

Monitoring Farm Performance

Using FADN data for Ireland

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Overview

- Monitor Farm Performance – economic and environmental
- Enterprise level – mixed farms dairy versus beef etc
- Annual report – enterprise factsheets & sustainability factsheets
- Performance of client farms
 - Achievement of targets
- Representative & objective data set



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Enterprise Level Analysis

- Data is disaggregated on an enterprise level
- Arrive at a gross margin on a per unit of production level
- Allocate fixed costs and produce net margins
- Analysis along the various factors of production
 - Soil type, farm size, region, farmer characteristics

Average gross and net margin c/litre: Dairy Farms

	2011	2012	Change (%) '11 to '12
Milk Price	35.3	32.3	-9
Total Gross Output	35.6	33.3	-6
Concentrate Costs	4.5	6.0	+35
Pasture and Forage Costs	4.2	4.8	+14
Other Direct Costs	3.7	4.3	+16
Total Direct Costs	12.4	15	+21
Gross Margin	23.2	18.3	-21
Energy and Fuel	2.3	2.3	0
Hired Labour	0.5	0.5	0
Other Fixed Costs	7.5	7.8	+4
Total Fixed Costs	10.3	10.6	+3
Net Margin	12.9	7.7	-41

Performance Analysis: Top, Middle & Bottom REDP

	<i>Top</i>	<i>Middle</i>	<i>Bottom</i>
Stocking rate (Cows/Hectare)	2.24	1.85	1.59
Milk Sold per hectare (litres)	12,571	9,200	6,759
Concentrates fed per cow (kg)	1,049	959	1,026
Concentrates fed per litre produced (kg)	0.18	0.19	0.24
Gross output per hectare (€)	4,356	3,055	2,151
Direct Costs per hectare (€)	1,722	1,335	1,189
Gross Margin per hectare (€)	2,634	1,720	962



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The economic return to extension REDP

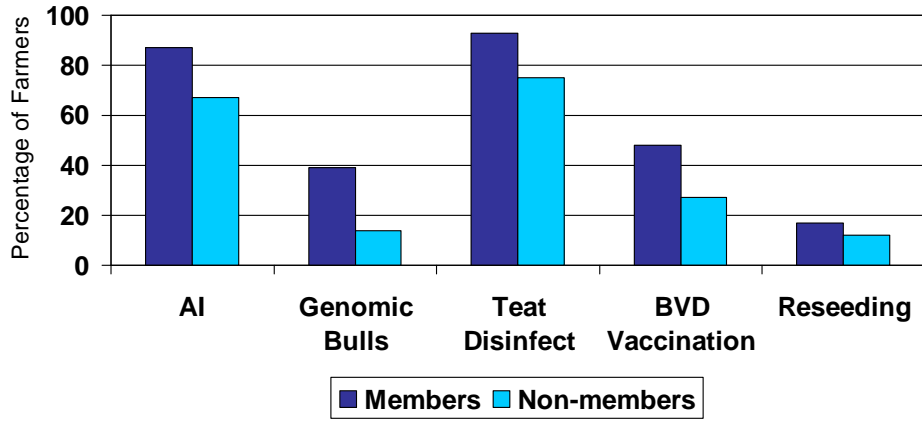
- Important to understand the factors affecting performance
 - Impact of extension programmes
- Is there a quantifiable return to group membership?
 - Technology adoption
 - Technical performance
 - Farm Profit
- FADN data available for participants and non-participants



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Results – Technology Adoption

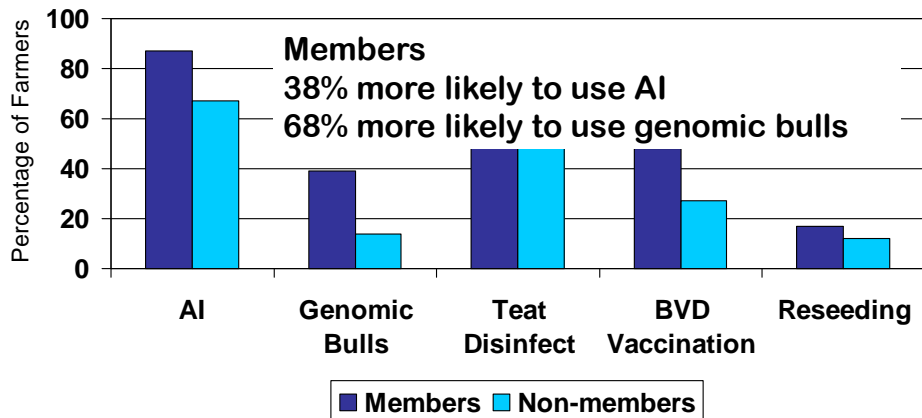
REDP



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Results – Technology Adoption

REDP



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Results – Technical Performance

REDP

Percentage of farms achieving targets	Members	Non-Members
Milk yield per cow: $\geq 5,200$ litres	56	42
Milk solids per cow: ≥ 378 kg	53	37
Somatic Count: $\leq 200,000$ cells/ml	52	23
Concentrate feed: ≤ 750 kg per cow	57	39



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Results – Technical Performance

REDP

Performance Indicator	Members	Non-Members	Return
Grazing Season (days)	248	230	12
SCC ('000s cells/ml)	245	295	40
Deliveries per cow (litres)	4888	4130	370



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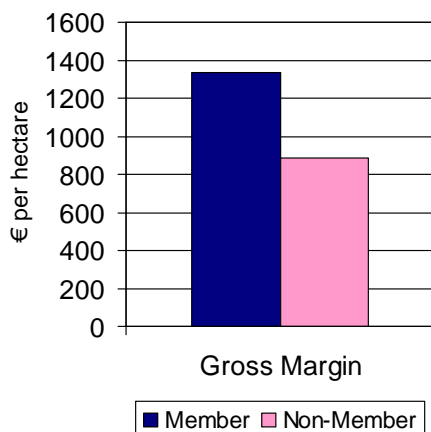
Does it translate to profit?

- Are profits higher on members' farms?
 - Need to control for characteristics of the farm and farmers
 - Selection bias is important



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Profit Indicators



- Gross Margin €450
- Control farm factors
- €185 higher for members
- Effect on output and costs
 - greater on costs



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Performance - Sustainability

- Launching a sustainability report this year
- Full life-cycle analysis of milk production
- Carbon measure per litre of milk produced
- Adoption of environmental friendly practices
- Assessing economic and environmental performance jointly.

Conclusions

- Enterprise analysis often of more interest than whole farm analysis
- Useful for monitoring performance
 - Year on year, inter farm, impact of extension programmes
- Environmental performance along with economic also becoming more important