

National Assembly for Wales
Environment and Sustainability Committee

Inquiry into Sustainable Land Management

May 2014



Cynulliad
Cenedlaethol
Cymru

National
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Wales

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Environment and Sustainability Committee

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Wales

Environment and Sustainability Committee

The Committee was established on 22 June 2011 with a remit to examine legislation and hold the Welsh Government to account by scrutinising expenditure, administration and policy matters encompassing: the maintenance, development and planning of Wales's natural environment and energy resources.

Current Committee membership



Alun Ffred Jones (Chair)
Plaid Cymru
Arfon



Mick Antoniw
Welsh Labour
Pontypridd



Russell George
Welsh Conservatives
Montgomeryshire



Llyr Gruffydd
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North Wales



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Cardiff North



William Powell
Welsh Liberal Democrats
Mid and West Wales



Antoinette Sandbach
Welsh Conservatives
North Wales



Joyce Watson
Welsh Labour
Mid and West Wales

The following Member was also member of the Committee during this inquiry:



Dafydd Elis-Thomas
Plaid Cymru
Dwyfor Meirionnydd

The following Member did not participate in the proceedings relating to this inquiry:



Vaughan Gething
Welsh Labour
Cardiff South and Penarth

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Summary

Since June 2013 we have looked into Sustainable Land Management in Wales. To understand this, we have worked closely with farmers, land managers, conservationists and scientists and we have spent time on the ground with them to further our knowledge of the opportunities and challenges of managing land sustainably.

We have found that:

- A clear definition of sustainable land management is needed;
- High-level outcomes for sustainable land management need to be articulated at a national and regional level, but land managers must be empowered to contribute their delivery in a manner that suits their specific circumstances;
- More needs to be done to close knowledge gaps and to make the gathering of data more consistent;
- We need to improve how we share knowledge and apply new innovations on the ground; and
- Establishing markets for ecosystems services is essential to the future sustainability of land management in Wales.

A note on our evidence gathering

In addition to the formal evidence we gathered, making barns, farm kitchens, y ffridd, uplands, the back of Land Rovers, visitor centres and laboratories the forum for our discussions has had a powerful effect on us and the important messages we heard out on the ground will stay with us beyond the conclusion of this work.

Stakeholders shaped our approach to this work by participating in a workshop at the outset of our inquiry to develop terms of reference. We also tested the conclusions and recommendations we make in this report with stakeholders at a workshop at the end of our inquiry. This has made a significant contribution to our work and it is a model we would like to utilise again in the future.

Acknowledgements

We have been aided in our work by Professor Terry Marsden, Director of the Sustainable Places Research Institute at Cardiff University. We

wish to acknowledge his valuable contribution to our work and thank him for his erudite guidance.

As ever, our work is only as good as the evidence we receive and we thank all those who have contributed. We offer special thanks to the farmers, land managers, conservationists, scientists and project officers who welcomed us onto their land, farms, labs and, on occasion, into their homes. With such people on the front line we can be optimistic about the future management of land in Wales.

The Committee's Recommendations

The Committee's recommendations to the Welsh Government are listed below, in the order that they appear in this Report. Please refer to the relevant pages of the report to see the supporting evidence and conclusions:

Recommendation 1. We recommend that the Welsh Government refines its definition of 'sustainable management' to take account of our key principles. This should be done before the introduction of the Environment Bill, and preferably feature in the draft Bill the Minister for Natural and Resources and Food has committed to providing by the end of 2014. Our key principles are:

- That any definition of sustainable land management should be based upon the Welsh Government's definition of sustainable development and recognise the interdependence of the environmental, social and economic needs of Wales both now and in the future.
- That any definition should recognise the need for sustainable land management in Wales to protect and enhance ecosystem services and biodiversity and the public benefits they provide to Welsh society.
- That any definition should recognise the importance of ensuring that land-based business in Wales, including agricultural and forestry businesses, are profitable and can continue to support vibrant rural communities.
- That sustainable land management should seek to protect Wales's most important and cherished landscapes. (Page 14)

Recommendation 2. We recommend that the Welsh Government includes clearly articulated outcomes for sustainable land management in its Natural Resources Policy. (Page 20)

Recommendation 3. We recommend that the Welsh Government publishes a timetable that sets out how it will develop a Natural Resources Policy between now and its expected completion date (i.e. 2016-17). This timetable should:

- include details of how outcomes for sustainable land management are to be developed, incorporated and communicated;
- explain how stakeholders will be involved; and
- be published in advance of the Environment Bill's introduction.

(Page 21)

Recommendation 4. We recommend that the Welsh Government explores ways in which existing schemes, such as Glastir, can be designed to empower land owners to take decisions about how sustainable land management is delivered on the ground. We ask the Welsh Government to provide us with details of how this will be implemented before the end of 2014. (Page 21)

Recommendation 5. We recommend that NRW, within its pilot schemes, evaluates the potential use of 'directed choice' models of delivery and reports back to the Committee on the outcomes of these evaluations at the end of the pilot projects. (Page 21)

Recommendation 6. We recommend that the Welsh Government develops and adopts an evidence framework to assess progress towards delivering sustainable land management in Wales. The framework should:

- identify existing data sources and gaps in knowledge;
- include clear objectives as to what indicators of progress we will need to measure;
- from this it should set out a prioritised action plan for improving the gathering of data;
- provide an indication of the resources we will need to deliver our objectives; and
- set out the role of different organisations in the data gathering process.

This work should build on the work already being done by the Welsh Government in relation to biodiversity data and support the delivery of the Environment Bill. We ask that the Welsh Government implements this recommendation by the end of March 2015. (Page 25)

Recommendation 7. We recommend that the Welsh Government develops pilot schemes to include land managers in the data gathering

process. In doing so, it should ensure that the data gathered and any conclusion drawn from the data are meaningfully fed back to land managers. We ask that the Welsh Government provides us with details of how and when it will implement this recommendation when responding to this report. (Page 25)

Recommendation 8. We recommend that the Welsh Government ensures that the Rural Development Plan and the revision of the Glastir scheme are utilised to drive better transfer of knowledge from our research centres to land managers on the ground and to support and facilitate the transfer of knowledge between land managers. Additionally, this support should extend to encouraging research and development to reflect the needs of land managers. (Page 29)

Recommendation 9. We recommend that the Farming Connect-style approach to support services should be expanded to provide bespoke services to land managers, including the forestry sector, in relation to sustainable land management practices. (Page 29)

Recommendation 10. We recommend that the Welsh Government considers including provision of advice and support on succession planning to existing farmers in the next Rural Development Plan. (Page 33)

Recommendation 11. We recommend that the Welsh Government takes a coordinating role to pull together and disseminate the work already happening through individual projects on the delivery of ecosystem services. It may wish to consider the case studies we have gathered and published at <http://tiny.cc/ey27ex> (Page 37)

Recommendation 12. We recommend that the Welsh Government sets out how it will support the development of payment for ecosystems services and the timescale within which it envisages meaningful markets for ecosystem services being developed and/or accessed in Wales. We ask that it provides us with this information before the end of 2014. (Page 37)

Recommendation 13. We recommend that the next Rural Development Plan provides support for the piloting and development of the delivery of ecosystems services both through Glastir and through other sections of the plan including knowledge transfer and innovative forms of funding such as loans. In meeting this recommendation, the Welsh Government should give careful

consideration to how it designs payment rates for different schemes.
(Page 38)

Recommendation 14. We recommend that the Welsh Government and NRW leads on work to develop partnerships to attract and support projects with investment from private sector enterprises. (Page 38)

1. A definition of Sustainable Land Management

Stakeholder views

1. Whilst there has been little agreement in the evidence we received about the precise wording for a definition for sustainable land management there has been a general consensus that an agreed definition is needed. In its written evidence, Natural Resources Wales (NRW) identified the lack of a definition as a key barrier to delivery. It stated that sustainable land management “has not been sufficiently well defined and embedded at a national level”.¹ In his oral evidence to the Committee, Mr Atkins from the Brecon Beacons National Park Authority (BBNPA) spoke of the need to build “common consensus”² and in its written evidence the National Association of Areas of Outstanding Natural Beauty (NAAONB) stated that it is:

“keen to ensure that there is clear and consistent use and communication of terminology to support better understanding of land management objectives.”³

2. The majority of stakeholders who attended our workshop on key issues and draft conclusions agreed with the need to identify a common definition of sustainable land management and supported our proposals for key principles upon which the Welsh Government could work to develop an agreed definition.⁴

3. We heard that some work on agreeing priorities for Sustainable Land Management between the farming unions and environment organisations had already been undertaken by NRW’s legacy bodies.

4. Although there wasn’t consensus amongst stakeholders as to whether or not a legal definition of sustainable land management was needed, there was agreement that any definition adopted would need to be consistent with the definitions for sustainable management and sustainable development proposed in the Environment and Future

¹ Environment and Sustainability Committee Consultation Response SLM16, *Inquiry into Sustainable Land Management in Wales; Submission from W*, September 2013

² RoP [para 116], 15 January 2014, Environment and Sustainability Committee

³ Environment and Sustainability Committee Consultation Response SLM2, *Inquiry into Sustainable Land Management in Wales; Submission from the National Association for Areas of Outstanding Natural Beauty*, September 2013

⁴ Details of this workshop and a video capturing the key messages can be found at <http://tinyurl.com/q8d6n5b> [Accessed on 16 April 2014]

Generations Bills. Ms Sherwood, from NRW, in her oral evidence stated that in its response to the Environment Bill White Paper, NRW had set out the need for consistency between both of these Bills and the Planning Bill:

“In our response to the environment Bill White Paper, we flagged up that these Bills all need to be going in the same direction of travel and, preferably, use common language, so that they are clear to everybody and be geared towards delivering the outcomes set out in the programme for government.”⁵

5. In our workshop with stakeholders on the initial findings of the report a number of people expressed reservations about the definition of ‘sustainable management’ contained in the Environment Bill White Paper. Some expressed concern about the lack of reference to biodiversity while others expressed concern about its clarity.

6. Some stakeholders stated that any definition of sustainable land management adopted would need support from across Government. In his oral evidence, Mr Byrne from Wildlife Trusts Wales stated:

“Some of the new Bills—the sustainable development Bill and the environment Bill—bring concepts such as living within environmental limits and land management not just to Natural Resources Wales or to the Minister, Alun Davies’s portfolio, but to other portfolios as well. It is about trying to bring about opportunities in other ministerial portfolios to look at land management and sustainable land management as well.”⁶

The Welsh Government’s view

7. The Minister for Natural Resources and Food agreed that there is a need for a definition, though with a significant difference. The Minister believes that a broader definition of ‘sustainable management’ of natural resources is required, as set out in the Environment Bill White Paper:

“*Sustainable management* means the collective actions (including non-action) required for managing the maintenance,

⁵ RoP [para 98] 29 January 2014, Environment and Sustainability Committee

⁶ RoP [para 30], 15 January 2014, Environment and Sustainability Committee

enhancement and use of natural resources in a way, or at a rate, which will enable the people and communities of Wales to provide for their social, economic and environmental well-being, while maintaining the life-support systems of nature. In doing so, ensuring that the benefit of the use to the present generation does not diminish the potential to meet the needs and aspirations of future generations.”⁷

8. Further to this, he stated that he would not move away from this definition unless very strong reasons were presented to him.⁸

9. The Minister asserted that all of the definitions being used by the Welsh Government are in keeping with existing European and international definitions.

The Committee’s view

10. The evidence we have received shows that there is stakeholder demand for a definition so that all land managers in Wales can have clarity and certainty about the outcomes they are being asked to deliver.

11. We are pleased that the Minister acknowledges the need for a definition, and can understand why he is inclined towards a broader definition.

12. However, we are not wholly convinced that the definition of ‘sustainable management’ set out in the Environment Bill White paper will address the call from land managers for greater clarity, nor are we convinced that that all stakeholders are content with this definition as currently drafted.

13. During our stakeholder workshop on 27 March 2014, the feedback we received was that the draft principles that we have developed offer a clearer vision of sustainable land management than the definitions provided in the Environment Bill White Paper at present.

14. Recognising that we are still some way off the introduction of the Environment Bill, we believe that the Minister has sufficient time to

⁷ Welsh Government, *Towards the Sustainable Management of Wales’ Natural Environment: Consultation on proposals for an Environment Bill*, 23 October 2013

⁸ RoP [para 30], 1 May 2014, Environment and Sustainability Committee

refine his definition of 'sustainable management' to take account of the following principles:

- That any definition of sustainable land management should be based upon the Welsh Government's definition of sustainable development and recognise the interdependence of the environmental, social and economic needs of Wales both now and in the future.
- That any definition should recognise the need for sustainable land management in Wales to protect and enhance ecosystem services and biodiversity and the public benefits they provide to Welsh society.
- That any definition should recognise the importance of ensuring that land-based business in Wales, including agricultural and forestry businesses, are profitable and can continue to support vibrant rural communities.
- That sustainable land management should seek to protect Wales's most important and cherished landscapes.

Recommendation 1- defining sustainable land management

We recommend that the Welsh Government refines its definition of 'sustainable management' to take account of our key principles. This should be done before the introduction of the Environment Bill, and preferably feature in the draft Bill the Minister for Natural and Resources and Food has committed to providing by the end of 2014. Our key principles are:

- **That any definition of sustainable land management should be based upon the Welsh Government's definition of sustainable development and recognise the interdependence of the environmental, social and economic needs of Wales both now and in the future;**
- **That any definition should recognise the need for sustainable land management in Wales to protect and enhance ecosystem services and biodiversity and the public benefits they provide to Welsh society;**
- **That any definition should recognise the importance of ensuring that land-based business in Wales, including agricultural and forestry businesses, are profitable and can continue to support vibrant rural communities;**

- **That sustainable land management should seek to protect Wales's most important and cherished landscapes.**

2. Geographical Scale

Stakeholder views

15. There has been broad agreement amongst those who have taken part in the inquiry that there is a need for both a national framework on sustainable land management that contains high level outcomes for Wales and plans at a more regional level to deliver these high level outcomes on the ground. In its written evidence NRW stated that “all scales are appropriate for progressing Sustainable Land Management”⁹ whilst in its written evidence, FUW (Farmers’ Union of Wales) stated that:

“...it might not be appropriate to identify a ‘one size fits all’ approach to the delivery of sustainable land management policies and practices.

“Given, the wider variations in the geography and topography of Wales, the Union believes that consideration should be given to the use of a regional approach for the delivery of sustainable land management policies and practices as this will allow specific interventions to be developed and adopted to reflect local needs.”¹⁰

16. The views of NRW and FUW were echoed in the written evidence from National Parks Wales. It stated that sustainable land management can be delivered at multiple levels as long as these are complimentary:

“There are several scales at which sustainable land management can be delivered. Produce, product and service marketing can be delivered at local, regional and national levels, each tier being complementary and mutually supportive.”¹¹

⁹ Environment and Sustainability Committee Consultation Response SLM16, *Inquiry into Sustainable Land Management in Wales; Submission from Natural Resources Wales*, September 2013

¹⁰ Environment and Sustainability Committee Consultation Response SLM13, *Inquiry into Sustainable Land Management in Wales; Submission from FUW*, September 2013

¹¹ Environment and Sustainability Committee Consultation Response SLM8, *Inquiry into Sustainable Land Management in Wales; Submission from National Parks Wales*, September 2013

17. Hybu Cig Cymru (HCC) in its written evidence called for a national plan with flexibility to take account of local issues.¹²

18. Different suggestions were made as to the appropriate scale for regional action. A number of organisations including NRW, the Woodland Trust, NAAONB and Wildlife Trusts Wales make reference in their evidence to river catchments as potential starting points for regional planning and this scale was also given as an example during the workshop sessions. Reference was made by RSPB Cymru, the Countryside Land and Business Association (CLA) and National Parks Wales to a landscape scale approach to sustainable land management in their written evidence. During the workshop sessions some stakeholders suggested that different sized regions may be appropriate depending on their geography and the environmental and economic pressures within them.

19. Reference was made by several stakeholders during the workshop sessions to the proposals contained in the Environment Bill White Paper for Natural Resource Area management plans. In general, stakeholders felt that these plans could provide an avenue for more regional planning but that there would need to be good coordination between the proposals for these plans and the proposals set out in the Planning White Paper.

20. In addition to supporting the principle of multi-layered plans, or outcomes, a number of stakeholders supported the principle of empowering landowners to have a greater say in the way in which they deliver outcomes on their holdings. In their written evidence both the British Association for Shooting and Conservation (BASC) and the NAAONB support the principle of decisions being taken at the local or holding level within a wider framework. In its evidence the NAAONB stated:

“The NAAONB supports an expansion of the concept of “subsidiarity” – the idea that decisions are best taken at as local

¹² Environment and Sustainability Committee, Committee Paper E&S(4)-03-14 Paper 3, *Inquiry into Sustainable Land Management in Wales; Submission from Hybu Cig Cymru*, 29 January 2013

a scale as possible within a wider strategic framework agreed at a higher level.”¹³

21. In his oral evidence Mr Jones, from Pembrokeshire Coast National Park Authority (PCNPA), stated that the principles of “localism” and “adaptive management” are key.¹⁴ Mr Davies, from Organic Group Wales, told us that land managers hadn’t been empowered to make decisions under some elements of the Glastir Advanced scheme which led to a lack of understanding about the outcomes farmers were being asked to deliver:

“The farmer does not understand why so much money is coming to the farm but that he is not directly in control of the project himself.”¹⁵

22. It should be noted that, since we began our inquiry, the Welsh Government has consulted on proposals to amend elements of Glastir under the next Rural Development Plan.

23. We also heard from NRW that the Haverfordwest Creamery offered a positive example of farmers being empowered to make decisions on delivery. A group of farmers had worked with First Milk to adopt a range of actions to reduce nutrient levels in the local area in order to offset any additional carbon emissions that would be produced by the creamery shifting into cheese production. This method of working was referred to by NRW as “directed choice” with farmers being provided with a list of options from which they could select the actions most suited to them.

24. However, in his oral evidence, Mr Pawson from NRW stated that whilst this sort of approach “has the potential to deliver a lot more” we “have to accept that going about it in that kind of way is potentially going to take longer and require different skills”.¹⁶ In addition, he stated that we may need to accept that the transaction costs e.g. the amount it costs to administer a scheme may be higher with this kind of approach.

¹³ Environment and Sustainability Committee Consultation Response SLM8, *Inquiry into Sustainable Land Management in Wales; Submission from the National Association for Areas of Outstanding Natural Beauty*, September 2013

¹⁴ RoP [para 170], 15 January 2014, Environment and Sustainability Committee

¹⁵ RoP [para 101], 24 October 2013, Environment and Sustainability Committee

¹⁶ RoP [para 116], 29 January 2014, Environment and Sustainability Committee

The Welsh Government's view

25. The Welsh Government's proposals for an Environment Bill set out a two-tiered approach to natural resources management. At a national level, a Natural Resources Policy will set out the high-level direction of travel for all natural resources related policy in Wales. Underpinning this national policy, will be an area-based natural resource management approach, managed by NRW. There will be a requirement placed on NRW to report on progress towards meeting the objectives set out in the Natural Resources Policy at least every five years.

26. The geographic areas for the area-based approach have not been defined and remain the subject of further study. The Welsh Government has piloted a river catchment approach in three locations (Tawe, Dyfi and Rhondda) and is planning to run pilots on different geographic areas, including at a landscape scale.¹⁷

The Committee's view

27. Stakeholders have asked for high-level outcomes for sustainable land management to be better articulated. Whilst this returns us to the importance of defining sustainable land management in a better way, we also see the potential of utilising the envisaged Natural Resources Policy as a vehicle through which high-level outcomes can be set.

28. Whilst we see the logic of utilising the proposed framework set out in the Environment Bill White Paper for progressing policy in relation to sustainable land management, there are risks that it could become lost amongst other priorities in a national plan. We are also mindful that the creation of a Natural Resources Policy relies on a number of uncertainties, including the passage of the Environment Bill and the priorities of the next Welsh Government. In any event, the White Paper's timetable places the creation of the Policy some two to three years away from now i.e. 2016-17.

29. In the meantime it is important that other policy drivers ensure that policy in this area continues to develop. The new Rural Development Plan and the refresh of Glastir are obvious candidates. In addition to these, we believe work should begin on shaping a vision for sustainable land management and on the process of consulting

¹⁷ RoP [para 59], 1 May 2014, Environment and Sustainability Committee

and working with stakeholders on the outcomes for a future Natural Resources Policy.

30. The Natural Resources Policy will need to provide a framework for balancing the competing social, economic and environmental demands on our natural resources. Based on our current understanding, the proposed Bill for Future Generations will require the Welsh Government to set out how it has considered these three pillars of sustainable development in arriving at a decision on the objectives this policy defines.

31. The question of geographic scale has posed us something of a dilemma. Initially, we were inclined towards the view that a river catchment approach may offer the best geographic scale. Whilst this may be appropriate in some areas, we were quickly disabused of the belief that this could be universally applicable across Wales. For example, it would be inappropriate for upland landscape-scale projects which often span several catchments.

32. We believe that different size areas will be appropriate depending on their geography and the environmental and economic pressures that exist within them.

33. Within these areas, we believe that high level outcomes need to be defined but that land managers should be empowered to have a role in shaping how these outcomes are delivered on the ground. We were attracted to the concept of directed choice (presented to us by NRW) and there is merit in exploring a broader application of this approach.

34. The Environment Bill has the potential to establish a framework for this approach through the creation of area-based natural resources management plans. How these plans interrelate with the provisions of the Planning Bill and existing requirements must be considered further, else there is a risk of diminishing the potential effectiveness of the Environment Bill proposals.

Recommendation 2 – setting high level outcomes

We recommend that the Welsh Government includes clearly articulated outcomes for sustainable land management in its Natural Resources Policy.

Recommendation 3 – publish an action plan for developing the Natural Resources Policy

We recommend that the Welsh Government publishes a timetable that sets out how it will develop a Natural Resources Policy between now and its expected completion date (i.e. 2016-17). This timetable should:

- include details of how outcomes for sustainable land management are to be developed, incorporated and communicated;**
- explain how stakeholders will be involved; and**
- be published in advance of the Environment Bill’s introduction.**

Recommendation 4 – empowering land managers

We recommend that the Welsh Government explores ways in which existing schemes, such as Glastir, can be designed to empower land owners to take decisions about how sustainable land management is delivered on the ground. We ask the Welsh Government to provide us with details of how this will be implemented before the end of 2014.

Recommendation 5 – piloting the ‘directed choice’ model

We recommend that NRW, within its pilot schemes, evaluates the potential use of ‘directed choice’ models of delivery and reports back to the Committee on the outcomes of these evaluations at the end of the pilot projects.

3. Measuring Progress: Data and Monitoring

Stakeholder views

35. Most stakeholders identified improving data collation, use and communication as one of the key actions required to underpin successful sustainable land management.

36. In written evidence, NRW stated that a lack of access for land managers to all the information they require was a barrier to the development of sustainable land management in Wales. NRW also stated in written evidence that:

“Numerous governmental and non-governmental monitoring programmes provide data relevant to SLM assessment. A fundamental challenge is to collect and collate these data, and any additional data required to fill gaps, in consistent and easily accessible formats to inform SLM assessment. Meeting this challenge will require committing resources to establish and maintain data sets that can be made widely available across Wales via the web. Data confidentiality for some sources remains an issue.”¹⁸

37. Numerous examples were provided of existing sources of data and there was general agreement among stakeholders that this data is not managed effectively. Some stakeholders, including National Parks Wales and the Woodland Trust, stated that the local records centres could play a greater role in storing and coordinating data.

38. It is worth noting that stakeholders made similar comments during our inquiry into Invasive Non-Native Species in 2013.¹⁹

39. In recognising the need to urgently address data and evidence deficiencies we also heard of the need to ensure that careful consideration is given to the design, construction and approach to data gathering mechanisms. Smarter design of data gathering mechanisms and better use of partnership working was seen as

¹⁸ Environment and Sustainability Committee Consultation Response SLM16, *Inquiry into Sustainable Land Management in Wales; Submission from Natural Resources Wales*, September 2013

¹⁹ Environment and Sustainability Committee, *Inquiry into Invasive Non Native Species*, January 2014

particularly important given the limited resource available for data collection.

40. Some stakeholders talked of the importance of involving and empowering land managers themselves to gather data as opposed to the collection of data being undertaken by external organisations. An example was given of Fish Map Môn from the marine environment where fishermen have been trained and provided with equipment to gather data on fisheries themselves.

41. In written evidence the Countryside and Community Research Institute (CCRI), University of Gloucestershire, stated that the involvement of the public in data collection, or “citizen science”, should be investigated further by the Welsh Government. It said:

“Given the acknowledged lack of ‘official’ resources available to collect baseline data for Wales, serious consideration needs to be given to exploring opportunities for gathering ‘crowd-sourced’ data from land managers themselves as well as members of the public.”²⁰

42. CCRI stated that data collected in this way, through for example smartphone apps, could be valuable in validating and ground-truthing (particularly from remote-sensed sources), and filling gaps in data coverage.²¹

The Welsh Government’s view

43. The Minister acknowledged that there were “some real gaps in our knowledge” and in collecting data.²² He is of the view that the State of Nature report confirmed this. He is keen to utilise the different sources of data that are available in Wales, but wishes to ensure there is consistency in the approach to gathering data.²³

²⁰ Environment and Sustainability Committee Paper E&S(4)-06-14 Paper 4, *Inquiry into Sustainable Land Management; Submission from the Countryside and Community Research Institute (CCRI) at the University of Gloucestershire*, 20 February 2014

²¹ Ibid

²² RoP [para 15], 1 May 2014, Environment and Sustainability Committee

²³ Ibid [para 22]

44. The Minister has placed a duty on NRW, through the annual remit letter, to develop a data hub. He was clear in his view that NRW is already adequately resourced to deliver this.²⁴

45. The Nature Fund is also to be used to improve the gathering of data.

46. The Welsh Government is actively engaged with the European Union's COBWEB Citizen Observatory Web project. The Minister stated his support for utilising citizen science where appropriate.²⁵

The Committee's view

47. The lack of data available to adequately develop policy and measure its outcomes has become a recurring message throughout our inquiry work – for example in relation to marine policy and combating invasive non-native species. We are pleased to hear that the Minister is taking steps to address this.

48. In order to ensure a consistent approach to addressing knowledge gaps, we believe there is a need for a data and evidence framework that should identify existing data sources, the organisations currently involved in gathering data in Wales and gaps in knowledge.

49. This framework should include a prioritised action plan for improving the gathering of data and set out the role of different stakeholders in the data gathering process. It should have clear objectives and be precise about what exactly it is we are gathering data to measure. In addition, in designing this framework careful consideration should be given to the resource available to support data collection in Wales. This work should build on the work already being done by the Welsh Government in relation to biodiversity data and ensure that it will be able to support the delivery of natural resource area management plans

50. More work needs to be done to include land managers in the data gathering process. The Welsh Government, as part of its work on natural resource management plans and Glastir, should consider the development of pilot schemes to address this. In doing so, it is

²⁴ RoP [para 18], 1 May 2014, Environment and Sustainability Committee

²⁵ Ibid [para 20]

essential that the data gathered and any conclusion drawn from the data are meaningfully fed back to land managers.

Recommendation 6 – to develop a monitoring strategy

We recommend that the Welsh Government develops and adopts an evidence framework to assess progress towards delivering sustainable land management in Wales. The framework should:

- identify existing data sources and gaps in knowledge;**
- include clear objectives as to what indicators of progress we will need to measure**
- from this it should set out a prioritised action plan for improving the gathering of data**
- provide an indication of the resources we will need to deliver our objectives; and**
- set out the role of different organisations in the data gathering process.**

This work should build on the work already being done by the Welsh Government in relation to biodiversity data and support the delivery of the Environment Bill. We ask that the Welsh Government implements this recommendation by the end of March 2015.

Recommendation 7 – to develop pilot schemes for data gathering

We recommend that the Welsh Government develops pilot schemes to include land managers in the data gathering process. In doing so, it should ensure that the data gathered and any conclusion drawn from the data are meaningfully fed back to land managers. We ask that the Welsh Government provides us with details of how and when it will implement this recommendation when responding to this report.

4. Communication and Knowledge Transfer

Stakeholder views

51. We received a great deal of evidence around the need to improve how new knowledge is transferred to land managers.

52. This includes both the need to improve the transfer of technological and scientific knowledge on efficient farm practices and the need to improve the advisory services offered to land managers on conservation and the delivery of ecosystems services.

53. This is not to say stakeholders felt that current communication activities were poor; rather that they provide a firm foundation that could be developed further to achieve sustainable land management outcomes. For example, Farming Connect, in particular the Demonstration Farms element, was generally seen to be a successful delivery model within the agricultural sector.

54. Stakeholders from the forestry sector noted that they would like to see a similar 'Farming Connect style' model applied to their own sector.

Ecosystem Services

55. During our workshop on key issues and draft conclusions there was discussion about translating the narrative around "ecosystem services" into language and examples that are meaningful to land managers on the ground.

56. In written evidence, NRW stated exemplar projects should be used as they "can be used to test new approaches and share key messages with land managers and policy makers".²⁶ In written and oral evidence both farming unions stated that one of the best ways to transfer knowledge to farmers was by providing them with practical examples via demonstration farms.

²⁶ Environment and Sustainability Committee Consultation Response SLM16, *Inquiry into Sustainable Land Management in Wales; Submission from Natural Resources Wales*, September 2013

57. In written evidence, RSPB Cymru, Wildlife Trusts Wales and Coed Cadw all called on NRW to be an exemplar of best practice on its own land.

58. Some stakeholders noted that knowledge transfer should also be a two-way process. In written evidence CCRI highlighted work it is doing for Natural England to evaluate the Hill Farm Training Programme in Cumbria and Dartmoor, where farmers “act as trainers for conservation professionals”. It stated that:

“As conservation professionals are made more aware of farmers’ business preoccupations and concerns, they are more able to identify aspects of payment schemes which will be most attractive to farmers, and to put together incentive packages which can attract a good level of uptake and continued commitment from farm families”²⁷

Agricultural Technology and Science

59. In written and oral evidence, IBERS²⁸ stated that often scientific innovations were made in Wales but not necessarily communicated to land based industries in Wales first. Many stakeholders were of the view that having a world-leading institution such as IBERS in Wales was an opportunity to put Wales at a competitive advantage, if links between research and industry could be improved.

60. In oral evidence Professor Newbold of IBERS stated that:

“We as a nation should take advantage of the technologies that we generate, and then we should export out of the country. We have the ability, due to the size of the country, to operate as a single unit. We can have a laboratory Wales.”²⁹

61. Professor Newbold proceeded to state that links between research and industry could be improved by having demonstration farms that “do not demonstrate best practice today, but demonstrate best

²⁷ Environment and Sustainability Committee Paper E&S(4)-06-14 Paper 4, *Inquiry into Sustainable Land Management; Submission from the Countryside and Community Research Institute (CCRI) at the University of Gloucestershire*, 20 February 2014

²⁸ ‘IBERS’ is the Institute of Biological, Environmental and Rural Sciences at Aberystwyth University.

²⁹ RoP [para 3], 20 February 2014, Environment and Sustainability Committee

practice in 2030". He also stated that information should be disseminated earlier:

"we have to move science from the laboratory. We have a tendency of waiting until we are finished before we try to disseminate it. I think that, if we take farmers on the journey with us, they will take the technology up much earlier."³⁰

The Welsh Government's view

62. The Minister recognised that there is world-leading research being undertaken in Wales into sustainable land management, but that there is a gap in conveying the outcomes from this research to land managers on the ground.³¹

63. He has commissioned Gareth Wyn Jones to conduct an independent review of learning delivered by further education colleges and the relevance of that delivery in supporting farm businesses in Wales.³²

64. Increased facilitation of and training to allow farmer to farmer coaching and support will be part of the future of Glastir.

The Committee's view

65. We have heard and seen that there is world-class research and innovation taking place in Wales, but that this knowledge is not being utilised to its full potential in Wales. We believe that the Welsh Government needs to do more to bridge the gap between the land manager on the ground and our research centres.

66. Support should be provided through the Rural Development Plan for improved knowledge transfer to land managers both for sustainable land management skills and to transfer new technologies and scientific developments.

67. The Farming Connect-style approach to support services should be expanded to provide bespoke services to land managers, including

³⁰ RoP [para 32], 20 February 2014, Environment and Sustainability Committee

³¹ RoP [para 93], 1 May 2014, Environment and Sustainability Committee

³² Welsh Government, Alun Davies (Minister for Natural Resources and Food), *Independent review of learning delivered by further education colleges and the relevance of that delivery in supporting farm businesses in Wales*, Cabinet Written Statement, 4 March 2014

the forestry sector. If the Rural Development Plan is to support moves towards support for ecosystem services, then Farming Connect could help prepare farmers for delivering these services. Examples could include advice on diversification and/or biodiversity management.

68. The Welsh Government should investigate ways to better convert new developments from Welsh research institutions into practical examples which are accessible to land managers, and we hope that the work being undertaken by Garth Wyn Jones will assist in this regard.

69. We are pleased that the Minister is thinking of including support for farmer to farmer knowledge transfer in his work to refine the Glastir scheme. Stakeholders advocated this type of approach. We would also like to see the potential for two-way transfer of knowledge between both land managers and the conservation sector explored further. The Welsh Government should engage with CCRI to explore their work in this area further.

Recommendation 8 – improve knowledge transfer

We recommend that the Welsh Government ensures that the Rural Development Plan and the revision of the Glastir scheme are utilised to drive better transfer of knowledge from our research centres to land managers on the ground and to support and facilitate the transfer of knowledge between land managers. Additionally, this support should extend to encouraging research and development to reflect the needs of land managers.

70. In meeting the above recommendation, performance measures will need to be established so that progress can be monitored. We intend to explore this further with the Minister once the Rural Development Plan and changes to Glastir have been finalised.

Recommendation 9 – extending Farming Connect

We recommend that the Farming Connect-style approach to support services should be expanded to provide bespoke services to land managers, including the forestry sector, in relation to sustainable land management practices.

5. Rural Profitability and Food Production

Stakeholder views

71. The evidence provided to us throughout this inquiry has been clear that first and foremost farmers wish to remain food producers and that this should remain their primary role in the future. In oral evidence, Mr Bailey, the then President of NFU Cymru stated that:

“We have a £3 billion food and drink industry in Wales, of which farming is the cornerstone. It is a sizable part of the Welsh economy, and the survivability of the agriculture industry now and in the future will depend on the profitable production of food. However, we cannot ignore the need to maintain that food production and to increase it as the population of the world continues to grow.”³³

72. Furthermore, in written evidence Young Farmers Clubs Cymru stated that:

“the message we receive from our members is that they need to be allowed to farm, rather than being straitjacketed by paperwork or required to become rangers. We want to produce food for our country, and in doing so, we believe that we can also deliver sustainable land use as high productivity is entwined with good land management practices.”³⁴

73. Some of the farm representatives and farmers who have provided evidence to this inquiry identified sustainable intensification as a system that could enable farmers to increase productivity whilst impacting less on the environment. In written and oral evidence both NFU Cymru and IBERS described sustainable intensification broadly as “producing more and impacting less”. In written evidence NFU Cymru stated:

“The term “sustainable intensification” was first formally coined by the Royal Society in a report it published in October 2009 as a means of encapsulating the most important single response

³³ RoP [para 10], 24 October 2013, Environment and Sustainability Committee

³⁴ Environment and Sustainability Committee Paper E&S(4)-25-13 Paper 3, *Inquiry into Sustainable Land Management; Submission from Young Farmers Clubs Cymru*, 24 October 2013

to the global challenges of food security, environmental protection and climate change.”³⁵

74. The work of the Land Use Policy Group (LUPG) which includes representatives from NRW on sustainable intensification was drawn to our attention. LUPG commissioned a report (published in 2013) to assess across different farm types and regions in Britain whether it was possible to increase production whilst also delivering environmental benefit i.e. sustainably intensify production.³⁶

75. The report concluded that whilst it was possible in some farming systems to increase yield and improve the environment, in other farming systems, such as upland areas, it may not be desirable. Farms in these areas, it concluded, should focus on the delivery of ecosystem services rather than seeking to intensify current levels of production.

76. The issues of access into the agriculture industry were raised by some stakeholders and, particularly the issues surrounding succession planning and access to land for young farmers. Some stakeholders suggested that further advice and incentives should be provided to existing farmers considering retirement from the industry to increase opportunities for young farmers; however others urged caution in this area as to what could be realistically achieved within existing legislation.

77. In addition to farm profitability the contribution of the forestry and timber sector to the rural economy was also highlighted to the Committee in written and oral evidence. This point was also put forward strongly by UPM Tilhill during our second stakeholder workshop.

The Welsh Government’s view

78. The Minister believes that arguments around the primacy of food production as opposed to other activities are “stale” and of the 20th Century.³⁷

³⁵ Environment and Sustainability Committee Consultation Response SLM14, *Inquiry into Sustainable Land Management in Wales; Submission from NFU Cymru*, September 2013

³⁶ Elliott, Firbank, Drake, Cao and Gooday, Exploring the Concept of Sustainable Intensification, *Land Use Policy Group*, January 2013

³⁷ RoP [para 44 and 51], 1 May 2014, Environment and Sustainability Committee

79. He told us that the land managers can, and must, deliver on a number of fronts if they are to operate sustainable farm businesses, including: food production; environmental management; and sustainable natural resource management.

80. He believes that the binary conflict between food production and other activity to be a “false dichotomy” and different farm businesses will have different priorities.³⁸ He argued that it was simplistic to give one facet of farm business primacy over others.

81. The Minister expressed the view that he preferred the concept of “sustainable production” over that of “sustainable intensification”.

The Committee’s view

82. It is clear to us that food production should remain at the core of farm businesses alongside other land management activities.

83. Current evidence suggests to us that sustainable intensification is not a suitable approach to managing upland farms in Wales. It is a model which may offer benefits to some other modes of farming, but only in relatively few locations in Wales.

84. We are however supportive of the view that support should be provided to farms to help them become more resource efficient and financially sustainable and support the Minister’s view that there is scope for more sustainable production in Wales.

85. We support the Welsh Government’s proposals to include the young entrants support scheme within the next Rural Development Plan, but we believe that consideration should also be given to providing existing farmers with advice and support on succession planning.

86. We acknowledged the important role of forestry and timber to the rural economy and believe that it has an important role to play in the future of sustainable land management in Wales. Support to help deliver a sustainable forestry sector in Wales should also be considered.

³⁸ RoP [para 47], 1 May 2014, Environment and Sustainability Committee

Recommendation 10 – succession planning

We recommend that the Welsh Government considers including provision of advice and support on succession planning to existing farmers in the next Rural Development Plan.

6. Delivery of Ecosystem Services

Stakeholder views

87. There was agreement between stakeholders that the delivery of ecosystem services will play an increasingly important role in land management in Wales. We heard evidence that delivery of these services was not only important for the public goods they provide but also because they offer land managers an alternative source of income. In its written evidence, the CLA stated:

“A sustainable living standard will not be achieved by dependence on selling agricultural products alone. Land managers should not be expected to cross-subsidise the delivery of environmental public goods and services from their market returns. It is therefore necessary to ensure that proper public payment for the value of public goods and services delivered is guaranteed.”³⁹

88. We were provided with a number of examples of projects where land managers in Wales were already engaging in the delivery of ecosystem services such as in the Pumlumon Project, and we have published a number of these case-studies on our website.⁴⁰ Examples given to us of ecosystems services that land managers could get paid to deliver included water quality, flood risk reduction, renewable energy, sustainable timber construction materials and carbon sequestration. In its written evidence, Wildlife Trust Wales suggested that sustainable land management can also provide cultural services such as tourism.

89. RSPB Cymru, Wildlife Trusts Wales and the Woodland Trust, in their written evidence, argued that NRW should seek to act as an exemplar for the delivery of ecosystems services by piloting schemes on the Welsh Government’s estate.

90. Although there was broad support for the delivery of enhanced ecosystem services a number of organisations stated that more work was needed to develop markets for these services and to design

³⁹ Environment and Sustainability Committee Consultation Response SLM17, *Inquiry into Sustainable Land Management in Wales; Submission from the CLA*, September 2013

⁴⁰ See <http://tinyurl.com/nzwyzhf> [Accessed 16 April 2014]

suitable monitoring mechanism to demonstrate progress. In its written evidence, Wildlife Trusts Wales stated that there is at present “a market failure, there are almost no mechanisms to ensure that farmers and landowners receive money for providing ecosystem goods and services”.⁴¹ Stakeholders identified two ways in which this market failure could be addressed: through the provision of public support through the Rural Development Plan and other government policies; and by the stimulation of private markets for investment in and payment for services provided by land owners.

91. The majority of stakeholders told us that the next Rural Development Plan has an important role to play in providing schemes that support the delivery of ecosystem services by land managers in Wales. In its written evidence the BASC stated that “The next rural development plan for Wales is a key driver for land management choices”.⁴² In its written evidence NRW made a number of recommendations for programmes that could be included within the next Rural Development Plan to support the delivery of ecosystem services including the provision of better advisory services and the provision of a loan scheme to help with capital investments on farm.

92. However, limitations to the use of rural development funds to support ecosystems delivery were also identified. A number of respondents highlighted the limitations imposed by the requirement for payments under the Rural Development Plan to be made on income foregone/costs incurred basis. In its written evidence FUW states:

“Currently agri-environmental payments supported under Pillar II of the CAP are made on the basis of compensation for profit foregone plus costs which cannot include a profit element. This means that there is little real incentive for farmers to adopt the wider provision of public goods and services on improved land

⁴¹ Environment and Sustainability Committee Consultation Response SLM10, *Inquiry into Sustainable Land Management in Wales; Submission from Wildlife Trusts Wales*, September 2013

⁴² Environment and Sustainability Committee Consultation Response SLM3, *Inquiry into Sustainable Land Management in Wales; Submission from the BASC*, September 2013

or undertaking high nature value farming practices on semi natural areas.”⁴³

93. This view was supported by NFU Cymru and the CLA in their written evidence and was an issue that was raised in a number of the workshop groups. To overcome this problem, the BBNPA in its written evidence, suggested that rural development schemes should be designed to provide start-up funding for projects that can attract additional private sector investment.⁴⁴

94. In his oral evidence, Mr Pawson from NRW suggested that a more “creative” approach to the calculation on income forgone and costs incurred under rural development schemes could increase the amounts paid to landowners.⁴⁵ In addition, in its written evidence, Wildlife Trusts Wales identified other Ministerial portfolios from which support for ecosystem services could be provided including support for wildlife projects that attract tourism and support for projects that seek to reduce infrastructure flood risk.

95. In relation to private sector investment in ecosystem services, some stakeholders provided examples of where this had already occurred such as water companies supporting land-based schemes to improve water quality, but stated that more work was needed to support the development of these markets in the long-term. The Environment Bill White Paper includes proposals for NRW to be tasked with facilitation of markets for ecosystem services. During the workshop some stakeholders made reference to work already being done by the Welsh Government to look at payment mechanisms for ecosystem services.

The Welsh Government’s view

96. Provision of ecosystem services will underpin all decisions taken in relation to the next Rural Development Plan.⁴⁶

⁴³ Environment and Sustainability Committee Consultation Response SLM13, *Inquiry into Sustainable Land Management in Wales; Submission from the FUW*, September 2013

⁴⁴ Environment and Sustainability Committee Consultation Response SLM15, *Inquiry into Sustainable Land Management in Wales; Submission from the Brecon Beacons National Park Authority*, September 2013

⁴⁵ RoP [para 67], 29 January 2014, Environment and Sustainability Committee

⁴⁶ RoP [para 85], 1 May 2014, Environment and Sustainability Committee

97. The Minister is working with cabinet colleagues, including the Minister for Economy, Science and Transport, to develop payments for ecosystems services.⁴⁷

98. Additionally, the Minister told us that he sees the need to establish markets – the link between buyer and seller – and is currently awaiting the outcome from research he has commissioned in this area.⁴⁸

The Committee's view

99. There are many good projects underway in Wales that demonstrate the potential for developing ecosystem services. Our register of case studies, published on our website, provides a snapshot of this good work. However, many of these projects and schemes operate in isolation and more needs to be done to draw this work together.

Recommendation 11 – coordinating work on ecosystem services

We recommend that the Welsh Government takes a coordinating role to pull together and disseminate the work already happening through individual projects on the delivery of ecosystem services. It may wish to consider the case studies we have gathered and published at <http://tiny.cc/ey27ex>

100. We believe that the development of payment for ecosystems services (PES) will be essential in securing a sustainable future for Wales.

101. It is encouraging to hear of cross-departmental working within the Welsh Government to develop PES, but we require more information of how this is to be delivered.

Recommendation 12 – payment for ecosystems services

We recommend that the Welsh Government sets out how it will support the development of payment for ecosystems services and the timescale within which it envisages meaningful markets for ecosystem services being developed and/or accessed in Wales. We

⁴⁷ RoP [para 87], 1 May 2014, Environment and Sustainability Committee

⁴⁸ Ibid [para 90]

ask that it provides us with this information before the end of 2014.

102. There is a substantial amount of land in Wales in public ownership. The Welsh Government should encourage NRW to act as an exemplar for the delivery of sustainable land management and delivery of ecosystems services. We are pleased that the Minister has confirmed that he expects NRW to act as an exemplar land manager.⁴⁹

103. We believe that the next RDP offers an important opportunity to pilot and test models of payment for ecosystems services in Wales. We acknowledge that the way in which payment calculations are made limits the ability of the RDP to truly reflect the value of the services provided by land managers but ask the Welsh Government to work with NRW to develop a more creative approach to payment calculations for relevant schemes.

104. Whilst the next RDP is vital for piloting approaches to payments for ecosystem services the scale of the task ahead will require much greater investment than this plan alone. It is therefore vital that partnerships between land managers, the public and private sectors are built to develop markets for ecosystem services. We note the proposals in the Environment Bill White Paper that NRW should act as a broker for new markets and look forward to hearing more information about this proposal as the Bill progresses.

Recommendation 13 – piloting ecosystem services

We recommend that the next Rural Development Plan provides support for the piloting and development of the delivery of ecosystems services both through Glastir and through other sections of the plan including knowledge transfer and innovative forms of funding such as loans. In meeting this recommendation, the Welsh Government should give careful consideration to how it designs payment rates for different schemes.

Recommendation 14 – investment from the private sector

We recommend that the Welsh Government and NRW leads on work to develop partnerships to attract and support projects with investment from private sector enterprises.

⁴⁹ Rop [para 96], 1 May 2014, Environment and Sustainability Committee

Annex A – Terms of reference

Recent events, studies and reports have highlighted that a sustainable future for agriculture and our environment is by no means certain. Further, aspects of both are especially fragile and have limited resilience to unexpected change.

When it comes to agriculture and the natural environment, it is clear to us that we cannot realise a sustainable future for one without the other. That is why we believe it is important that we look at the resilience and sustainability of our land management practices and policies in Wales.

We intend to gather evidence and analyse the issues that arise before drawing conclusions and making recommendations to help ensure that the Welsh Government is using its policy tools to maximum effect to ensure that our land is managed in a sustainable way.

In order to arrive at this position we will address three key questions:

- What do we want sustainable land management in Wales to look like and what outcomes do we want to deliver in the short, medium and longer term?
- What are the barriers preventing us from delivering these outcomes now?
- How do we overcome these challenges?
- What are the main policy drivers and how can these be shaped to overcome these challenges?

In doing so, we wish in particular (though not exclusively) to gather your views on:

- How we define the key ecosystems and ecosystem services in a way that makes sense for Wales?
- How we develop a baseline from which to measure progress? This includes how we collect, coordinate and use data to support sustainable land management in Wales.
- What incentives we can provide land managers to develop sustainable practices, and in particular, any new sources of investment we can attract to support these?

- How we ensure that our sustainable land management policies maintain vibrant rural communities and attract new entrants into the land-based sector?
- The most appropriate geographical scale(s) at which we should be delivering sustainable land management policies and practices in Wales?
- If there are key actions we can take to deliver short-term 'quick wins' and the actions we should be taking for the long-term?

In undertaking this inquiry, we have been guided by the views and opinions expressed to us at our stakeholder workshop on 3 July 2013.

We intend to maintain a dialogue with these stakeholders throughout the life of this inquiry.

Annex B - Witnesses

The following witnesses gave evidence to the Committee. Transcripts of the meetings can be viewed at

www.senedd.assemblywales.org/mgIssueHistoryHome.aspx?Ild=1308

24 OCTOBER 2013	
Session 1	
Ed Bailey	NFU Cymru
Dylan Morgan	NFU Cymru
Gavin Williams	Farmers Union of Wales
Rhian Nowell-Phillips	Farmers Union of Wales
Session 2	
Ceri Davies	Wales Young Farmers Clubs
Sarah Price	Wales Young Farmers Clubs
Ben Underwood	Country Land & Business Association
Keri Davies	Organic Group of Wales
15 JANUARY 2014	
Session 3	
Arfon Williams	RSPB Cymru
Annie Smith	RSPB Cymru
Rachel Sharp	Wildlife Trusts Wales
James Byrne	Wildlife Trusts Wales
Session 4	
Julian Atkins	National Parks Wales
Geraint Jones	National Parks Wales
Chris Lindley	National Association for Areas of Outstanding Natural Beauty
23 JANUARY 2014	
Session 5	
Jerry Langford	Coed Cadw (The Woodland Trust)
Kath McNulty	Confor

Mike Harvey	Maelor Forest Nurseries Ltd
George McRobbie	UPM Tillhill
29 JANUARY 2014	
Session 6	
Joanne Sherwood	Natural Resources Wales
Brian Pawson	Natural Resources Wales
Session 7	
Ben Underwood	Country Land & Business Association
Gary Davies	South West Wales Regional Partnership
Dai Davies	Hybu Cig Cymru
Siôn Aron Jones	Hybu Cig Cymru
Session 8	
Chris Blake	The Green Valleys (Wales)
Richard Tomlinson	Fre-energy
20 FEBRUARY 2014	
Session 9	
Professor Jamie Newbold	Institute of Biological, Environmental and Rural Sciences (IBERS), Aberystwyth University
Professor Iain Donnison	Institute of Biological, Environmental and Rural Sciences (IBERS), Aberystwyth University
Session 10	
Gary Douch	Farming Connect
Eirwen Williams	Farming Connect
Session 11	
Dr Shaun Russell	Wales Environment Research Hub
Session 12	
Professor Janet Dwyer	Countryside and Community Research Institute (CCRI), University of Gloucestershire
Chris Short	Countryside and Community Research Institute (CCRI), University of Gloucestershire
1 MAY 2014	
Session 13	
Alun Davies AM	Minister for Natural Resources and Food
Kevin Austin	Welsh Government
Nicola Thomas	Welsh Government

In addition to the formal oral evidence session, the Committee also undertook a series of site visits:

27 JUNE 2013
Pumlumon Living Landscapes Project, Montgomeryshire
Dyfi Ospreys Project, Montgomeryshire
10 OCTOBER 2013
RSPB Nature Reserve, Lake Vyrnwy
24 OCTOBER 2013
Gethin Havard, Llwynrhys farm
Darren Williams, Talwen Fawr farm
28 NOVEMBER 2013
Caryl Hughes, Llyndy Isaf farm
Gwyn Thomas, Blaen y Nant farm
Ogwen Valley visitor centre, Nant Ffrancon, Bethesda, Gwynedd

The Committee also held workshop sessions to seek the views of stakeholders on the scope of the inquiry and the key conclusions:

3 JULY 2013
Workshop to frame the terms of reference for the inquiry, Pierhead building, Cardiff Bay
27 MARCH 2014
Workshop to discuss the key conclusions of the inquiry, Norwegian Church, Cardiff Bay

Annex C - Written Evidence

The following written evidence was received. All written evidence can be viewed in full at

www.senedd.assemblywales.org/mgIssueHistoryHome.aspx?IId=7047

<i>Organisation</i>	<i>Reference</i>
Ray Woods	SLM1
The National Association for Areas of Outstanding Natural Beauty	SLM2
British Association for Shooting and Conservation	SLM3
Hybu Cig Cymru	SLM4
Maelor Forest Nurseries Limited	SLM5
Coed Cadw - The Woodland Trust	SLM6
Graham Taylor	SLM7
National Parks Wales	SLM8
Dŵr Cymru	SLM9
Wildlife Trusts Wales	SLM10
RSPB Cymru	SLM11
Confor	SLM12
Farmers Union of Wales	SLM13
NFU Cymru	SLM14
Brecon Beacons National Park	SLM15
Natural Resources Wales	SLM16
Country Land & Business Association	SLM17
David Thorpe	SLM18
Paul Wimbush	SLM19