

Why don't environmental payments work?

The origins of agri-environment schemes (AES) lie with safeguarding SSSIs in the late 1960s and there have been comprehensive schemes since the late 1980s. Despite this the quality of the agricultural environment and the diversity of its wildlife have continued to decline. The reason is that all systems of agricultural subsidy and protection reduce risk, thereby increasing the return on investment in intensification and specialisation. AES will not work in the broad unless and until agricultural support is removed. The latest proposed modifications of AES recognise this.

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The genesis of the UK's system of payments to farmers for environmentally friendly farming was the system of payments for Scheduled Sites of Special Scientific Interest (SSSI) under the 1968 Countryside Act and consolidated in the Wildlife and Countryside Act 1981. To trigger these payments a farmer occupying an SSSI had simply to notify an intention of undertaking agricultural activity that would damage the scientific interest of the site. The level of payments was supposed to provide exact compensation for the income foregone.

Cosy deals

As a way of protecting wildlife and its habitats from agricultural change this system was of limited value since it applied only to (usually very small) pockets of land in an intensively farmed countryside. Extension of the idea to the wider countryside has sometimes been attributed to the Broads Authority in the mid 1980s with payments to farmers on Halvergate Marshes in Norfolk. This bizarre scheme really serves only to demonstrate the power of the farming lobby. Water levels on the marshes were controlled by a series of ancient obsolete pumps operated by an Internal Drainage Board. Public money was only available to replace these pumps if the work satisfied a cost-benefit test. The public benefit alleged was the higher returns from switching from grazing to cropping. This was far from adequate to justify the costs and in fact no economic case for pump replacement existed.¹ Despite this, a deal was reached between The Ministry of Agriculture (MAFF), the IDB and the Broads Authority whereby MAFF grant-aided the IDB to replace the pumps, and the Broads Authority made annual hectare payments to the farmers in return for an undertaking that they would not exploit the opportunity afforded by pump replacement to convert to arable!

Under the Halvergate Scheme the payments per hectare were uniform across the marshes and unrelated to the (unknown) opportunity costs of foregoing conversion, which presumably would have varied both between holdings and probably between fields, or at least between benefit areas of the several pumps. In this regard the payments would have been deemed economically inefficient; the same result could

have been achieved at lower cost to the tax-payer by a discriminating monopolist. But of course the tax-payer would have been a lot better off had the pumps had not been replaced at all.

The mid-1980s saw another scheme of interest to environmentalists, but this time coming from Brussels. Set-Aside was a device for reducing the politically embarrassing surpluses generated by the CAP by leaving some land fallow each year. There was some thought that this measure might have a spin-off of environmental benefits but the evidence if anything points the other way.² Initially farmers could volunteer land into set-aside reserve; thereafter set-aside became a requirement. Either way, it was recognised that the least productive land would be set aside and that farmers would respond by intensifying use of the remaining land. Since set-aside was intended to be temporary and ideally, rotational, there was not enough time for any environmental benefits to develop. In addition the requirement to keep the fallow land in 'good heart' meant it was sprayed with chemicals to ensure that it didn't become a haven for agricultural pests. Few conservationists mourned when CAP politics brought about its demise.

Stewardship of wildlife deserts

The first proper Agri-Environment scheme (AES) was the Environmentally Sensitive Areas Scheme (ESA) introduced in 1987. This was targeted on designated ESAs which, by the time the scheme was closed, numbered 22. The Countryside Stewardship scheme, introduced in 1991 offered similar payments in return for environmentally sensitive farming in the wider countryside. These two schemes and other smaller and more specialised ones were subsequently merged into the Environmental Stewardship (ES) scheme based on plans to manage farms in the interest of the environment to achieve a range of wildlife and landscape objectives. ES introduced the idea of different levels of environmental farming with an entry level requiring no more than the retention of a few environmental features and a higher level option entailing greater modifications to perceived commercial practice compensated by a higher level of payment.

From 1987 AES has been part funded by the CAP. Environmental Stewardship is administered through the 7-year Rural Development Programme for which funding of £3.1 billion was provided 2007-13. In August 2009 there were over 58,000 agreements covering over 6 million Ha of agricultural land in England, about 66% of the total, a little short of the target agreed between Defra and Natural England of 70% coverage. Two thirds of this land is subject only to Entry Level ES (45% of English farmland) with only a small area (7%) at the Higher Level ES. 10% continues to be subject to the older schemes, ASL and CS which were only closed to new entrants.³

Despite this impressive coverage the farmland wildlife continues an inexorable decline towards what the Nature Conservancy in 1972 described as an ecological desert. The principal indicator of wildlife on agricultural land, the Farmland Bird Index, is still falling. Between 2006 and 2011 the smoothed index of farmland generalists declined significantly by 5% and that of farmland specialists by 7%.⁴ Despite evidence that



Culm grassland at Dunsdon National Nature Reserve, north Devon.

Photo: Peter Burgess/Devon Wildlife Trust

2013 was a good year for butterflies, there is no reason to think that the FBI is not a reliable indicator of trends in other taxa. In the face of this over-whelming evidence of failure Natural England (2009) has been reduced to putting double emphasis on the few positives.³ Central to these is the Cirl bunting (*Emberiza cirlus*) whose population in its residual South Devon stronghold more than doubled between 1992 and 2003. In the late 1960s Cirl buntings were found all along the South coast from Cornwall to the borders of Kent and inland throughout Hampshire, Wiltshire, Berkshire, along the Hog's Back in Surrey and into Oxfordshire.⁵ The decline started earlier than this survey. Thus in Hampshire: "The decline accelerated in the 1950s and 1960s until very few remained by the late 1970s".⁶

Similar comments can be made about the other targeted successes of the Agri-environment schemes. If resources are concentrated in a sufficiently small area

on a focussed problem, success can be achieved. Equally, if enough money were spent it should be possible to grow bananas on an arable farm! None-the-less taken in the round agri-environment schemes have not achieved one of their primary objectives of halting, still less reversing, the loss of wildlife on agricultural land. Why have they failed?

Subsidising farm intensification and wildlife decline

The destruction of farmland wildlife is a consequence of agricultural change, particularly specialisation and intensification of production, these processes typically going together in what is known as the modernisation of agriculture. As I have pointed out on numerous occasions going back to the 1960s, modernisation of agriculture is not a response to market forces but rather is an intended consequence of agricultural policy achieved through the payment of agricultural subsidies which have been the principal source of farm income since the 1940s.⁷ Prior to UK entry into the CAP, shifts on the intensive and extensive margin were achieved partly by the deliberate distortion of input prices in the mistaken belief that a more capital intensive agriculture would be more competitive in world markets.⁸ Under the CAP the focus for many years was on increasing output prices. Subsequently, in response to the 'landscape' effects of the policy - the beef mountains and the milk lakes - as well its impacts on wildlife habitats, recent reform has shifted to directly subsidising agricultural land rather than its output, the Single Payment Scheme. This shift in focus however is only partial. An EU cereals intervention scheme still remains, together with subsidies for growing what are called combinable crops and grants for processed fodder and biofuels including maize.⁹

To a farming population accustomed to cradle to grave support from consumers and tax-payers, agri-environment schemes constitute just another set of income opportunities. Furthermore AES are not among the big players in the subsidy scene. AES is financed from one of the two budgetary funds, the Pillar 2 of the CAP budget that, even after the maximum permitted transfers (modulations) between the two pillars, has amounted typically to only about 25% of total expenditure on agricultural support which is dominated by the Single Payment Scheme. SPS is of course subject to cross-compliant environmental conditions but these amount to very little: buffer strips on the edges of intensive arable fields and the odd hedge or other landscape features.

The standard explanation for the failure of AES is two-fold: the level of support is too low, *c.f.* SPS; and the majority of AES expenditure is on entry-level schemes that place few demands on farmers and in consequence confer few benefits to the environment.

The framework for reform of the CAP agreed in 2013 has been presented as an attempt to correct these faults. First there is to be a greening of direct payments in the form of an obligation on arable farmers to manage 5% of their land as Ecological Focus Areas. This is roughly equivalent to entry level conditions under Environmental Stewardship so that entry-level ES is to be de facto an obligation on all farmers. But it is already clear that entry level ES does nothing to stop wildlife losses. Furthermore, for England at least, the Government intends to do the least possible in terms of greening of direct payments.

Not much environmental gain can be expected on the typical intensive arable farm, particularly since short-term rotation coppice and nitrogen fixing crops are to count towards the 5%. EFA will probably be entry-level minus.

Second, under the reforms member states have the power to transfer up to an extra 15% of support money from Pillar 1 to Pillar 2 uses. The British Government is proposing to transfer the full amount allowable. The support money transferred from Pillar 1 will fund a new scheme from 2016 to be called the New Environmental Land Management Scheme (NELMS). This will be a single tiered scheme to replace ES. The objectives of the scheme are to enhance biodiversity and water quality. NELMS will be more focussed than ES and will recognise current thinking about landscape scale conservation. The 70% target will be dropped. The thinking behind this proposal appears to be that *wildlife in the broader countryside cannot be saved and resources should be focussed on protecting those areas which are not yet part of British agriculture's ecological desert.*

Moral hazard consequences

Perhaps this is no more than realism. At any politically feasible level of funding AES is unable to protect wildlife for a simple reason. All systems of agricultural support or subsidy, by placing a floor on financial returns, reduce the level of financial risk facing farmers, and it is this reduction of risk, rather than the level of producer prices, that results in intensification and specialisation. Mixed farming is the classic strategy for risk management in agriculture; it is also a necessary condition for maintaining farmland biodiversity. SFS raises the rate of return on investment in increasing specialisation and intensive production, the very investment that AES is trying to prevent. Thus all agri-environment schemes suffer from what we could call the Halvergate folly; creating the conditions where a certain course of action is profitable and then trying to prevent that action by paying the actors not to pursue it. The folly was partially successful at Halvergate, at least for a period of time, because the action, draining and ploughing the marshes, was easily monitored. However the moral hazard is obvious. These conditions don't hold for agricultural subsidies. Unless and until we can dispense with them and the safety net they provide, we will continue to pay the price of wildlife losses.

References

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