

Sustainable agriculture in the UK

Summary

UK farmers are struggling to adapt to their markets and to become economically sustainable but there will probably never be a state where 'sustainability' is achieved and the fall in their numbers stabilises. They have always worked to maintain and improve the environment and government policy changes will help them to do more of this in future. Farmers are so few nowadays that they have little effect on the social sustainability of rural areas but as they are mainly responsible for the landscape and how it looks they have social impacts on tourism. The growing importance of issues around food miles and the interest in local and seasonal food will produce business opportunities for farmers, help to combat greenhouse gases and have social impacts by improving diets.

Introduction

This paper explores the economic sustainability of agriculture and its impact on the environmental sustainability of the countryside. Agriculture also impacts on rural social sustainability but less and less as the number of farmers falls. It has wider indirect social impacts though, for instance, through the landscape, on tourism and, through the food industry, on the quality of our diet.

Is UK farming sustainable now?

The government doesn't think so. In its "Strategy for Sustainable Farming and Food - Facing the Future"¹ it states that farming is underperforming in all three arms of sustainability:

Economically

Profitability is low – farmers' incomes have fallen to their lowest levels since the 1930s, the number of full time farmers has fallen by around 40% since the 1980s and the number of farm workers is down by over half². Fewer farmers means less business for those who supply goods to them and who buy their produce and so there are knock-on effects affecting the rest of rural life.

Environmentally

On the plus side around 75% of Britain is farmed so farming is responsible for creating and maintaining the wide diversity of landscapes that surround us.

On the other hand farming can be a cause of problems like water pollution from pesticides and fertilisers and reductions in wildlife populations (biodiversity).

And farming could increase the efficiency of its energy use to save fossil fuels and make a greater contribution to reducing greenhouse gases.

Socially

Farming affects tourism through its impact on landscape and its produce provides jobs in food manufacturing.

Farming people are part of rural communities and as their numbers fall the character of rural life changes. Many of those living in rural communities are urban-born and their ideas of how the countryside should be are different to those of locals. They increasingly affect the shape of the countryside and farmers have less and less influence on it.

Low profits and a poor public image have affected the self-esteem and quality of life of all those involved in farming. Because there are fewer farmers, and because those remaining are under pressure they are less likely to participate in community life and there is now a serious disconnection between farmers and non-farmers with neither understanding the point of view of the other.

So what is sustainable farming?

"Sustainable" is a well used word. The Strategy for Farming and Food, mentioned above, for instance, uses it or 'sustainability' 67 times in 51 pages! Like all over-used words its meaning tends to vary and it can become little more than a politically correct platitude. So it might be instructive to explore a couple of definitions.

The Chambers Concise Dictionary says:

Sustainability: from the verb to sustain meaning: to hold up; to bear; to support; to provide for; to maintain; to sanction; to keep going; to keep up; to prolong; to support the life of.

The most widely accepted definition of sustainable development is that offered in the Brundtland report³:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

From these definitions farming needs to work in a way in which it is economically sustainable – so that farmers have a long term future in the business whilst maintaining (and improving) the environment and contributing to the social success of rural communities and the success of the countryside as an area which the rest of us want to enjoy. This does not necessarily mean that the current number of farmers can be sustained, or even that there is a particular number of farmers which is sustainable in the long term. Economic forces will probably continue to reduce their numbers. Neither is there some fixed future ideal of a sustainable environment. For instance no one seems to be thinking much about how much biodiversity there should be long term. (See the section 'Some problems', below)

Farming's impact on the social sustainability of rural areas will get less and less as farmer numbers fall and become a lower proportion of rural populations and especially as more and more urban people move out to the countryside. (The rural population of England is rising by around 100,000 a year⁴).

There are worries that the changes in EU support for farming which are currently coming in, because they encourage less extensive farming, will produce less food. This will have with impacts on the food industry and produce changes in the landscape which might affect the tourist experience. It is early days to know yet but farming may not be sustainable at all in some of our tougher areas and it may revert to wilderness with consequent reduction in farming populations and less appeal to tourists.

Key principles for sustainable farming and food

A vision for a sustainable European agriculture⁵ argues that agriculture should be:

- internationally competitive without reliance on subsidy or trade protection;
- rewarded by the open market for its outputs including safe and good quality food;
- rewarded by the taxpayer for producing benefits that the open market cannot deliver - like the work farmers do to maintain and improve the environment;
- environmentally sensitive, maintaining and enhancing landscape and wildlife and tackling pollution;
- socially responsive to the needs of rural communities;
- producing to high levels of animal health and welfare; and
- not distorting of international trade.

Farmers are doing what they can to achieve these goals already...

... after all they need to be economically sustainable to stay in business. With hard farming times at least half of them find income from other sources than farming, for example by developing and letting surplus property on their land. This contributes to a sustainable rural sector by providing homes and places of work and to the landscape because used buildings are better to look at than derelict ones.

They also get involved in farm shops and farmers' markets which allows them to produce what the market wants and get better prices. Farm shops and farmers' markets only take up a small share of the overall food market but they have wider impacts as they help farmers to reconnect with non farming people. These changes and the increasing demand for local and seasonal food are seen as a major opportunity for farmers unable to compete with cheaper produce from abroad.⁶

Local foods produce more local jobs and money remaining in a locality does more work for that community than if it leaks away to external economies.

One outcome of the growing centralisation of the food chain is the increase in unnecessary movements of food, both within and between countries. Local food reduces damage to the environment through fossil fuel emissions during transport and congestion on the roads.

Farmers are stakeholders in the countryside and work at maintaining and improving it. A recent report from the CPRE (Council for the Protection of Rural England) and the NFU (National Farmers Union⁷) estimates that they do an estimated £400 million worth of unpaid work a year for the environment. This is equivalent to about £2,400 a farm.

Also fertiliser use has been decreasing steadily since the 1980's.⁸ Crop production has increased over the same period. So UK farmers are using fertilisers more efficiently. Reducing fertiliser use contributes to sustainability by saving the energy costs of their manufacture and transport and reduces the risk of polluting streams and rivers.

Over recent years the quantity of pesticides used in agriculture has remained largely unchanged but many of the more environmentally damaging products are no longer used and the industry has developed a programme of voluntary measures to encourage best practice⁹. Better use of pesticides means that they are more effective at reducing the damage done by pests and diseases and do less harm to non-target species.

Numbers of farmland birds are a good way to measure biodiversity because they are fairly well up the food chain. If they are in good shape then so are the plants and insects they feed on. Farmland bird populations fell heavily from the 1970's onwards as farming went all out to maximise yields. Measures farmers are taking nowadays are having an effect and the latest statistics show that farmland bird populations have stopped decreasing.

Also¹⁰, since 1992 English and Welsh farmers have planted over 70 million trees and woodland cover is nowadays double what it was in 1920. The reduction in the length of hedges and walls which took place up to the end of the 1980s has stopped and the number of lowland ponds is on the increase.

New arrangements from the EU for support of agriculture brought in last year also encourage biodiversity. Farmers must farm to what is called Good Agricultural Practice and there is extra support available from Environmental Stewardship schemes to contribute towards the costs of environmental investments.

What more can farmers do?

Stewardship schemes

There are two new schemes¹¹ Entry Level Stewardship and Higher Level Stewardship.

Entry Level Stewardship aims to encourage a large number of farmers to improve the environment beyond what they are already doing. It supports hedgerow management and stone wall maintenance for instance. The scheme has been used with enthusiasm by farmers and over 2,700,000 hectares are now under agreement.

Higher Level Stewardship aims to deliver more focussed environmental benefits in high priority situations and is flexible so that plans can be tailored to support key characteristics of particular areas.

Better farming systems

Organic farming and Integrated Farm Management are both farming systems which adopt more sustainable methods.

Organic farming¹² uses resources produced on the farm itself as far as possible and aims for extensive production which uses man-made inputs such as fertilizers, pesticides and animal medicines as little as possible. Instead there is stress on crop rotations which balance soil fertility and management which minimises disease risks.

Organic farming needs more labour and so produces more jobs than conventional farming. It also encourages biodiversity which in turn has social benefits.

Three years ago it was reported that approximately half of consumers were buying organic food. That figure has now risen to 65%¹³. However many of these purchases are occasional and the main market for organic products is concentrated within only about 7% of UK households¹⁴. So whilst organic producers might argue that their system is closest to truly sustainable farming they do not currently have a big enough share of the food market to have a very significant overall impact.

Integrated Farm Management¹⁵ may have a larger impact than organic in the long term. It combines traditional farming methods including crop rotations with modern technology to ensure the highest standards of food production whilst enhancing the environment. Pesticides and fertilisers are used only when absolutely necessary to keep animals and crops healthy.

Some problems

Economic

1. Changing support for agriculture will mean moving from a taxpayer-supported agriculture to one driven by markets. It will produce wholesale changes to the way farming is practised. Some areas, like our hills and uplands may not be farmable this way and may be abandoned. This will produce social impacts as farming people leave and environmental impacts as ungrazed landscapes change to brush and scrub. Visitors to these areas may not like this wilderness - we don't know. If they stop visiting there will be further knock on effects on local economies and social structures.
2. A good illustration of the complexities that beset the struggle for more sustainable food production is that of poly-tunnels. These have enabled British strawberry farmers to extend the growing season from its original six-week period to one which goes from early June to mid-August so saving imports and food miles. However, they are considered by some as blights on the landscape.¹⁶ How do we decide on complexities like this?
3. Small scale, localised production should be more sustainable because it gives farmers better prices, makes fresher, tastier food available to consumers and saves food miles. But as it becomes more common will producers find it just as difficult to get satisfactory prices from big buyers as they do with mainstream products now?

Environmental

4. No one has got to grip much with the idea of managing wildlife. Because 75% of our land area is farmed, mostly for food production we need to consider how much biodiversity we need and what we need and where. Our present course of just more of everything everywhere is not sustainable in the long term and will ultimately affect the amount, quality and cost of our food. Farmers are already worried about burgeoning populations of some species like badgers and foxes which have no predators.
5. Another problem is if we move to less intensive systems of agriculture we will produce less food. This will impact on jobs in the food industry but, more important, with world food demand expanding will it mean we have to destroy wild environments elsewhere to help feed everyone?

Social

6. An advantage supporters of less extensive farming promote is that it produces more jobs. But in many rural areas there are difficulties finding labour. And many of the jobs are pretty menial, in unpleasant working conditions and for low pay.
7. Quality assurance, food safety and other regulation is costly to supervise in small businesses.

Problems with heart versus head

8. Local food, small family farms, organic - all seem right. They should be more sustainable than intensive, large scale systems – we all agree that small is beautiful, but is it inevitably? For instance supermarket logistics are so efficient and move such huge quantities of food around that their energy use may often be more efficient than local food moved small distances but in relatively small quantities. The answer to this question is not known and it and many others need more research.

Sources

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² Commission for Rural Communities, *State of the Countryside Report 2006*
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³ Reading University, Agricultural Policy and Development website – *Environmental challenges in farm management*. http://www.ecifm.rdg.ac.uk/sustainable_agriculture.htm

⁴ State of the Countryside Report (see above)

⁵ HM Treasury/ Defra report *A Vision for the CAP*
http://www.hm-treasury.gov.uk/documents/international_issues/global_challenges/the_common_agricultural_policy.cfm

⁶ Royal Agricultural Society of England, *Differentiation – a sustainable future for UK Agriculture*
http://www.rase.org.uk/activities/publications/articles/differentiation_report.pdf

⁷ Council for the Protection of Rural England (CPRE) and National Farmers Union (NFU) *Living Landscapes: hidden costs of managing the landscape*
<http://www.cpre.org.uk/resources/pub/pdfs/farming-and-food/agriculture/living-landscapes.pdf>

⁸ Environment Agency, *Environmental facts and figures, fertilisers* http://www.environment-agency.gov.uk/yourenv/eff/1190084/business_industry/agri/fertilisers/?version=1&lang=e

⁹ Environment Agency, *Environmental facts and figures, pesticides* http://www.environment-agency.gov.uk/yourenv/eff/1190084/business_industry/agri/pests/?lang=e

¹⁰ RuSource briefing 224 Agriculture protects the environment

¹¹ Defra website – Environmental Stewardship Schemes
<http://www.defra.gov.uk/erdp/schemes/es/default.htm>

¹² There are many sources of information about organic farming. See for instance University of Aberystwyth, Organic Centre Wales. <http://www.organic.aber.ac.uk/organics/define.shtml>

¹³ Soil Association at
[http://www.soilassociation.org/web/sa/saweb.nsf/librarytitles/20CB2.HTMI/\\$file/exec_sum.pdf](http://www.soilassociation.org/web/sa/saweb.nsf/librarytitles/20CB2.HTMI/$file/exec_sum.pdf)

¹⁴ Quoted at <http://www.scotland.gov.uk/Publications/2006/02/08094741/3>

¹⁵ LEAF <http://www.leafuk.org/leaf/organisation/ifm.asp>

¹⁶Royal Agricultural Society of England, *Differentiation*, see above.