Written evidence submitted by the Nature Friendly Farming Network (HIL0017)

Background

The Nature Friendly Farming Network (NFFN) is a farmer led organisation established in January 2018. We are uniting farmers across the UK who are committed to managing their land for wildlife and the environment, as well as growing and providing healthy, nutritious food. We have 10 farmers on our NFFN Cymru steering group, and almost 300 farmer members in Wales who support our Manifesto, clearly emphasising the support for nature friendly land management from farmers who are looking for a voice to influence future policies.

Context

Nature-friendly farming plays an integral part in supporting vibrant rural communities and economies, whilst producing plentiful healthy sustainable food and improving public health. Furthermore, farming with nature can be the most profitable way of producing food; the *Less is More* approach that implements sustainable livestock and/or cropping systems in line with the natural productive capacity of the land (maximum sustainable output) can be a route to increasing farm business profitability, thus creating more resilient rural economies and communities.

A shift towards more nature and climate friendly farming approaches will also help tackle the climate and nature crises – arguably the biggest threat facing agriculture, the rural economy and rural communities. Our food and farming system depends on a healthy and resilient environment; healthy soil, water, air and biodiversity are the very building blocks of food production. When these natural resources are degraded, it threatens the resilience and longevity of Welsh agriculture, which as we know is the backbone of our rural economies and communities.

Key Points

- Welsh family farms contribute significantly to Wales' cultural life: contributing towards social and cultural clubs, events and activities; supporting rural jobs and services; inspiring literary works and maintaining the Welsh language.
- Some of the biggest challenges facing Welsh family farm businesses include nature loss, climate change, poor market return and dependency on farming subsidies leading to negative socio-economic trends, the *rewilding agenda* and uncertainty over future domestic agricultural support payment.
- Government environmental policies can offer huge benefits to Welsh family farm businesses, rural economies and communities. However poorly conceived and/or implemented policies could potentially threaten rural communities, the Welsh language, the wider rural economy and could in fact lead to perverse outcomes for nature and climate.
- International trade policies could reduce environmental standards and the economic position of Welsh farmers by expose us to the sort of low standards, and cut-price

competition that will drive farmers towards more harmful ways of farming for both land and livestock.

- Trees play a vital role in addressing the nature and climate crises, can improve farm profitability and productivity and support rural economies. However, planting the wrong tree in the wrong place can lead to perverse outcomes for climate, nature and rural communities. As such we must plant the right tree in the right place.

- We are very concerned about the rise in large-scale corporations buying Welsh farms to plant trees to offset their own carbon emissions, threatening local biodiversity, culture, language, and heritage.

- Environmental policy must give nature restoration the same attention and urgency as climate change.

- Facilitating agroecological farming practices (achieving Maximum Sustainable Output) and redirecting adequate farming payments towards rewarding environmental enhancement increases income stability and raises farm income for Welsh family farm businesses.

- We need a transformative food system that ensures farmers earn a fair return whilst ensuring food is healthy, affordable and sustainably produced.

How unique are family farms and how significant is their contribution to Wales' cultural life?

1.1 The landscape in Wales is shaped by farming, with farmers managing over 80% of the country's land. As such, farming (particularly small and medium Welsh family farms) plays an important role in sustaining rural economies and communities, and in many places forms the bedrock of Wales' cultural life.

1.2 Farming contributes towards social and cultural clubs and activities such as the Young Farmers' Clubs, agricultural markets and shows (Wales is home to Europe's biggest agricultural festival - the Royal Welsh Show). Welsh farmers also create the backdrop for the tourism industry worth over £2.8bn.

1.3 Farming contributes towards the food and drink supply chain worth over £6bn and there are 58,000 employed full or part time staff on farm holdings in Wales. Whilst agriculture in Wales makes a relatively small contribution to Gross Value Added (£457 million in 2017 which represents 0.8% of the total GVA for Wales for that year) it is an economically active industry through its expenditure[1]. Consider the rural jobs and services that are built around agriculture; veterinarians, mechanics, accountants, contractors, agri merchants etc. The list goes on.

[1] *Agriculture in Wales 2019*

1.4 Farming has also heavily influenced Welsh literature and continues to do so. One of Wales' most famous poets Ellis Evans, better known by his bardic name Hedd Wyn, was a farmer himself who's poems were oft inspired by nature. Farming and rural life dominated the works of Dic Jones - one of Wales's most important literary figures.

1.5 Farming also contributes towards the Welsh language. Indeed, whilst around 20% of the population are Welsh speakers, the percentage of the population who can speak Welsh and who earn their livelihood in the agricultural sector is higher, standing at 43%. Furthermore, 4 of the top 6 counties in terms of the proportion of people speaking Welsh are also 4 of the top 6 counties in terms of the proportion of the population employed in agriculture, forestry and fishing (these being Gwynedd, Anglesey, Ceredigion and Carmarthenshire)

Although, research carried out by Wavehill[2] which explored the relationship between the farming sector and the Welsh language in Gwynedd found that there is no relationship between the two i.e. employment in the sector does not affect the number of Welsh speakers. However, although the sector does not directly support the number of Welsh speakers, the research highlights that the industry is part of the infrastructure and foundations of Welsh rural communities. The cultural link between the land, the people and the language is an important one, and it is a link that the industry helps to create and preserve. **This link is immeasurable in a calculation.**

1.6 Importantly, Welsh family farms are businesses. They are not relics of a time gone by to be preserved as a living museum. Together, Welsh family farm business can make a huge difference and help solve many of our societal issues. We're suitably situated on the ground in real time, ready to deliver practical solutions and to deservedly make a living like any other well run small business.

What are the main challenges facing family farms specifically, and farming communities more generally, in Wales?

Nature and Climate Crises

2.1 Climate change poses an enormous challenge to UK agriculture, particularly livestock production systems in Wales, as it brings with it an increased frequency in extreme weather events. Indeed, studies show that the number of extremely hot days in the UK could increase four-fold.[3] Days exceeding 25.0°C could rise from around 10 days a year now to 37 days with a 4.0°C rise in global warming, whilst a 2.0°C rise in average global temperature would see the number of days exceeding 25.0°C almost double to 18 days per year. By 2080, climate change projections will lead to a decrease in overall Agricultural Land Classification grade quality compared to the baseline, with drought and dryness being the biggest factors.[4] Aberystwyth University's Institute of Biological, Environmental & Rural Sciences states that a

[2] *Agriculture and the Welsh Language (Wavehill, 2020)*
[3] *Future changes to high impact weather in the UK (Hanlon et al, 2021)*
[4] *Welsh Government/ ADAS (2020) The effect of Climate Change on Agricultural Land Classification (ALC) in Wales*

continuation of the exceptional heat and drought of recent summers will make it unlikely that Wales can continue to support its sheep industry.[5]

Increased rainfall will also become an issue, with the number of days of high-impact heavy rainfall in the UK leading to severe weather warnings potentially rising by three days per year. Currently, there are around 7 days per year in England and Wales with intense and prolonged rainfall that could lead to river flooding. With a 4.0°C rise in global temperature this could rise to 13 days per year. Under a 2.0°C rise in global temperature it is expected England and Wales will receive 10 days of intense and prolonged rainfall. A trend towards wetter winters is likely to increase problems such as soil compaction and erosion, unless good management practices are adopted.[6] As such, increasing the application of on-farm adaptation and mitigation strategies to manage the impact of climate change is of critical importance, with immediate inaction very likely to result in high costs later.[7]

2.2 Biodiversity loss is arguably a bigger threat to the planet than climate change. If we save the climate but we lose nature we're still left with an unliveable planet. Whilst there are countless examples of sustainable, nature friendly farms in Wales, we must acknowledge that farmland biodiversity declines need to be addressed urgently. There is growing evidence that shows the natural resources on which we depend (including soil, water and air), habitat condition and species numbers, are in poor conditions and declining. For example, 1 in 6 wildlife species in Wales is at risk of disappearing altogether[8] whilst none of Wales' ecosystems are resilient, meaning that their capacity to provide ecosystem services and benefits may be at risk.[9] We have also seen declines in farmland wildlife[10].

These national reports, as well as other UK wide, European and global reports identify unsustainable farming and land use as a key driver of environmental degradation &/or recommend a transition to sustainable land management.[11,1213,14] However, this isn't the farmers fault, but rather the issue lies with poorly conceived agricultural policies and markets for food that have failed to reward sustainable production. Many farms are bucking this trend, and many farmers are playing an incredible role in helping wildlife flourish on their farms - we believe that they should be better supported and rewarded for their good work. If more follow this lead, we can reverse these declines. More on that later…

Rewilding

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[5] *IBERS 2020 Climate change could wreck traditional sheep farming in Wales*
[6] *UK Committee on Climate Change 2017*
[7] *Farming Connect Technical Document: The impact of climate change on grass-based agricultural systems*
[8] *State of Nature 2019 (Wales)*
[9] *The State of Natural Resources Report (SoNaRR): Chapter 4*
[10] *State of Birds in Wales 2018 Report*
[11] *The RSA Food, Farming & Countryside Commission Our Future in the Land report*
[12] *The Eating Better Alliance report: Better by half: A roadmap to less and better meat and dairy*
[13] *The United Nation's Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5 °C*
[14] *The United Nation's Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment Report on Biodiversity and Ecosystem Services*

2.3 Rewilding is a somewhat divisive term. It is a poorly defined concept that means different things to different people. However, it generally implies a no (or very limited) human intervention approach to land management. This approach removes or greatly reduces the need for livestock and farmers, which in itself threatens the very existence of Welsh family farm businesses.

NFFN are open to considering evidence for rewilding within a broader land use approach, where nature friendly farms form part of a mosaic of habitats in the landscape. Habitat restoration is a core aspect of nature friendly farming, and farmers play a vital role in ensuring natural habitats and carbon stores are returned to good condition. In some areas, rewilding can deliver a host of benefits, such as carbon capture, flood prevention, water quality and soil health improvement, and biodiversity enhancement. For example;

- Fencing off areas of unproductive land and allowing it to regenerate naturally
- Peatland restoration
- Reducing stocking density/ agricultural management to allow regeneration of important wildfire habitats such as heather moorland
- Restoring species rich grasslands and hay meadows
- Encouraging agroforestry farming practices. Habitats such as ffridd and pasture woodland are special habitats in the uplands of Wales; these have their own unique biodiversity and can assist in connecting habitats together.

However, rewilding or the reduction/ cessation of agricultural management can have a negative impact on biodiversity. For example;

- Vegetation becoming too rank, which stifles other flowering plants. *Molinia Caerula* (puruple moor grass) is a good example of this, because if it not kept in check, it dominates and discourages the growth of other plants.
- Species rich grasslands and hay meadows would scrub over, resulting in a loss of one of our most precious and valuable wildlife habitats.
- Furthermore, ground nesting birds such as the golden plover nest on shorter swards, therefore a reduction/ cessation in grazing could threaten their nesting grounds.
- Afforestation near areas utilised by ground nesting birds (such as curlew) can have a negative effect, as they prefer more open habitats and increase predator numbers.

Every farm in Wales can deliver for biodiversity and climate; be it upland or lowland, livestock or mixed, arable or dairy, organic or conventional. Establishing wildflower field margins, planting and appropriately managing hedgerows, tree planting, restoring hay meadows, retaining winter stubbles, planting multi-species leys and bird cover crops are examples of measures that can be adopted on any farm in Wales. As such, we advocate a land sharing approach, where food is produced in harmony with nature.

Of course, there is room for wilder areas within that farmed landscape. Rewilding is one of many conservation management tools and should be viewed within a broader land use approach, tailored to local contexts. We must avoid a one size fits all/ blanket approach to rewilding. It needs to be locally appropriate, so involving and working with those who know the area is incredibly important.

Socio-economic trends

2.4 High production costs coupled with limited returns for their produce means that many family farm businesses are running to stand still. Past policies and *cheap food markets* have not arrested the socio-economic declines witnessed within the farming industry;

- The majority of farms in Wales rely heavily on income support, more so than in any other UK country.[15]
- 73% of Welsh cattle and sheep farms in less Favoured Areas (LFA) either make a loss or would have made a loss without subsidy[16]
- The total number of active farm holdings in Wales has reduced by 830 since 2013[1]
- The average age of farmers in Wales is over sixty[1]
- Farming employment opportunities continue to decline and there have been more part time than full time farmers since the early 2000s[17]

Some farmers are still encouraged to intensify their way out of economic hardship, even though research shows that this actually reduces profitability.[18] Later we explore how nature friendly farming not only benefits the climate and wildlife, but also improves business performance and increases profitability.

Uncertainty over future domestic agricultural policy

2.5 Whilst we welcome the high-level ambition proposed in the recent Agriculture (Wales) White Paper, there continues to be a worrying lack of clarity and detail surrounding the proposed Sustainable Farming Scheme and the associated transition period. Farmers need certainty for their farming business and practices. These rarely fit into the '5-year political cycles' within which policy decisions are often made. Whilst we are glad that the Welsh government has committed more than £66m to allow existing Glastir Advanced, Commons and Organic contracts to be extended until December 2023; the Sustainable Farming Scheme will not be launched until 2025 which means there will be a significant wait and income gap for farmers who aren't currently enrolled in any agri-environment schemes. We ask that a roadmap for the next 10 years of farming policy in Wales is outlined, with clear targets and milestones, to give farmers time to prepare and plan for the changes ahead.

Uncertainty over future funding support for farming

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[15] *Agriculture in the United Kingdom 2019*
[16] *Welsh Government – Statistics for Wales 2019*
[17] *Institute of Welsh Affairs: The Future of Farming and Nature in Wales*
[18] *Clark & Scanlon (20190 Less is More - Improving profitability and the natural environment in hill and other marginal farming systems*

2.6 The UK Government has not committed to any long-term agriculture funding beyond 2023. Considering how reliant Welsh farm business are on support payments, a sudden loss of public financial support could devastate Welsh farming. Furthermore, farm funding for Wales set out in the UK Treasury spending review was about 35% less than expected, resulting in a possible near £100 million shortfall in funding for Welsh agriculture.

What are the potential implications of free trade agreements for farmers in Wales?

Free Trade Agreements

3.1 The wrong trade policy could reduce environmental standards and the economic position of Welsh farmers. The NFFN is committed to ensuring that a new international trade regime does not expose us to the sort of low standards, and cut-price competition that will drive farmers towards more harmful ways of farming for both land and livestock. Bearing in mind the UK Government's refusal to guarantee to maintain food, environmental and animal welfare standards in a post-Brexit Trade Bill, we must resist the urge to lower our own standards and avoid a race to the bottom. Evidence shows that the Welsh public supports strong environmental and food safety standards and want to see EU-derived public protections maintained or strengthened.[19] Any political moves to weaken or remove regulations in these areas would not be supported by the Welsh public. 96% of our NFFN farmer survey respondents agree (12%) or strongly agree (84%) that maintaining high environmental standards, at home and for imports, should be a key requirement of future trade.

Whilst the Welsh Affairs Committee's Report on the Implications of the UK-Australia FTA for Wales highlights that the deal is unlikely to have a significant *short term* impact on Wales - the longer term impact are less clear. It also acknowledges the concerns that exist within the Welsh agri-food sector. The report recommends that *the UK Government should clarify, in the explanatory memorandum accompanying the final treaty text, what conditions would need to be met for agricultural safeguards to be applied in years 10–15 after the agreement comes into force.* Future international trade deals should be subject to the same scrutiny to safeguard the Welsh agri-food system.

Wales' Global Responsibility

3.2 On the subject of international trade, a recent report[20] highlights that an area equivalent to 40% of the size of Wales (823,000 hectares) was required overseas to grow Welsh imports of cocoa, palm, beef, leather, natural rubber, soy, timber, pulp and paper in an average year between 2011-2018. 30% of this land is in countries categorised high or very high risk for social and deforestation issues, meaning that

[19] *Unchecked UK (2021) Protecting what matters: attitudes of Welsh voters to regulation and deregulation*
[20] *Wales and Global Responsibility (2021)*

commodity supply chains supplying Wales in these countries risk deforestation, conversion of natural ecosystems and/or social issues, such as child or forced labour.

Unfortunately, Welsh agriculture is indirectly contributing to these issues. Take soy for example, of which Wales imports 190,000 tonnes a year. 80% of soy is imported into Wales in the form of meal and beans for livestock feed, of which 48% is estimated to be consumed by the poultry industry, 20% by the dairy sector and 19% for sheep. Nearly three-quarters of the soy import land footprint falls in countries that are high or very high risk for deforestation and/or social issues, including Paraguay, Brazil, and Argentina. As such we must reduce our reliance on imported feed and promote more agroecological/ pasture fed livestock systems.[21]

Our global environmental footprint should be measured and considered as part of the UK and Welsh Government's carbon budgeting. There is no use in setting ambitious climate and biodiversity targets if we continue to import it from elsewhere.

How, if at all, is the UK Government's climate change policy agenda impacting on family farms, including the future generations of farmers, and rural communities in Wales?

Future Agricultural Support Systems

4.1 The NFFN welcomes a *public money for public goods* policy that rewards farmers for delivering environmental benefits. Evidence shows us that nature friendly farming is not only better for nature, but is also the most productive, sustainable and economically viable way of getting food from our land. We endorse the **Less is More** approach[18], which encourages farmers to operate within the natural carrying capacity of their land (also knowns as *Maximum Sustainable Output*).

Nature provides farmers with *natural capital* for their businesses in the form of soils, grass, water and geology, which farm businesses work with for crop or livestock production to take place. Where these *free issue* assets are not managed correctly, farm productivity will reduce. Taken beyond their natural production limit, for example by increasing stocking to levels that exceed the amount that can be fed on naturally available forage, or cropping more than the soil can naturally support, the farming businesses will need to adapt to maintain production. This is achieved via additional inputs such as fertilisers or the requirement to purchase additional feed to maintain productivity. This increases the overall costs of production and potentially reduces the profitability of the farm business. Our Nature Means Business report provides more information on this, and includes farm case studies of how this approach works in practice.

Nature Means Business: Tony Davies, Henfron Farm, Elan Valley

[21] *Not to be confused with "grass fed", which has no legal definition but can be used to describe produce from cattle and sheep that are free to roam and graze and are predominantly reared on grass i.e., for at least 51% of their lives.*

"Over ten years ago, we reduced the sheep numbers from 1,800 to 600, however with increased lambing percentages and carcase sizes the actual financial value of the lamb sales only reduced by 25%. Combined with drastically cutting import costs (no fertiliser and minimal feed purchased) farm profits rose by £20,000.

I calculated the projected profits before reducing sheep numbers. My analysis calculated the number of sheep the farm needed to comply with regulations, manage with limited inputs and maximise profits. Not surprisingly this number was similar to the number of breeding ewes that my ancestors kept on the farm over a hundred years ago.

I'm a producer of environmental services or 'public goods' such as wildlife habitats, clean water, flood mitigation and carbon sequestration. These habitats are managed by Welsh Mountain sheep and a small herd of Dexter cows. The low-carbon lamb, mutton, wool and beef could be considered a by-product of these outputs. The farm management focuses on environmental improvements, as well as the creation of a financially viable, sustainable business that supports the family."

Less is More: Gethin Owen, Nant yr Efail, Abergele[22]

"I support nature friendly farming because it makes economic sense. The key to viability is to be as self-sufficient as possible, producing as much of your own animal feed, bedding and fuel as possible, and buying in as little of the inputs as is possible.

Growing 15 acres of spring cereals for combining has produced a financial benefit of about £3,000 per year from savings in bought in feed and straw and the Glastir environmental scheme it attracts. More emphasis on growing legumes saves approximately £6,000 per year in bought-in fertiliser and has improved soils on the farm. This also makes the overall business more resilient to the effect of volatile input costs. This also naturally leads to an ecologically diverse system. Winter stubbles provides winter feed and habitat for birds, with red-listed tree sparrows spotted during the most recent survey."

4.2 Evidence shows that the maximum sustainable output approach not only improves farms' financial performance (across all farm types) but also yields positive environmental outcomes for which farmers would receive payments under future government schemes. This would be a genuine payment (as opposed to a *subsidy*) for delivering multiple benefits that aren't currently rewarded by the market; services such as improving air and water quality, storing carbon, creating and

[22] Gethin Owen Full NFFN Case Study

maintaining wildlife habitats, reducing flood risk and enhancing public access. We explore how this could work in the next chapter.

Woodland and Tree Planting Policies

4.3 There is no doubt that trees play a vital role in addressing the nature and climate crisis. Woodlands and trees make us more resilient to climate change and can create a nature-rich landscape that is beneficial to both farmland and wildlife. NFFN Cymru welcomes plans to increase woodland cover on farms. We have always maintained that Agro-forestry, silvopasture, hedgerow trees and (broadleaved/ mixed) woodlands can form an important component of the farmed landscape. Trees can play role in storing carbon, biodiversity, reducing flood risk, improving landscape quality and amenity, whilst also improving farm productivity and providing and alternative income stream.[23,24]

However, UK[25] and Welsh Government[26] tree planting targets are very ambitious and a roll-out to this magnitude could have unintended consequences if not actioned cautiously, not least on our rural communities, biodiversity and wider environment. Planting the wrong tree in the wrong place can threaten farmland biodiversity and in fact lead to perverse negative outcomes for our climate.

Right Tree in the Right Place

4.4 When it comes to tree planting, we *must* plant the right tree in the right place and avoid a cavalier attitude that could negatively impact valuable biodiversity and rural communities. For example, policies that supported a post-war drive for domestic timber production led to large swathes of commercial forestry dominating the Welsh landscape, unintentionally affecting wildlife and resulting in loss of farmland. By the outbreak of the Second World War in 1939 the Forestry Commission had bought some 28,000ha of farmland, much of it in the uplands and planted with conifer species. Between 1946 and 1951 a further 20,000ha of Welsh farmland was acquired. These commercial plantations, usually dominated by the non-native S*itka spruce,* are more often than not of limited biodiversity value, with thousands of hectares planted as single-species forests on important wildlife habitats. This most certainly contributed towards losing 44% of our upland heathland between the 1940s and late 1980s.

We believe that owners of such plantation should not receive support under any type of public goods scheme as timber is a marketable product which has a clear monetary value. Furthermore, many inappropriately planted non-native conifer plantations are actually having a *negative* effect on the environment and wildlife e.g. afforestation on areas of deep peat, and near areas known to be used by ground nesting birds. [27]

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[23] *Woodland Trust: Benefits of trees on livestock farms*
[24] *Woodland Trust: Agroforestry benefits nature, climate and farming*
[25] *https://www.gov.uk/government/news/tree-planting-rates-to-treble-by-end-of-this-parliament*
[26] *https://gov.wales/written-statement-trees-and-timber*

4.5 The Welsh Government Woodland Estate, which is managed by Natural Resources Wales (NRW), extends over 50,000 hectares of publicly owned land[28] of which 84% is conifer woodland where Sitka spruce is the dominant species.[29] More than two thirds of conifer woodland in Wales is owned by the Welsh Government[30] therefore it needs to lead by example and plant the right tree in the right place. This means a mixture of different species, including native broadleaved trees. Welsh Government's own legislation, the Environment (Wales) Act 2016, sets the legally binding objective of maintaining and enhancing the resilience of ecosystems and the benefits they provide. The legislation states that *when taking account of the resilience of ecosystems, we must take account of the diversity between and within ecosystems*. Promoting large scale monocultures of non-native tree species therefore does not fall within the parameters of Welsh Government's own legislation.

In some instances, the opposite of tree planting is more appropriate for contributing to the bigger picture of climate mitigation and nature restoration, where we should be *felling trees* on peatland and shelterbelts near areas used by ground-nesting farmland birds.

4.6 Tree planting isn't a silver bullet to tackling climate change. Environmental policy should give equal consideration to other carbon-rich agricultural habitats such as hedgerows, heathlands, peatlands, species-rich grasslands, hay meadows and multispecies leys. As it stands, degraded UK peatlands emit more carbon than what even the most ambitious UK Climate Change Committee tree planting targets could capture and store.[31] Why don't the UK and Welsh Governments offer peatland restoration the same priority and urgency? Wouldn't woodland creation be better supplemented by targets for restoring hay meadows and species-rich grasslands? Right now, neither action is encouraged by nationwide targets. Efforts must be made to ensure incentives are in place to encourage restoration of a range of habitats that all provide carbon benefits.

Climate Friendly Farming[32]

Farmers are perfectly positioned to combat climate change. Farming needs to include protecting soils, carbon storage, water sequestration, water protection, renewable energy and planting trees, as well as educating the public on the positive impacts of farming systems and reconnecting people with the landscape. Here in the Elan Valley, we see the positive impacts that our

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[27] Ground nesting birds such as curlew prefer to nest in open landscapes and tend not to breed within 200m of forestry/woodland edge. Furthermore, the associated increase in predator populations (e.g. foxes and crows) because of inappropriate woodland planting (in particular conifer shelter belts) can have a negative effect on chick survival rates.

[28] Natural Resources Wales Forestry resources

[29] Vincent Wildlife Trust – Forestry Trends in Wales

[30] Senedd Cymru (2021) Forestry and Woodland in Wales Research Briefing

[31] The Countryside Charity: Net-zero virtually impossible without more ambition on peatlands

[32] NFFN Report: Farming for our future - the nature friendly climate solution we urgently need

traditional farming system has on the landscape - not just the quality of the water and the soils, peat bogs and upland habitats that store carbon, but also the rich varieties of rare wildlife.

Sorcha Lewis, Troedrhiwdrain, Elan Valley

Carbon Offsetting

4.7 We disagree with carbon offsetting that essentially allows business to continue to pollute or justify losing wildlife habitat to development. On the other hand, private investment in farmland carbon sequestration from businesses such as insurance companies (that are looking to reduce risk e.g. through reducing flood risk damage to property) is appropriate and should be encouraged.

We are very concerned about the rise in large-scale corporations, investment companies and private businesses buying farms across the country to plant trees to offset their own carbon emissions, threatening local culture, language and heritage. For example, over the last year the number of Glastir Woodland Creation applicants with addresses outside of Wales grew from 3% to 8%. Furthermore, the average planting area for Welsh applicants was 17.3ha, which is considerably less than the 96.3ha average for non-Welsh applicants. This does not keep money in the local economy and community, but rather shifts public money outside of Wales. Farmers and local communities need to be at the heart of tree planting initiatives.

We also highlight the importance of planting trees of local provenance. Supporting farmers or local community woodland groups to establish nurseries of local tree species would be beneficial. The *right tree* is not just about the right tree species – we should consider local genetics as well. *Coed o Gymru, gan y Cymry.*

Emphasising Decarbonisation at Nature's Expense

4.8 We're concerned that environmental policy puts considerable emphasis on decarbonisation and carbon sequestration and doesn't focus enough on nature's recovery. Carbon sequestration is not the sole proxy for environmental performance. In fact, we believe that farmland biodiversity is a better indicator of a farm's environmental performance.

Evidence shows that nature-based solutions such as appropriate tree planting, restoring and creating species rich grasslands and establishing multi species leys, peatland restoration, establishing wildflower field margins, wetland creation (including ponds), hedgerow creation (and their appropriate management) should be prioritized to deliver twin nature and climate benefits.[33] Our Report titled Farming For Our Future: The Nature Friendly Climate Change Solution We Urgently Need, demonstrate how we can achieve net zero carbon that also delivers thriving wildlife, a vibrant farming sector and good quality food. Our NFFN Practical Guide to Net

[33] *Sustainable climate change mitigation in UK agriculture A review of climate change mitigation measures in agriculture, and the impacts on biodiversity, climate change and resource protection (Ellie Crane, 2020)*

Zero Farming in the UK highlights some of the ways farmers can achieve this. Welsh family farming busniesses need to be at the heart of delivering these actions and benefits but need more support to do so – a sentiment echoed by the Prince Charles himself.[34]

What practical steps can the UK Government take to support these communities and how should the UK and Welsh governments work together to support these communities' unique culture, including their contribution to the Welsh language, and heritage?

Reward Nature Friendly Farming

5.1 We believe agriculture needs to be profitable and sustainable, and farmers should receive adequate payments for undertaking environmental and nature friendly activities. Future government agricultural policy should focus on rewarding farmers for providing environmental and public benefits that are not normally paid for through the market. Our recent report: Rethink Farming: A Practical Guide to Climate & Biodiversity Restoration demonstrates how farmers across Wales (and the rest of the UK) are already putting sustainable farming systems in place. Our Wales NFFN farmer survey showed overwhelming support for a radical overhaul of agricultural policy, with 95% of respondents agreeing that a future farming policy should principally recognise and reward farmers for their environmental work.

5.2 Recent academic research shows that direct subsidises based on the area farmed are associated with a relatively large decrease in the stability of farm income, across most farm types, whilst adopting agroecological farming practices and higher agri-environment payments increases income stability and raises farm income.[35,36] It is therefore a common misconception that direct income support safeguards family farm businesses, as in many instances it stifles innovation and discourages thorough farm business analysis.

5.3 Facilitating and rewarding on-farm nature-based solutions to climate offers numerous other economic benefits:

- In 2012 the economic value of the Welsh environment was estimated as being about £9 billion[37]. A restored environment would be worth considerably more.
- £1 in every £11 of Welsh GDP is dependent on the environment.[38]
- Across the UK, current policy for SSSIs delivers substantial conservation benefits, ecosystem service delivery and economic values. The value of the benefits of the existing policy are estimated at £956 million annually, almost 9 times as high as the £111 million annual public cost of the policy.[39]

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[34] https://www.theguardian.com/environment/2021/may/23/prince-charles-small-scale-family-farms-must-be-at-heart-of-sustainable-future

[35] The economic potential of agroecology: Empirical evidence from Europe (van der Ploeg et al 2019)

[36] Stability of farm income: The role of agricultural diversity and agri-environment scheme payments (Harkness et al 2021)

[37] UK National Ecosystem Assessment

[38] Valuing Our Environment: The Economic Impact of the Environment of Wales

- Increase the UK's hedgerow network 40% by 2050 would create 25,000 jobs. Furthermore, for every £1 of investment in hedgerows in flood risk catchment areas, £2.50 of economic benefits are generated as saved costs, whilst every £1 invested as much as £3.92 is generated for the wider economy.[40]

Whilst unsustainable farming and land use negatively effects our economy;

- UK consumers spend £120 billion on food each year yet generates hidden costs of over £116 billion each year.[41] This includes;
    - £7.8 billion attributed to loss of ecosystem biodiversity due to agriculture).
    - £12.56 billion attributed to GHG emissions and air pollution
    - £19.9 billion attributed to food waste across the total UK food system
    - £3.55 billion attributed to soil degradation including soil carbon loss
    - £1.34 billion due to water cost attributable to agriculture
- This means that for every £1 UK consumers spend on food, additional costs of 97p are incurred.

Sam Kenyon, Glanllyn Farm, St Asaph[42]

"Put simply, if we didn't work with nature and didn't try to improve water flow and quality with our 'slow the flow' approach, there wouldn't be much farm - nor access to our woodland - left. The devastation previously caused here by practices that worked against nature has meant the loss of much soil and farm infrastructure (tracks, woodland and livestock fences), so that the farm was becoming unviable."

Located on the banks of River Elwy, Samantha's farm historically flooded once every seven years, but due to progressively adverse weather, it now experiences flooding once or twice a year. Flood prevention has become one of the farm's key priorities and they have adopted several practices to mitigate extensive flood damage. This includes increasing the cover of native trees, such as willow and alder, to help retain the soil at the same time as providing habitat for local wildlife. They have also fenced off their livestock and stopped application of chemical inputs to reduce runoff and improve soil conditions.

Their next steps are to create a flood basin, where a 27-acre field will be taken out of conventional production and made into an area where flash floods can be held back. The basin will include a wet woodland area to help catch sediment

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[39] *Defra (2011) Benefits of Sites of Special Scientific Interest*
[40] *The Countryside Charity (2021) Hedge fund: investing in hedgerows for climate, nature and the economy*
[41] *Sustainable Food Trust (2019) The Hidden Costs of Food*
[42] *Sam's full case study:* ***https://www.nffn.org.uk/rethink-farming-sam-kenyon/***

and to create a more diverse habitat, with floodplain meadow grassland rich in a diverse mix of plant species to support biodiversity.

"I measure impact by how much farmland I save compared to that which was being lost under the conventional mismanagement. I also measure the impact by how well wildlife survives each flood. We have seen how beneficial our approaches have been for local wildlife, with a diverse range of birds nesting here for the first time in over 40 years. The species thriving on our farm include kingfishers, pied flycatchers, barn owls, collared doves, hoverflies, bees, bats and more."

5.4 Rewarding farmers for delivering environmental improvements alongside sustainable food production is the best way of justifying continued public funding in the agricultural sector. Not only would it negate these enormous hidden costs but would provide farmers with an attractive and stable income stream as part of a sustainable business model. We believe that payments should be calculated beyond cost-incurred/ income foregone as too often the true cost and value of environmental services aren't reflected in the payments attached to them. Coupled with adopting maximum sustainable output this approach would increase the economic resilience of Welsh family farm businesses. **We would urge the UK and Welsh Governments to trial a role out of business advice aimed at helping farms achieve maximum sustainable output. The NFFN are more than happy to support the Government in doing this.**

5.5 More emphasis should be put on the economic benefits of nature friendly farming, particularly in agricultural colleges and universities. This can help change mindsets and debunk common misconceptions that *"to go green, you must be in the black*". We would flip this on its head and say that *"**you've got to be green to be in the black**".*

5.6 Farms are capital-intensive businesses, with land, buildings, fixed equipment, working capital for labour, livestock, seeds etc - almost all of which needs to be expensed before a penny of income is received. As such we believe that future food and farming policy should include capital support payments to invest in technology/ machinery/ infrastructure/ equipment that help deliver or contribute towards environmental.

5.7 We urge the UK Governments and all the devolved Governments to roll out an advisory programme aimed at promoting the concept of maximum sustainable output (MSO) amongst farmers. Farming business must learn to adapt to life without direct payments; thorough business analysis will be a key step in achieving this. As we have stated in paragraph 4.1, this approach can help increase the resilience of Welsh family farms businesses whilst also helping to meet climate and nature targets. **Rolling out the MSO principle far and wide across the industry would be a game changer.** This should be done sooner rather than later, as it's recommended

that farm business take 3-5 years to transition to MSO.The NFFN would be more than happy to trail this approach with Governments across the UK.

Adequate Funding for Nature Friendly Farming

5.7 Given that the Welsh Government's Integrated Impact Assessment[43] predicts a host of benefits and cost savings as a result of future *public money for public goods* policy we believe that future farming schemes warrant additional funding. Work carried out recently has estimated that the total cost of meeting the identified environmental land management priorities in Wales are estimated at £273million per annum[44]. This is an amount broadly similar to that which farmers received under the Common Agriculture Policy. The report however does not estimate the total budget needed for future farming policy. For example, the model does not cost supporting investments such monitoring and evaluation, transaction costs or wider funding associated with rural development. Yet investment in these aspects will need to be significant, meaning that the total figure is likely to be much higher. We are concerned that a reduction or even the continuation of the current budget will not secure the outcomes outlined in the impact assessment, regardless of any political good will. The ball is in the UK Treasury's court on this one; nature friendly faming can help address multiple economic, environmental and societal issues, but it requires appropriate funding and resources.

5.8 Food Policy

We need to address the economic imbalances in the food supply chain. It's vital that Government help create a business environment that allows farmers to receive a fair price for their produce. This is often the reason why farmers are forced to intensify in an attempt to increase profits. As we know through the Less is More approach, this results in farm businesses exceeding their Maximum Sustainable Output, which in fact reduces profitability.

We need a transformative food system that ensures farmers earn a fair return whilst ensuring food is healthy, affordable and sustainably produced. When it comes to food policy, Government's role should be more of an 'enabling' one, setting up structures to facilitate a strategic national approach to food, including regulations, local food networks, transparent supply chains, and sustainable public procurement.

One could argue that there is no such thing as local food without the presence of local food infrastructures. Investment is needed in this area. Key infrastructure that may be required to support short supply chains include;

- Local and appropriately sized packing, cleaning, drying and processing facilities;
- Developing food hubs can help connect local farmers and producers with consumers whilst encouraging transparency in the food supply chain – thus

[43] https://gov.wales/sites/default/files/consultations/2020-12/agriculture-wales-bill-impact-assessment.pdf
[44] Matt Rayment 2019 Paying for public goods from land management: How much will it cost and how might we pay?

reconnecting people with where their food is produced and how it shapes the environment.
- Distribution hubs and local low carbon transportation;
- Farmers' markets
- Local production of animal feeds and pasture / food waste-based systems;
- Small, combined slaughterhouses and butchers, as well as mobile and on-farm butchers so that animals can be slaughtered on farms avoiding the need for live transport; and
- Cold storage for both stationary storage and short transportation.

We would encourage investment in establishing and supporting Community Supported Agriculture initiatives (CSA). CSA is an innovative farming model that provides fair, stable incomes for farmers and increases access to locally produced food while strengthening communities and increasing understanding of how sustainable farming protects, restores and enhances biodiversity and addresses climate change.[45]

Investing in all of the above can create local jobs, reduce environmental footprint and public health, creating a unique Welsh farm to fork food system. Indeed, a shift towards a more local food system can yield numerous positive results, with the recent UK report highlighting that a 10% shift in the food retail market towards more sustainable local food systems could yield up to 200,000 more jobs, support a green economic recovery and restore nature.[46]

Our NFFN public survey shows that 73% of Wales think that public (money should be used to help support shorter food supply chains. A sustainable food supply chain in the UK has never been more crucial to help farmers provide healthy and sustainable food, avoid food waste and protect wildlife and the environment. Our Report on Feeding The Nation: How Nature Friendly Farmers Are Responding To Covid-19 highlights the importance of shorter supply chains and the role of nature friendly farming in ensuring the supply of high quality produce.

A recent survey by Sustain[47] found that the vast majority of 500 farmers surveyed would prefer to sell to food hubs, box schemes and independent retailers (amongst others), but not the supermarkets and large-scale processors/manufacturers. This is because those supply chains and markets will give a fairer price, be better for business resilience, and help deliver more for climate and nature. Furthermore, most farmers were interested in joining a cooperative

Support Young Entrants in Farming

5.9 To help arrest some of the negative socio-economic trends we're witnessing across Wales (see paragraph 2.4) we urge both the UK and Welsh Governments to offer additional financial support and incentives for young farmers and new entrants in

[45] *Community supported agriculture in the UK - Key policy proposals for local authorities*
[46] *Sustain (2021) The Case of Local Food*
[47] *Sustain (2021) Beyond the farmgate: Unlocking the path to farmer-focused supply chains and climate-friendly, agroecological food systems*

agriculture. This could come in the form of grants for machinery, equipment, infrastructure and technology. Farming needs to be a viable and realistic career for the next generation. We believe this can be the case if the recommendations set out in this paper are adopted.

Common Frameworks

5.10 The Welsh Government should work with the other UK Governments to develop common frameworks for food and agriculture e.g. environmental standards, regulation, environmental principles (such as the polluter pays principle) and fair allocation of funding. 79% of UK NFFN farmers believe that the governments in each of the UK countries should cooperate to put the environment at the centre of future farming policy, through a common framework.

Conclusion

6.1 Future agricultural, climate change and trade policies are a likely to have a significant bearing on Welsh agriculture and family farm businesses. Policies that are carefully designed, well implemented and adequately funded can play a vital role in supporting a resilient, profitable, and sustainable Welsh food and farming sector, and rural communities. However, if not designed, implemented and funded properly then future government policies could undermine Welsh agriculture, and in doing so erode our environment, rural communities, economies and way of life.

We urge the UK and Welsh Government to engage with NFFN farmers to help develop future policies that work for farming, rural communities, nature and climate. We represent a unique community within the sector who are ready to tackle the twin crises of the climate and nature emergencies. What is at the heart of these farmers' efforts is a sense of collaboration and obligation that farming has a once-in-a-lifetime opportunity. We demonstrate, across many pockets of the UK, what the evolving role of a farmer looks like.

Thank you for considering our submission. We hope the Committee shares our view on the importance of a nature friendly food and farming system in protecting Welsh family farms, rural economies and communities.

November 2021