

Evidence and Innovation priorities 2011/12

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DARD



Department of
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Aims

- **What DARD's Evidence and Innovation gathering activities are.**
 - **How you can be involved.**
- **What DARD commissioned Evidence and Innovation Call 2011/12 is?**
- **Why we need it.**



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DARD's Vision- “a thriving and sustainable rural community”

- **Challenges and decisions needed on a wide range of issues**
 - **competitiveness**
 - **animal health**
 - **climate change**
 - **food security- productivity, GM crops etc.**
- **DARD needs robust policy development**
- **Gathering of scientific evidence & innovative ideas is essential to underpin policy development**
 - **Defined form of R&D**



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Why is Evidence and Innovation gathering important to DARD?

- To ensure that policy developed by DARD will deliver the best possible outcomes.
- Local farms central to rural economy, need to be able to harness:
 - latest ideas
 - working methods & technologies

In order to achieve success in a competitive marketplace.

- DARD funded evidence and innovation gathering is critical to maintain our competitiveness.

•Evidence and Innovation Strategy 2009-13



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Evidence and Innovation Strategy 2009-13 (EIS)

- Key principle- DARD-funded evidence gathering activities will be robust **AND POLICY-LED**
- Evidence/Innovation gathering activities co-ordinated through 4 Programme Management Boards (PMBs)

EIS Goal		PMB
Goal 1: To improve performance in the Marketplace	↔	PMB1: Performance in the Marketplace
Goal 2: To strengthen the Social and Economic Infrastructure of Rural Areas	↔	PMB2: Social and Economic Infrastructure in Rural Areas
Goal 3: To enhance Animal Health and Welfare, Fish and Plant Health	↔	PMB3: Animal and Plant Health and Animal Welfare
Goal 4: To develop a more Sustainable Environment	↔	PMB4: Sustainable Environment



Evidence & Innovation Strategy
2009-2013



What is the role of PMBs?

- Policy Leads identify gaps in evidence needed for policy development
 - Statutory/regulatory duties
 - Through contact with stakeholders informally, and formally
 - Annual Stakeholders forum (<http://www.dardni.gov.uk/>)
 - Contribute to decision making on DARD E&I funding
- Evidence gaps are
 - prioritised
 - Overarching Evidence and Innovation Priorities Group (EIPG) make final decision on what can be funded in a given year.
 - Published as **DARD Commissioned Evidence and Innovation call 2011/12.**
 - December 2010



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DARD Commissioned Evidence and Innovation call 2011/12

- Each PMB sets out its priority areas
- Open to AFBI only
- This year approx. £ 3 million is available from DARD for Evidence and Innovation gathering activities



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PMB1 Performance in the Market Place (approx £1M, 6 priority areas)

- Assessment of weather-related and other risks, including disease, to farm businesses and evidence to inform risk mitigation/management strategies and policy on hardship payments.
- **Understanding attitudes to knowledge exchange and adoption. Identifying best practice for sharing information. Assess industry's role in this process.**
- Identify the limiting factors in production systems and optimise biological efficiency (including application of genomic selection) and financial performance to support productivity, sustainability and competitiveness in the agri-food sector in NI.
- **Evidence to inform optimum management of soil/growing medium for sustainable production in grass, arable, fruit, horticulture and mushroom sectors.**
- Identify economically viable and sustainable uses for by-products from the agri-food industry



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Proposals received for PMB1 priority areas

- 28 proposals received



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PMB3 Animal and Plant Health and Animal Welfare (Approx. £1M, 5 priority areas)

- **Assessment and development of diagnostic tests, epidemiology and eradication measures for plant disease (e.g *Phytophthora ramorum*)**



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Proposals received for PMB3 priority areas

- **9 proposals received**



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PMB 4 Sustainable Environment (Approx. £1M, 5 priority areas)

- Potential for C sequestration within the land based sector.

Evaluate the current knowledge on the potential for peat-land / grassland soil sequestration and the actual contribution land is making in addition to the potential for land to act as a sink for carbon.

- Agri-emissions – mitigation of direct emissions and optimising the environmental credentials of local agri-food produce.
- Examine strategies to improve nutrient efficiency across all sectors, including an evaluation of the impact and effectiveness of the Nitrates Action Programme.
- Management, production economics and environmental impact of biomass crops and strategies to use agri-food by-products as energy.



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Proposals received for PMB 4 priority areas

- 12 proposals received



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Previous DARD Funded Research Projects

•Potatoes

- Potato breeding
- Detection and control of fungal pathogens in potatoes
- Control of potato blight by fungicides and varieties
- Sensory qualities of potatoes
- Diagnosis of PCN
- Identification of root knot nematodes



•Cereals

- Ease of de-hulling in oats
- Defining the nutritive value of cereals for pigs and poultry
- New molecular tools for early identification of plant viral pathogens
- Development of disease resistance markers
- Optimizing management of N nutrition of winter wheat
- Weed management in organic arable and horticultural crops



•Alternative forages

- Optimizing management of N nutrition in forage maize
- Low input forages for ruminants
- Legume performance
- Clover sward



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Other Evidence and Innovation gathering activities in DARD

- **DARD funded Post Graduate studentships**

- 8 per year funded

2011/12

- **PMB1**

- “Evaluation of new breeding technologies and potential impact of application of these technologies on progress in plant and/or animal breeding”.

- **PMB 3**

- “An assessment of the level and sustainability of the local bee population and the impact of imported needs on native bee colonies”.
- “Horizon scanning of the international agri-food sector and early warning of emerging plant/animal disease threats to the NI agri-food sector”

- **PMB 4**

- “ Opportunities for production of dual purpose food/fuel crops in NI”



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Current DARD Post-graduate studentships

- “Evaluation of countryside management for sustainable pollination services”. **Lorraine McKendrick**
- “An examination of nutrient flows within grassland based dairy systems with a special focus on overland flow of phosphorous”. **Debbie McConnell**
- “Ecological structure of grassland field margins”. **Sharon Spratt**



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Knowledge Exchange

- **Vital part of any Evidence and Innovation gathering activity**
- **Use of a variety of mechanisms is important in order to reach all stakeholders**
 - **Scientific conferences, developed policies**
 - **Workshops / farm walks/ open days / technical booklets (CAFRE)**
 - **Monitor farms/ Focus farms (CAFRE)**
 - **Challenge programmes / short courses**
 - **Press Articles/Rural Portal**
- **Other mechanisms?**



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Conclusions

- **Organisation of R&D within DARD has changed. Priorities now determined by DARD Policy needs.**
 - Stakeholder input is also needed.
- **DARD will commission Evidence and Innovation gathering activities on an annual basis.**
 - Used to direct AFBI-based research
 - Used to direct post-graduate studentship
- **Outcomes and outputs will drive**
 - robust policy development
 - Knowledge exchange to farmers
 - Latest ideas
 - Improved methods



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