

# "Resource Efficiency in Practice - Closing Mineral Cycles"







#### **Presentation Overview**

- ✓ Comments on Report
- ✓ Background
- ✓ Collaborative & voluntary
- ✓ Objectives
- ✓ Whole farm approach
- ✓ Resource Efficiency Assessments (REA'S) / Cost Saving Studies
- ✓ Plans for 2014





#### Comments on Report

✓ No Substantial Reference to Existing KT Measures

✓ No engagement with key stakeholders

- ✓ Conclusion
  - ✓ Report incomplete





## Knowledge Transfer (KT)Measures

- ✓ Beef Technology Adoption Programme
  - ✓ Initiative to encourage cattle farmers to adopt new technologies to improve their enterprise.
- ✓ Beef Data Programme
  - ✓ Assists farmers in improving the genetic quality of their livestock
- ✓ Sheep Technology Adoption Programme
  - Designed to improve technology transfer on sheep farms.





# Knowledge Transfer (KT)Measures

#### ✓ Carbon Navigator

Developed by Teagasc and Bord Bia as a management tool which allows farmers to set improvement targets in key management areas and see the results for their enterprise in terms of environmental and economic performance.

#### ✓ Teagasc BETTER Farm Programme

 Transfer usable knowledge from research to practicing farmers Assists farmers in improving the genetic quality of their livestock

### **Smart Farming Origin**





- Gap identified in Resource Efficiency Programme
- Increasing Agri-Environmental Obligations
- Irish Agriculture for 2013
  - Value of Outputs = €7.1 billion
  - Cost of inputs = €5.5 billion
- Even an increase of 1% in resource efficiency on-farm potential savings of €55 million





### Background

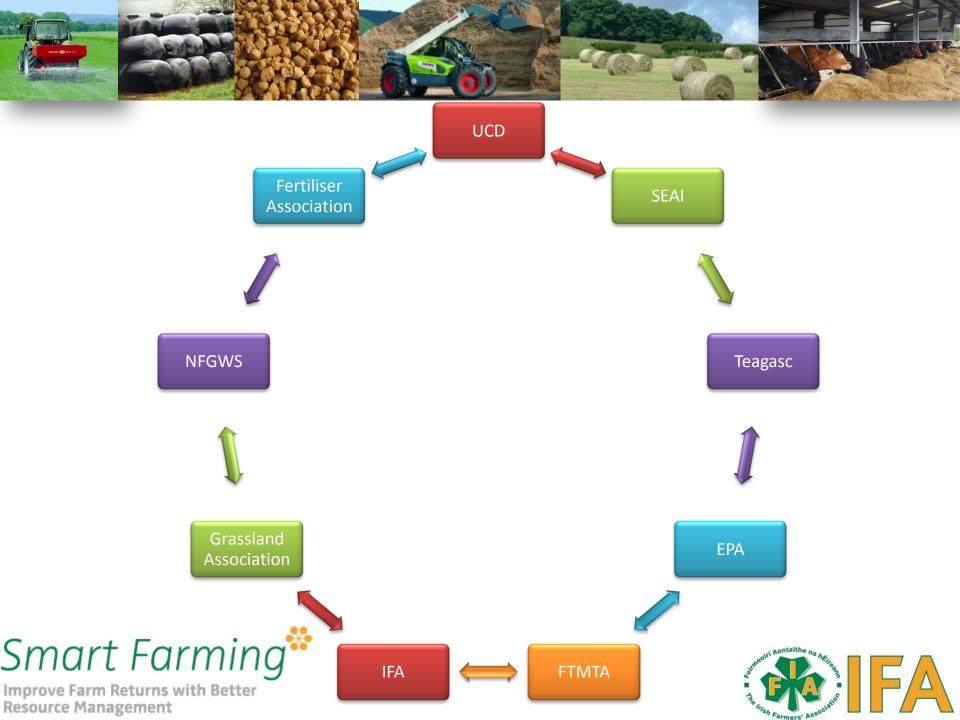




- Smart Farming Initiative collaborative & voluntary
- Collaboration
  - Using existing knowledge and expertise
  - Improve farm returns and deliver environmental benefits
  - Through better resource management
- Implementing Partner
  - Irish Farmers' Association









#### Whole farm approach

- Top tips on how to save money and maximise outputs
  - i.e., doing the simple things better

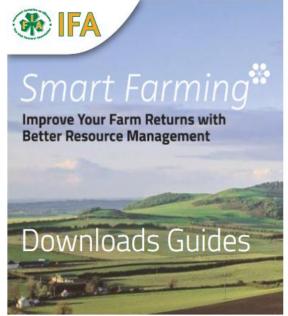








## **Smart Farming Guide**



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#### Dissemination & Implementation



- Smart Farming Guide
- www.smartfarming.ie
- IFA has 87,000 members and network of 947 branches
- Smart Phone App and IFA Farm Directory www.ifarm.ie
- National Conference 6<sup>th</sup> November
- Farmers Journal 12 page supplement – readership 100,000





## Example of a CSS



Focus Area	Action	Economic Return	<b>Environmental Dividend</b>
Soil Fertility	Apply Lime 2.5 ton/ac – 60% of the farm  • Low soil pH  • Cost €4,500	Release equivalent of 2 bags of CAN per acre  Save 9 ton of CAN per year = €2,610  Payback period = 2 years	More efficient use of nutrients  Reduced Risk of Run-off





### Example of a CSS



Focus Area	Action	Economic Return	<b>Environmental Dividend</b>
Water	<ul> <li>Invest €7750 in water</li> <li>20 troughs @ €200</li> <li>1500m pipe @ €2.5</li> </ul>	Cows currently yield 5500 L  +10% yield @ €0.1/L profit = €4,400  Benefits in less than 2 years	Increased output/unit of production Increased Resource Efficiency
Feed	Measured the amount of feed that was being delivered to the cows	Saving by feeder adjustment €3300	Improved feed efficiency Reduced GHG emissions





#### Activities in 2014



- 30 on-farm CSS
- Across all farm types
- Farmers informing farmers
- Findings of case studies uploaded to web and app
- National seminar
  - Nov 6<sup>th</sup>





### Resource Efficiency - the double dividend!





#### Acknowledgement



#### THE SMART FARMING TEAM

#### The people below have prepared this guide to help improve farm returns and reduce farm bills.

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Stan Lalor is a research officer with Teagasc working in the crops environment and land use programme at Johnstown Castle, Co Wex-

ord. He is president of the Fertilizer Association of Ireland.

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Fommy Boland is a lecturer and researcher in ruminant nutrition and sheep production at University College Dublin. From a mixed

sheep and beef farming background, Tommy graduated from UCD with a PhD in animal nutrition in 2005.



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Harold chairs the Smart Farming working group. He is a dairy farmer from Summerhill, Court-

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Thomas is the programme manager for the Smart Farming initiative. He is executive to the



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100th year in business.

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providing training courses.









Thank you

www.smartfarming.ie and www.ifarm.ie



