



FARMING CONNECT UPDATE – January 2014

Overall Progress

Since the start of the programme in 2007 Farming Connect has provided support to **18,768** unique individuals, either in the form of one-to-one subsidised services, or via Farming Connect events.

There have also been 77,584 attendances at Farming Connect events. These are split across the different periods of Farming Connect as follows:

	Number of attendances
Interim period - 01/04/07 - 31/03/08	7,908
Phase 1 - 01/06/08 - 31/08/11	34,106
Phase 2 - 01/09/11 - 31/012/13	35,570
TOTAL	77,584

8,230 (31 Dec 2013) farm and forestry businesses have now registered with Farming Connect, which is also supporting other Welsh Government schemes such as Glastir Entry, Glastir Efficiency Grants and the Young Entrant Support Scheme.

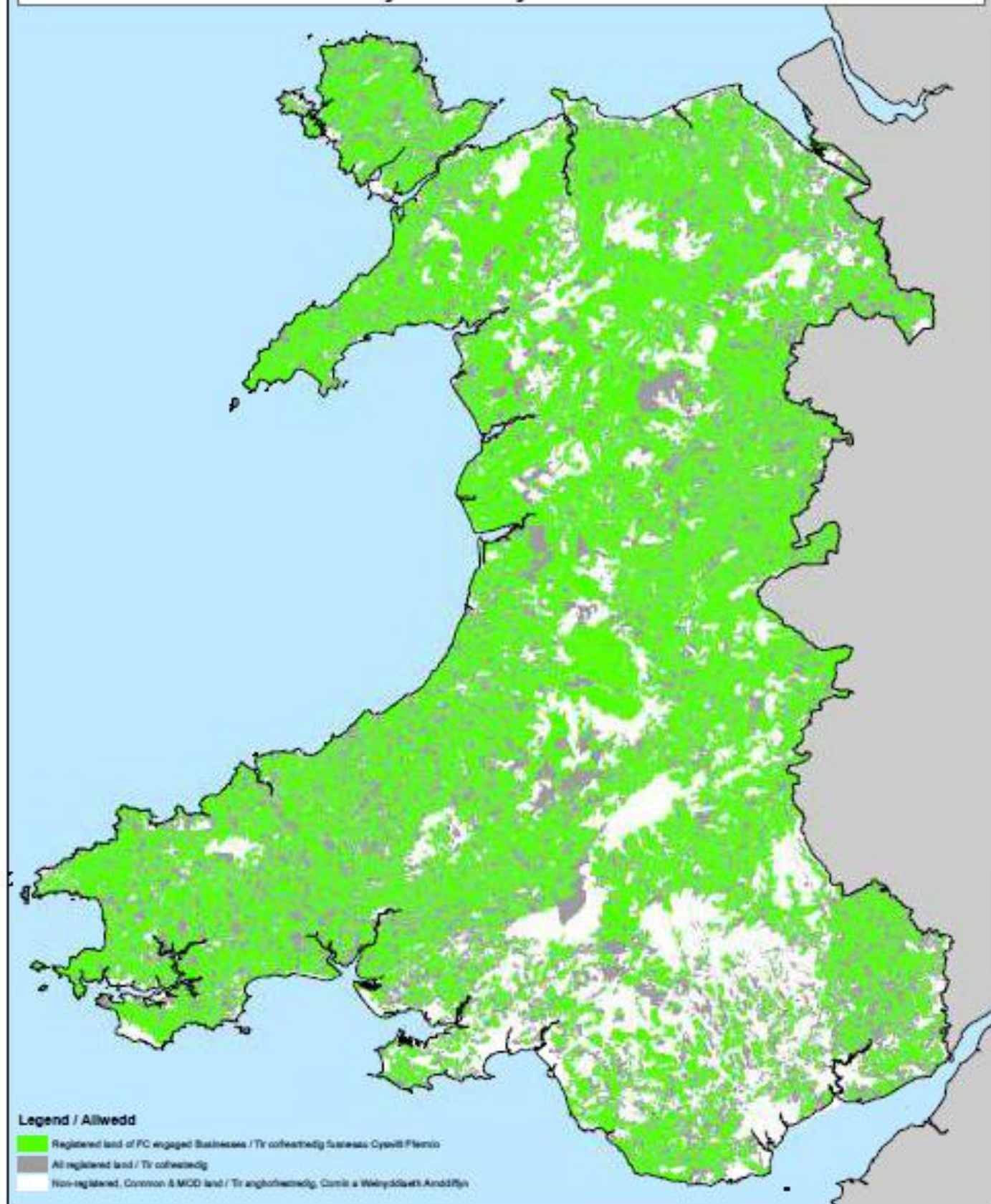
The total number of subsidised services application and claim forms approved since the start of the programme to 31 Dec 2013 is outlined below:

	Application forms approved	Claim forms approved
Skills Development Programme	7700*	4926*
Whole Farm Plan	4348	2965
Farm Advisory Service	1689	1316

* During the interim period 01/04/07 - 31/03/08 an additional 5,945 applications for training were approved and funded.

A geographical spread of businesses engaged with the Farming Connect programme is shown in the map below:

Businesses engaged with the Farming Connect Programme Busnesau'n cyswllt a Cyswllt Ffermio - 10/2013



The Farming Connect programme delivers on a number of Welsh Government policy priorities and contributes to the action plans of several independent reports, some of the most recent are summarised below.

Working Smarter Report

Working Smarter is a report of recommendations by Gareth Williams to the Welsh Government on better regulation in farming and includes 78 recommendations on how to ensure better regulation within an appropriate framework, improved customer service for the farmers and a sector with increased profitability from a business perspective.

Working Smarter is most importantly of all a state of mind and especially an attitude to change; it's about the attitude of Government towards farmers and farming, the attitude of stakeholders and farmers towards the government and regulation and about preparing properly and in good time for change.

Farming Connect is contributing to the delivery of recommendations 6, 24, 43 & 48 as described below and is helping the industry prepare for this change.

Recommendation 6 – to research and develop business models to emphasise to customers the business benefits of good regulatory compliance

Recommendation 24 – Welsh Government RPW to organise with FLS on-farm events for farmers to explain inspections and in so doing improve farmer preparedness and reduce the fear factor

Recommendation 43 – Environmental 'water' priorities (basic standards) should be incorporated into all environmental advice communicated on-farm by all of the organisations delivering regulatory advice and controls on farms including slurry storage, slurry application, disposal of chemicals, poaching of river banks, soil compaction and management of river banks.

Recommendation 48 – NEF (Natural Environment Framework) starting to approach environmental regulation from a business model perspective. This is commendable and many robust examples are now needed to demonstrate that good environmental practice is fully compatible with food production whilst enhancing business performance and profitability.

Cross Cutting Themes

The Farming Connect Programme delivers support to the industry on the Welsh Government cross-cutting themes of environment and climate change, animal health and welfare, health and safety, biosecurity, effective use of ICT, women and young entrants.

Climate change is an overarching theme for the Knowledge Transfer Programme and the programme is appraised at the development stage to ensure that appropriate opportunities for action on climate change are highlighted at all Farming Connect events.

Resilience

The Kevin Roberts Review of the resilience of farming in Wales focused in particular on the beef and sheep sectors in the uplands and hills. The report recommends that an integrated package of measures be considered for the

uplands in the next RDP that will help improve farming and environmental performance and which, in time, should provide resilience to the industry. The Farming Connect Knowledge Transfer Programme should contribute to this work and resilience will be introduced as an additional cross cutting theme in 2014.

Young Entrant Support Scheme

Farming Connect contributes to The Young Entrant Support Scheme, the team of Regional Co-ordinators support applicants through the process by explaining scheme requirements, liaising with YESS Welsh Government officers, accessing 80% funding towards the business plan, and completing Skills Assessments with applicants who were encouraged to complete the online Skills Assessments in order to comply with the scheme's requirements. In many cases, the Regional Co-ordinators were the first port of call for interested and potential candidates.

Young entrants are encouraged to attend all events under the Knowledge Transfer Programme however a number of Discussion Groups for young people have been established across Wales to support young entrants to establish successful farming businesses. A total of 15 young entrants' groups are currently being facilitated across Wales on a range of themes across sectors including innovative farming practices and developing opportunities and alternative income streams for younger farmers.

Glastir

Glastir is supported through Farming Connect with fully funded one to one surgeries to assist farmers to select the best options for their farms, 80% subsidised mentoring to look at the full business implications of entering Glastir, and Glastir Efficiency Grant supporting documents can be provided by Farming Connect mentors and advisors also 80% funded. All mentors/advisors who deliver these services have been on a compulsory training event prior to delivering. Failure to attend the event resulted in the mentor/advisor not being able to offer their services to farmers wishing to access the 80% funding. The aim was to improve the service provided, and reduce the time it takes to approve Glastir Efficiency Grant applications.

Analysis and Evaluation

Farming Connect have procured a number of independent evaluations which have now been completed, along with analysis by Welsh Rural Observatory (WRO) of knowledge transfer and innovation in Wales. These will contribute to the evidence base for development of the successor programme in the 2014-2020 Rural Development Plan for Wales.

The following independent analysis and evaluation reports have been completed:

- Knowledge Transfer and Innovation in the Wales Rural Development Plan (RDP) and European Innovation Partnership 2014-20 carried out by the Welsh Rural Observatory (WRO)
- Evaluation of the Agrisgôp Management Development Programme carried out by SQW Ltd

- Evaluation of the Farming Connect Development Programme carried out by SQW Ltd
- Evaluation of Farming Connect Events carried out by ADAS UK Ltd
- Evaluation of Farming Connect Subsidised Services carried out by SQW Ltd

The evaluations indicated that Farming Connect has been successful in achieving its key objectives of improving business and environmental performance, raising skill levels, and supporting greater emphasis on animal health and welfare and the use of ICT. They also support the current direction of travel in terms of ongoing development of the service. Farming Connect has already started to implement many of the policy findings from these reports under current contracts which have been in place since September 2011.

Branding services as part of Farming Connect helped to avoid confusion amongst farmers, and the Farming Connect Subsidised Services Evaluation noted that Farming Connect was seen as an independent 'trusted provider' of support and advice. The evaluations identify a continuing need for this type of support in the future, and provide a sound, independent evidence base to support proposals for developing the next RDP.

Specifically the Knowledge Transfer & Innovation work undertaken by WRO calls for greater collaboration across and beyond the RDP, with a continuing need for knowledge transfer through visual and applied methods, and incorporating links to applied research.

The WRO report also highlights a number of points of good practice in knowledge transfer; including the importance of 'selling' the business benefits of participating in knowledge transfer (particularly when communicating environmental and regulatory issues), adapting communication for regional/local contexts, and the need for greater prioritisation of professional development and training within the land economy. These will be important considerations in the design of knowledge transfer interventions under the next RDP.

Farming Connect Unit
Agriculture and Rural Affairs Division



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Report on the Cross Cutting Theme ENVIRONMENT AND CLIMATE CHANGE

DURING THE PERIOD 1 SEPTEMBER 2011 - 31 JANUARY 2014



Cronfa Amaethyddol Ewrop ar gyfer Datblygu
Gwledig Ewrop yn Buddsoddi
mewn Ardaloedd Gwledig
The European Agricultural Fund for
Rural Development: Europe Investing in
Rural Areas



Llywodraeth Cymru
Welsh Government

1. Farming Connect - Background

Farming Connect is an integrated, high profile, Wales-wide service for farming families and forestry businesses. It is funded through the Rural Development Programme 2007-2013 which is financed by the European Agricultural Fund for Rural Development and the Welsh Government. Its main purpose is to help farmers, foresters and their families to run their business more efficiently and to safeguard the future of their farm. It is an integrated programme for all sectors including Red Meat, Dairy, Land-use and Organic and delivers support to the industry on the cross-cutting themes of environment and climate change, animal health and welfare, health and safety, biosecurity, effective use of ICT, women and young entrants. The main elements of the programme can be summarised as follows:

- *Knowledge Transfer Programme.* The aim of this programme is to ensure that information is available to help producers adopt new practices, benchmark performance, share ideas, address market needs and encourage innovation
- *Subsidised Services.* The Whole Farm Plan provides one-to-one mentoring on a range of options designed to support agricultural and forestry businesses grow and develop including Animal Health Planning; and the Farm Advisory Service offers one-to-one, confidential on-farm advice aimed at supporting farm and forestry holders to improve the sustainable management of their holdings in relation to SMRs, GAECs and standards relating to occupational health and safety.
- *The Skills Development Programme* aims to up-skill individuals who work in the farming and forestry sectors in Wales to improve working practices, comply with legislation and to encourage diversification.
- *Farming Connect Industry Development (Event Management)* disseminates strategic messages and key topical issues via a range of mechanisms including seminars and surgeries. The contract allows the Welsh Government the flexibility to disseminate strategic messages in whatever format, frequency and location that is required to achieve maximum impact and uptake.
- *Agrisgôp* is a Management Development Programme which works with groups of approximately eight farmers. It is based on the concept of Action Learning and aims to stimulate a culture of innovation and entrepreneurship.

Menter a Busnes has been responsible for the delivery of Farming Connect since September 2011, and between 1st Sept 2011 and 31st December 2013, a total of 32,695 attendees have attended our events, with 11,985 of these unique beneficiaries.

2. Knowledge Transfer Programme

The Cross Cutting theme paper on the environment identifies that the environment is our key asset. It recognises the valuable role that the industry has in the future management of the environment and sustainable use of resources and also that sound environmental management is borne out of good business management. Environmental messages should be integrated into every element of the Farming Connect programme with an emphasis on wise use of natural resources as an essential and integral part of good business management.

The Climate Change Cross Cutting theme paper identifies that the Farming Connect Programme should aim to encourage farmers to adopt practices that will lead to reduced GHG emissions and, in the medium to longer term, raise awareness of the opportunities and risks posed by a changing climate. Many practices, it is identified, can also enhance the profitability of the business, for example, efficiencies in farming production through more efficient livestock husbandry will achieve reduced levels of GHG (mainly CH₄) per unit product (e.g. litre of milk or kg of beef / lamb) and managing the use of nitrogen fertiliser and slurry/manure will also reduce the levels of GHG emissions.

Climate change is an overarching theme for the Knowledge Transfer Programme and the programme is appraised at the development stage to ensure that appropriate opportunities for action on climate change are highlighted at all Farming Connect events.

Annex 1 summarises the knowledge transfer programme activity on Environmental and Climate Change cross cutting themes and their relation to Welsh Government objectives during the period 1st September 2011-31st January 2014.

Digital media and the Farming Connect website provide the opportunity for Knowledge Transfer; short podcasts are filmed at events and are promoted via Gwlad online and mail chimp email campaigns. Farming Connect have also worked in conjunction with Natural Resources Wales to provide an online soil temperature map coupled with written technical articles to provide information the timely use of resources such as fertilizers. This resource attracted 3000 unique page views between February and October 2013.

CASE STUDY – ‘Improving water quality together’ – The Olway Catchment project (Knowledge Transfer)

RIVER OLWAY CATCHMENT AREA

Simple, cost-effective improvements can often be sufficient to enable livestock farms to comply with pollution regulations designed to protect Wales’ watercourses. At Great House Farm, near Usk, beef producer Peter Williams had examined options for dealing with dirty water run-off and these included potentially building a £25,000 slurry store.

But, following guidance from Farming Connect, Mr Williams is implementing a series of alternatives costing less than £7,000 in order to satisfy pollution prevention legislation. Great House Farm is one of a number of farms that fall within the River Olway Catchment Area. Sampling by Natural Resources Wales had shown that the river is failing to meet Water Framework Directive requirements. Through Mr Williams’ work as a Farming Connect Demonstration Farm, he underwent a mock assessment focussing on the Silage Slurry and Agricultural Fuel Oil Regulations and this highlighted a series of potential areas of improvement relating to dirty water run-off.

He has since worked with Keith Owen, senior buildings and environmental consultant at ADAS to look at ways of addressing these issues resulting in Mr Owen producing a detailed report advising on what could be done to prevent dirty water run-off. “Peter was initially looking at creating a new slurry store but his isn’t a slurry problem, and the key issue relates to the management of dirty water. That is the case for a lot of farms and if Peter had built a lagoon it would simply have collected contaminated rainwater which would then have had to be disposed of at considerable cost and effort. Because Peter has no existing slurry storage facilities he would have needed to create a store with a minimum of four months capacity to comply with the SSAFO regulations,” Mr Owen explained.

Improvements at Great House Farm include creating a concrete ‘lip’ as a barrier to prevent seepage from loose cattle housing onto the farm yard. “Any contaminated seepage onto a clean yard is regarded as pollution, the amount might be negligible but during a SSAFO visit it is something that will be picked up. “Something simple like creating a concrete lip which costs as little as £20 will resolve the issue of containing any contaminated liquid within the stock housing preventing any leaking onto clean yards.’ Mr Williams will also improve the collection of effluent from the silage clamp, keep stock undercover at housing and divert rainwater falling onto shed roofs to prevent it mixing with animal waste.

Other farmers in the area have visited Great House farm to see the work that Mr Williams is undertaking and have also received one hour of confidential free advice on their own farms through Farming Connect Clinic. Owen urged farmers to confront any potential issues on their farms. “There are farmers who bury their heads in the sand and hope that the problem will go away but it won’t.

A lot of it is simply separating clean water from dirty water.” He said it was better for farmers to be in a position where they are proactive rather than face potential enforcement action from NRW. “Many farmers are too afraid to face the problem because they only see a big bill for an expensive new slurry store but in reality it can mean just a few simple improvements that will save them a lot of expense and worry,” said Mr Owen.

3. Industry Development

Activities under the Industry Development programme addressing the environment and climate change have included Glastir Drop in Sessions and Glastir on farm events. Diversification seminars with a particular focus on renewable energy have been held as well as one to one Planning Surgeries, providing advice on regulations relating to slurry storage, roofing for slurry pits and waste management and potential renewable energy projects. Please see Annex 2 for further information on events.

4. Whole Farm Plan, Farm Advisory Service & Skills Development Programme

4.1 Whole Farm Plan

The Whole Farm Plan provides one-to-one mentoring on a range of options designed to support agricultural and forestry businesses grow and develop including:

- environmental protection and enhancement
- Alternative energy and energy conservation – improving profitability
- Maximise returns within sustainable farming systems
- Woodland management – making better use of woodland

Table 1 below shows the Whole Farm Plan applications made between 1st September 2011 and 31st January 2014:

Total number of application forms approved for WFP	2383
Total number of days approved for WFP	7013
Number of application forms approved for Alternative Energy+ Diversification	155
Percentage of WFP applications that were for Alternative Energy+ Diversification	7%
Number of application forms approved for Environment	853
Percentage of WFP applications that were for Environment application approved	36%

4.2 Farm Advisory Service

The Farm Advisory Service (FAS) offers one-to-one, confidential, on-farm advice. It is flexible and can be tailored to the needs of the farm. The aim of the service is to allow farm and forestry holders to improve the sustainable management of their holdings in relation to Statutory Management Requirements (SMRs) and Good Agricultural and Environmental Conditions (GAECs). Examples of advice include:

Land management

- Nutrient Management Plans (including soil analysis)
- Managing soil – compaction, erosion, structure
- Avoiding either under or over grazing

Environmental protection

- Advice on Nitrate Vulnerable Zone (NVZ) Regulations
- Managing slurry and silage facilities on farm
- Clean/dirty water separation
- Management of farm chemicals, sheep dip, crop sprays, disinfectants

Table 2 below shows the number of Farm Advisory Service applications made between 1st of September 2011 and 31st January 2014 for the Land Management, Environmental Protection and Environmental Management categories:

Total Number of Approvals for Land Management FAS ¹	983
Percentage of FAS approvals that were for Land Management	92%
Total Number of Environmental Protection applications for FAS	95
Percentage of FAS applications that were for Environmental Protection	9%
Total Number of Environmental Management applications for FAS	140
Percentage of FAS applications that were for Environmental Management	13%

¹

4.3 Skills Development Programme

The Skills Development Programme provides 80% funding to farmers towards short accredited courses, a number of these courses address environmental and climate change topics and issues, and these include:

- Pesticide / crop spraying
- FACTS/ BASIS
- Mole and Pest Control
- Dry – stone walling
- Fencing
- Hedge-laying
- Coppicing
- Woodland management

CASE STUDY - Nutrient Management Planning under the Farm Advisory Service (FAS)

Soil analysis proves a sound investment

Garneidd Hir, Golan, Garndolbenmaen is a livestock farm of 80 acres with 300 acres of rented unimproved mountain pasture, which rises to around 500 ft overlooking the bay at Porthmadog. Farmer Glyn Williams and his son Alan have a Welsh black suckler herd put to Charolais as well as a flock of 300 sheep. The farm entered Glastir at the start of 2014.

Glyn Williams had always tried to be on top of his grassland management. He was spreading his own manure and feeding a phosphate-based artificial fertiliser but wondered whether he might be neglecting lime. He decided to seek advice from Eiliw Evans, his Farming Connect regional co-ordinator, which resulted in him applying for technical advice through Farming Connect's Farm Advisory Service. Approved mentor David Peers of ADAS was called in to investigate and advise on a nutrient management programme.

Mr Peers said: "Mr Williams is a good farmer but he was concerned that grassland productivity was not as good as he hoped. Our soil analysis showed very low levels of Ph. A lot of grasses and clovers were struggling with a Ph as low as 5.2 while the phosphate content was above target levels."

Mr Williams was advised that he could save money by cutting back completely on phosphate, which would have the added benefit of reducing pollution from surface waters. Cutting back had benefits for both the farm and the environment.

The focus then turned to manure produced from the cattle and how best to maximise its nutrient and monetary value and where best to apply it.

"This was a very worthwhile exercise. It was an expense to have to lime the whole farm, but that meant everything else fell into place. The nutrient from the manure could work more efficiently and I can save money by not needing to buy in phosphate fertilizer." Said Mr Williams.

5. Agrisgôp

Agrisgôp is a management development programme for farming families. It brings together individuals and families at a local level to discuss and take forward business ideas. Working together as a group, Agrisgôp members can learn new management skills, access specialist information and explore and develop viable futures for themselves, their families and their businesses. Based on the concept of Action Learning, Agrisgôp provides the opportunity to progress skills and confidence, which will in turn assist group members to identify ideas and opportunities for their businesses. Agrisgôp was responsible for bringing together the Cambrian Mountains Lamb group.

Many Agrisgôp groups are considering renewable energy options including wind, solar and anaerobic digesters as means of carbon footprint reduction and increasing incomes. A group in mid Wales are specifically considering the reduction of the greenhouse effect through evaluating their business's carbon footprint. One pan Wales Agrisgôp group with strong ties to the Wildlife Trust organisation is exploring marketing opportunities linked to sustainable farming systems.

Agrisgôp Case Study - New income from renewable energy investment

Renewable energy from wind and solar power is the focus of a group of eight young farmers from the Denbigh area. Four are milk producers and four are beef and sheep farmers but all shared the same concern – rapidly rising energy bills that hit their businesses in 2011 for a total of more than £50,000 a year. With help from Farming Connect they formed themselves into an Agrisgôp group that met regularly – sometimes every fortnight – to look into the possibilities of diversifying by producing electricity from renewable.

They shared knowledge and experience and investigated the Feed In Tariff scheme that ensures a steady income from renewable. A renewable expert and a specialist planning consultant visited each farm and produced a site survey that explored the potential for investments that would cut costs and provide an alternative source of income.

Met Office wind reports purchased for each site showed that wind generation was not feasible in some locations, but there was the potential for electricity generation from solar panels or anaerobic digesters. A special finance day helped to secure the necessary funds.

The outcome has been impressive. Meilir Jones, who farms 260 acres with his father Dei at Farming Connect demonstration farm Gop in Trelawnyd is already producing electricity from a 35 kilowatt array of solar panels. Over at Maes Tyddyn, in Clawddnewydd, Ruthin, beef and sheep farmer Gwion Owen has a wind turbine up and running, and dairy farmer Aled Morris also has a wind turbine at Marian Mawr, Cwm, Rhuddlan. For a total outlay of £1,275,000 the group has secured an income totalling no less than £230,000 a year - guaranteed for 20 years.

And further investment is planned. One of the group members is looking into installing another 150KW of solar panels and another is looking at options for an anaerobic digester.

Local Agrisgôp leader Elaine Rees said, "It's been a sizeable investment but it has improved profitability and safeguarded energy costs for each business as well as reducing the carbon footprint and helping meet Welsh Government renewable targets."

6. Environmental and Climate Change – future activity

Future activity will include continuing with the provision of advice for farmers under the Whole Farm Plan and Farm Advisory Service, as well as funding towards Skills Development and training. Thorough Environmental Reviews are currently being undertaken on all Demonstration Farms, the aim of the reviews is to provide confidential, one to one advice and guidance to Farming Connect Demonstration Farmers on environmental management in line with regulatory cross compliance – this includes FYM/Slurry storage, silage, clean-dirty water, fuel oil etc. The reviews also provide the opportunity for the identification of projects that promote best practice and that emphasise to farmers the business benefits of good regulatory compliance which will be featured at future events.

In 2014, we are hoping to be able to provide practical information to farmers on the business benefits of good regulatory compliance. The aim is to provide practical information to farmers on an aspect of environmental management, for example, the construction and compliance of slurry and silage storage systems, clean/dirty water separation etc.

A number of activities, including discussion groups and on farm events will address climate change and discuss the suitability and feasibility of renewable energy. These events will provide information and develop knowledge on renewable energy technology.

A series of six events will be arranged on bio-mass boilers to raise awareness and develop knowledge on biomass boilers as an opportunity for farming businesses with high energy usage to include provision of technical and economic feasibility information. In addition to this we plan to hold a series of three events on Buildings and yards providing guidance on SAFFO regulations and how to design building and yards in order to optimise performance.

Workshops which aim to raise awareness and develop knowledge of the economic benefits of adopting a targeted approach to fertilizer use and managing the use of nitrogen fertilizer and slurry/manure to reduce levels of GHG emissions and have taken place across Wales in early 2013 and will be repeated with new farmer groups in 2014.

Good soil management which is key to profiting from fertilisers, manures and new leys will also be included in event planning in 2014. Events promoting the benefits of grassland based farming systems through reseeding and sward renovation, the utilisation of new varieties, control of weeds and use of clovers for more efficient livestock production and effective nutrient management will be included in the programme for 2014.

The optimum utilisation of grassland has never been more important with the cost of purchased feed and fertiliser higher than ever. The aim is to promote the benefits of grassland based farming systems and efficient use of grass to improve profitability and increase sustainability.

In addition events and activities to enable farmers to reduce their reliance on brought in feeds and to provide information and develop knowledge on topics such as silage management to reduce dry matter losses/improving silage yield and making the silage nutritive value for the stock fed to increase profit and improve efficiency and growing and feeding home-grown crops including establishing and utilising forage crops, cropping to reduce winter feed costs and highlighting the benefits which include extending feeding supplies, reducing overall feeding costs and meeting environmental targets.

We will continue to provide advice on farm woodland as part of demonstration farm events in order to attract a wider audience.

Annex 1 Summary of the knowledge transfer programme activity on Environmental and Climate Change cross cutting themes and their relation to Welsh Government objectives during the period 1st September 2011-31st January 2014.

Welsh Government Objectives	Knowledge Transfer activity type and count (Please see annex 1 for key)																Total number of KT activities	Examples of activity
	CF	OD	DG	WS	FE	FW	ST	FEC	BC	AA	MM	CL	PD	SH	FS	TA		
Wise use of natural resources is an essential and integral part of good business management		5	15	22	3		1						2		3	16	68	<ol style="list-style-type: none"> 1. Soils Workshops (Workshops) 2. The benefits of Nutrient Management Planning (Discussion Groups) 3. Soil, muck and money (Farm events) <p>In addition Nutrient Management Plans have been carried out on all demonstration farms</p>
Increasing the arable/alternative forage crops to improve sustainability with less reliance on bought in feeds The development of an organic arable sector		10	12		5	3				1			2	2	7	6	48	<ol style="list-style-type: none"> 1. Crop Focus - the benefits of growing alternative forages (Demonstration Farm Open day) 2. Growing crops in marginal areas (Technical article) 3. Home grown feeds clinic – (Clinic)
Efficient use of grass to improve profitability and increase sustainability Management of grassland as a carbon store		17	50		3	20	1		2		2	12	4		7	18	136	<ol style="list-style-type: none"> 1. Rotational Grazing Study tour to France (Study Tour) 2. Grassland management and utilisation (Discussion group) 3. Mileage in silage bulletins (Technical articles)
Renewable energy options including anaerobic digestion Increased implementation of			16		4	2					1	8	3	1	2	2	39	<ol style="list-style-type: none"> 1. Anaerobic Digestion (Farm event) 2. Wind Turbines for farms (Factsheet)

alternative energy																			3. Renewable energy clinic (Clinics)		
Soil carbon management Improved soil management Adoption of soil practices that protect and enhance the carbon store see environment and climate change above			6	15		4	1								1	8	2	2	5	44	1. Getting soils ready for spring - visual indicators of soil health (technical article) 2. Soil Management and the IBERS PROSOILS project (Discussion group meeting) 3. Nutrient management and soil compaction issues (Demonstration Farm open day)
Expand horticulture production by encouraging others in the agricultural industry to see horticulture as an opportunity			2	12	1	1	1									2		4	2	25	1. Soil Analysis Workshop for horticulture (workshop) 2. Field-scale fruit and fruit tree production in Wales (Demonstration Farm Open day) 3. Protected cropping in horticulture (Factsheet)
Reduced energy use Reduced energy use and improved energy efficiency																			1	1	1. Tractor Fuel Efficiency (Technical article)
Increased clover use to reduce fertiliser use				9	1															10	1. The case for clover (Discussion group meeting) 2. The case for clover and sulphur workshop results (workshop)
Organic Production The development of an organic horticulture sector				3																3	Future of Organic Production in Wales (Discussion group meetings)

Sustainable use of resources & Reducing environmental footprint			2	1												6	<ol style="list-style-type: none"> 1. Sustainable Intensification (Workshop) 2. Environmental clinic 3. Olway catchment project on farm event - Environmental regulations
Efficient use of inputs Improve efficiency of use of on-farm resources Increased water efficiency			2												1	3	<ol style="list-style-type: none"> 1. Efficient Winter feeding (Technical article and Discussion group) 2. Demonstration Farm Project - 3. Energy efficiency in the dairy (Ifton Hill)
Increase woodland cover in Wales The management of woodland & trees more closely related to other land uses Increased woodland establishment and management Opportunities to develop woodland related enterprises		2	2		1											6	<ol style="list-style-type: none"> 1. Farm woodland management (Discussion group) 2. Practical Orchard Management with Health and Safety (Demonstration Farm open day) 3. Practical orchard management (podcast)
High Sugar Grasses															1	1	<ol style="list-style-type: none"> 7. The benefits of High Sugar Grasses (Technical Article)
Improved energy efficiency		1	1													2	<ol style="list-style-type: none"> 8. Energy - Resource management (Demonstration Farm Open day) 9. Efficient use of energy and renewable energy sources (Discussion Group)

Key to Farming Connect Knowledge Transfer activity types

Key	Event title
CF	Conference
OD	Demonstration Farm Open Day
DG	Discussion Group
WS	Workshop
FE	Farm Event
FW	Farm Walk
ST	Study Tour
FEC	Farmer Enterprise Competition
BC	Business Clubs
AA	Agri Academy
MM	Merched y Maes
CL	Clinic
PD	Podcast
SH	Shows
FS	Factsheet
TA	Technical Article

Annex 2 Industry Development activity 1st September 2011 – 31 December 2014

Activity Type	Number	Description
Diversification Seminar with a focus on Renewable Energy	4	Allowing farmers to assess the viability and suitability of renewable energy projects on their farms
Planning Surgeries		One to one sessions with a planning consultant - advice on planning regulations relating to slurry storage, roofing for slurry pits and waste management and potential renewable energy projects
Focus on Business events	6	These events included a presentation from a renewable energy consultant
Glastir Drop in sessions	48	One-to-one guidance was provided for farmers considering applying for Glastir Entry.
Glastir on farm events	17	Farm open days including a farm walk, demonstrating practical ways of undertaking sustainable land management options.