagasc to complement its environmental and technical research. ▪ In being part of unique PhD program with links to universities and a large alumni network that is useful to develop REDP further. 	<ol style="list-style-type: none"> 1. Programme level meetings (HOP, HOD and NFS Team lead) will be organised to review whether the Programme's vision and objectives need to be revised. 	Kevin Hanrahan	31/12/2018
2	<p>It is important for Teagasc to ensure that its institutional framework for external networking is strong to facilitate continued partnerships (national and international) that go beyond individual informal networks and ensure partners on continuity and research planning. This is particularly important in light of staff departure or retirement.</p>	<ol style="list-style-type: none"> 1. Ensure that external collaborations in research and KT programme areas involve more than one staff member to ensure continuity where possible. 2. Formalise external research collaborations that occur outside of the frame of funded research projects, where desirable and feasible. 	Kevin Hanrahan and all HOD.	On-going
3	<p>Given its data strengths (NFS, Spatial Data) and developments in ICT (Electronic Data Interchange) and Big data trends, a data strategy should be developed based on Teagasc as a trusted partner.</p>	<p>REDP is active and will continue to be active in the area of data generation, collection, management and dissemination. The development of a Teagasc Data Strategy is</p>	Kevin Hanrahan	

		<p>beyond the remit of REDP alone. If the development of such a strategy is seen as an organisational priority</p> <ol style="list-style-type: none"> 1. REDP (HOP, HOD and NFS team lead and spatial analysis researchers) will cooperate with others in Teagasc on the development of a Teagasc data strategy. <p>On an on-going basis</p> <ol style="list-style-type: none"> 2. REDP researchers will continue to collaborate with colleagues from AGRIP and CELUP on research projects involving big data and will adhere at all times to regulatory requirements relating to data collection, management and dissemination.. 3. REDP will continue to collaborate with CSO, DAFM, ICBF and other external institutions on electronic data exchange. 	HOD, NFS team lead, Reamonn Fealy and Stuart Green.	TBC
				On-going
4	For future reviews a category for 'Partnership and Innovation' should be included in order to fully capture how research is implemented and how new (and ground breaking) ideas are utilized.	<ol style="list-style-type: none"> 1. Action in response to this recommendation cannot be taken by REDP alone. This recommendation needs to be considered at a higher organisational level. REDP will support consideration through the provision of requested research and data inputs. 	Teagasc SMG	TBC
5	REDP should strengthen and structure engagement with a wider group of stakeholders, to include value chain businesses and societal stakeholders.	<ol style="list-style-type: none"> 1. The Departmental stakeholder group composition to be reviewed by HOP and HODs to ensure that the appropriate breadth of stakeholder interests is reflected in REDP stakeholder groups and other formats. 	Kevin Hanrahan and all HOD	31/12/2017
6	Provide a more explicit statement of the purpose of the REDP programme in Teagasc and a statement	<ol style="list-style-type: none"> 1. Programme level meetings (involving HOP, HOD and NFS Team lead) will 	Kevin Hanrahan, all HOD	31/12/2018

	of philosophy relating to knowledge transfer in terms of which topics need support and at what level.	<p>be organised to review the Programme's vision and objectives.</p> <p>2. In conjunction with Teagasc statements of strategy in regard to how Teagasc delivers research and KT services to economically viable, sustainable and economically vulnerable farms, REDP HOP and FMRD HOD will consider whether a "statement of philosophy" is required.</p>	Kevin Hanrahan & Fintan Phelan	
7	As resources reflect priorities the important areas of research and delivery systems that Teagasc most values for the next 5 years should be identified and funded.	<p>Action in response to this recommendation cannot be taken by REDP alone and will involve consideration by Teagasc SMG.</p> <p>1. Programme level meetings (HOP, HOD and programme staff) will be organised to review the Programme's vision and research priorities for the next 5 years.</p> <p>2. Workshop including senior management to be organised to consider research programme prioritisation and resources allocation to REDP</p>	Teagasc SMG and HOP, HOD	TBC
8	Taking into account the austerity measures of the past 10 years, it is now a critical time for Teagasc management to prioritize how to value and acknowledge staff with means and opportunities for career growth, flexibility and independence in order to not lose critical mass.	<p>Action in response to this recommendation cannot be taken by REDP. This recommendation needs to be considered at a higher organisational level. Notwithstanding this:</p> <p>1. HOP and HOD will seek to retain current staff and replace exiting staff with consideration given on an ongoing basis to Teagasc research priorities.</p> <p>2. REDP Management will, on an ongoing basis, mentor and support new and existing staff so as to minimise staff turnover and programme disruption.</p>	Teagasc SMG and HOP and HOD	TBC On-going

9	The retirement or departure of key staff should be seen as an opportunity for growth and a strategic time for reprioritization rather than generating anxiety and uncertainty.	<ol style="list-style-type: none"> 1. Future retirements and/or resignations currently being replaced in line with Teagasc research, KT and operational priorities. 2. Investigate the possibility for staff shadowing in technical and administrative roles where upcoming retirements can be predicted. 	HOP, HOD, Frank O'Mara and Teagasc SMG	On-going
10	Retaining post-docs within the current post-doc system is challenging and poses problems of talent retention that should be addressed.	<ol style="list-style-type: none"> 1. Action in response to this recommendation cannot be taken by REDP. This recommendation needs to be considered at a higher organisational level. 2. REDP will contribute its perspectives to any review of the Teagasc post-doc system. 	SMG, & REDP HOP and HOD	TBC

2. Recommendations for Agricultural Economics and Farm Surveys Research Department

No.	Recommendations	Actions to be taken	Person responsible	Date for completion
1	There needs to be a champion to sell the value of the possibilities of the AEFSD and secure necessary resources: Agricultural economics research is increasingly important at this time given the future needs for a robust unit in the context of grand societal challenges.	Action in response to this recommendation cannot be taken by REDP alone. Notwithstanding this: 1. REDP managers (HOP and HOD) will seek to contribute (via the Teagasc Director of Research) to the national research prioritisation process. HOP and HOD will seek to expand funding opportunities available to social scientists within current external funding structures. The restrictions on Social Science research include, inter alia, the 2 year limit, within DAFM call, on social science research projects.	HOP research HODs and Teagasc Director of Research.	TBC
2	Teagasc should consider a more nuanced publication strategy appropriate to discipline and mission of the group/Department.	1. AEFSD (and REDP in general) will continue to explore the assessment of other alternative metrics, and appropriate comparators, in measuring the impact of socio-economic research. 2. REDP will investigate what performance metrics are used in other comparable social science research organisations and departments in Ireland and elsewhere and prepare a note for SMG on this topic.	HOP and AEFSD and AFBSAD HOD	31/12/2018
3	To protect reputation, independence & integrity, an internal review system for all reports/published output should be developed.	HOP and HODs to consider the development of programme level guidelines on the approval of research reports and other publications (such as requiring PI and/or HOD sign off) prior to release.	HOP and research HOD	30/06/2018
4	Based on its capabilities and expertise, the AEFSD vision should be to be a leader in national policy	The Management and staff of the AEFSD are of the opinion AEFSD and REDP more generally	HOD	On-going

	discussions.	<p>plays an active and leading role in national policy discussions. The nature of the participation is necessarily conditioned by Teagasc's statutory role as the Agriculture and Food Development Authority. In light of this</p> <ol style="list-style-type: none"> 1. AEFSD will continue to play its current role in policy discussions up to and at the highest levels. 2. AEFSD will ensure that it is represented in fora where developments in national policy are discussed, such as Government Consultative Committees, and agricultural and food industry expert committees. 		
5	The NFS should be used to strengthen the links with environmental and rural development research.	<p>This work is already on-going. There are strong research project links with CELUP and AGRIP.</p> <ol style="list-style-type: none"> 1. AEFSD via collaborative projects will support the use of Teagasc NFS data and resources for rural development research in Teagasc and elsewhere subject to existing resource constraints. 2. The AEFSD will continue to seek opportunities to add value to existing and future Teagasc NFS data through collaborations with AFBSAD, Teagasc CELUP, AGRIP and RD staff, Government and other state agencies 	HOD and NFS Team Lead	On-going

3. Recommendations for Farm Management and Rural Development Department

No.	Recommendations	Actions to be taken	Person responsible	Date for completion
1	There should be some consideration of alternative futures for Irish farming in terms of the Food Wise 2025 scenarios for agriculture.	<p>In our opinion this is an issue of such scope that Teagasc needs to consider it. Notwithstanding this:</p> <ol style="list-style-type: none"> 1. FMRD will identify potential resource constraints that can be alleviated within the farm gate which include constraints relating to land and labour. 2. We will continue to undertake developmental work in the area of Collaborative farming, generational renewal and labour contracts. 3. Using farm resource auditing and case study analysis we will evaluate potential alternative routes for farm development 	Fintan Phelan	<p>31/12/18</p> <p>On-going</p> <p>31/12/19</p>
2	Relatedly, Farm Management should engage with a wider range of external stakeholders and there is a need to engage with all farmers (including sustainable and vulnerable), especially to promote new arrangements relating to increasing efficiency of land use (promoting new share-farming/leasing arrangements)	<ol style="list-style-type: none"> 1. The make-up of the current FM stakeholder group will be reviewed so as to ensure that it has appropriate representation. 2. The Rural Development Stakeholder group will be consulted in relation to farm management issues relating to <i>sustainable</i> and <i>vulnerable</i> farm types. 3. We will support the roll out of the Rural Development service proposed in the action relating to recommendation 4.1 below. 	Fintan Phelan	<p>31/12/17</p> <p>31/6/18</p>
3	Farm Management needs to make more use of Monitoring & Evaluation tools so as to better understand the outcomes generated by their activities.	<ol style="list-style-type: none"> 1. We will support an international review of best practice in the area of KT monitoring and evaluation that should be conducted for all KT work by the evaluation and business planning unit. 2. KT Customer Relationship Management 	Evaluation Unit & Fintan Phelan	31/12/18

		<p>processes should be developed so as to provide a more detailed breakdown of activities of advisers that overtime can be used asses impact.</p> <p>3. Using new information from redeveloped CRM processes that will provide more information on adviser activities there will be a detailed qualitative measure of impact every five years</p>	CRM working group to consider	TBD
4	Relatedly, Farm Management should focus more on outcomes rather than activities in their planning processes.	Review measures with NFS to assist in impact measurement and address actions in the previous point.	Evaluation Unit & Fintan Phelan	31/12/18
5	There is a need to ensure that the Financial Management Programme reaches all farm sectors, including sustainable and vulnerable farms.	<ol style="list-style-type: none"> 1. See proposed actions relating to recommendation 3.1 & 3.2. 2. We will support the roll out of the Rural Development service proposed at 4.1 in this document. 	Fintan Phelan	31/12/18
6	Farm Management should seek to develop and/or avail of IT innovations, especially in relation to ePM.	<ol style="list-style-type: none"> 1. Continue the redevelopment and integration of the Teagasc Profit Monitor with other Teagasc financial tools and integrate with other ICT solutions 	Fintan Phelan	31/6/18

4. Recommendations for Rural Development Unit

No.	Recommendations	Actions to be taken	Person responsible	Date for completion
1	Staffing issues need to be addressed in order for the RDU to fully perform at a productive and sustainable level.	<p>Requires leadership and strategic planning from SMG to give greater clarity around Teagasc objectives in the RD space nationally.</p> <ol style="list-style-type: none"> 1. Together with SMG, KT, REDP HOP and FMRD HOD, critically assess the resources required to formalise KT linkages in RMUs re Rural Development. 2. Strengthen capacity of RDU to deliver on RD objectives. 	Teagasc SMG	TBD
2	Research and KT linkages need to be further developed and “tethered” to the appropriate institutional partners in order to grow.	<p>More systematic cross-cutting whole-farm approach needed for effective delivery of RD supports:</p> <ol style="list-style-type: none"> 1. Strengthen internal Teagasc linkages. 2. Build on linkages with rural agencies to leverage training, upskilling and diversification supports. 3. Strengthen research, KT and stakeholder linkages re RDP/CAP Pillar II measures. 	HOP HOD & Rural Dev Programme Coordinator (RDPC)	31/12/18
3	Research and Advocacy for important national and international areas of future leadership including R&D and training need development.	<ol style="list-style-type: none"> 1. Clearly articulate Teagasc advocacy role in Rural Development as an intermediary between farm families and rural supports. 2. Investigate ways to build on existing RD initiatives to inform policy research and training needs assessments. 	HOD & RDPC	31/12/18

5. Recommendations for Agri-Food Business and Spatial Analysis Research Department

No.	Recommendations	Actions to be taken	Person responsible	Date for completion
1	The PRP strongly recommends that a formal more inclusive stakeholder group to include representatives of the entire value chain should be established for this department so that the demand-driven aspect of the sector can be considered.	The Departmental stakeholder group composition to be reviewed by HOP and HOD to ensure that the appropriate breadth of stakeholder interests is reflected in stakeholder groups and within wider stakeholder engagement activities	HOP and HOD	31/12/17
2	Reflecting on the Technology Foresight Report (2016) there is an opportunity for AFBSA to build on the social and translational dimensions of technological change.	HOD to reflect on role of department in this area and to develop a business case for additional resources in this space, in consultation with HOP, if necessary.	HOD and HOP	31/12/17
3	The branding of AFBSAD both within and outside Teagasc and the focus of its activities need to be revisited.	Arising out of the programme level reassessment of its objectives and vision (action in relation to Recommendation 1.1) rebranding will be considered by HOP and HOD.	HOD and HOP	31/12/17
4	The impact of the department should be strengthened through the development of stronger collaborative relationships with research partners who provide complementary social science (theoretical/ conceptual/ methodological) expertise.	Level of collaborative research inside and outside of Teagasc will be continued and reviewed periodically.	HOD	Ongoing
5	Competence in research to support more effective KT and science communication should be developed.	This recommendation is reflected in the currently on-going process of recruiting a behavioural scientist	HOD	Interviews to be held in June 2017
6	The department should instigate, lead and evaluate a 'responsible research and innovation' programme for all Teagasc.	HOD to liaise with Research Support Office, Research Integrity Officer and other relevant Teagasc units/functions to organise seminar on RRI for SMG and research directorate managers to clarify the meaning of RRI for Teagasc, and to progress accordingly.	Teagasc SMG and HOD	31/12/17

Appendix 2 Peer Review Assessment Criteria

Table 1 Peer Review Assessment Criteria

Criteria	Sub-Criteria	Aspects that may be considered – Research Departments	Aspects that may be considered - Knowledge Transfer Departments
Quality	A1. Quality and scientific relevance of research and knowledge transfer	Originality of the ideas and the research, significance of the contribution to the field; coherence of the programme; quality of the scientific publications; scientific and technological relevance.	Quality of technical knowledge gathered and disseminated / transferred. Up to date knowledge transfer methods used
	A2. Leadership	Leadership by primary individuals; mission and goals; strategy and policy.	Leadership demonstrated by individuals and teams. Advisory Programme development and leadership Problem solving and mentoring for advisors
	A3. Reputation	International position and recognition; prominence of the programme Director and other research staff; impact and significance of the research in the field.	External Collaboration Stakeholder Interaction Prominence of programme manager and staff Recent programme knowledge transfer achievements
	A4. Resources	Human resources; funding policies and earning capacity; relevance of research facilities.	Capacity and knowledge base of existing staff. Quality of In-service training programme developed and delivered to Advisory staff.
Productivity	B1. Productivity	Publication output; external income; stakeholder interaction	Knowledge transfer output; training & education;
Relevance and impact	C1. Development Industry Support	Alignment to national priorities. collaboration with industry stakeholders,	Tillage Advisory Programme Objectives Influence and collaboration with Stakeholders and Industry
	C2. Knowledge Transfer	Behaviour change, practice adoption	Behaviour change, practice adoption. Evidence of impact Assessment
Sustainability, Vitality and Feasibility	D1. Strategy	Strategic planning; investments and collaboration; research and knowledge transfer topics planned for the near future and their perspectives; flexibility and anticipation of expected changes.	

For the assessment of the programme, the report should follow the suggested terminology in table 2. In the text, the most important considerations and recommendations of the panel should be clearly presented.

Table 2 Qualitative Peer Review Assessment

Qualitative Assessment		
	Research	Knowledge transfer
Excellent	Research is world leading. Researchers are working at the forefront of their field internationally and their research has an important and substantial impact in the field.	KT Programme has very high national visibility; employs the most up-to-date methods; draws on significant stakeholder involvement; and delivers significant economic/social impacts. – Comprehensive evidence of regular impact assessment
Very good	Research is internationally competitive and makes a significant contribution to the field. Research is considered nationally leading.	KT Programme has high national visibility; employs the most up-to-date methods; draws on stakeholder involvement; and delivers significant impacts for the sector. Strong evidence of regular impact assessment
Good	Work is competitive at the national level and makes a valuable contribution in the international field. Research is considered internationally visible.	KT Programme has a national visibility; employs a range of methods; draws on stakeholder involvement; and delivers good outcomes for stakeholders. Selected evidence of impact assessment
Satisfactory	Work adds to our understanding and is solid, but not exciting. Research is nationally visible.	KT Programme has low national visibility; employs limited range of methods; has satisfactory stakeholder involvement; and delivers outputs with some stakeholder impact. Some evidence of impact assessment
Unsatisfactory	Work is neither solid nor exciting, flawed in the scientific and or technical approach, repetitions of other work, etc.	KT Programme has no national visibility; employs limited range of methods; has little stakeholder involvement; and has little impact. No evidence of impact assessment

Appendix 3 REDP Peer Review Panel

TEAGASC RURAL ECONOMY AND DEVELOPMENT PROGRAMME PEER REVIEW PANEL

	Name and Contact details
1.	Dr. Krijn Poppe (Chair) Research manager Wageningen Economic Research The Netherlands. E: krijn.poppe@wur.nl
2.	Prof. Kerri Wright Platais Program Head for Scientific and Technical Partnerships in Africa, Environment and Production Technology Division (EPTD), International Food Policy Research Institute Washington, USA. E: K.W.Platais@cgiar.org
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