



Agriculture Strategy and Rural Proofing Branch  
Agriculture and Rural Affairs Division  
Welsh Government  
Ladywell House  
Newtown  
SY16 1JB

Dear Sir/Madam

**Welsh Government Consultation Document: A Strategic Framework for Welsh Agriculture.**

**Response by Cyfoeth Naturiol Cymru/Natural Resources Wales**

Thank you for consulting Natural Resources Wales (NRW) on a 'Strategic Framework for Welsh Agriculture'. We welcome the initiative to engage with the agricultural sector in this way. Whilst we recognise that this consultation is taking place at a difficult time for many in the industry, we believe considerable work is still required to bring this proposed framework in-line with the Future Generations Act and the Welsh Government's proposed Environment Bill. We would very much like to play our part in helping deliver a more sustainable agricultural sector in Wales.

NRW works as a regulator, partner and advisor to businesses, non-governmental organisations, Local Authorities and communities to help deliver Welsh Government and European Union policies and priorities. We take an ecosystem approach to promoting sustainable development that delivers social, economic and environmental benefits to the people of Wales.

Whilst supportive of the overall vision of a prosperous, resilient agriculture industry that works to promote present and future well-being, we believe that the "vision" should be much more explicit. In particular, it should promote productive, profitable farming systems that simultaneously reduce risks to the environment, whilst recognising that appropriate management of land should aim to deliver a wide range of ecosystem services. A truly holistic vision for Welsh agriculture should also reflect the needs of rural communities and the tourism sector as well as making the link to the Welsh Government's food and health policies. Such an approach would dovetail with the requirement for an area based approach to natural resource management as proposed under the Environment Bill

In those locations where natural systems are shown to be approaching their limits in terms of environmental carrying capacity, a sustainable production approach will necessitate the adoption of a wide range of innovative techniques. Whilst many of these measures can (and in some cases already do) operate at the level of individual holdings, others will require new forms of co-operation at the catchment scale and above. An increasingly integrated approach to regulation will also be necessary. This should involve local authorities as well as NRW and Welsh Government.

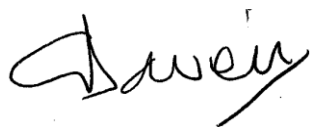
We believe that there would be considerable merit in identifying a number of case study farms (as well as groups of farms working in collaboration). These could demonstrate what sustainable production, in harmony with the wider environment, actually involves at farm level. Such case studies should be drawn from the different agricultural sectors and landscape types across Wales. Farming & Forestry Connect, Gwlad and Ministerial visits could all be used to promote these.

NRW believes that the proposed Partnership Group should play a pivotal role in the development of a more environmentally sustainable industry. In conjunction with the supporting Action Groups, the Partnership Group will need to play a major role in terms of providing the necessary leadership. It would also promote integrated and innovative approaches to problem solving and the sharing of expertise on the development of best practice. We would very much welcome the opportunity to be involved and to bring our breadth of experience of sustainable Natural Resource Management into this new approach.

Our detailed response to each of the specific questions set out in the consultation document can be found in Annex 1.

Please contact [brian.pawson@naturalresourceswales.gov.uk](mailto:brian.pawson@naturalresourceswales.gov.uk) if you wish to discuss our response in more detail.

Yours faithfully



**CERI DAVIES**

Cyfarwyddwr Gweithredol Gwybodaeth, Strategaeth a Chynllunio, Cyfoeth  
Naturiol Cymru

Executive Director for Knowledge, Strategy & Planning, Natural Resources  
Wales

# ANNEX 1

## Detailed Response from Natural Resources Wales

**Question 1: Do you agree with our shared vision for agriculture? Would you suggest an alternative?**

Strongly Agree    Agree    Neither agree  
nor disagree    <sup>√</sup> Disagree    Strongly  
Disagree

Although we agree with the vision for “A prosperous and resilient industry which promotes Wales’ present and future well-being”, we have significant concerns about the level of ambition. This is because the description of sustainable production is characterised by the phrase “limiting any damaging side effects”. The evidence that we present below clearly demonstrates the unsustainability of many current approaches to agricultural production in certain parts of Wales. This is taking place despite a long standing record of previous interventions designed to address both point source and diffuse pollution.

The struggle to remain viable means that some parts of the agricultural industry are already encountering significant issues in terms of environmental sustainability. We feel that a more open acknowledgement of the existence of such problems would strengthen the role of the proposed Partnership Group in seeking to create a joint working framework. This could then promote innovative ways of working and enhance the management of natural resources alongside greater profitability and improved resilience.

Whilst the overarching vision statement echoes the language of the Future Generations Act, the subsequent description of sustainable production means that it could be open to misinterpretation. It therefore requires a clearer statement of the need to respect environmental limits and the need to tackle existing problems alongside the other well-being goals. As signalled by the introduction to the consultation document, the sustainable management of soil, water and the natural environment comprises the bedrock of a sustainable farming industry. Further work will be required, however, in order to develop the necessary mechanisms and the ways in which these are linked to the requirements of other legislation such as the Environment Bill. We should not forget that farming has a great opportunity to contribute to the delivery of a wide range of services that can support Welsh society and the natural environment. The provision of such services could be exploited by farmers and land managers to support business diversification and deliver more sustainable businesses in the longer term.

The outcomes sought for the agriculture industry include an improvement in sustainability as well as a lower carbon footprint and “management of soil, water and natural organisms that sustains and enhances both production and the natural environment for the long term”. All of these are welcome as broad statements of intent, but reference to existing Welsh Government

environmental targets for carbon, water and biodiversity would assist in establishing a clearer and more measurable set of objectives against which to gauge progress.

We particularly welcome the references to a broader concept of product (including management of the natural environment, renewable energy generation and actions to increase carbon storage). We feel, however, that there should be greater emphasis on the variety of ways that farmers can achieve profitability in both the short and longer term. In many cases this could mean producing less, but ensuring greater profitability through a reduction in input costs. In other cases it could involve adding greater value to the product, whether through focussing on quality, or through vertical integration within the supply chain. Both of these have the potential to produce environmental, economic and social triple wins as already demonstrated across Wales<sup>1</sup>. As stated by the EC Agriculture Commissioner during the European Parliamentary debate on the future of the dairy sector on 7<sup>th</sup> July, *“there is a need to change our mind set: the goal is not to produce as much as we can, but as much as we can find a market for”*<sup>2</sup>.

In highlighting the wide range of spatial and cross-sectoral issues which need to be addressed as part of implementing the vision, we wish to draw particular attention to the following:

- Whilst agricultural benchmarking shows a big difference between the “best” performers and the rest, this kind of approach nearly always refers to commodity production and the resulting economic benefits<sup>3</sup>. Seemingly “inefficient” farmers are often very effective in managing ecosystem services for wider public benefit or through other businesses linked to the farm such as tourism. Such performance is currently largely rewarded under agri-environment schemes such as Glastir rather than through the market. The logic of the Rural Development Regulation (resulting in standardised payments based on “costs plus income foregone”) means, however, that there is limited capacity to improve profitability as part of such an approach unless it can be linked to an improvement in marketing or another business such as tourism.
- Previous work commissioned by the UK countryside agencies explored the capacity of individual farms to increase food production whilst simultaneously reducing nitrate losses to water; ammonia losses to air and greenhouse gas emissions as well as enhancing biodiversity and landscape<sup>4</sup>. This concluded that, *“Different farm types and farming*

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<sup>1</sup> <http://clwydianrangemeats.co.uk/>

<sup>2</sup> [http://ec.europa.eu/agriculture/commissioner-speeches/pdf/hogan-dairy-package-report-ep-plenary-06-07-2015\\_en.pdf](http://ec.europa.eu/agriculture/commissioner-speeches/pdf/hogan-dairy-package-report-ep-plenary-06-07-2015_en.pdf)

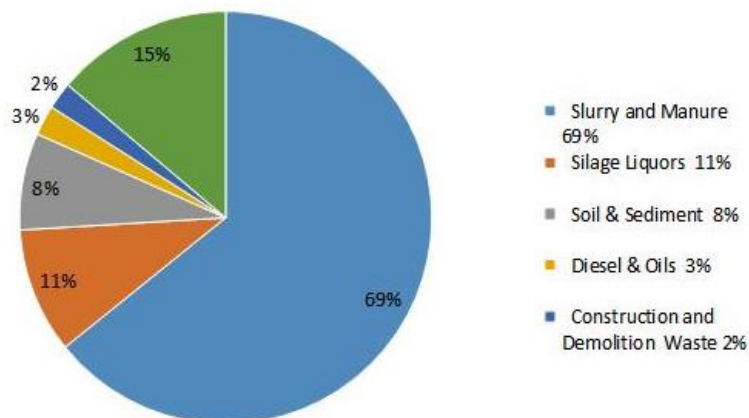
<sup>3</sup> <http://www.farmbusinesssurvey.co.uk/benchmarking/>

<sup>4</sup> Exploring the Concept of Sustainable Intensification. Report for the UK Land Use Policy Group by ADAS and Les Firbank Ecosystems. January 2013. Accessible at: <http://publications.naturalengland.org.uk/publication/6286901725102080>

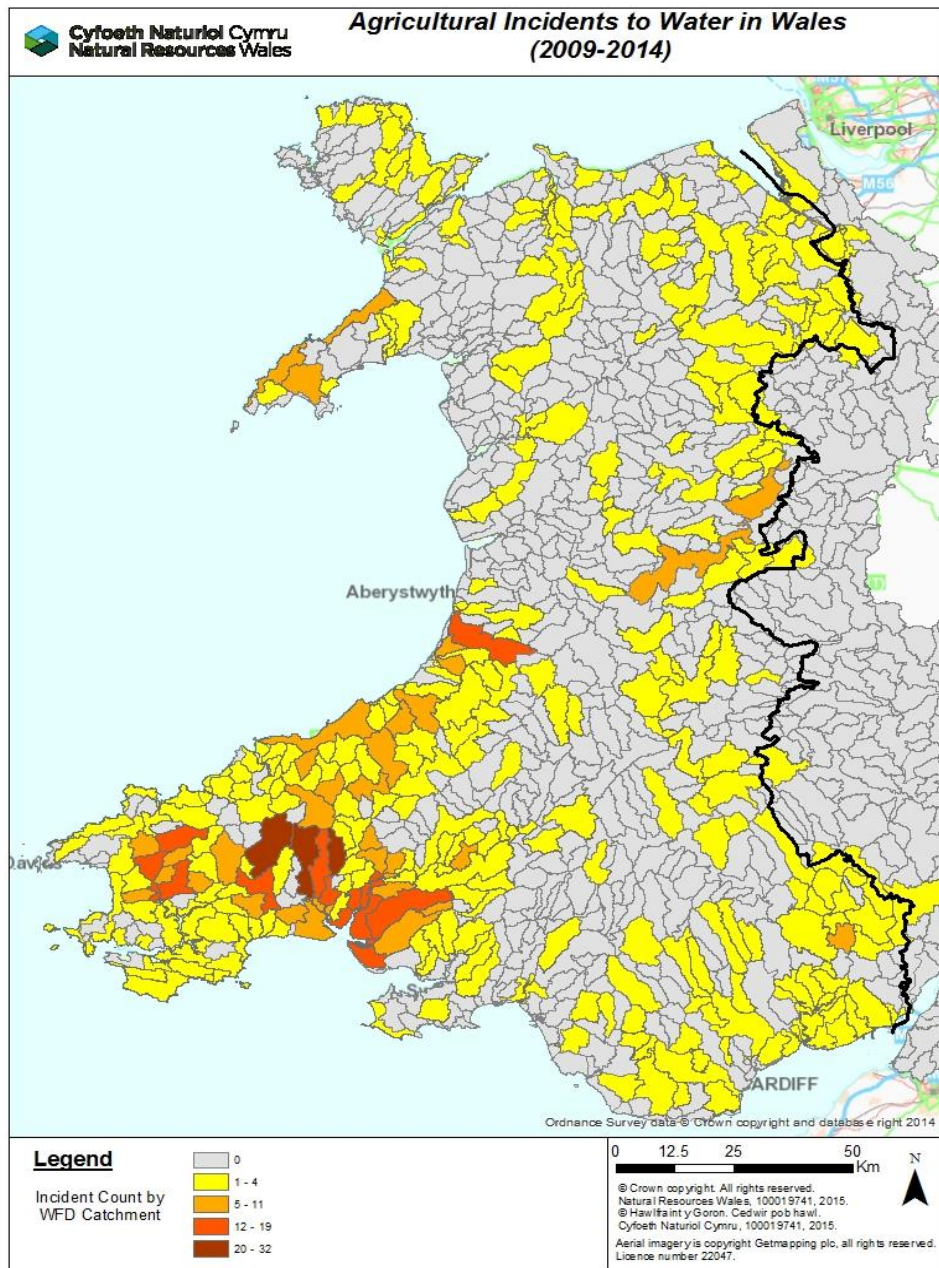
*systems have different possibilities for sustainable intensification. In particular, dairy systems have relatively high levels of environmental impact linked to methane and the pollutants in manures. The results suggest that there may be limitations in terms of the SI concept for the livestock industry, where increased productivity is likely to be associated with higher input intensity (though not exclusively) and higher emissions per unit land (but not per unit of food production) given current farming methods and application of technologies. For example, SI may not be an appropriate strategy in the uplands, where other ecosystem functions such as water quality, carbon storage, landscape and biodiversity may have a greater social value than increased in food production”.*

- The Welsh Government has instructed NRW to undertake a review of the evidence supporting Nitrate Vulnerable Zone (NVZ) designations during 2015/16. Draft designations must be in place by early autumn 2015 to leave time for a period of consultation in late 2015. The review will provide evidence for the designation of new NVZ’s as well as the de-designation of existing NVZ’s where nitrate concentrations have been reduced. Whilst the review is not yet complete, preliminary indications suggest that a number of waters in parts of Wales are, or are becoming, further polluted by nitrates from agricultural sources. This could lead to more NVZ designations with accompanying restrictions and controls placed on the way farmers manage their businesses.
- Economic factors mean that new investments in cattle housing and new dairy parlours tend to be accompanied by an inadequate approach to the storage and management of slurry. NRW’s Incident Recording System shows that poor slurry and manure management is implicated in 69% of agricultural incidents during the period 2009-14. These incidents include both slurry storage and slurry spreading, although the two issues are often interrelated. For example, insufficient storage capacity leads to slurry spreading at unsuitable times of the year such as autumn and winter.

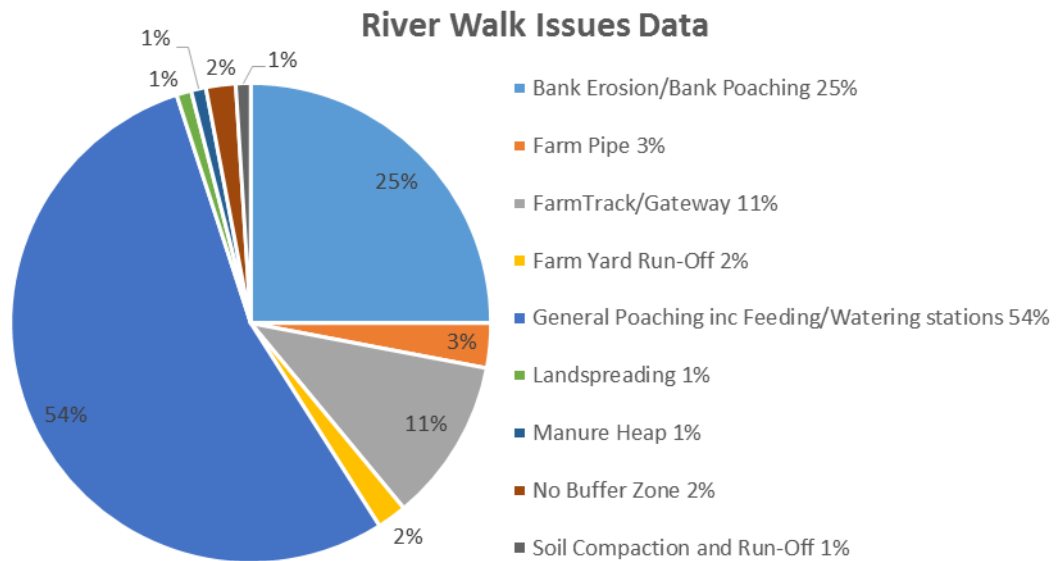
**Pollution incidents at agricultural premises  
Jan 2009 - Dec 2014 (Total of 828)**



- Additional information taken from NRW's Incident Recording System shows that agricultural incidents affecting water are concentrated substantially within South-West Wales:



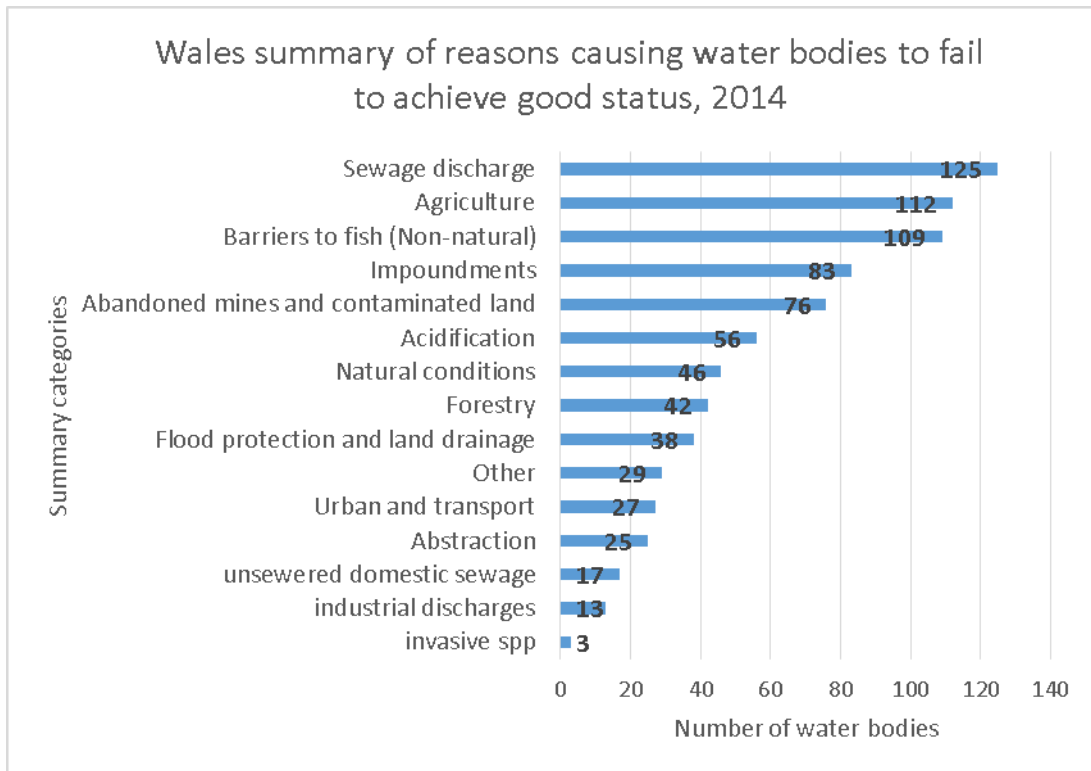
- Systematic collection of data relating to poor land management practice was undertaken during river walks as part of our WFD investigations into water bodies failing to achieve good status. This data has identified the frequency/extent of the poor land management practices giving rise to the diffuse pollution that are the reason for failures at a water body scale. Over 1192 kms of river walks were carried out with 2467 issues arising from poor agricultural practice being recorded. The findings have been summarised as follows:



- Key concerns are the extent of soil and bank poaching by livestock, erosion of river banks and fields, run-off from grassland and arable fields, tracks and the farm yard, as well as the poor management of slurry. These result in sediments being discharged into adjacent water courses. Sediments derived from soil are a source of both nitrate and phosphate as well as being a pollutant in their own right e.g. by smothering the spawning beds used by fish such as salmon. Soils are a key natural resource for any farm and although a renewable resource they take thousands of years to develop. Soil loss will have a direct impact on the productivity of the farm. Nitrate, phosphate and soils are key diffuse pollutants that when aggregated along a water course can lead to its failure to achieve good status. In Wales, rural diffuse pollution is the reason for 9% of water bodies not achieving good status
- The lack of nutrient management being carried out on agricultural land is also a major concern. NRW officers have collected some 5096 soil samples from fields on agricultural land across Wales and have identified that 44% of those analysed were above optimum levels for phosphate. Phosphate additions (both organic and inorganic) on these fields have exceeded the crop requirement and crop off-take. Often this will have cost the farmer a great deal of money. The result is an increase in overall levels

of phosphate which is at high risk of being washed off the field to pollute the water environment.

- NRW’s recent consultation on updating Wales’ River Basin Management Plans, produced as part of Water Framework Directive (WFD) requirements, identifies a number of unsustainable agricultural practices. Of particular note is the diffuse pollution from poor land management which is a significant issue impacting our water environment. The available evidence has been summarised in the Water Strategy for Wales<sup>5</sup>:



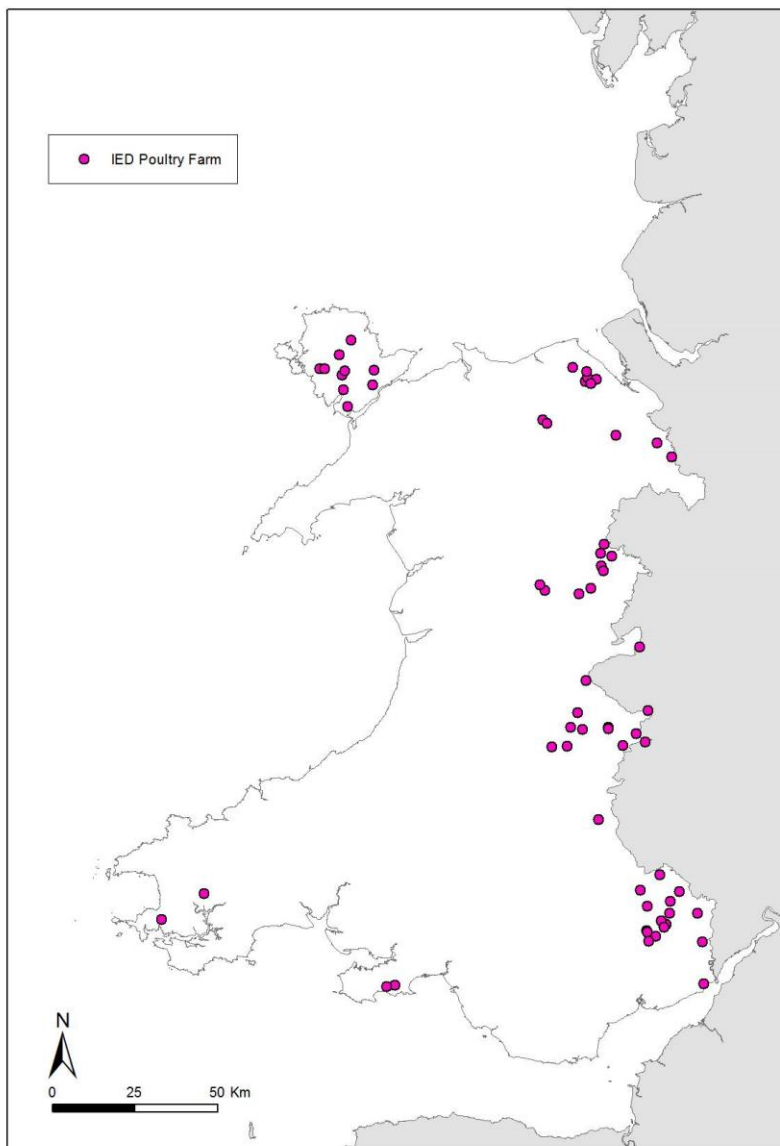
- A more strategic approach to the development of each sector would bring significant benefits to both the developer in considering new proposals and to the wider environment. For example, the production of both poultry meat and eggs is now a popular agricultural diversification option. Given the economic attractions, this expansion is likely to continue. Public concerns are currently focussed on the rapid increase in the number of units in mid-Wales. Issues include manure storage and spreading, ammonia and dust emissions at local level, potential impacts on human health and also on statutory conservation sites. Applications for larger units (>40,000 birds) are assessed by NRW under the Environmental Permitting Regulations (EPR). NRW is also a statutory consultee when applications for smaller units are assessed by Local Planning Authorities (LPA) under the Town and Country Planning and EIA Regulations. In current “hot spots” in East Wales and Anglesey, there are dense clusters of poultry developments

<sup>5</sup> Accessible at: <http://gov.wales/docs/desh/publications/150521-water-strategy-for-wales-en.pdf>. Diagram adapted from page 26



very close to each other, resulting in overlapping atmospheric pollution impacts as well as manure storage and utilisation issues. Due to in-combination and accumulative effects, such clusters of poultry developments can lead to environmental thresholds being exceeded in total, even though each development may make a relatively small contribution in its own right.

**Poultry Farms approved in Wales under the Industrial Emissions Directive (IED) as transposed into UK law by the Environmental Permitting (England & Wales) Regulations:**



**Question 2: What is your reaction to our assessment of the opportunities, threats and challenges that the agriculture industry must address? Are there others?**

Strongly Agree    <sup>√</sup> **Agree**    Neither agree nor disagree    Disagree    Strongly Disagree

A substantial number of separate opportunities, threats and challenges have already been identified in the consultation document. There is scope to expand on these alongside identifying some additional issues:

Challenges

Creating a thorough understanding that **production, good farming practice and care of the environment go hand in hand** will be fundamental to the long term health of the agricultural industry. It will also deliver successful implementation of natural resource management as proposed in the Environment Bill. In the shorter term, the need for many farmers to ensure that they remain profitable continues to erode their capacity to achieve longer term objectives. RDP schemes such as Glastir and the new Sustainable Production Grant will need to be complemented by a range of other mechanisms. This could include payments for ecosystem services (PES) as well as improved capacity to improve on existing market returns. In addition, knowledge-based approaches such as agro-ecology (utilising natural ecological processes as part of agricultural systems) provide significant opportunities for reducing input costs whilst at the same time adding value to production<sup>6</sup>.

NRW is fully committed to embedding **the principles of “Better Regulation” and “Working Smarter”** into our work. This will ensure that our interpretation and implementation of regulation is both effective and appropriate. For example, new simpler NRW guidance on the licensing of hydropower abstractions was issued in April 2014. Effective implementation of the new guidance across the organisation has enabled us to be more consistent in our licensing decisions. We have also halved the amount of time we spend on determining applications from 46 to 23 hours for each simple licence. NRW’s Permitting Service is continuing to trial new ways of reducing the end-to-end time for applications related to small scale, lower risk hydropower schemes. Also, as part of seeking to improve customer experience, all permit application forms have now been revised.

The evidence we have collected from WFD river walks and farm visits in support of Glastir suggests that frequently encountered poor practices such as poaching and bank erosion by livestock are either not within the scope of existing regulatory tools or that their use in such cases would be overly burdensome, disproportionate or ineffective. By contrast, we feel that the

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<sup>6</sup> The Role of Agroecology in Sustainable Intensification. Lampkin, N.H., Pearce, B.D., Leake, A.R., Creissen, H., Gerrard, C.L., Girling, R., Lloyd, S., Padel, S., Smith, J., Smith, L.G., Vieweger, A., Wolfe, M.S. (Organic Research Centre and Game & Wildlife Conservation Trust. (June 2015). <http://www.snh.gov.uk/docs/A1652615.pdf>

development of a set of straightforward **General Binding Rules (GBR's)** would substantially reinforce the promotion of accepted good practice. At the same time they would provide a “lighter touch” approach towards those farmers who are operating their businesses in this way. Any system of GBR's will need to be linked to clear and concise guidance which, if breached, would attract a proportionate sanction. Whilst there is currently no legal basis on which to make such rules, the power to conduct experimental schemes (as provided under the Environment Bill) should enable us to trial a range of approaches to this issue.

Although **climate change** issues are mentioned at several points in the consultation document, there is no reference to the vital role of the agricultural sector in contributing to devolved Greenhouse Gas (GHG) emission reduction targets (especially since c20% of Welsh emissions come from the land use sector). A more explicit statement of the importance of GHG emission reduction through using mitigation measures (such as those set out in the Red Meat and Dairy Roadmaps) would be useful. In relation to the reference to a 'lower carbon footprint' it is critical to ensure that resource and emission efficiencies result in a net reduction in Welsh agricultural sector emissions (as will be required by the Carbon Budgets set out in the Environment Bill) rather than just a per hectare reduction in the carbon intensity of agricultural output. The need for a net reduction in GHG emissions should be made much more explicit.

### Opportunities

Some 40% of the woodland cover in Wales currently remains unmanaged. This often comprises small, fragmented native woodlands on farms. We suggest that the role of well-managed woodlands and longer term agro-forestry systems in contributing to overall farm profitability would be a suitable topic for one of the proposed Action Groups. In particular, woodland creation and management can support and strengthen existing businesses through the provision of improved livestock shelter, biosecurity and timber products, whilst lowering the risk of diffuse pollution, controlling flood risk downstream and reducing carbon footprints<sup>7</sup>. The possible loss of direct payments once agricultural land is afforested presents a particular challenge in the light of current EU audit requirements, although Article 32.2 (b) (iii) of the Direct Payments Regulation (EC 1307/2013) covers afforestation under the RDP and also under national schemes, albeit only for the period covered by the relevant commitment<sup>8</sup>.

The undeveloped **market potential for other agricultural products** such as carbon storage and sequestration, renewable energy generation and water management provides substantial scope for the establishment of new systems of payments for ecosystem services (PES). While these systems remain largely undeveloped at present, the economic impetus, valuation and accounting schemes, plus the legislative and regulatory framework required to

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<sup>7</sup> <https://naturalresources.wales/forestry/new-woodland-creation/why-we-need-more-trees-the-benefits-of-new-woodland-creation/?lang=en>

<sup>8</sup> Accessible at: <http://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32013R1307>

realise the necessary markets are now emerging, in part through the development of several PES pilots in Wales and across the UK<sup>9</sup>. The two co-operation measures within the new RDP will provide a significant opportunity for engaging with farmers (in their role as service providers) so as to catalyse these elements into the formation of functioning markets in Wales. Such developments would serve to enhance farm profitability, resilience and sustainability, as well as enhancing 'production' in its broadest economic sense.

### Threats

Following the decoupling of direct payments, the resulting emphasis on the quality of agricultural production as well as the size and conformation of carcasses has shifted the way that sheep are now farmed, especially in upland Wales. There is now much greater emphasis on heavier cross-breeds, which make more use of the improved and semi-improved in-bye land and are put onto the unimproved hills later in the year. At the same time, the ongoing decline in the suckler beef herd is leading to the **undergrazing of semi-natural vegetation**, with real difficulties now being encountered in the capacity to achieve the kinds of agricultural management (especially by large animals such as cattle and ponies) which is required on many statutory sites and in order to safeguard protected species. Whilst accepting that numerous factors have contributed to the current situation (not least global markets, the strong pound, TB controls and the decoupling of direct payments) a range of RDP measures could still be brought to bear. For example, alongside schemes such as Glastir, the provision of increased support for processing and marketing (with more emphasis on where livestock have been reared and their contribution to the management of biodiversity in particular locations) would help to underpin the sustainable production of red meat on semi-natural rough grazings. In turn, this could help to support a range of other desired outcomes, including landscape management and food-related tourism.

### ***Question 3: Do you have other comments and views, including on how the partnership approach should work?***

We welcome the idea of a partnership and strongly recommend that NRW is directly involved. We would welcome an opportunity to contribute either through the proposed Partnership Group or by participating in one or more of the Action Groups. We believe our current activity and future role in delivering against the requirements of the Environment Bill supports this recommendation. NRW's membership of the new Public Service Boards, coupled with our role in preparing area natural resource management statements, also significantly strengthens the contribution we are able to make.

We believe that there would be considerable merit in identifying a number of case study farms (as well as groups of farms working in collaboration). These could demonstrate what sustainable production in harmony with the wider

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<sup>9</sup> For example, see <http://www.eepecobank.co.uk/> in relation to testing the validity of a market based offsetting scheme

environment actually involves at farm level. Such case studies should be drawn from the different agricultural sectors and landscape types across Wales. Farming & Forestry Connect, Gwlad and Ministerial visits could all be used to promote these. Examples could be drawn from previous investigations into sustainable intensification<sup>10</sup> as well as from Farming & Forestry Connect consultants and ongoing work by the various Welsh research institutions.

We suggest that the proposed Partnership Group should focus on the development of more strategic approaches to the development of each agriculture sector, promoting early engagement with regulators such as NRW. Individual Action Groups could then be encouraged to develop co-operative approaches to defining the nature of the various challenges prior to seeking innovative solutions. For example, NRW is currently using the Small Business Research Initiative<sup>11</sup> (SBRI) to investigate new approaches to managing livestock without the use of fencing. Whilst SBRI funding is only available within the public sector, a similar approach could be developed under the proposed new RDP Co-operation Scheme.

We feel that it would be beneficial for each of the Action Groups to be charged with taking an innovative and cross-sectoral approach to their work. Manure and slurry management issues (as described in our response to question 1) are much more likely to be resolved through such an approach. The need for innovation and cross-sectoral working should also be reflected in the Terms of Reference for the Partnership Group.

***Responses to consultations are likely to be made public, on the internet or in a report. If you would prefer your response to remain anonymous, please tick here:***

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<sup>10</sup> Exploring the Concept of Sustainable Intensification. Report for the UK Land Use Policy Group by ADAS and Les Firbank Ecosystems. January 2013. Accessible at: <http://publications.naturalengland.org.uk/publication/6286901725102080>

<sup>11</sup> Further information on the SBRI is available at: <https://sbri.innovateuk.org/>