



Delivering More Sustainable Food and Farming

LEAF's Global Impacts Report 2016



WHO WE ARE

LEAF (Linking Environment And Farming) – the leading organisation delivering sustainable food and farming

OUR VISION

A world that is farming, eating and living sustainably

OUR MISSION

To inspire and enable sustainable farming that is prosperous, enriches the environment and engages local communities

LEAF celebrates its **25th anniversary** in 2016. Work with us to deliver healthy food and farming fit for the future

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FARMING FOR THE FUTURE

M&S

EST. 1884

At M&S we are committed to securing our future supply of raw materials from the most sustainable sources.

Our Farming for the Future programme sees us working with our supply chain partners, farmers and growers to help them address the sustainability challenges they face.

M&S is proud to support the principles of LEAF as a key step in driving our commitment to sustainable agriculture.



Delivering more sustainable farming. Together.



It is my pleasure to introduce 'Delivering More Sustainable Food and Farming, LEAF's Global Impacts Report 2016' which provides a fantastic overview of yet another year of real progress.

As we face the reality of needing to produce more food with fewer resources, sustainability presents a huge challenge to the farming industry and to society at large. But it presents a huge opportunity too. The size and complexity of sustainability issues though means they cannot be addressed by any one solution or any one organisation. This is why LEAF has such a crucial role to play. It is uniquely placed to help bring together the agricultural community, civil society and business to deliver a shared vision for the future of farming and food.

We fully support LEAF's vision and are committed to promoting Integrated Farm Management. We have a proud history of working with the agricultural community to provide the breadth of range and seasonal availability that our customers expect while minimising our impacts. We have invested in research and innovation for many years in order to develop and improve crop breeding and agronomic practices that benefit farmers and the environment.

Through our Farming for the Future programme we are helping our farmers and growers address the challenges ahead by finding opportunities to improve efficiency, environmental performance and ethical practice. This is making their businesses more resilient and profitable, helping ensure that they can continue to deliver quality and innovation for the long term whilst reducing their impact on the world around them. In turn, this is delivering security of supply for M&S.

LEAF is wholly aligned with what we are trying to achieve and we are fully supportive of the practical and accessible approach taken to helping farmers and growers become more sustainable. We are proud to be long-standing sponsors of Open Farm Sunday and actively promote the principles of LEAF as a key step in driving our commitment to sustainable agriculture.

"LEAF is uniquely placed to help bring together the agricultural community, civil society and business to deliver a shared vision for the future of farming and food."

We look forward to continue working with the Team at LEAF over the next year, in order to improve performance and impact in the delivery of more sustainable agriculture.

Johnathan Sutton
Head of Agronomy, Marks and Spencer plc

Tailored nutrient management from Yara



Reduce unit cost of production through increased yield and quality whilst improving the crops natural defence against disease.



Yara - your first choice for quality fertilizers & application advice

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Knowledge grows

Welcome to LEAF's fourth Global Impacts Report



We are delighted to present LEAF's fourth Global Impacts Report based on data to the end of 2015. It is, first and foremost, a celebration of the achievements of our members across the world and the impact they are making to more sustainable farming, through Integrated Farm Management (IFM).

Indeed it is particularly encouraging to see engagement with LEAF continuing to increase at a time when there has been a drop in world agricultural commodity prices with farmers are continuing to invest in LEAF as a way to make their businesses more profitable.

Our first report, published in 2012, demonstrated that almost all LEAF Marque certified businesses were making improvements in their operations, across the nine sections of IFM. The current report shows these trends are continuing. Monitoring and evaluation activities are now firmly embedded within LEAF's operational culture. Drawing on data from LEAF Marque certified businesses, LEAF members, users of the LEAF Sustainable Farming Review and findings from a LEAF member's survey, we are able to monitor our growth, impact and geographical expansion. In addition, they provide the foundation for a transparent, impartial and consistent evaluation of LEAF's effectiveness in delivering more sustainable food and farming.

We continue to see strong and steady growth in the number of LEAF Marque certified businesses across the globe which totals 992, representing 342,556 hectares in 37 countries. Cereals and horticulture remain the two largest sectors with 180,556 hectares and 144,378 hectares respectively being grown on LEAF Marque certified businesses. In the UK, we see a similar trend with an impressive 33% of UK fruit and vegetable crop area now being grown by LEAF Marque certified businesses, the top five being onions, carrots, lettuces, cauliflowers and broccoli.

In terms of implementing key IFM practices, LEAF Marque certified businesses are making steady improvements in key areas. For example, we are seeing some encouraging results with a growing number of LEAF Marque businesses measuring nitrogen efficiency per tonne product and their carbon footprint. We are also pleased to report similar gains in water management practices with more LEAF Marque certified businesses measuring water efficiency of irrigated crops.

We can also report continued growth in the number of LEAF Marque certified businesses taking steps to minimise damage to beneficial species and non-target organisms.

"We continue to see strong and steady growth in the number of LEAF Marque certified businesses across the globe."

Communicating with staff and customers about sustainable farming commitments is a key component of IFM.

We are pleased to see that LEAF Marque businesses are delivering regular training on Integrated Farm Management to team members as well as reaching out to their local communities by hosting farm visits and promoting good news stories about food and farming using local media channels.

These are encouraging results illustrating the impact LEAF Marque certified businesses and LEAF members are making to delivering more sustainable food and farming, through the principles and practices of IFM.

We still have a long way to go. Building on what we have already achieved, it is clear we must continue to innovate for even greater impact. As we do so, we will keep focused on our mission: to inspire and enable sustainable farming that is prosperous, enriches the environment and engages local communities.

A huge thank you to each and every one of our members for their commitment to delivering more sustainable farming. Congratulations for all you have achieved so far.

Caroline Drummond MBE
LEAF Chief Executive

How we are achieving change

Facilitating sustainable farming knowledge generation and exchange amongst farmers and researchers

Developing market opportunities

LEAF's Demonstration Farms and Innovation Centres

LEAF Marque certification system

LEAF Marque Chain of Custody

The LEAF Sustainable Farming Review provides a complete on-line health check for farming businesses

Technical resources for farmers

Annual LEAF Conference

Our mission is to inspire a prosperous, enriches the environment

2,194 LEAF members

33% of UK fruit and vegetables grown on LEAF Marque certified businesses

Area of land around growing LEAF Marque reaches 342,556

37 Countries around the world with farms producing to LEAF Marque standards



Organisation and Planning



Soil Management and Fertility



Crop Health and Protection



Pollution Control and By-Product Management



Animal Husbandry

INTEGRATED FARMING

Engaging the public in sustainable food and farming

Farming's national open day
Open Farm Sunday

and enable sustainable farming that is
independent and engages local communities

6,000 children visited
a farm as part of
Open Farm School Days

around the world
to produce high quality
crops

389 farms opened their
gates for Open Farm Sunday

291,000 visitors
to Open Farm Sunday

Growers

Food chain

Food chain

Consumers

FARM

PACKERS

SUPERMARKET



Animal
Landry



Energy
Efficiency



Water
Management



Landscape and
Nature Conservation



Community
Engagement

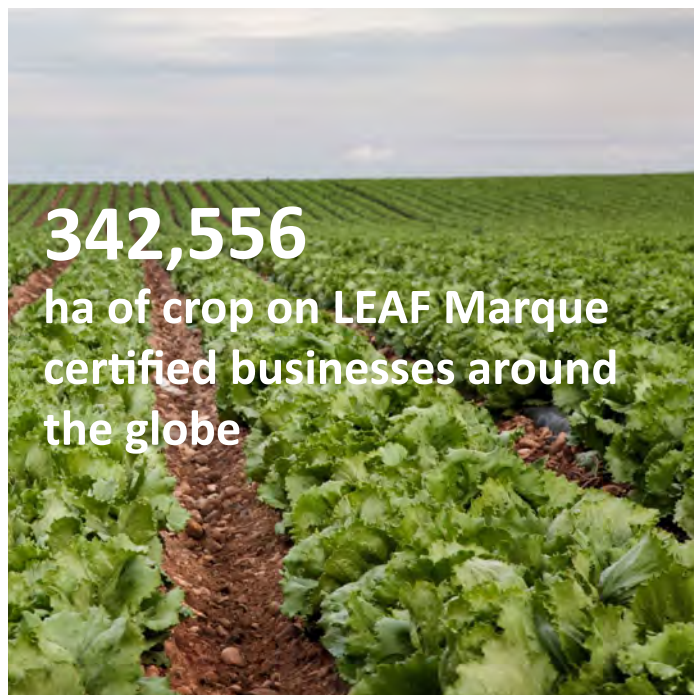
Celebrating success: Our highlights

2015 has been another year of significant growth in LEAF's global activities. Through our members' commitment to delivering more sustainable farming through Integrated Farm Management, the results highlighted in this, LEAF's fourth Global Impacts Report, illustrate clearly that they are continuing to make significant improvements in their overall farm sustainability performance.



Globally, we are able to report continued growth in the number of LEAF Marque certified businesses, which currently stands at 992, representing a total of 342,556 hectares of crop in 37 countries. Cereals remain the largest crop area at 52.8%, followed by horticulture at 42.1%. The largest number, by area, of LEAF Marque certified businesses are still predominately based in the UK and represent some 278,127 hectares of crop area, with Spain and France at 16,544 hectares and 13,331 hectares respectively.

In the UK, LEAF Marque certified businesses are growing an impressive 33% of the total UK fruit and vegetable crop area. Specifically, some 88.6% of the leek crop, 76.3% beetroot and 75.5% of



Spring Onions grown in the UK are produced by LEAF Marque certified businesses. This is a hugely significant achievement and illustrates that market penetration of LEAF Marque is continuing on an upward trend. Our LEAF Marque certified businesses are predominately in the arable and horticulture sector. However, as recognition of the marketing advantages of LEAF Marque certification grows and as consumer recognition increases, we expect to report on similarly impressive results in other sectors in the coming years.

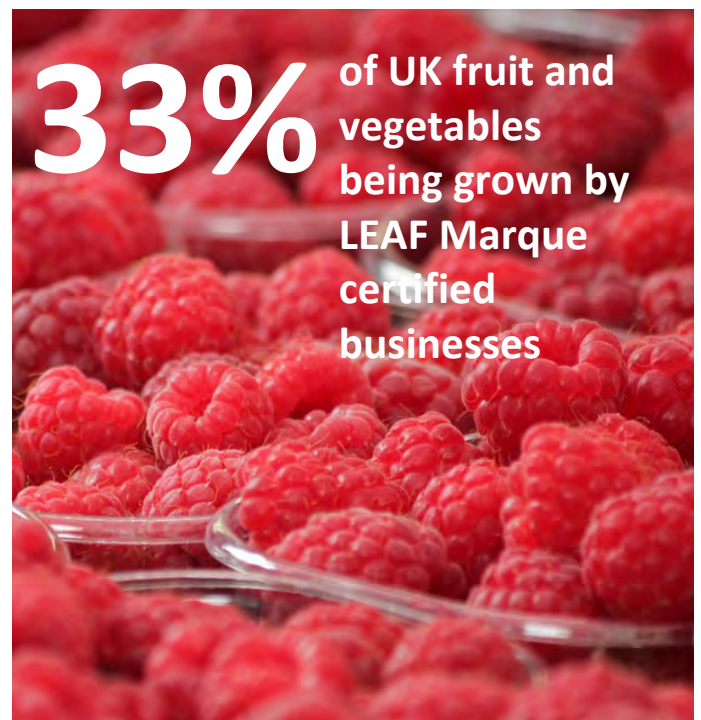


278,127

ha of crop on LEAF Marque certified businesses in the UK

In terms of delivering specific sustainable farming practices, we continue to see LEAF Marque certified businesses making significant gains in practices across the nine sections of Integrated Farm Management, including soil and water management, pollution control and energy use. Specifically, 190,516 hectares of crop on LEAF Marque certified businesses has a Soil Management Plan, 127,711 hectares of crop is being monitored for energy consumption, and 198,799 hectares of crop on LEAF Marque certified businesses is covered by a Crop Protection Policy.

We are also seeing continued commitment to staff training in Integrated Farm Management and a



33%

of UK fruit and vegetables being grown by LEAF Marque certified businesses



37

countries with LEAF Marque certified businesses

passion for reaching out to local communities through hosting farm visits, involvement with Open Farm Sunday and Open Farm School Days.

There is a great deal to be inspired by but there is much more still to be done. Overall, these are very encouraging results which illustrate that the framework of Integrated Farm Management and the tools and resources we offer our members, are helping growers make steady and meaningful changes on the ground.

Delivering more sustainable farming

The global food system will continue to experience change over the next 40 years. On the demand side, global population is likely to increase to eight billion by 2030; many people are likely to be wealthier, creating demand for a more varied, high-quality diet requiring additional resources to produce.

There is increasing competition for land, water and energy and with more frequent adverse weather events, the effects of climate change will become increasingly apparent. The need to reduce greenhouse gas emissions and adapt to a changing climate will become imperative. Over this period, globalisation will continue, exposing the food system to new economic and political pressures with an increasingly urban society more removed from food, farming and the natural environment.

In short, we have to deliver more sustainable farming systems. We need to produce more food, not just for economic growth but to feed the growing world population. Farmers, manufacturers, retailers and consumers all have a part to play in using resources more effectively. At the same time, we need to protect our resources and enhance our environment. LEAF's Integrated Farm Management is a whole farm business approach that delivers sustainable farming through economic performance, environmental quality and social health.

LEAF works with farmers, the food industry, scientists and consumers to develop and promote Integrated Farm Management in three main areas:

- **Facilitating knowledge generation and exchange** amongst farmers and researchers through our network of LEAF Demonstration Farms and Innovation Centres; farm business management tools and events.
- **Developing market opportunities** through the LEAF Marque environmental assurance system recognising sustainably farmed products.
- **Engaging the public** in sustainable food and farming through Open Farm Sunday, Open Farm School Days, other farm visits, resources and training.

LEAF is a catalyst for change. Our vision for a world that is farming, eating and living sustainably will be delivered on the ground. The principles and practices of Integrated Farm Management offer a realistic way forward for farmers, helping their businesses address the challenges of economic uncertainty, climatic fragility and an ever more inquisitive and demanding public.



Sustainable farming can be defined in many ways, but ultimately it seeks to sustain farmers, the environment and communities by promoting farming practices and methods that are profitable, environmentally sound and good for communities.

Sustainable farming is smart agriculture. It rewards the true values of producers and their products. It works on a range of farms varying in size and enterprise, harnessing new technologies and embracing the best practices of the past.

LEAF's definition of sustainable farming is:

'Sustainable farming, delivers a site-specific farming system supporting the integration of the environment, society and farm economic viability over the long term.'

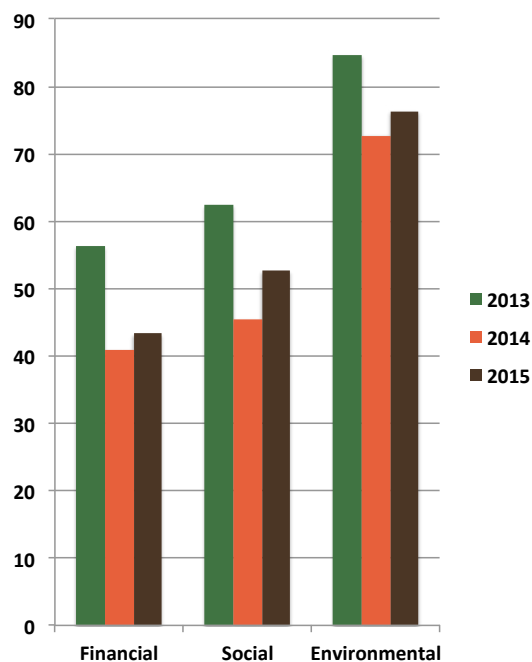
This means an integrated system of plant and animal production practices having a site-specific application that will, over the long term:

- Satisfy human food, fibre and social needs;
- Enhance environmental quality and the natural resource base upon which the agricultural economy depends;
- Make the most efficient use of non-renewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls;
- Sustain the economic viability of farm operations;
- Enhance the quality of life for farmers and society as a whole.

In 2015, LEAF conducted a survey of our farmer members including individual farmers, producer groups and college members. We were interested in whether our members felt their businesses were more or less sustainable than five years ago and secondly, how they were communicating the sustainability of their business practices to their customers.

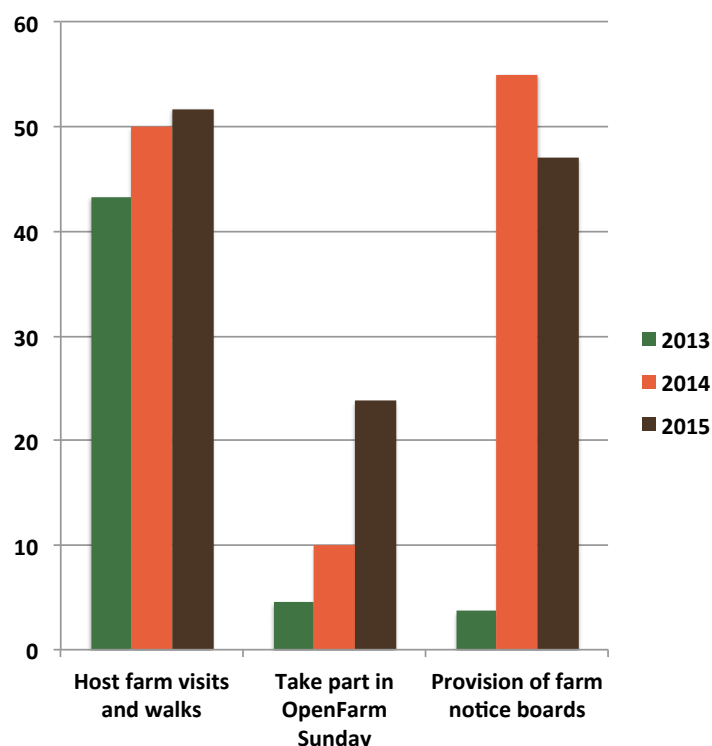
Encouragingly, 76.3% of respondents felt their businesses were more environmentally sustainable than five years ago, with 43.4% saying they were more financially sustainable and over half, 52.6%, stating their businesses were more socially sustainable. The same questions were asked in membership surveys conducted in 2013 and 2014 and although a different sample set was used, it is useful to compare these responses as a general indicator of how our members perceive their own progress towards more sustainable businesses – financially, environmentally and socially (see figure 1).

Figure 1: Do you feel that your business is more or less financially, socially and environmentally sustainable than it was five years ago?



We also asked how LEAF members are communicating the sustainability of their business practices to their customers, over half, 51.7% of the respondents, are actively engaging with their customers and the wider public by hosting farm visits with nearly a quarter 23.8% getting involved with Open Farm Sunday. In addition, over half of respondents, 55%, are using farm notice boards to communicate their sustainability commitments to the public.

Figure 2: How are you communicating the sustainability of your business practices to your customers?



Making a difference. Together.

LEAF is, first and foremost, a membership organisation. Our members are the ones who are making a difference on the ground. They deliver our goals, drive forward our vision and shape the organisation we are.

The passion, expertise and commitment of our members make us who we are – a vibrant and diverse worldwide community. It is through our members that we advance excellence, support innovation and shape the future of farming.

Our members come from all over the world and include farmers, advisers, consultants, colleges and corporate organisations from across the food and farming sector. They are united by their commitment to delivering more sustainable farming that is prosperous, enriches the environment and engages local communities. LEAF membership provides a wide range of services and resources

designed to help farmers adopt Integrated Farm Management, enable advisers to support their clients, colleges to inspire and inform students and help businesses demonstrate their commitment to sustainable farming.

LEAF members represent a dynamic movement for change. Working together to deliver sustainable farming that encourages nature and landscapes to thrive, supports livelihoods and local communities and has public health and wellbeing at its heart.

Together we are making a real difference.

LEAF Membership 2015





LEAF Producer Groups - stronger together

Producer groups play a hugely important role in helping smaller farmers compete effectively in the market place by building and strengthening the organisation and business capacities of the farmers involved. They also provide space for participation, which contributes to members' ownership of issues as well as solutions. This in turn builds group cohesiveness, solidarity and promotes mutual support. In addition, Producer Groups can offer an effective platform for building a sense of community, a social support system, increasing self-confidence, learning together and providing a sense of equality.

In 2007, LEAF Marque started to go global, we embraced the producer group model to support this. As well as helping to reduce the cost of certification, farmers involved in Producer Groups benefit from improved access to markets, centralised decision making and responsibility as well as collective support from other group members.

We now have around 30 producer groups representing 351 producers in 7 countries across the world, growing over 40 different crops and covering a land area of over 11, 000 hectares. We are determined to build on the success of the Producer Group model and continue to provide the tools, training and resources to support smaller farmers all over the globe, to build their business capacity.

Farming fit for the future

LEAF works to deliver more sustainable food and farming. We believe in a food and farming system that encourages nature and landscapes to thrive, supports livelihoods and local communities and has public health and wellbeing at its heart. In other words, farming that is economically, environmentally and socially sustainable.

LEAF promotes a system of farming called Integrated Farm Management (IFM). IFM is a whole farm business approach that uses the best of modern technology and traditional methods to deliver prosperous farming that enriches the environment and engages local communities.

IFM is made up of nine sections (see below) which together address the entire farm business. An essential part of implementing IFM is understanding each section and the integration between sections. IFM delivers more sustainable farming by contributing to the following areas:

Economic Performance

- Protecting high productivity with low environmental impact
- Tangible financial benefits delivered by increased attention to detail
- Being prepared for future challenges and keeping ahead of legislation

Environmental Quality

- Maintaining and enhancing the wildlife value and character of the countryside and landscape

- Reducing the risk of pollution and environmental degradation
- Monitoring and demonstrating improvements in the quality of soil, water, air, wildlife habitats and landscape

Social Health

- Reaching out and connecting with suppliers, customers and the wider agricultural industry
- Building public understanding, knowledge and trust in farming and the countryside whilst providing sustainable choices for consumers

LEAF offers a range of services and resources to help farmers adopt IFM. A key resource is the **LEAF Sustainable Farming Review**. Developed in close consultation with farmers, it offers a very practical, easy to use on-line management tool based on the nine sections of IFM. It helps farmers to monitor their performance, identify strengths and weaknesses, track performance over time and set targets for action across the whole farm. We encourage all our members to use the LEAF Sustainable Farming Review and completing it is a core requirement of LEAF Marque certification.

1,185
users
of the LEAF
Sustainable
Farming Review
in 2015



137
types of LEAF
Marque crop

Marketing opportunities through LEAF Marque

First introduced in 2003, the LEAF Marque is an environmental assurance system recognising sustainably farmed products. LEAF Marque farmers operate in 37 countries worldwide and the area of crops grown on LEAF Marque certified businesses now totals 342,556 hectares.

A LEAF Marque Supply Chain: Why it is important to us

Florette is the European leader in fresh fruit desserts and ready-to-eat bagged salad. It was amongst the first companies to require all its growers to become LEAF Marque certified and were pioneers in adopting the LEAF Marque Chain of Custody. Ian Hammond, Raw Materials Quality Manager at Florette explains more about how LEAF is helping Florette address its sustainability agenda...

"As part of our corporate and social responsibility strategy, Florette requires full traceability for our ingredients. Above all, we want to ensure good environmental standards are maintained by all our growers. LEAF Marque certification helps us deliver just this.

The growth of LEAF Marque internationally ensures we can have a uniform standard of environmental management across our supply base, all year round. The recognition by LEAF of the GLOBALG.A.P. auditing process as a baseline scheme means this is possible for all our growers around the world. As both public and retailer awareness of environmental factors grows, LEAF Marque certification offers positive marketing potential for our producers. Using the LEAF Marque logo on our packaging allows us share the environmental commitment and credentials of our growers with our customers.

Furthermore, the new LEAF Marque Chain of Custody will help to secure the future of the supply chain and allows full traceability and transparency, which is good news for our growers, our customers and our business.

Florette is proud to have been one of the pioneering supporters of LEAF Marque and continues to be committed to its success."



LEAF Marque growers across the globe



37 countries
with LEAF Marque certification



Countries with affiliated businesses in 2015

LEAF Marque crop diversity across the globe



Cauliflower
5,531 ha



Sugar beet
9,428 ha



Onion
10,242 ha

Carrot
7,265 ha



Broccoli
4,814 ha



Apple
4,267 ha



Lettuce
11,635 ha



Cabbage
3,916 ha



Wheat
95,195 ha

Maize
7,291ha



Spinach
3,310 ha



Barley
22,512 ha

Permanent grassland
7,373 ha

Short term grassland
3,737 ha

Note: Global data excludes peas



Percentage of UK Fruit and Vegetable Cropped area grown on LEAF Marque Certified businesses



Leeks
88.6%



Beetroot
76.3%



Spring Onions
75.5%



Watercress
73.8%



Lettuce
70.1%



Parsnips
68.9%



Onions
66.9%



Cherries
64.5%



Celery
64.2%

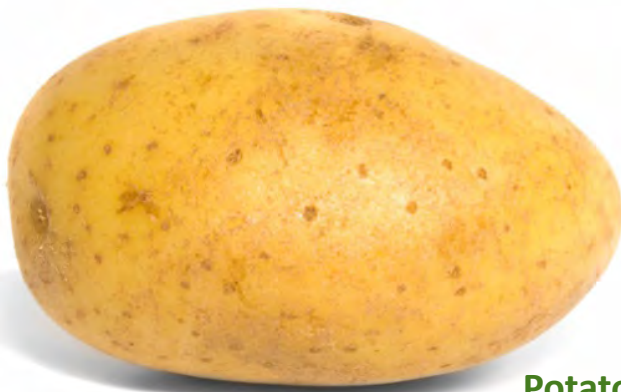


Asparagus
59.4%

 LEAF Member

 Non LEAF Member

Note: UK data excludes peas and potatoes

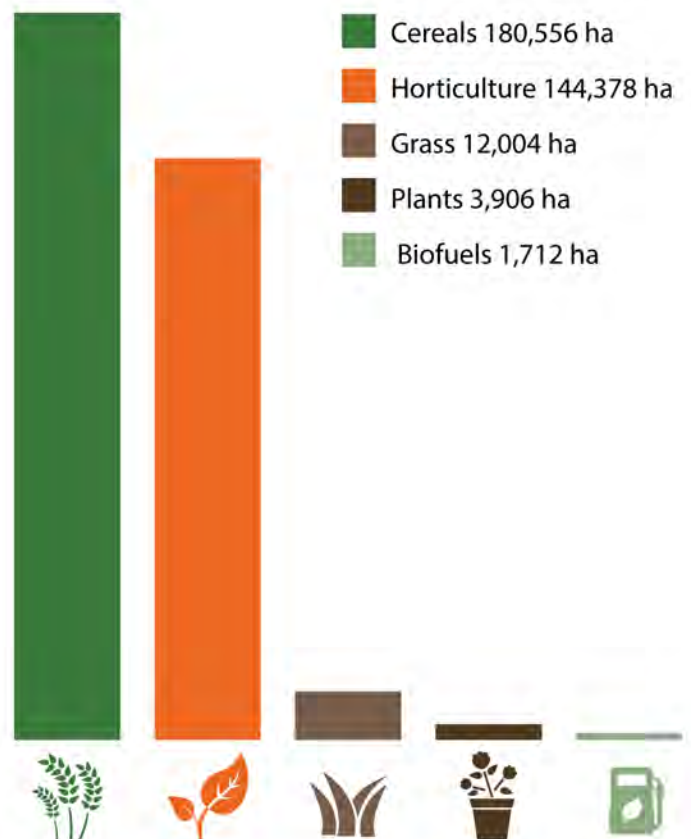


Potato
27,261 ha



Oilseed rape
31,992 ha

Area of crop on LEAF Marque certified businesses worldwide





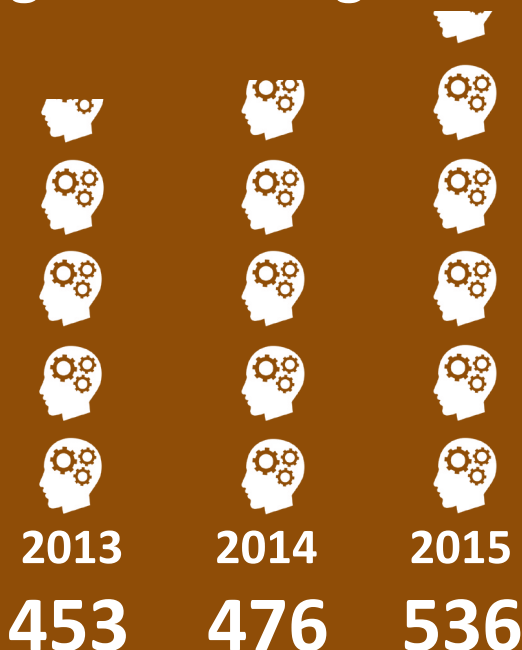
Focus on: Organisation and Planning

Effective organisation and planning are the foundation of a successful Integrated Farm Management (IFM) approach. Assessing current farming practices, identifying areas of improvement, setting objectives and monitoring the results allow the benefits of IFM to be quantified, demonstrated and continuously improved.

LEAF works hard to assess the needs of our members, respond to their requirements and develop practical and cost effective tools and resources to help them adopt IFM. During 2015, we have rolled out the LEAF Sustainable Farming Review and were delighted to see some 1185 businesses completing it. Another important development in 2015 was the launch of 'Integrated Farm Management: A Guide', a practical handbook setting out the principles and practices of IFM and how to implement it. We also added to our 'Simply Sustainable' series of technical guidance booklets with the publication of 'Simply Sustainable Biodiversity'.

The overall performance of LEAF Marque certified growers in the area of Organisation and Planning has been very encouraging this year. A key indicator we use to monitor performance in this area is businesses with a Farm Environmental Policy. In 2015, we saw 602 LEAF Marque certified businesses with a Farm Environmental Policy, covering 209,229 hectares. We saw a rise to 536 in the number of LEAF Marque certified business providing regular training for their staff on Integrated Farm Management. An encouraging year, showing that our growers are making great strides in monitoring what they are doing, continually improving their documented plans and, importantly, communicating them to their wider team.

Number of LEAF
Marque certified
businesses providing
regular training on IFM



602

LEAF Marque certified
businesses with a Farm
Environmental Policy





What is a Farm Environmental Policy?

The key to achieving sound environmental performance is about communicating to everyone involved in a farming business what it is trying to achieve. A Farm Environmental Policy is a useful management tool and an important part of overall business planning. The LEAF Sustainable Farming Review can form the basis of a Farm Environmental Policy and it is a requirement of LEAF Marque certification.

A Farm Environmental Policy offers a proactive way to communicate a farming businesses' values, vision and goals in relation to its environmental commitments. It sets out a farm's commitment to benefiting biodiversity; optimising resource management, for example the use of energy, water and other consumables; reducing waste and pollution as well as re-using and recycling of materials. Documenting the farm's overall objectives and targets in these areas, helps farmers to take stock and objectively review their farming practices as well as show their commitment to LEAF, Integrated Farm Management (IFM) and sustainable farming in general.

Furthermore, developing and reviewing a Farm Environmental Policy helps to stimulate ideas and conversation about the objectives and future direction of the farming business and is a core part of continual improvement, which underpins IFM.



Focus on: Soil Management and Fertility

Healthy soil is fundamental to food security, ecosystems and to life itself. Soils help feed a global population that has increased to 7.3 billion people. Healthy soils provide a variety of vital ecosystem services such as nutrient cycling, water regulation, flood protection, and habitats for biodiversity.

The conservation and improvement of soil is among the highest priorities of any farm and an essential part of LEAF's Integrated Farm Management (IFM). Farmers practicing IFM carry out routine analysis, maintenance and improvement of physical, chemical and biological soil health. This helps ensure soil's long term fertility and builds organic matter, while reducing the risk of erosion, structural degradation, compaction and associated environmental concerns, such as flooding and drought. Good soil husbandry can increase yields and profitability.

2015 was declared the International Year of Soils by the Food and Agriculture Organisation of the United Nations. A global soil partnership working to raise awareness of the importance of healthy soil and to advocate for sustainable soil management. We were pleased to organise two technical soils events for farmers in conjunction with National Farmers' Union and the Game and Wildlife Conservation Trust at LEAF Innovation Centres - North Wyke and Loddington. They focused on key aspects of grassland and arable soil management and provided farmers with insight into specific soil management strategies.

We are delighted to report that LEAF members, through their adoption of IFM, continue to show improvements in their soil management practices. The number of LEAF Marque certified businesses in 2015, where nitrogen efficiency is being measured totalled 563. Furthermore, it is particularly encouraging to see continuous improvement of Soil Management Plans used by LEAF Marque certified businesses.

190,516

Hectares of crop on LEAF Marque certified businesses with a **Soil Management Plan**



Number of LEAF Marque certified businesses where **nitrogen efficiency per tonne product is measured**



2013

358



2014

383



2015

563



Case Study: M H Poskitt Ltd

Protecting soils protects crop value

LEAF Marque certified grower Guy Poskitt grows carrots and other fresh produce in Kellington, East Yorkshire, supplying Asda as well as food service and wholesale markets. The predominantly sand and sandy loams is perfect for the high proportion of root crops which support 480 hectares of carrots, 140 hectares of sugarbeet and 60 hectares of parsnips among other crops. But wind erosion is a major threat. Guy explains how the principles of Integrated Farm Management and the discipline of becoming LEAF Marque certified have helped to focus on timing of cultivations, using cover crops and overall soil management planning.

“The smaller grains of sand will shred the top of the crop soon after it emerges. Keeping 'blow away sands' in their place means regular checks and careful cropping. I've seen a lot of disasters, including the loss of 200 acres of crop lost in a matter of hours.

Sugarbeet is planted with minimal cultivations to disturb the soil as little as possible, but a different approach is needed for the high-value maincrop carrots. We establish them with a barley cover crop. This is sown with the carrots in April or May and comes up fast to create a micro-climate – its like little hedges protecting the emerging carrots. We then spray off the barley three or four weeks after drilling as soon as the carrots are strong enough to withstand the blowing sands and wind.

Following the principles of Integrated Farm Management is all about attention to detail and minimising risks. Completing the LEAF Sustainable Farming Review, which is a core requirement of LEAF Marque certification has really helped us consider the environmental impact of our practices across the whole business.”



Focus on: Crop Health and Protection

Protecting crops from weeds, pests and disease is a routine part of farming in order to maintain yields and reduce losses. While protecting crops is essential, it is important to ensure that control is safe and effective to reduce the risk of water pollution and help preserve biodiversity. For LEAF farmers, Integrated Pest Management (IPM) is an inherent part of IFM. It takes a holistic approach to crop health and protection and offers farmers a toolbox of techniques combining cultural, biological, thermal, mechanical and

where necessary, chemical strategies to protect crops. These can be tailored to different cropping systems, climatic conditions and pest varieties.

IFM encourages continual improvement in pest control measures that have minimal impact on the environment and human health and which delivers sustainability and profitability. A well managed crop will be more competitive with weeds, more resilient to attack from pests and disease and require fewer inputs.

We are seeing steady improvements in the area of Crop Health and Protection. There is no doubt that our farmers are open to new technologies, they innovate and, importantly, have a strong desire to improve. We look forward to seeing these positive trends continue and expect to report continued improvements amongst our growers in a number of key areas - developing strategies to avoid pest resistance to plant protection products and in recording, planning and justifying crop protection practices.

We continue to see an encouraging number of LEAF Marque certified businesses continually improving Crop Protection Policies in 2015 with 198,799 hectares of crop with a Crop Health and Protection Policy. Similarly encouraging is the rise in the number of LEAF Marque certified businesses where steps are being taken to minimise damage to beneficial organisms. This ongoing commitment by LEAF Marque businesses to protect crops in sustainable ways is hugely positive.

198,799

Hectares of crop on LEAF Marque certified businesses with a **Crop Health and Protection Policy**



Hectares of crop on LEAF Marque certified businesses where steps are taken to **minimise damage to beneficial species and non-target organisms**



2013	2014	2015
206,470	205,699	295,607





Focus on: Pollution Control and By-Product Management

The environment, human health and agricultural practices are intrinsically linked. Protecting our natural resources of water, soil and air is essential for a sustainable environment.

Well managed pollution control and by-product management is an important part of Integrated Farm Management. It helps make best use of resources, avoid pollution and save money as well as playing an important part in protecting water, soil and biodiversity and helping to conserve energy. In many cases 'farm wastes' are a valuable resource which when used properly can help save money and decrease pollution risk.

LEAF encourages its members to carry out a number of key practices for sustainable pollution control and by-product management. These include: completing a farm pollution risk assessment and action plan, reducing wastes, reusing and recycling wherever possible, monitoring greenhouse gas emissions and regularly carrying out field drainage and ditch management.

We have seen good progress in 2015 by LEAF Marque certified businesses in understanding the environmental impact of their operations, particularly the number of these businesses where a carbon footprint has been carried out, with 461 undertaken in 2015.

160,860

Hectares of crop on LEAF Marque certified businesses with a **Farm Pollution Risk Action Plan**



Number of LEAF Marque certified businesses where a **carbon footprint** has been carried out

2013

2014

2015




275



300



461



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of a precious
resource.**

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 **BASF**

We create chemistry



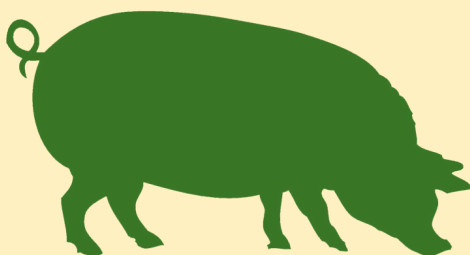
Focus on: Animal Husbandry

Optimising animal welfare, herd or flock health status and feeding are essential to any livestock business. Appropriate animal management can also contribute to improved grass production and reduced sward restoration costs. Suitable grazing management can help reduce topsoil and nutrient losses, improve the quality of water courses and enhance biodiversity. With appropriate planning and management, manures and slurries represent a valuable resource and can form a key fertiliser input, significantly reducing production costs.

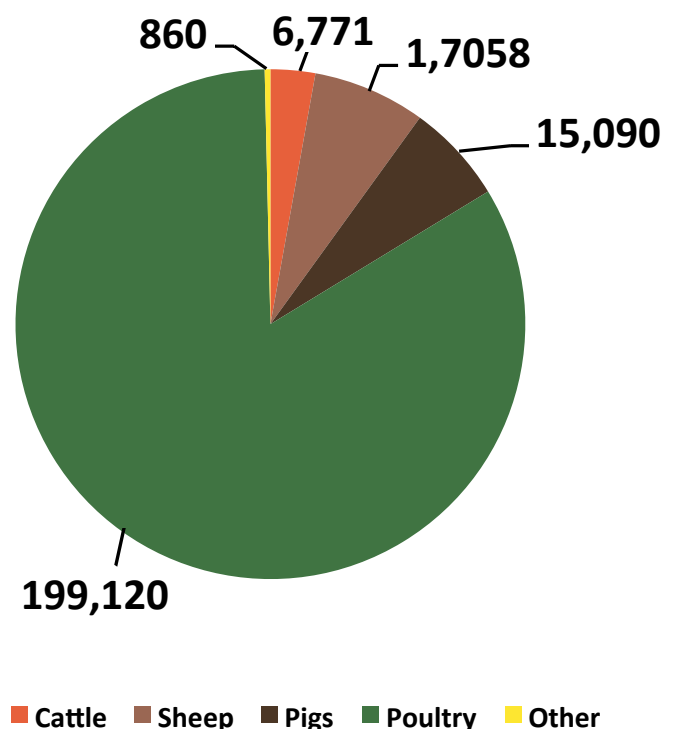
Animal health has a big impact on production, a key aspect of any successful livestock business. Poor animal husbandry is not only detrimental to animal welfare, but can also be at the root of a variety of production, environmental and food safety issues.

Integrated Farm Management focuses on a number of key practices to ensure optimum animal welfare. These are: production of Livestock Health Plans to ensure stock health is appropriately managed; development of breeding policies; ensuring the 'Five Freedoms' of animal welfare are adhered to; providing well ventilated, clean and dry housing; ensuring livestock handling facilities are safe and staff are appropriately trained and minimising disease risks. 2015 saw 220,533 animals on LEAF Marque certified businesses with a Livestock Health Plan.

220,533
animals on LEAF
Marque certified
businesses with a
Livestock Health Plan



Number of animals on LEAF Marque certified businesses





Case Study: Mercer Farming Ltd

Rearing happy and healthy pigs is all in the planning

Mercer Farming is a fourth generation family farming business in Staffordshire run by Roger Mercer and his sons Robert and Alec. The business includes arable farming with free range pork and chicken production and a diversified office rental business. They have a passion for rearing pork and poultry to the highest standards of care and animal welfare, following the principles of Integrated Farm Management. Alec Mercer, Director of Mercer Farming Limited explains more...

“The success of our business is based on the health and welfare of our pigs and poultry. Following LEAF’s IFM principles provides a useful framework for us to meet these objectives. We are really proud of what we do and the quality of our products. Achieving LEAF Marque certification provides important third party recognition of our efforts and is a great way for us to outwardly demonstrate our environmental commitments to our customers.

All our pigs, sold under the Packington Free Range Pigs label, are truly free-range. Born and living outdoors for their whole lives, they are reared to the highest welfare standards with plenty of space to roam, be sociable and wallow in the mud on sunny days. Our philosophy is ‘a happy pig is a healthy pig!’ They are well recognised by butchers and the RSPCA Freedom Foods, as the best you can get. We believe that the traditional free-range way of farming is paramount. It may take longer to produce pigs in this way and cost a little more, but the results are worth it and all our customers agree.

It’s the same with our chickens – their needs come first. We keep flock numbers low, they roam freely and are fed the finest maize and omega3 enriched corn to ensure healthy, strong growth.

One of the core requirements of LEAF Marque certification is producing a Livestock Health Plan. Developed in conjunction with our vet, it is key to ensuring we do all we can to prevent illness, reduce the risk of introducing disease and recognising, treating and controlling existing conditions to keep all our livestock healthy.”



Focus on: Energy Efficiency

Awareness of sustainability issues and responsible management of natural resources is a key part of Integrated Farm Management. For farming businesses, energy costs may only be a small percentage of turnover, but reducing them can increase profits and competitiveness. Similarly, energy efficiency is often the most effective first step in reducing a farm businesses' contribution to climate change.

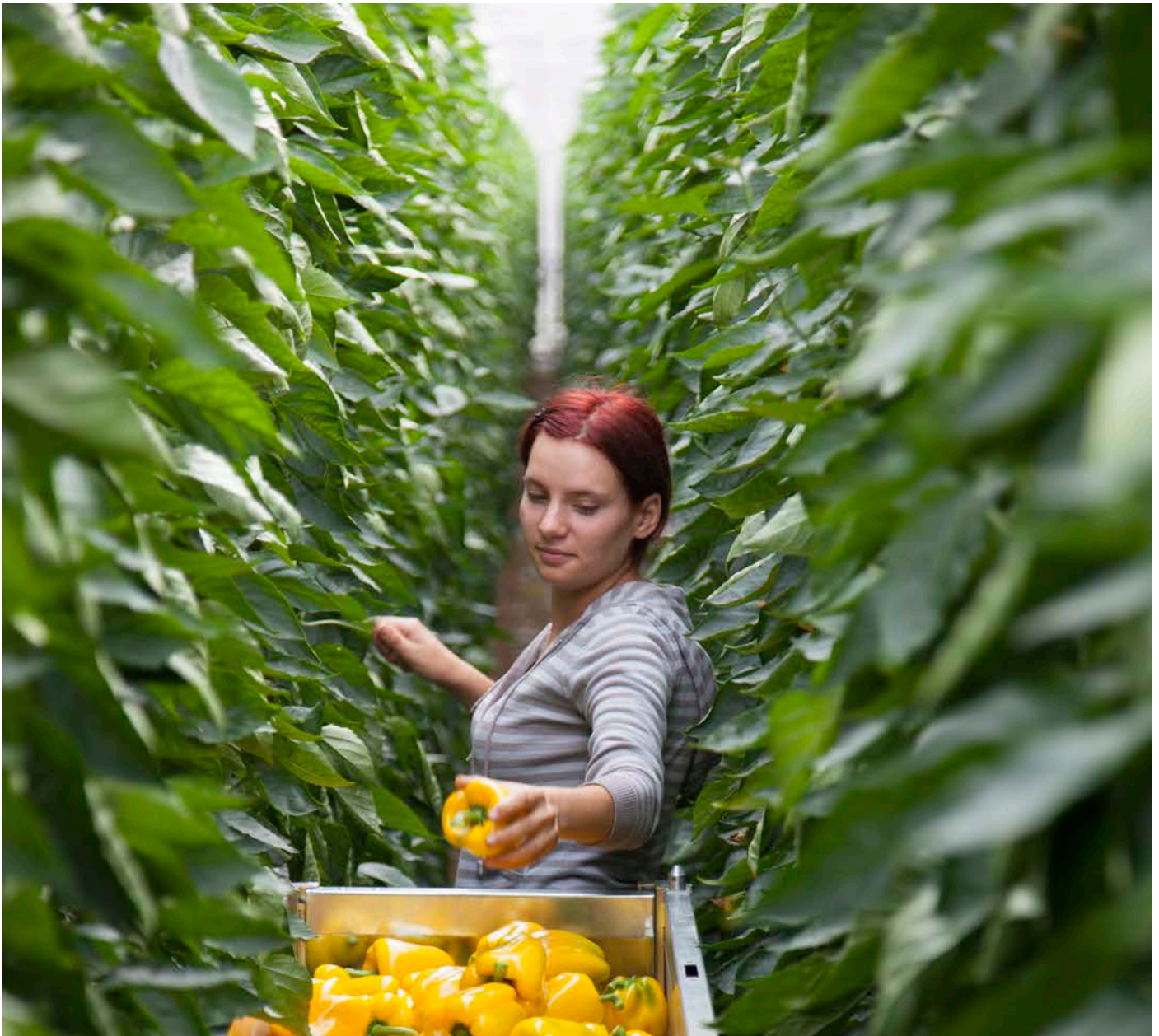
In agriculture, heating, field operations (including use of inputs, reduced reliance on fossil fuels), ventilation, lighting, air circulation and refrigeration equipment are the biggest energy users where efficiency improvement can provide the most significant savings. Integrated Farm Management advocates a number of key practices to help improve energy efficiency. These include: regularly monitoring and recording energy use and cost; implementing a programme to maintain and repair buildings, vehicles and equipment to ensure they are as energy efficient as possible; reusing heat energy and ensuring insulation is installed where required; annually reviewing each enterprise in respect of energy use and optimising inputs through precision farming techniques.

In 2015, we saw some 127,711 hectares of crop on LEAF Marque certified businesses measuring their energy consumption.

127,711

Hectares of crop on
LEAF Marque certified
businesses where
energy consumption is
monitored





Case Study: Tangmere Airfield Nurseries Ltd

Picking peppers and saving energy

The efficient use of energy is a crucial part of Integrated Farm Management. LEAF Demonstration Farm, Tangmere Airfield Nurseries Ltd is one of Europe's largest sweet pepper nurseries growing peppers to LEAF Marque standards. They are using innovative solutions to help efficient energy use throughout the business.

Thermal screens along with a Combined Heat and Power (CHP) system are used to provide their glasshouses with heat, power and CO². This CHP process involves burning gas in onsite engines designed to produce electricity. Within the combustion process, heat and flue gases are produced as 'waste products'. The electricity is sold onto the national grid (providing the business with income). The heat can then be stored in large buffer tanks, allowing the hot water to be used as required. The flue gases are cleaned using a catalytic converter and the CO² can be pumped into the glasshouse for improved plant growth. The CHP provides enough electricity for 10,000 homes and heats the 30ha of glasshouse throughout the year.

The CHP system was introduced to minimise waste and since its introduction, efficiency has been improved, resulting in a reduction in energy costs. Using Integrated Farm Management involving attention to detail, constant monitoring and innovative techniques, Tangmere Airfield Nurseries are continually improving their energy efficiency.



Focus on: Water Management

Water is a vital component of agricultural production. It is essential to optimise both yield and quality. Water has to be applied in the right amounts at the right time in order to achieve the right crop result. At the same time, the application of water should avoid waste of a valuable resource and be in sympathy with the environment as a whole. Understanding, measuring and assessing how water flows around the farm, and recognising how farming practices affect flows, helps farmers to manage water efficiently and reduce pollution risks. Careful and effective water management also helps farmers optimise profitability.

Through Integrated Farm Management, farmers aim to guarantee that the safety and quality of the water they use will satisfy the highest expectations of the food industry and consumers. In addition to ensuring that water management is produced under sustainable economic, social, environmental conditions. Key areas of water management within IFM include: producing a Water Management Plan and using it to identify areas for improvement; monitoring and recording irrigation applications; maintaining existing drains; reducing water use where practical, reusing water where possible and recycling water where appropriate.

LEAF Marque certified businesses are encouraged to measure water efficiency of irrigated crops and in 2015 we saw some 490 LEAF Marque certified businesses carrying out this practice.

Number of LEAF Marque certified businesses where **water efficiency of irrigated crops is measured**



2013	2014	2015
471	469	490





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Join LEAF



LINKING ENVIRONMENT AND FARMING

LEAF is a charity and membership organisation. We help our members deliver more sustainable farming through Integrated Farm Management. Our membership tools and services include:

- LEAF Sustainable Farming Review
- LEAF Innovation Centres and LEAF Demonstration Farms
- LEAF Marque certification scheme
- Integrated Farm Management Bulletins
- Access to our online Information Centre

You can support our work and get involved by becoming a member. Join us at www.leafuk.org



Focus on: Landscape and Nature Conservation

Environmental protection and enhancement is at the core of LEAF's Integrated Farm Management (IFM) and underpins all other sections of IFM. Responsible management of the landscape leads to enhanced biodiversity.

It can also help protect soil and water and improve land value, farm image and market opportunities. In addition, environmental land management will support a range of ecosystem services that benefit both the farm and the surrounding area. Landscape and wildlife are like any other aspects of the farm – what is achieved depends on the starting conditions, the capability of the land and the effort invested.

The rewards can be high providing the activities include the following key IFM practices: carrying out a landscape and nature conservation audit and enhancement plan to help identify the biodiversity and habitats on the farm, set out improvements and measure progress; providing safe nesting, habitats, winter and summer food for adults and chicks; creating and maintaining a range of field margins and working with bordering farms to create larger, more connected habitats and more stable farm ecosystems.

In 2015, 686 LEAF Marque certified businesses had a minimum of 5% of land for habitat management and there were 116,092 hectares of crop on LEAF Marque certified businesses with a Landscape and Nature Conservation and Enhancement Plan.

Number of LEAF Marque certified businesses with a **minimum of 5% of land for habitat management**



2013	2014	2015
632	613	686

116,092
Hectares of crop on LEAF Marque certified businesses with a **Landscape and Nature Conservation and Enhancement Plan**





Case Study: Blue Skies Green focus at Blue Skies

LEAF Marque producer, Blue Skies is a fresh fruit cutting business with production facilities in Ghana, Egypt and South Africa. It specialises in exporting high quality, just harvested, fruit products to Europe, supplying to a wide range of customers including Asda, Waitrose and Sainsburys. Here Stephan Morris explains what steps its growers are taking to increase biodiversity through IFM.

We source from raw material suppliers all over the world who invariably work in areas of high biodiversity. For this reason we are careful to ensure our farmers become a part of a concerted effort to increase biodiversity and never to destroy it. As well as ensuring all of our farmers are certified to GLOBALG.A.P. standards, all our farms are LEAF Marque certified. We were the second company in the world to achieve GLOBALG.A.P for a group of farmers, and the first company in the world to achieve LEAF Marque certification for a group of farmers. As a business, we make every effort to encourage and protect biodiversity by following the principles of Integrated Farm Management, which underpin LEAF Marque. Specifically the development of a Landscape and Nature Conservation Enhancement Plan has really helped us to set targets for biodiversity improvement. In Ghana, we are engaging in a programme of tree-planting and, wherever possible, we adopt a policy of 'purchase to preserve' to protect areas at risk from land degradation or deforestation. We have also engaged in an active campaign to stop illegal quarrying and 'sand-winning' which is causing widespread environmental damage to areas of land surrounding Accra.

Being LEAF Marque certified reassures our customers about what our suppliers are doing to minimise detrimental environmental impacts of farming operations, reducing the use of chemical inputs and ensuring a responsible approach to the health and safety of our people and those of our suppliers. It's that added reassurance and third party endorsement that set us apart.



Focus on: Community Engagement

A core part of Integrated Farm Management is community engagement. Reaching out to the general public is key to building public trust and understanding in food and farming.

A good relationship with the local community forms a shop front for farming businesses and enables farmers to explain how they farm and implement Integrated Farm Management. LEAF members carry out a range of activities in their local communities, including hosting farm visits for a wide range of groups, building relations with local schools, making donations (financial and in kind) to local projects, plus creating good will with the local community, through for example, hedge trimming and roadway clearing.

We are delighted to report that a significant number of LEAF Marque certified businesses are actively engaging with their local communities in various ways to show and explain a balanced and positive approach to farming. Some 706 businesses are regularly hosting farm visits and 501 are promoting good news stories about farming through their local media.

We are also encouraged to see a growing number of LEAF members participating in Open Farm Sunday and hosting school visits as part of Open Farm School Days throughout June.

706

LEAF Marque certified
businesses which host
farm visits



501

LEAF Marque certified
businesses which
promote good news
stories about farming
locally

Open Farm Sunday

LEAF set up Open Farm Sunday in 2006 and continues to manage this hugely successful event with support from leading food and farming organisations. It is firmly established as the farming industry's annual open day. A day for farmers to 'open their gates' and welcome the public onto their farms to build public trust and understanding in food and farming. To date over 1.6 million people have visited events since 2006.



www.farmsunday.org



Open Farm Sunday 2015

389
host farmers 

10,000
family, friends
and supporters
giving up their
time to give host
farmers a hand



291,396
visitors went to farms
to discover how their
food is produced and
where it comes from

that's a massive
40%↑
increase since 2014

40%↑ 
increase in first
time visitors to
Open Farm Sunday

49%↑ 
growth in visitors
from urban areas

 **82%↑**
Facebook fans

 **21%↑**
Twitter followers

Open Farm
Sunday trended
on twitter!

1,132 pieces of media coverage
including broadcast, print and online 



Next steps

2016 marks LEAF's 25th anniversary year. This is a momentous year for us, a chance to reflect on past achievements as well as look ahead and ensure we have our eyes firmly focused on the future and our strategy towards 2020 and beyond.

Building on what we have already achieved, it is clear we must continue to innovate for even greater impact. As we do so, we will keep firmly focused on our core objective:

To establish LEAF as the 'go-to' organisation for the delivery of more sustainable food and farming by:

- **Increasing** the adoption of more sustainable farming practices through Integrated Farm Management;
- **Improving** industry recognition and demand for sustainably sourced products;
- **Leading** a collaborative approach within the industry for better public engagement in food and farming;
- **Positively influencing** consumer attitudes towards and knowledge of, food, farming and the environment.

Heading in the right direction

The framework of Integrated Farm Management empowers and enables farmers to make positive changes to more sustainable farming. In addition, businesses that achieve LEAF Marque certification are able to celebrate and demonstrate their achievements in the market place. Change will be gradual. But there is little doubt that LEAF members are heading in the right direction.

The introduction of the LEAF Marque Chain of Custody in 2015 will further strengthen the robustness and transparency of the claims we make, helping to build consumer trust in the LEAF Marque logo and all it represents.

We are committed to ensuring our tools, resources and services continue to meet the changing needs of our members so they are prepared for the challenges ahead.

The theme for LEAF's 25th Year is '**Delivering Healthy Food and Farming Fit for the Future**'. We are committed to ensuring that our members' businesses are economically 'fit', environmentally 'fit' and socially 'fit'. These guiding principles will reach well beyond our 25th year helping us address difficult issues, such as mental health and obesity.

There is no doubt that industry and consumer awareness of LEAF's role in facilitating positive change to more sustainable farming is increasing. But more needs to be done. 2016 will be a key year for our collaborative work with various business coalitions to help build up our capability and ensure we continue to offer the farming industry positive solutions to the many challenges we are facing. All the progress and successes highlighted in this report would not be possible without the engagement, commitment and determination of all our members and the increasing number of stakeholders throughout the food chain who share our vision. To each and every one of you, thank you.

Together we are making a real difference.



LINKING ENVIRONMENT AND FARMING



Delivering Healthy Food and Farming Fit for the Future



Support our 25th anniversary year
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www.leafuk.org



Appendix

LEAF constantly reviews the monitoring and evaluation of its data and this will be an ongoing discipline. The key data used in LEAF's Global Impacts Report 2015 includes information from LEAF Membership¹, the LEAF Audit², the LEAF Sustainable Farming Review³, LEAF's Sustainability Survey⁴, Open Farm Sunday and Open Farm School Days⁵. The data is provided to the best of our knowledge.

¹LEAF Membership

LEAF Members voluntarily provide information in the process of becoming a LEAF member and/or renewing their LEAF membership annually. It is not verified. LEAF members are also encouraged to update this information on an annual basis through MyLEAF.

This information includes: farm size, hectares of production of a pre-defined list of crops, numbers of livestock. Note: for some aspects of the data, peas have been excluded.

For the purposes of this report, analysis of this data only includes LEAF Members who held a current, full LEAF Marque certificate at 31st December 2015.

²LEAF Audit

The LEAF Audit is an online self-assessment resource which was available to LEAF Members until December 2014 when it was replaced by the LEAF Sustainable Farming Review. It supported LEAF Members' implementation of Integrated Farm Management. The completion of the LEAF Audit was a requirement of the LEAF Marque Standard (v11.2) and this completion is independently verified. However, the specific responses within the LEAF Audit are self-assessed and not verified through third party inspection.

The LEAF Audit comprised over 370 statements based around the nine sections of Integrated Farm Management along with guidance information and links to support the user. Each question was required to be answered with one of the following 5 responses: Fully Achieved; Considerable Progress; Some Progress; Not Started; or Not Applicable.

For the purposes of this report, analysis of this data only includes LEAF Members who held a current, full LEAF Marque certificate at 31st December 2014 for 2014 data and at 31st December 2013 for 2013 data.

Unless otherwise stated, the data shows the total crop area (not farm business area) for LEAF Members that answered "Fully Achieved". It should be noted that LEAF Members who responded "Considerable Progress" or "Some Progress" may still meet the criteria required within the LEAF Marque Standard; however, this is not represented within this report.

³LEAF Sustainable Farming Review

The LEAF Sustainable Farming Review is an online self-assessment resource for LEAF members to support their implementation of Integrated Farm Management. The completion of the LEAF Sustainable Farming Review is a requirement of the LEAF Marque Standard (v.12.0) and this completion is independently verified. However, the specific responses within the Review are self-assessed and not verified through third party inspection.

The LEAF Sustainable Farming Review is composed of around 90 principles based around the nine sections of the Integrated Farm Management along with further guidance information and links to support the user. Each question must be answered in one of the following 5 ways: Fully Achieved; Considerable Progress; Some Progress; Not Started; or Not Applicable. Additionally, the user indicates which of the supporting practices which are associated with the principle they carry out.

For the purposes of this report, the data used for LEAF Sustainable Farming Review 2015 only includes LEAF Members who held a current, full LEAF Marque certificate at 31st December 2015.

Unless otherwise stated, the data shows the total crop area (not farm business area) for LEAF Members that answered "Fully Achieved". It should be noted that LEAF Members who responded "Considerable Progress" or "Some Progress" may still meet the criteria required within the LEAF Marque Standard; however, this is not represented within this report. The LEAF Sustainable Farming Review can be completed at any point during the year.

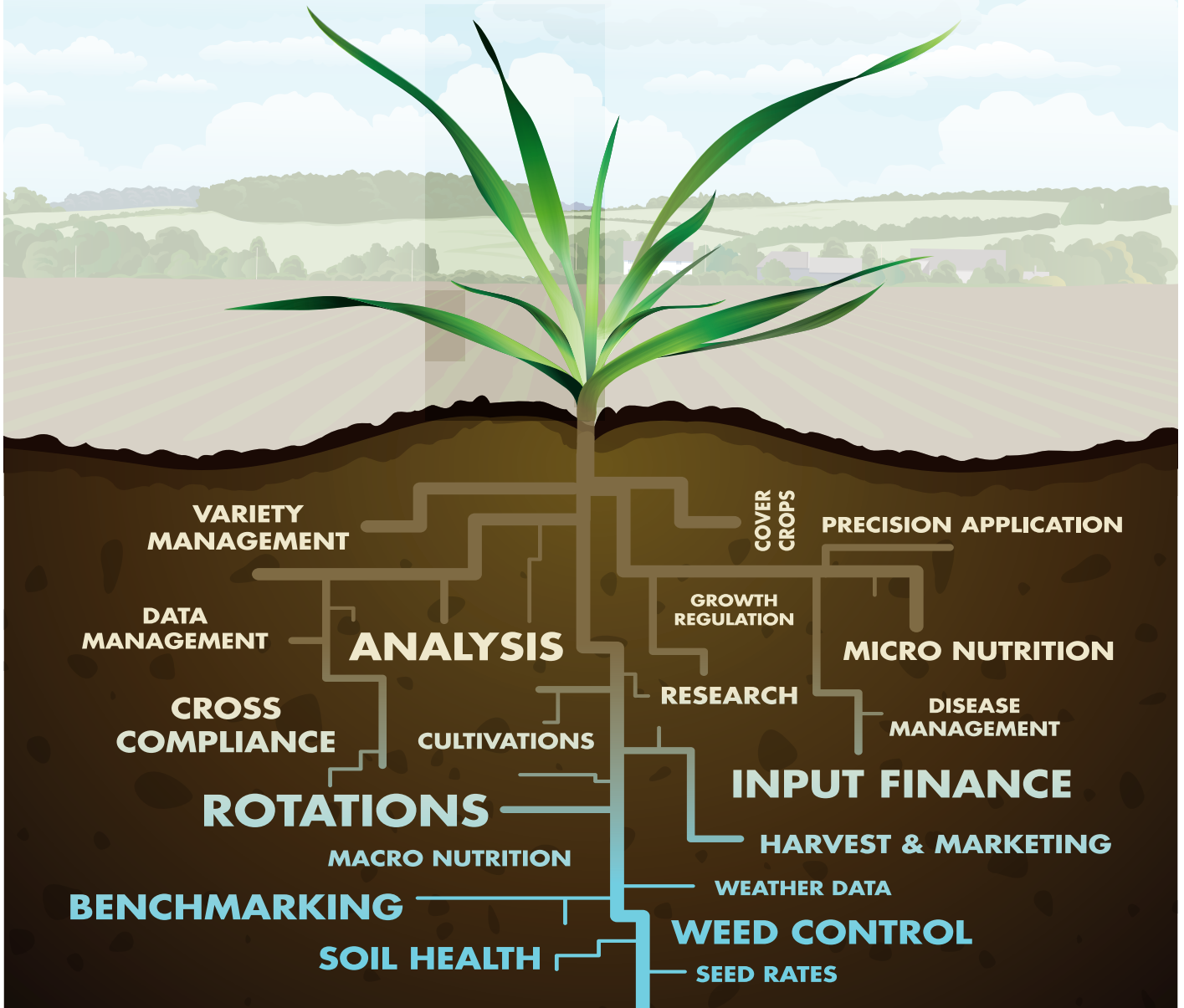
⁴LEAF's Sustainability Survey

Over the last 3 years LEAF has sent out a repeat questionnaire to its members to ascertain LEAF members' perception of their farms' sustainability.

⁵Open Farm Sunday and Open Farm School Days

Every year, LEAF carries out an extensive analysis of farms participating in Open Farm Sunday and Open Farm School Days events. One of the measurements taken is the number of visitors attending each event. Farmers participating in Open Farm Sunday are both LEAF members and non-LEAF members.

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