AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

The Irish Agriculture and Food Development Authority

Strategies to reduce feed prices

Peadar Lawlor & Michael Martin

Introduction

- Feed - 70% of the cost of producing a pig
- Feed costs higher in Ireland vs. other EU countries
- Not possible to completely eliminate this differential
- BUT potential for major improvement
- Essential for competitiveness - home and export
- Particularly important in times of high feed ingredient prices

Production Costs (c) per kg Dead Weight

	Year				
	2006	**2007**	**2008**	**2009**	**2010**
Feed	79.6	94.3	106.7	91.9	90.4
Common	36.8	37.8	37.0	32.9	34.5
Herd Specific	6.6	8.5	9.3	7.0	5.5
Total	123.0	140.6	153.0	131.8	130.4
Feed as % of total	**64.7**	**67.1**	**69.3**	**69.7**	**69.3**

(PigSys 2010)

Feed cost / kg dead weight in EU countries (2010)

Country	Feed cost (c/kg DW)	Differential vs Ireland (c/kg DW)
Denmark	78.9	-10.7
Netherlands	75.8	-13.8
France	76.4	-13.2
Germany	80.7	-8.9
Avg. (DK, NL, Fr, G)	**78.0**	**-11.7**
Great Britain	98.2	+8.6
Spain	91.3	+1.7
Ireland	**89.6**	**-**

Feed is 70% of our costs &

It costs us ~12c more /kg DW than our competitors

Feed cost per kg is determined by

1. Feed efficiency

   Feed used (kg) per kg dead weight

2. Average composite feed price per tonne

   Takes account of the amounts of the different diets used and the price per tonne of each

Feed / kg DW and avg composite feed price / tonne in selected EU countries 2010

Country	Feed / kg Dead Weight (kg)	Avg. Composite feed price (€/tonne)	Differential vs Ireland (€/tonne)
Denmark	3.73	212	-31
Netherlands	3.45	220	-23
France	3.76	203	-40
Germany	3.77	214	-29
DK, NL, FR, DE	**3.68**	**212**	**-31**
Great Britain	3.92	250	+7
Spain	3.84	238	-5
Ireland	**3.68**	**243**	-

Feed Efficiency (FCE)

- Comparison of FCE confused by differences between countries
  - in slaughter weight and
  - whether males are castrated or not
- In DK, SP, GB and IRL slaughter weights are relatively low
- In the other countries slaughter weights are higher at 88-93kg dead
- IFIP standardise over a 8-120kg live weight range

ADG and FCE over 8-120kg (2010)

Country	ADG (g/day)	FCE
Denmark	726	2.65
Netherlands	691	2.48
France	688	2.68
Germany	670	2.62
Great Britain	658	2.72
Spain	596	2.86
Ireland	**687**	**2.58**

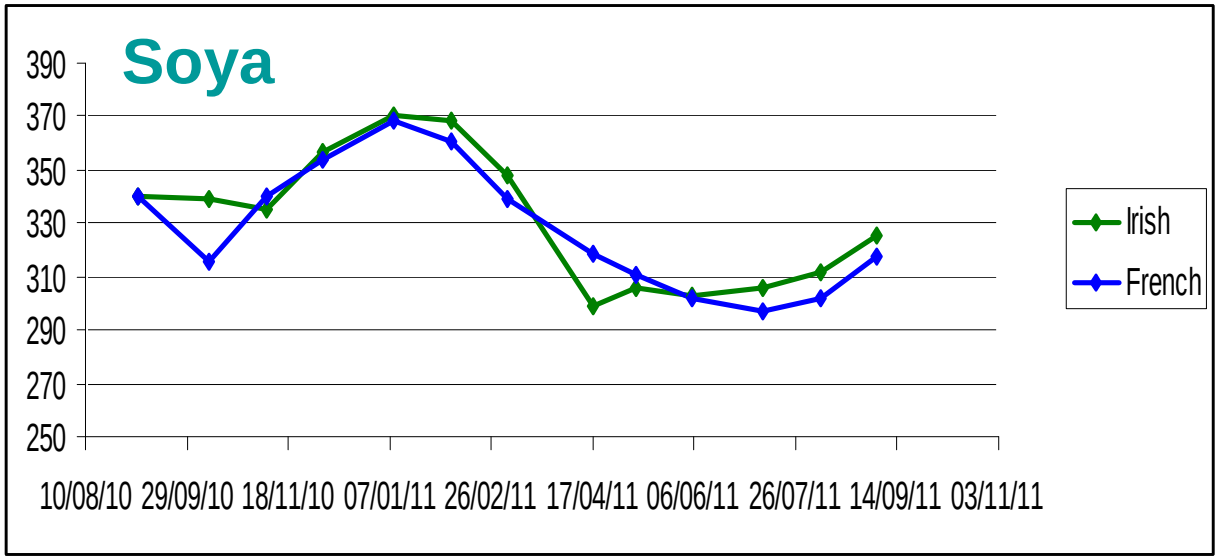
- Compares favourably with that in the other countries
- But diet specifications differ?

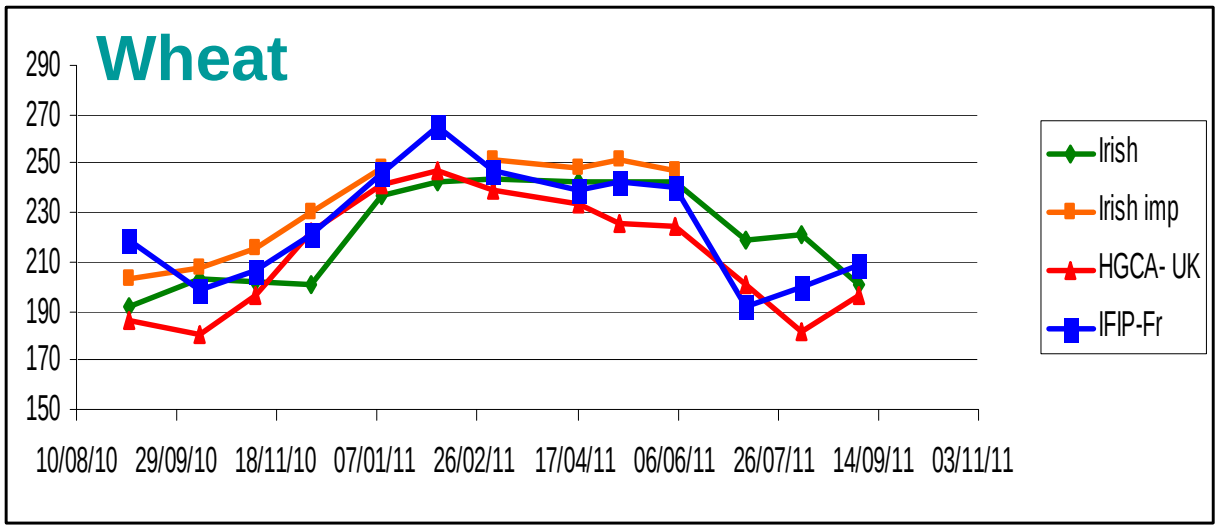
Strategies to reduce the price of a composite tonne of pig feed

Feed Price per tonne

- Sept. composite feed price for IRL was €304/tonne
- This is higher than in most other EU countries
- Between €23 and €40 per tonne higher than for the NE, DK, FR and DE
- What can we do to close this gap?

1. Higher pig feed ingredients prices





Normal Fluctuations

But

Higher Transport costs

2. Higher usage of the more expensive diets

Country	"Rearer" feeds kg/pig)	Differentia vs Ireland (kg/pig)	Average price of "rearer" Feeds (€ / tonne)	Rearer feed cost per pig (€ /pig)
Denmark	40.6	**-13.4**	279	11.33
Netherlands	28.3	**-25.7**	314	8.89
France	41.2	**-12.8**	312	12.85
Germany	38.1	**-15.9**	285	10.86
GB	52.7	**-1.3**	272	14.33
Spain	21.8	**-32.2**	389	8.48
Ireland	**54.0**	**-**	**352**	**19.00**

Diet usage for growing pigs (weaning to 100 kg)

Diet	PigSys 2010	Target
Sow	51.9	51.9
Creep	3.7	3
Link	5.9	5
Weaner	45.2	35
Finisher 1	176	80
Finisher 2		109
TOTAL	282.7	283.9
FCE	2.48	2.49
Avg Price € / tonne	**304**	**296**

Reduce Kgs of starter, link and weaner fed

Use a 2nd stage finisher especially if selling heavy

Will reduce composite feed price

Meeting targets could reduce composite feed price by **€8/tonne**

= €2.26/pig or 3 c/kg DW

3. Credit terms

Cost of credit on a composite feed price of €304/t in Sept '11

	Credit Duration			
	COD / End of month	**1**	**2**	**3**
Int. rate	0	1%/ mt.	1%/ mt	1%/ mt
Cost (€/t)	0	€3.04	€6.08	€9.12

In Europe payment is typically by direct debit within 7 days

Compounder credit in IRL was 3 months in '07/'08

Now?

Costs **~€3 per tonne per month**

In-built into the cost of a tonne of pig feed

4. Diet specifications

As slaughter weights increasing

- Financial incentive to modify the specs of the diets (Phase feed)
- Match nutrient requirements of the pig and
- Minimise feed cost per kg dead

Formulation of diets on a Net Energy (NE) basis

- 6% of the differential between the composite price in IRL and that in NE (Hanrahan,1994).
- Differential was €31 per tonne in 2010
- Saving of **€1.86/tonne**

5. Feed delivery cost

- 10%+ of the differential between the composite price in IRL and that in NE (Hanrahan,1994)
  - proximity of feed mills to customer pig units

- Lynch et al. (2002) estimated delivery costs for pig feed in Ireland at €11/tonne ranging from €8-€20/tonne.

- Order full loads of feed with fewer drops could easily reduce feed delivery costs by **€1.50/tonne.**

6. Home Milling

Feed	Purchased	Home Milled
No Herds	63	17
Ave Herd Size	600	696
Pigs/Sow /Year	23.9	24.6
Weaning to sale		
DFI (g/day)	1605	1646
ADG (g/day)	651	682
FCE	2.47	2.42

Not like vs like

Health
Facilities
Management
etc

30% of the pig feed in IRL is home compounded

Real savings vary depending on a number of factors

Reconcile ingredient use with computer records

Summary

- Gap in feed cost/kg compared to competitors (DK and NL)
- Role for all in sector in closing the gap
- Island status – IRL has higher feed ingredient prices
- However, we can help offset this cost disadvantage by
  - reducing the usage of the more expensive diets
  - reducing feed credit
  - optimising diet formulation
  - reducing feed delivery costs
- A reduction in composite feed price of up to **€20/tonne** is possible