



## SCIENCE, POLICY AND PRACTICE NOTE 2

### Farmer and Adviser Attitudes to Integrated Farm Management





## The Issue

Integrated Farm Management (IFM) is a whole farm business approach that delivers more sustainable farming. It uses the best of modern technology and traditional methods to deliver prosperous farming that enriches the environment and engages local communities. IFM includes all areas of a farming business and one way of breaking down the approach is represented in the nine areas that make up LEAF's IFM wheel (Figure 1).

IFM promotes practical, site-specific practices in each of these areas and offers a useful framework for growers to continually improve their business and farm more sustainably. The term and associated practices however, are not universally understood or carried out. This part of the SIP project, therefore, undertook research to examine the extent to which farmers understand and use the framework, and how the project and further work could promote wider uptake.

## SIP's Response

An initial literature review found that there had been much historical confusion about the concept of IFM. Fieldwork conducted in the summer of 2015 set out to understand the attitudes towards IFM across the farming community in England and Wales. The following groups were asked a number of different questions about IFM, including whether they had heard of it, seen the diagram, how they would define it and to make suggestions about how to improve knowledge exchange around the idea:

- ▶ two arable farmer groups in Norfolk
- ▶ one arable adviser group [agronomists covering the East Anglia region]
- ▶ one dairy farmer group in Sussex
- ▶ one red meat farmer group in Central Wales
- ▶ 78 interviews with other farmers and advisers
- ▶ three industry-specific workshops for representatives from the supply chain



Figure 1. LEAF's IFM wheel



## What SIP Learnt

Following these interactions, it was clear that there was significant confusion about IFM as a concept. Livestock farmers, in particular, were rarely aware of the term, although arable farmers and advisers tended to know more about it. This could be because the term IFM developed out of the practices and terminology around Integrated Crop Management. Similarly, SIP Partner, LEAF, has been involved with promoting IFM for many years in the UK and their membership base favours arable and horticulture farmers over livestock. Despite this, the approach is equally relevant and useful in livestock systems.

Despite varying terminology use however, nearly all farmers suggested that they were carrying out some elements of IFM practices without necessarily using the specific phrase. Some respondents, particularly arable advisers, wondered how IFM differed from other terms used to explain methods and practices to farm sustainably such as Integrated Pest Management (IPM) and agro-ecology. While IPM is a crucial part of IFM, its coverage however is limited to the management of pests in crops, whereas IFM covers the whole farm.

Since the summer of 2015, as well as researching IFM, SIP has been disseminating information. The project has developed many of the practices that fit well with an IFM approach and these have been well communicated within the study areas. The knowledge exchange partners within the project have been communicating these practices and SIP tools more widely within their own and other networks. The SIP findings have also fed in to existing industry tools, training and networks such as BASIS IFM training, the LEAF Sustainable Farming Review, an online management decision-making IFM tool and demonstration farms.

## Opportunities for Policy and Practice

The low awareness of IFM as a concept, combined with its overlap with other ideas, suggests the exact definition and its practical use needs to be better communicated. A specific area that needs to be better understood by farmers and advisers is the role IFM can have in improving profitability as well as longer term economic sustainability. IFM delivers this though better attention to detail, improved efficiencies and contribution to greater resilience in the farming system in areas such as soil management and crop protection.

One challenge highlighted by advisers, a key trusted source of information, was the fact that many of them are specialists, and not necessarily trained to give integrated advice across the whole business (particularly on aspects like community engagement). Encouraging advisers to train in and subsequently offer more integrated advice would be a key learning here. This could be facilitated by encouraging more diverse training programmes and ensuring continual professional development requirements include attending different events.

It is clear that if IFM as a concept is to be encouraged further, knowledge exchange activities should address the whole farming community, from grower, to adviser, through to farming organisations. **These knowledge exchange activities would be most productive if they utilised existing trusted support networks, such as advisers and peer-to-peer farming groups.**





## Author

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## Further Resources

David C. Rose, William J. Sutherland, Andrew Barnes, Fiona Borthwick, Charles Ffoulkes, Clare Hall, Jon Moorby, Phillipa Nicholas-Davies, Susan Twining, and Lynn V. Dicks *in revision* 'Thinking holistically for sustainable agriculture: understanding farmer, advisor, and industry attitudes towards integrated farm management, *Land Use Policy*

The below report can be accessed via the Defra website. Please visit: <http://bit.ly/2sN9WUW>

Rose, D., Dicks, L., Sutherland, W., Parker, C., Lobley, M. and Twining, S. (2016). *Final Report for Work Package 1.3A: Identifying the characteristics of effective decision support and guidance systems*. Report for Defra project LM0302 Sustainable Intensification Research Platform Project 1: Integrated Farm Management for Improved Economic, Environmental and Social Performance

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*The Sustainable Intensification Research Platform (SIP) is a multi-partner research programme comprising academia, farmers, industry experts, environmental organisations, and policymakers.*

*Funded by Defra and the Welsh Government, the platform explores the opportunities and risks of Sustainable Intensification (SI) from a range of perspectives and landscape scales across England and Wales.*

*The Platform, run from 2014-17, has investigated ways to increase farm productivity, reduce environmental impacts, and increase the benefits that agricultural land provides to society.*



SUSTAINABLE INTENSIFICATION  
RESEARCH PLATFORM

## More Information

Visit: [www.siplatform.org.uk](http://www.siplatform.org.uk)

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Mwy o Wybodaeth

Rhaglen ymchwil aml-bortner yw'r Plafform Ymchwil i Ddwyasa Cynaliadwy (SIP) sy'n cynnwys academa, ffermwyr, arbenigwyr y divydiant, sefydliadau amgylcheddol, a gwneuthurwyr polisi. Ariennir y plafform gan Defra a Llywodraeth Cymru, ac mae'n archwilio'r cyfleoedd a'r risgiau sydd ynghlwm wrth Ddwyasa Cynaliadwy o amrywiol safbwyntiau a g'raddfeydd tirwedd ar draws Cymru a Lloegr. Mae'r Plafform, a oedd yn gweithredu o 2014-17, wedi ymchwilio i ffyrdd o gynyddu cynhyrchiant ffermydd, lleihau effeithiau amgylcheddol, a chynyddu mantision tir amgelyddol i'r gymdeithas.

**Diolch iadau**  
Cydnabyddir yn ddolchgar y cyllid a gafwyd gan Defra a Llywodraeth Cymru ar gyfer y Plafform Ymchwil i Ddwyasa Cynaliadwy (SIP). Rydym hefyd eisau mynegi ein diolch i'r ffermwyr a'r cynghorwyr yng Nghymru a Lloegr sydd wedi bod yn ddigon caredig i gymryd rhan yn yr arolygon a gweithdai SIP yn eu hamser eu hunain. Diolch hefyd i LEAF (Linking Environment and Farming) am eu sylwadau a'u hawgrymiadau yn ystod y gwaith o ddarparu'r Nodyn Gwyddoniaeth, Polisi ac Ymarfer hwn, ac am gael atgynhyrchu'r lliniau.

Gellir darllen yr adroddiad isod ar wefan Defra: <http://bit.ly/2SN9WUW>  
Rose, D., Dicks, L., Sutherland, W., Parker, C., Lobley, M. and Twining, S. (2016). *Final Report for Work Package 1.3A: Identifying the characteristics of effective decision support and guidance systems. Report for Defra project LM0302 Sustainable Intensification Research Platform Project 1: Integrated Farm Management for Improved Economic, Environmental and Social Performance*

**Adnoddau pellach**  
David C. Rose, William J. Sutherland, Andrew Barnes, Fiona Borthwick, Charles Foulkes, Clare Hall, Jon Moorby, Phillipa Nicholas-Davies, Susan Twining, and Lynn V. Dicks *dan adolygiad* 'Thinking holistically for sustainable agriculture: understanding farmer, advisor, and industry attitudes towards integrated farm management, Land Use Policy'

David Rose (Prifysgol East Anglia, ond fe ymgwyrodd y gwaith SIP tra ym Mhrifysgol Caergrawnt), Alice Midmer (LEAF), Caroline Drummond (LEAF)





## Yr Hyn a Ddysgodd SIP

Yn dilyn y digwyddiadau rhyngweithio hyn, roedd yn amlwg bod cyn ddryswch ynghylch Dull Integredig o Reoli Ffermydd fel cysniad. Prin iawn oedd nifer y ffermywr da byw, yn arbennig, a oedd yn ymwybodol o'r term, ond roedd ffermywr a chynghorwyr â'r yn tueddu i wybod mwy amdano. Efallai mai'r rheswm dros hyn yw'r ffaith bod y term Dull Integredig o Reoli Ffermydd wedi datblygu o ganlyniad i'r arferion a'r dermoleg sydd ynghwlm wrth Ddull Integredig o Reoli Cnydau. Yn yr un modd, mae un o Bartneriaid SIP, LEAF, wedi bod yn rhan o'r broses o hyrwyddo Dull Integredig o Reoli Ffermydd am flynyddoedd lawer yn y DU ac mae ei aelodaeth yn ffafrio ffermywr â'r garddwriaeth yn hytrach na ffermywr da byw.

Er gwaeathaf hyn, mae'r dull gweithredu yr un mor berthnasol a defnyddiol mewn systemau da byw. Er gwaeathaf yr amrywiad o ran y defnydd o dermoleg, fodd bynnag, awgrymodd bron pob ffermywr eu bod yn cyflawni effennau o Ddull Integredig o Reoli Ffermydd er nad oeddent o reidwydd yn defnyddio'r term penodol hwn. Roedd rhai ymatebwyr, yn arbennig cynghorwyr â'r, yn pendroni ynghylch sut yr oedd Dull Integredig o Reoli Ffermydd yn wahanol i'r termau eraill a ddefnyddiwyd i egluro dulliau ac arferion ffermio cynaliadwy, fel Dull Integredig o Reoli Plâu ac agro-ecoleg. Er bod Dull Integredig o Reoli Plâu yn rhan hanfodol o Ddull Integredig o Reoli Ffermydd, mae ei gwmpas, fodd bynnag, yn gyflyngedig i reoli plâu mewn cnydau, ond mae Dull Integredig o Reoli Ffermydd yn cwmpasu'r fferm gyfan.

Ers haf 2015, yn ogystal ag ymchwilio i Ddull Integredig o Reoli Ffermydd, mae SIP wedi bod yn dosbarthu gwybodaeth. Mae'r prosiect wedi datblygu llawer o'r arferion sy'n cyd-fynd yn dda â'r Dull Integredig o Reoli Ffermydd ac mae'r rhain wedi'u cyfathrebu'n dda o fewn ardaloedd yr astudiaeth. Mae'r partneriaid cyfnewid gwybodaeth o fewn y prosiect wedi bod yn lledaenu'r arferion hyn ac offer SIP yn ehangach o fewn eu rhydwethiau eu hunain a rhydwethiau eraill. Mae canfyddiadau SIP hefyd wedi'u defnyddio mewn offer, hyfforddiant a rhydwethiau cyfredol y diwydiant, fel hyfforddiant BASIS ar Ddull Integredig o Reoli Ffermydd, Adolygiad Ffermio Cynaliadwy LEAF, offer yn gwneud penderfyniadau rheoli ar-lein ar gyfer Dull Integredig o Reoli Ffermydd a ffermydd arddangos.

## Cyflioedd ar gyfer Polisi ac Ymarfer

Mae'r lefel isel o ymwybyddiaeth o Ddull Integredig o Reoli Ffermydd fel cysniad, ynghyd â'r ffaith ei fod yn gorygffwrdd â syniadau eraill, yn awgrymu bod angen i'r union ddiffiniad a'i ddefnydd ymarferol gael eu cyfathrebu'n well. Un maes penodol y mae angen i ffermywr a chynghorwyr ei ddeall yn well yw rôl Dull Integredig o Reoli Ffermydd o ran gwella profffioledeb yn ogystal â chynaliadwyedd economaidd yn y tymor hwy. Mae Dull Integredig o Reoli Ffermydd yn darparu hyn drwy roi mwy o sylw i fanylion, gwella effeithlonrwydd a chyfranau at wneud y system ffermio'n fwy cydnorth mewn meysydd fel rheoli pridd ac amddiffyn cnydau. Un her a amlygwyd gan gynghorwyr, sy'n ffynhonnell wybodaeth allweddol y gellid ymddiried ynddi, oedd y ffaith bod llawer ohonynt yn arbennigwyr, ac nid o reidwydd wedi'u hyfforddi i roi cyngor integredig ar draws y busnes cyfan (yn arbennig ar agweddau fel ymgyylltu â'r gymuned). Byddai annog cynghorwyr i hyfforddi ym maes cyngor integredig a chynigi mwy o gyngor integredig drwy hynny yn wers bwysig i'w dysgu. Gellid hwylyso hyn drwy annog rhagleni hyfforddi mwy amrywiol a sicrhau bod gofynion datblygiad profesiynol parhaus yn cynnwys mynychu gwahanol ddiwyddiadau.

Os bwriedir annog Dull Integredig o Reoli Ffermydd ymhellach fel cysniad, mae'n amlwg y dylai gweithgareddau cyfnewid gwybodaeth dargedu'r gymuned ffermio gyfan, o'r tyfwr, i'r cynghorwyr, i'r sefydliadau ffermio. Byddai'r gweithgareddau cyfnewid gwybodaeth hyn yn gynhyrchio iawn pe baent yn defnyddio rhydwethiau cymorth yr ymddiriedwyd ynddynt **eisoes, fel cynghorwyr a grwpiau ffermio cymheiriaid.**



### Y Problem

Ddull busnes fferm-gyfan sy'n darparu ffermio mwy cynaliadwy yw Dull Integredig o Reoli Ffermydd. Mae'n defnyddio eiffennau gorau technoleg fodern a dulliau traddodiadol i ddarparu ffermio ffyniannus sy'n cyfoethogi'r amgylchedd ac yn ymgysylltu â chymunedau lleol. Mae Dull Integredig o Reoli Ffermydd yn cynnwys pob maes sydd ynghlwm wrth fusnes ffermio ac mae un ffordd o ddadansoddi'r dull gweithredu hwn yn cael ei dangos yn y naw maes sy'n rhan o olwyn Dull Integredig o Reoli Ffermydd LEAF (Figur 1).

Mae Dull Integredig o Reoli Ffermydd yn hyrwyddo arferion hyn ac yn cynnig fframwaith defnyddio ar gyfer tyfwyr i wella'u busnes yn barhaus a ffermio mewn dull mwy cynaliadwy. Fodd bynnag, ni chaffi y term nat'r arferion cysylltiedig eu deall na'u cyflawni gan bawb. Felly, cynhaliodd y rhan hon o broiect SIP waitn ymchwil i archwilio i ba raddau y mae ffermydd yn deall ac yn defnyddio'r fframwaith, a sut y gallai'r prosiect a gwaith pellach gynyddu'r nifer sy'n ei ddefnyddio.

### Ymateb SIP

Canfu adolygiad cychwynnol o lenyddiaeth y bu llawer o ddrwsch hanesyddol ynghylch y cysyniad o Reoli Ffermydd yn Integredig. Nod gwaith maes a gynhaliwyd yn ystod haf 2015 oedd deall yr agweddau tuag Dull Integredig o Reoli Ffermydd ar draws y gymuned ffermio yng Nghymru a Lloegr. Gofynnwyd nifer o gwestiynau gwahanol ynghylch Dull Integredig o Reoli Ffermydd i'r grwpiau canlynol, gan gynnwys a oeddent wedi clywed amdano, wedi gweld y diagram, sut y byddent yn ei ddiffinio a gwneud argymhellion ar sut i wella'r broses o gyfnwidi gwytboddaeth am y syniad:

- dau grwp o ffermydd ar yn Norfolk
- un grwp cynghori ar [agronomegwyr sy'n cwmpasu rhanbarth East Anglia]
- un grwp o ffermydd godro yn Sussex
- un grwp o ffermydd cig coch yng Nghanolbarth Cymru
- 78 o gyfweiliadau â ffermydd a chynghorwyr eraill
- tri gweithdy yn benodol i ddiwydiant ar gyfer cynrychiolwyr o'r gadwynnau gyflenwi



Figur 1. LEAF's IFM wheel



NODYN GWYDDONIAETH, POLISI AC YMARFER 2  
Agweddau Ffermwyr a Chynghorwyr tuag  
at Ddulliau Integredig o Reoli Ffermydd

