Public money for public benefit: the basis for a post-Brexit farm system

Summary

- The replacement for the Common Agricultural Policy (CAP) should be framed around the idea of public money for public benefits.
- The economists' definition of 'public goods' is helpful in defining what public benefits should be funded, but misses some important services from the environment.
- Public benefits in this context should therefore be defined as goods and services that would not otherwise be provided by markets, or as compensation for farmers and other land managers for income foregone and other costs from changing their approach to land management.
- Food security is not a public benefit under this definition, as it should be addressed by other approaches rather than direct funding.
- Improving the environment should be the focus of any public funding, given the existing market failures and scale of need, whilst recognising the crucial role to be played by farmers and other land managers. This will provide a strong economic, social and environmental return on investment.
- Although public understanding of the CAP and the potential public benefits from replacing the CAP is low, there is strong support for protecting and enhancing the environment.
- Putting public benefits and environmental delivery at the heart of a replacement for the CAP will help shape effective and efficient policy design, whilst helping to secure a strong, healthy and viable agricultural sector.

Introduction

The vote to leave the EU presents a unique opportunity for the UK Government and devolved administrations to develop a new system for sustainable farming and other land-uses which encourages better stewardship of the countryside, secures the future of farming and gives taxpayers better value for their money. It also represents a big risk if the chance is missed and if the UK's trading position results in a lowering of standards and a race to the bottom.

We believe that farmers will continue to have a critical role producing safe and sustainable supplies of food, but they will also have a crucial part to play in improving biodiversity, protecting vulnerable natural resources upon which our economy depends, caring for our landscape and heritage, looking after the welfare of livestock, and helping address new and growing challenges like climate change and flooding. Farmers should be rewarded for this role and this justifies continued public funding.

The starting point for a new system should therefore be that it addresses market failures and distortions, protects the natural and historic environment, avoids adverse environmental impacts, and ensures that public money only supports delivery of public benefits – especially things that the market will not pay for but are valued and needed by the public most. Alongside other mechanisms needed to secure a strong, healthy and viable agricultural sector, we firmly believe a role for public funding will continue post-Brexit, working hand-in-hand with a robust and sensible regulatory baseline and, in time, new market-based mechanisms. Only this way, can it be both
profitable and rewarding to manage land and farm sustainably for the benefit of all. But what should be defined as a public benefit and how should we support its delivery?

**Background**

Compared to other sectors, agriculture can deliver many public benefits\(^1\). It is on this basis that we have seen public intervention on a sustained scale not seen in most other sections of the economy. However, the EU system that the UK has been part of for over 40 years was originally designed to incentivise the production and secure the supply of food (with consequential environmental degradation) and then safeguard farm income and smooth out market volatility, with the intentional delivery of environmental public goods being introduced from the late 1980s but remaining relatively small.

Currently under the CAP, some £600m a year in ‘Pillar 2’ rural development funding gets spent in the UK on delivering public benefits like wildlife and heritage through agri-environment schemes and on rural business development (primarily tourism related), whilst some £2.5bn goes on ‘Pillar 1’ subsidising of farm incomes (based on land area). The large disparity in support between the two continues despite growing evidence of environmental degradation resulting from decades of intensive farming and climate change effects.

And we need to go much beyond the current ‘greening’ rules where farmers must meet certain ‘beyond compliance’ environmental requirements in order to remain eligible for nearly a third of their farm subsidy payment under Pillar 1. Such rules are widely acknowledged as not delivering the environmental benefits for which they were originally designed.

We now have the opportunity to create a fundamentally different model to drive a different strategy for land; one that addresses the imbalance between farm subsidies and the environment, better targets funding, and achieves a thriving, healthy countryside delivering multiple benefits for society. We need the countryside to also provide services like clean water and healthy soils, and the benefits to our well-being that contact with nature brings. In turn, these services can play a key role in securing a prosperous rural economy, ensuring the future viability of farming, and the sustainability of food production. But to change how decisions are made on the ground, we need to take a broader view of what land is for and what we fund to achieve it.

**Public money for public benefit?**

Previous government ministers and departments have indicated that the UK Government and devolved administrations would be unlikely to match the current levels of Pillar 1 subsidy and would require more ‘public goods’ in return for farm support. This includes environmental protection, which is widely acknowledged as one of the key market failures in the agricultural sector.

The UK National Ecosystem Assessment 2011 describes a public good as a good or service in which the benefit received by any one party does not diminish the availability of the benefits to others, and where access to the good cannot be restricted. Public goods can therefore be characterised as ‘non-excludable’, ‘non-rivalrous’, and open to consumption by everyone. Typical examples include clean air, water storage that yields flood control, beautiful views over a landscape, walking in the countryside or the enjoyment of birdsong.

\(^1\) [http://www.ieep.eu/assets/457/final_pg_report.pdf](http://www.ieep.eu/assets/457/final_pg_report.pdf)
Given the non-excludable and non-rivalrous nature of pure public goods in agriculture, we cannot look to traditional markets to deliver them. Since we are largely dealing with private land and farmers not being paid to deliver public goods, they are often undersupplied. This is why, without functioning markets, public intervention is needed to achieve a desired level of supply to meet society's needs.

In practice, however, defining public goods is not always this black and white. In the countryside, it is sometimes possible to exclude people where they do not help cover the cost of something (for instance walking on an uncongested private estate), and sometimes people's enjoyment can be impacted when something becomes too popular (such as cultural landscape becoming congested with visitors). Public goods can be used to describe and overlap with some types of ecosystem service but are not necessarily synonymous.

Indeed, ecosystem services which display some degree of rivalry or excludability may be considered ‘quasi-public goods’ as opposed to pure public goods. Adding to this complexity is the concept of ‘common goods’ which are rivalrous and non-excludable (eg fish stocks in our seas or fungi foraged from land that can be freely accessed) and ‘private goods’ which are both rivalrous and excludable (eg food, fuel and fibre). The latter may yield positive benefits to people but markets have been shown to be the most effective mechanism for balancing their supply and demand.

So, public money has to be used to pay for the reallocation of resources to underpin the provision of certain public goods in farming. But too tight a definition may cause problems as some ‘quasi-public goods’ may also have a good justification for public funds to ensure they continue or start to be provided by farmers and other land managers (eg flood management). In the list of policy principles that the National Trust and Greener UK have adopted, we have largely used the language of ‘public goods’ but we recognise that for a general audience, this language may not be clearly understood. Given also the recognition that there are varying degrees of what could be deemed a public good, we believe ‘public benefits for which a market does not currently exist’ may be a more appropriate concept around which a future policy is designed.

What could public money support in future?

The agricultural sector is associated with a wide array of public benefits which are increasingly valued by society. This includes heritage and cultural landscapes, diverse wildlife, clean and plentiful supplies of water, healthy soils, carbon sequestration, access and recreation, clean air,

\(^2\) http://www.ieep.eu/assets/457/final_pg_report.pdf

\(^3\) According to the 2005 UN Millennium Ecosystem Assessment, ‘ecosystem services’ are the benefits people obtain from ecosystems or the dynamic complex of plant, animal and microorganism communities and the non-living environment, interacting as a functional unit. These include provisioning services (e.g. food and water); regulating services (e.g. flood and disease control); cultural services (e.g. spiritual, recreational, and cultural benefits); and supporting services (e.g. nutrient cycling) that maintain the conditions for life on Earth. Often used together is the term ‘natural capital’ which the UK Natural Capital Committee defines simply as those ‘assets’ provided by nature with the capacity to generate ‘flows’ of goods and services – and regarded as the source of all other types of capital: manufactured, financial, human or social.

\(^4\) Many types of ecosystem service display the characteristics of public goods, especially their non-excludability, which can to some degree lead to their under-provision or overuse. But ecosystem services are also characterised by issues of uncertainty, jointness and irreversibility that are important considerations for governance and management. Ecosystem services may be either rival (i.e. finite) or non-rival (i.e. not subject to physical consumption, or otherwise renewable), and either exclusive (e.g., if access is limited to certain groups) or non-exclusive (i.e. common pool resources). From Kretsch, C., van Dijk, J. and C. Schleyer (2016): Public Goods and Ecosystem Services. In: Potschin, M. and K. Jax (eds): OpenNESS Ecosystem Services Reference Book.


\(^6\) http://greeneruk.org/resources/Greener_UK_Food_%26_Farming.pdf
stable climate and flood management. These are a mix of social and environmental goods, which is not unsurprising given the fundamental interconnectedness of people and land. But farming also plays an important role in delivering broader social public goods from vibrant rural economies to animal welfare and of course food security and renewable energy.

It is around the issue of food security that there has been much discussion and which it is often argued should be the core basis around which the UK farming sector should continue to be subsidised. However, food security is a good with distinct private characteristics (farmers do receive a return for producing food), so production should be better rewarded through the market.

Food security too often becomes conflated and confused with ideas of domestic self-sufficiency (‘food sovereignty’) but this is an untenable connection. Put crudely, if the aim is food sovereignty, then policy should be to reduce food exports. If the aim is food security, then the policy should be to have good relations and a trade policy to support imports and international supply chains but not at any cost (amongst many other things). Under both, the aim would also be to reduce incentives or constrain opportunities to grow ‘non-human’ or ‘non-food’ crops.

And if food security is about the ability of the UK to respond to a global crisis that interrupts global food networks, then a more optimal approach might be to support farmers to deliver other outcomes during ordinary times (eg farming for environmental results) but retain their ability to increase production if a crisis was to emerge (ie to avoid complete abandonment of farmland). Securing the fundamental asset base will be fundamental to securing this flexibility in the future: farming’s long-term future is dependent on the quality of natural resources like soil, pollinators and water.

We would agree that, with limited resources and the aim of securing better taxpayer value, the goal of any future public policy should be to improve and enhance the long-term health of the environment, promote more innovative and sustainable ways to increase productivity and manage catastrophic risk, and ensure farmers get paid a fair price for their products. Even so, previous analysis, much of it by Defra, builds a compelling case for why the focus of any such future policy should be on maintaining and improving the environment. This would open up the opportunity to target more public support on the key environmental and social public goods that are in undersupply from agriculture relative to the scale of societal demand - but which also have a twin purpose in the part they play in securing a more sustainable sector and vibrant countryside.

We therefore believe a system is needed which optimises the use of public money in delivering public benefits, aligning the needs of farmers and need for food security with good social and environmental outcomes: the more a farmer delivers for society, the more support they get. And a new policy framework should help with the introduction of new market-based mechanisms to complement and enhance the impact of such public funding. However, this will not happen overnight; it will take time to establish and scale up these complementary approaches to delivering more ‘functional’ or ‘quasi-public goods’ like flood management and carbon sequestration.

As the Environment, Food and Rural Affairs Select Committee concluded in its inquiry into the Government’s ‘Vision for the Common Agricultural Policy’, published in December 2005: “The only long-justification for future expenditure of taxpayers’ money in the agricultural sector is the provision of public benefits. Payments should represent the most efficient means by which society can purchase the public ‘goods’ – environmental, rural, social – it wishes to enjoy. For these

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7 https://www.publications.parliament.uk/pa/cm200607/cmselect/cmenvfru/546/546i.pdf
payments to remain publicly acceptable, it is essential that they relate directly to the public goods provided and that, in turn, these public goods are measurable and capable of evaluation."

In its impact assessment of the England Rural Development Programme for 2014-2020 (which itself identified ‘public goods market failure’ as the principal weakness that needed to be addressed), Defra found that even at the low end of the ‘benefit cost ratio’ range, the preferred option of transferring 12% of funds from Pillar 1 to Pillar 2 with the overall allocation of budget being focused on delivering environmental improvements represented a worthwhile investment8.

Comparable data showing a high social and economic return on investment in both the natural and historic environment is widely available. For example, Defra/English Heritage studies have estimated that for every £1 of public funding spent on repairing stone walling an estimated £1.92 is generated for the local economy. Similarly, it has been estimated that up to 70% of rural tourism is dependent on high quality environment and money invested in conserving and enhancing heritage assets within rural landscapes has a considerable multiplier effect within local economies9.

And in Wales, the value of wildlife and outdoor activity tourism is estimated to be in the region of £6.2 billion, creating an estimated 206,000 jobs. The quality, accessibility and diversity of natural landscapes are significant factors that encourage and support tourist visits to Wales. Indeed, the top reason for coming to Wales, given by both UK and overseas visitors, is to enjoy the scenery, landscape and countryside. In addition, the vast majority of people in Wales visit the outdoors, with over 80% of adults taking part in informal outdoor recreation at least once every four weeks. Many of these activities are dependent on a high quality natural environment, with people visiting a diversity of places, from local parks to woodlands, mountains and the sea10.

What is the scale of need?

The Land Use Policy Group examined the scale of future environmental land management requirements in 2009. Their work found the total estimated cost of meeting publicly defined environmental objectives in the UK (meeting environmental targets for biodiversity, landscape, climate change mitigation, flood risk management, farmland historic environment, soil quality, water quality, resource protection and public access) to be just under £2 billion per year – but ranging from £1-3 billion due to the variation in delivery costs across the UK and the extent to which existing scheme options would be sufficient to achieve the full range of policy objectives.

In calculating these costs, the authors stated that allowances had been made for the management of land to meet more than one environmental objective, with the main overlaps identified related to biodiversity, resource protection and climate change. However, it was considered that these cost estimates were likely to be a significant underestimate of the funding needed in practice due to, amongst other things, the lack of available detailed data for certain environmental issues and in certain regions.

More recent analysis to estimate the annual cost of meeting EU biodiversity and water quality objectives alone, as part of CAP implementation in England, suggested the total combined cost

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8 Achieving value for money with every £1 delivering £1.80 worth of benefit – with an even better return of £2.70 for every additional £1 invested (compared to the ‘do-nothing’ baseline option representing the absolute minimum under current legal obligations, i.e. funding only existing agri-environment commitments from 2007-2013 not new commitments).

9 V. Holyoak, Historic England, pers. comm.

10 https://naturalresources.wales/media/679404/chapter-5-wellbeing-final-for-publication.pdf
would be nearing £1.2 billion by 2020\textsuperscript{11}. And in Making Space for Nature: A review of England’s Wildlife Sites and Ecological Network in 2010, the authors estimated that the total annual costs of establishing a coherent and resilient ecological network alone would be in the range of £600 million to £1.1 billion.

The RSPB, National Trust and Wildlife Trusts have commissioned a piece of work which is currently looking at the outcomes we would want from both UK and devolved countryside policies in future and will attempt to build on the above costs – whilst also attempting to understand the benefits arising from this investment, and the costs of not addressing these objectives.

Some public goods are or may appears more difficult to value – including the attractiveness and integrity of landscapes including cultural heritage of the uplands, the appreciation of bird song and walks in the countryside that improve our health and wellbeing, and maintenance and renovation of heritage assets. ‘Willingness to pay’ could help to give a value for some of these goods, as has been used for instance in the evaluation of the benefits of the proposed tunnelling of the A303 under the Stonehenge landscape. Research on willingness to pay has produced a step change in some other areas, for instance new research on the public’s willingness to pay with regard to road safety led to reprioritisation of funding and major reductions in the numbers killed or seriously injured on UK roads in the 1990s and 2000s. On rural heritage, the evidence already exists, but more work needs to be done to disaggregate and better present the evidence that we have for its value.

There is also some evidence that people will value ecosystem services closer to where they live; the balance between the value people place on their local environment versus where the greatest environmental benefit that can be achieved. This could be an issue worth exploring for the governance of the replacement for CAP (e.g. the extent to which a UK-wide framework or local governance arrangements set the outcomes desired from the funding).

**Will the public support the principle of public money for public benefit?**

Despite the EU referendum, a major challenge still exists in that the majority of the public are not fully aware of how their money is currently subsidising farming, what the issues are or how farming could deliver more society.

A YouGov-Cambridge survey from 2012 uncovered a surprisingly low level of knowledge about the extent and contribution of farming in the UK\textsuperscript{12}. A majority of people (72%) felt they did not know much, or know nothing, about the sector, despite widespread affection for the countryside and a perception that it played an important part in protecting the environment (75%). The referendum did little to help, in that no attention was given to how ‘what we got back’ was spent in the UK, only how much we were contributing to EU coffers. Indeed, of the £4.5 billion we receive in EU funding each year, some £3.1 billion gets spent on farming of which 80% is spent on Pillar 1 subsidies.

What the limited research does show is that the public want funding to do more for nature and attitudinal surveys have shown widespread concern for environmental issues associated with farming (e.g. loss of biodiversity, pollution, degradation of habitats and natural assets like soil), all


\textsuperscript{12} http://www.cam.ac.uk/research/news/farming-loved-but-misunderstood-survey-shows
while still wanting cheap food. In particular, a YouGov survey from 2016\textsuperscript{13} revealed 57% of respondents felt British farming subsidies should put either more (25%) or the same (32%) emphasis on environmental protection than current EU subsidies do – and only 7% said a new British system should put less emphasis on protecting the environment.

In Wales, the Rural Business Survey conducted by the Wales Rural Observatory found that 85% of respondents considered the Wales rural environment to be ‘important’ or ‘very important’ for their businesses\textsuperscript{14}. In Northern Ireland, outdoor recreation, which is heavily dependent on the natural environment, generates some £102m gross value added (GVA), supports 3,537 full-time jobs and is responsible for around 17% of total tourism spend\textsuperscript{15}.

And we know the English public value visits to the countryside and contact with nature based on the Monitor of Engagement with the Natural Environment (MENE) surveys undertaken by Natural England. Latest figures for show that 34% of the population visited the natural environment over the period December 2015 to February 2016\textsuperscript{16}. However, this masks the fact that whole segments of society rarely or never experience the inspiration that the natural environment has to offer, particularly pronounced for children.

The large membership of environmental organisations such as the RSPB, National Trust and Wildlife Trusts is also testament to the value people attach to our natural environment.

**Where do we go from here?**

The National Trust is seeking an open and transparent debate about how we use public money to support farming and the countryside after Brexit. We do not pretend to have all the answers but we feel that what we have set out above is a good place to start.

To begin, we feel there are certain outcomes that should be publicly supported through a tight definition of public goods, coupled with outcomes that should, in time, be achieved by other means:

(a) Outcomes for which there is a strong case for public policy intervention above a regulatory baseline and which should be supported by a majority of public funding made available to farmers and other land managers:

- Conserving and enhancing wildlife (based on the Lawton principles\textsuperscript{17})
- Conserving and enhancing water resources availability
- Adapting to climate change
- Conserving and enhancing soil function
- Conserving and enhancing the character of cultural landscapes
- Ensuring resilience to flooding and coastal erosion (natural flood management)
- Ensuring and widening public access to the countryside

\textsuperscript{13} https://www.foe.co.uk/resource/press_releases/uk-public-overwhelmingly-back-eu-rules-protect-bees-nature-yougov-survey
\textsuperscript{14} http://www.walesruralobservatory.org.uk/sites/default/files/EcoReportFinal_0.pdf
\textsuperscript{17} http://webarchive.nationalarchives.gov.uk/20130402151656/http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf
Not all these require separate funding streams or the same level of support – and some together, including those specified below, would act as proxies and help deliver increased rural vitality. The design of funding should support delivery across multiple objectives whilst also reflecting differing scales of need and types of response (e.g. universal action to address widespread issues versus more strategically-targeted investment). Indeed, synergies can provide additional multiple outcome benefits at little or no additional cost, which might be the case for some types of extensive farming systems, e.g. high nature value farming or certified organic agriculture. In addition, some of these outcomes may, in time, be “bought” as quasi-public goods through new ecosystem services markets, and some primary outcomes may overlap with secondary outcomes where a continuum of action may exist (e.g. flood management).

(b) Outcomes that should be supported by mechanisms to address other market failures (eg regulation, industry and supply chain standards, markets, assurance and certification schemes, codes of conduct, taxes, labelling, etc) for which some public funding is used up front and then targeted or tapered over time:

- Encouraging higher standards of farm animal welfare and animal health
- Converting to organic agriculture
- Mitigating flood and coastal erosion risk (good agricultural practice)
- Provision of high water quality (good ecological and chemical status)
- Mitigating climate change (minimising greenhouse gas emissions)
- Improving air quality
- Helping farm business diversification (eg tourism or recreational activities)

Some of these ‘secondary outcomes’ might involve ‘pump-prime’ funding during a transition period to help farmers adjust to new policy objectives and funding mechanisms, including changes in their approach to land management or developing new skills and knowledge.

We would envisage this to include reaching a desired baseline from which some quasi-public goods like organic or animal welfare products, flood risk mitigation, clean water and tourism activities could then be secured through regulation, market premiums, new environmental markets and new business models. The gradual re-purposing of direct subsidies would help overcome the reduced fiscal space for delivering these public goods whilst new complementary private funding is secured.

As discussed earlier in this paper, we do not see the objective of achieving food security or increasing productivity to be a focus of public funding but rather the product of the contributions that meeting a number of the above primary and secondary outcomes will make to securing the natural resource base, restoring biological function, improving resource use efficiency, achieving sustainability and increasing resilience of production.

Based on this, our recommendations for a new sustainable farming and land use policy:

- Keep investing from the public purse to secure a long-term future for farming by protecting the land and nature on which it depends, and safeguard the countryside’s beauty and heritage which draws in people to visit and enjoy it.

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18 Heritage is a key part of the rural landscape which once lost cannot be replaced. To reflect its domestic importance, it should be fully recognised as a key environmental public good which has parity with other environmental interests.
• Start from the principle of public money for public benefit as the justification and most equitable means to achieve taxpayer value, with the majority of funding supporting the most effective and efficient approach to environmental land management.
• But recognise that a too overly restrictive definition of public goods in this context may mean some benefits and opportunities would be missed.
• Ensure public funding pays directly for specific actions or results, with those delivering greater public benefit receiving greater public support.
• View the natural and historic environment with parity, approaching public support on a whole farm and no detriment basis ie not damaging an environmental asset whilst being paid to maintain another, achieving one environmental objective not prejudicing another.
• Support the development of new environmental markets which would pay for products that go beyond but complement top quality food production, helping secure additional private funding for farming and land management.
• Include a combination of different mechanisms (eg contract-based multi-annual payments, advice, tax reliefs, capital grants and loans) and wider policy levers (eg regulation and codes of practice backed by institutions) to help farmers adapt to and capitalise on a new policy environment.
• Include transition assistance eg some “pump prime” funding to help farmers reach a baseline or prepare for new environmental markets, loans to help introduce new technology and consider new products for different markets, and knowledge transfer to help farmers develop the skills and expertise necessary.
• Commit to long-term thinking and engage farmers in the journey: move to a system which buys results and sets a destination, not just activity. As part of this, we would like to see farmers, land managers, investors and planners given a clear end date for any transition.

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