



Department of
**Agriculture and
Rural Development**

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POLICY AND ECONOMICS DIVISION

Farm Business Data 2008



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Foreword

The 2008 year will see the agricultural industry and individual farm businesses continue to adjust to the introduction of the Single Farm Payment and the impact CAP Reform has had on farm business economics. Environmental regulations, including the requirements of the Nitrates Directive, could also have considerable impacts on current farming activities.

Given the challenges farmers currently face, the availability of a sound, robust framework for farm planning decisions is of paramount importance. This is the role that 'Farm Business Data' fulfils, providing a comprehensive and authoritative source of physical and financial information tailored to farm planning needs in Northern Ireland.

Uncertainties surrounding future prices means that users of the data are again advised to make appropriate adjustments to enterprise data when those presented in the handbook become out of date or are felt to be inappropriate for long-term planning.

The handbook is divided into sections and presents budgets for all the enterprises commonly found in Northern Ireland. Within the section on Farm Support Schemes details on the operation of selected schemes such as the Single Farm Payment Scheme are presented. A range of useful information is also presented in the Miscellaneous section including a summary of nitrates and phosphorous regulations. The latter also includes details on taxation, fixed costs, building costs, machinery costs, hire charges, contractors' charges and conacre rents.

It is important to stress that the handbook is designed to facilitate farm planning exercises. As such, the data presented in the enterprise budgets are in 'normalised' gross margin format and are unsuitable for benchmarking or comparison purposes. Farm performance data are published in 'Northern Ireland Farm Performance Indicators 2006/07', available from Policy and Economics Division in DARD. Alternatively, it may be accessed on the DARD website at www.dardni.gov.uk/statistics.

'Farm Business Data' has been prepared by Paul Keatley with assistance from many individuals inside and outside DARD. Particular thanks are due to Blinnia Cunningham and Frankie Quinn for their contributions to the compilation of the handbook.

The author would also like to thank all those who provided information for inclusion in this edition and all who made constructive suggestions for change. Further comments are welcome and should be made to Paul Keatley in DARD, Dundonald House, Belfast BT4 3SB (Paul.Keatley@dardni.gov.uk)

Norman Fulton
Director of Policy and Economics
December 2007

USER NOTES

Arable crops

It should be noted that total variable costs **exclude** contract costs. In situations where a contractor will be used it should be remembered that this additional variable cost will have to be included. Contract rates are given on pages 107 to 109.

Grassland based enterprises

Grassland costs are split in each of the budgets into a grazing cost and a silage cost per head. In the dairy and dairy follower budgets the grazing costs have been calculated at a standard stocking rate of 2 cow equivalents per hectare. For other grazing livestock budgets a stocking rate of 1.8 cow equivalents is used. If these stocking rate are considered inappropriate for individual farm situations they can be adjusted by referring to page 18. The silage cost per tonne charged in all budgets includes a contractor cost for harvesting and buckraking 2.5 cuts into the silo. In situations where the farmer uses his own machinery or makes 2 or 3 cuts the silage cost can be adjusted by referring to page 19.

Taxation

The taxation section on pages 120 to 122 gives general information only. Users are reminded that tax is a complex subject and that professional advice should be obtained before any action is taken which might affect liability to taxation.

DEFINITION OF TERMS

1. **Enterprise output of a crop enterprise** is the total returns for the crop produced; it is the total value for crop sales plus the market value of any part of the crop used or in store on the farm.
2. **Enterprise output of a livestock enterprise** is the value of livestock sold plus the market value of livestock and livestock products transferred to another enterprise (transfers out), plus the market value of any production from the enterprise consumed on the farm less expenditure on livestock and less the market value of livestock transferred in from another enterprise (transfers in).
3. **Variable costs** are defined as those costs which can both be readily allocated to a specific enterprise and vary in proportion with the level of output. Examples of variable costs are fertilisers, sprays, seeds, concentrate feedstuffs, silage and grassland variable costs. Casual labour and contract charges which can be allocated to a specific enterprise are usually regarded as variable costs.
4. **Gross margin** of an enterprise is its **enterprise output** less its **variable costs**.
5. **Enterprise marginal capital** is the estimated amount of capital required to establish the enterprise to the point of first sale of output.

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INTRODUCTION

This handbook contains both physical and financial information for farm enterprises in Northern Ireland. For each enterprise, details of output, variable costs and gross margin are presented. The information relates to the production year beginning January 2008 (unless otherwise stated) and is based on price information available at the time of preparation (September 2007). For this reason, adjustments may be necessary to budgeted data where prices have deviated significantly from forecast levels.

The sources of information used in the booklet include the Farm Business Survey, the Agri-food and Biosciences Institute and the College of Agriculture Food and Rural Enterprise (CAFRE). In most of the budgets, more than one level of performance is given. The "typical" level of performance represents that most likely to be achieved. The "low" and "high" levels of performance, where given, encompass the range of performances found in approximately 80% of farms in Northern Ireland. On some farms, the level of performance will be outside the range given for a given enterprise.

If it is considered that the data are not appropriate for a particular farm, a different performance level should be substituted. This may be necessary when a series of farm plans with different levels of performance are used to indicate the range of possible outcomes for a particular farming situation. However, the levels of performance imputed should be realistic as the use of over optimistic or pessimistic levels of performance in a budget can result in the wrong decision being taken. Thus, each farming situation should be assessed adequately so that achievable levels of performance are used in budgets. For situations where a farm enterprise is being expanded, a level of performance similar to that presently achieved should not always be assumed. The quality of the land and livestock may differ, as may the seasonality of production.

CAP REFORM FROM JANUARY 2005

CAP reforms under the Mid-Term Review (MTR) were agreed in June 2003. The central feature of the reforms is that direct payments to producers, in the form of arable area aid and livestock headage premia, have been '*decoupled*' from production and replaced by a Single Farm Payment (SFP), payable annually. The amount of aid available under the SFP is based on Payment Entitlements awarded to farmers who declared land on their 2005 SFP/IACS declaration. Under the model of distribution selected in Northern Ireland, these Entitlements have been calculated by combining a uniform area rate per eligible hectare of land declared for payment of SFP in 2005 with a Historic Reference Amount, where appropriate. The latter has been calculated on the basis of individual livestock and arable subsidy claims by each farm business during the three-year Reference Period (2000, 2001 and 2002). Once established in 2005, the number and value of Entitlements will not normally change.

As the Single farm Payment is decoupled from production, it does not form part of the Gross margin of any enterprise. As a consequence, **in this handbook, gross margin budgets for all enterprises have been presented without the Single Farm Payment.** Further details relating to the operation of the Single Farm Payment scheme are available on page 85.

Fixed Costs

In assessing the impact of a change in the farm plan on farm profit, it is necessary to deduct the expected total farm fixed costs from the total farm gross margin. The projected farm profit can then be compared with the likely profit from continuing with the existing activities. To show the likely return on additional capital, the budgeted additional net profit should be related to the additional capital required to implement the new plan. When borrowed funds are used to finance the change, the interest charge should be deducted from the additional net profit.

Changes in fixed costs which occur when there is a change in the mix or size of enterprises on a farm will differ considerably between farms as these costs are very dependent on the scale of change and the resources already present on the farm. Such costs by their nature do not change gradually unlike variable costs which vary roughly in proportion to changes in the size of an enterprise. When preparing budgets the fixed costs should be changed if alterations are planned in the area of land farmed, the employment of regular labour, investment in machinery and buildings or, if there are appreciable changes in the usage of other fixed cost items such as fuel.

Farm planning exercises may range from a small modification of the present farming system to a completely new business plan for the farm. The first of these alternatives will, in most circumstances, require considerably less new information on fixed costs than is needed when a new farm plan has to be prepared. In either situation it is more sensible and accurate to prepare a list of the fixed cost items and calculate their cost to the business rather than using fixed cost 'standards' as guidelines. The list should include hired regular labour, depreciation of fixed capital and machinery, machinery repairs, fuel and oil, interest and general overhead costs.

Capital Requirements

Another essential element in farm planning is the cash flow budget. Such a budget will indicate how changes in the farm plan will affect the timing and flow of funds through the business. This can be critical information particularly when outside funding is required or capital resources are limited.

When new plans or budgets incorporating changes are prepared, it is important to determine how much extra capital will be needed. The return on the extra capital may be of particular significance in deciding how best to employ additional resources. Return on existing capital is of less importance, especially as machinery and buildings may have been written-off or have a low salvage value. For this reason, only marginal operating capital requirements per hectare of crop or per head of livestock are given on pages 102 and 103. In a livestock enterprise, this includes the cost of the extra animal(s) and the variable costs required to finance the production cycle until sufficient incoming funds have been obtained to finance the next period. This figure indicates the minimum necessary operating capital required per extra head of livestock. For a large increase in herd size, the additional operating capital should include the proposed capital outlay on the additional buildings, machinery and funds to pay extra labour until the production cycle is self-financing. Each particular situation should be investigated to determine whether extra labour or other fixed costs should be taken into account.

As many cattle enterprises require a large amount of operating capital (often financed from outside sources) per head and per hectare, an interest charge per head is given below the calculated gross margin in each of the cattle budgets. This, in many instances, is a substantial cost and should not be overlooked when comparing enterprises. Interest charge is calculated by applying the interest rate to the outlay on the animal plus the average variable costs for the production period.

Grassland, forage and calf rearing variable costs are common to many of the cattle enterprises and these topics are covered in pages 18 to 23 and 32 as a basis for inclusion in subsequent cattle budgets.

Occasional reference is made to trade names and proprietary products. No endorsement of such products is intended nor is any criticism implied of similar products not mentioned.

SPRING BARLEY PER HECTARE

	LOW	TYPICAL	HIGH
Grain yield (tonnes)	3.0	4.5	5.5
Price per tonne (£)		140	
Grain output (£)	420	630	770
Straw yield (tonnes)	2.6	3.0	3.5
Price per tonne (£)		60	
Straw output (£)	156	180	210
OUTPUT (£)	576	810	980
£			
Seed 187 kg		61	
Fertiliser 120: 55:55		105	
Sprays herbicide		25	
fungicide		25	
growth regulator		10	
Sundries twine etc.		16	
Total Variable Costs		242	
GROSS MARGIN	334	568	738

- (a) Grain price - estimated on the basis of 15% moisture content with grain sold at harvest for animal feed. For information on seasonal price movements see page 15.
- (b) Seed - 80% certified second generation, 20% farm saved.
- (c) Fertiliser - Fertiliser application rate based on a medium type soil with a Soil Nitrogen Supply Index of 2, a Soil Phosphate Index of 2 and a Soil Potash Index of 2+
- (d) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.
- (e) Sprays - post emergent herbicide.
fungicide, spray for mildew and rhynchosporium.

SPRING OATS PER HECTARE

	LOW	TYPICAL	HIGH
Grain yield (tonnes)	3.4	4.0	4.5
Price per tonne (£)		140	
Grain output (£)	476	560	630
Straw yield (tonnes)	3.0	3.3	3.9
Price per tonne (£)		50	
Straw output (£)	150	165	195
OUTPUT (£)	626	725	825
		£	
Seed 187 kg		65	
Fertiliser 80: 55: 55		83	
Sprays herbicide		25	
fungicide		25	
growth regulator		10	
Sundries twine etc.		16	
Total Variable Costs		224	
GROSS MARGIN	402	501	601

- (a) Grain price - estimated on the basis of 15% moisture content with grain sold at harvest for animal feed.
- (b) Seed - 100% certified second generation.
- (c) Fertiliser - Fertiliser application rate based on a medium type soil with a Soil Nitrogen Supply Index of 2, a Soil Phosphate Index of 2 and a Soil Potash Index of 2+
- (d) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.
- (e) Sprays - post emergent herbicide.
fungicide, mildew spray.
growth regulator.
insecticide may be used following grass at £20 per hectare.

WINTER BARLEY PER HECTARE

	LOW	TYPICAL	HIGH
Grain yield (tonnes)	5.0	6.0	7.0
Price per tonne (£)		140	
Grain output (£)	700	840	980
Straw yield (tonnes)	3.4	3.7	4.4
Price per tonne (£)		60	
Straw output (£)	204	222	264
OUTPUT (£)	904	1,062	1,244

		£	
Seed	187 kg	75	
Fertiliser	150: 70: 70	134	
Sprays	herbicide	25	
	fungicide (x2)	50	
	insecticide	8	
	growth regulator	10	
Sundries	twine etc.	16	
Total Variable Costs		318	
GROSS MARGIN		586	926

- (a) Grain price - estimated on the basis of 15% moisture content with grain sold at harvest for animal feed. For information on seasonal price movements see page 15.
- (b) Seed 100% certified second generation.
- (c) Fertiliser - Fertiliser application rate based on a medium type soil with a Soil Nitrogen Supply Index of 2, a Soil Phosphate Index of 2 and a Soil Potash Index of 2+
- (d) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.
- (e) Sprays - pre or post emergence herbicide.
 April/May, 2 spray fungicide program.
 insecticide for barley yellow dwarf virus.
 growth regulator.

WINTER OATS PER HECTARE

	LOW	TYPICAL	HIGH
Grain yield (tonnes)	5.0	6.0	6.8
Price per tonne (£)		140	
Grain output (£)	700	840	952
Straw yield (tonnes)	3.4	3.7	4.4
Price per tonne (£)		50	
Straw output (£)	170	185	220
OUTPUT (£)	870	1,025	1,172
£			
Seed 187 kg		88	
Fertiliser 100: 55: 80		95	
Sprays herbicide		25	
fungicide		50	
growth regulator		10	
Sundries twine etc.		16	
Total Variable Costs		284	
GROSS MARGIN	586	741	888

- (a) Grain price - estimated on the basis of 15% moisture content with grain sold at harvest for animal feed.
- (b) Seed - 100% certified second generation.
- (c) Fertiliser - Fertiliser application rate based on a medium type soil with a Soil Nitrogen Supply Index of 2, a Soil Phosphate Index of 2 and a Soil Potash Index of 2+
- (d) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.
- (e) Sprays - pre emergent herbicide.
2 spray fungicide program.
growth regulator.
insecticide (Barley Yellow Dwarf Virus) may be required.

WINTER WHEAT PER HECTARE

	LOW	TYPICAL	HIGH
Grain yield (tonnes)	5.5	7.4	8.6
Price per tonne (£)		150	
Grain output (£)	825	1,110	1,290
Straw yield (tonnes)	2.7	3.2	4.3
Price per tonne (£)		50	
Straw output (£)	135	160	215
OUTPUT (£)	960	1,270	1,505

		£	
Seed	187 kg	84	
Fertiliser	180: 70: 70	155	
Sprays	herbicide	25	
	fungicide (x3)	80	
	growth regulator	10	
Sundries	twine etc.	16	
Total Variable Costs		370	
GROSS MARGIN	590	900	1,135

- (a) Grain price - estimated on the basis of 15% moisture content with grain sold at harvest for animal feed.
- (b) Seed - 100% certified second generation.
- (c) Fertiliser - Fertiliser application rate based on a medium type soil with a Soil Nitrogen Supply Index of 2, a Soil Phosphate Index of 2 and a Soil Potash Index of 2+
- (d) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.
- (e) Sprays - pre or post emergence herbicide.
fungicides for control of septoria, ear diseases and mildew/yellow rust if required.
growth regulator.

SPRING OILSEED RAPE PER HECTARE

	LOW	TYPICAL	HIGH
Yield (tonnes)	1.8	2.4	2.9
Price per tonne (£)		180	
Seed output (£)	324	432	522
OUTPUT (£)	324	432	522
£			
Seed 8 kg		62	
Fertiliser 80: 30: 0		75	
Sprays insecticide		10	
fungicide		15	
desiccant		35	
Slug pellets 7 kg		15	
Total Variable Costs		212	
GROSS MARGIN	112	220	310

- (a) Price estimated on the basis of 'double low' varieties sold at harvest.
- (b) Yield based on 9% moisture content, desiccant applied 7 to 14 days before harvesting.
- (c) Sowing date between late March and mid April. Oilseed rape should not be grown more than 1 year in 5 on the same land.
- (d) Fertiliser - Fertiliser application rate based on a medium type soil with a Soil Nitrogen Supply Index of 2, a Soil Phosphate Index of 2 and a Soil Potash Index of 2+
- (e) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.
- (f) Sprays - insecticide for pollen beetle/seed weevil.
herbicide is normally not necessary.
fungicide for light leaf spot and/or sclerotinia.

WINTER OILSEED RAPE PER HECTARE

	LOW	TYPICAL	HIGH
Yield (tonnes)	2.6	3.3	4.0
Price per tonne (£)		180	
Seed output (£)	468	594	720
OUTPUT (£)	468	594	720
		£	
Seed 4 kg		30	
Fertiliser 190: 50: 20		140	
Sprays herbicide		65	
fungicide		20	
desiccant		35	
Slug pellets 7 kg		15	
Total Variable Costs		305	
GROSS MARGIN	163	289	415

- (a) Price estimated on the basis of 'double low' varieties sold at harvest.
- (b) Yield based on 8% moisture content, desiccant applied 7 to 14 days before harvesting.
- (c) Sowing date, mid August to early September. Oilseed rape should not be grown more than 1 year in 5 on the same land.
- (d) Fertiliser - Fertiliser application rate based on a medium type soil with a Soil Nitrogen Supply Index of 2, a Soil Phosphate Index of 2 and a Soil Potash Index of 2+
- (e) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.
- (f) Sprays - pre or post emergence herbicide.
fungicide for light leaf spot and/or sclerotinia.

SEED POTATOES PER HECTARE

				LOW	TYPICAL	HIGH
	£/t			£	£	£
Seed () tonnes	@ 140	(14)	1,960	(21)	2,940	(25) 3,500
Ware () tonnes	@ 120	(5)	600	(8)	960	(10) 1,200
Chats () tonnes	@ 10	(1)	10	(2)	20	(3) 30
OUTPUT			2,570		3,920	4,730
	£/t					
Seed 4.5t	@ 170				765	
Fertiliser 95 : 195 : 185					218	
Sprays herbicide					35	
fungicide (blight x 9)					135	
desiccant (burning down)					40	
aphidicide					25	
Potato inspection fees and levies			125		162	183
Total Variable Costs			1,343		1,380	1,401
GROSS MARGIN			1,227		2,540	3,329

- (a) Potato inspection fees quoted are for 2007. They comprise a growing crop inspection fee of £40.50 per hectare, £4.40 per tonne for tuber inspection fees and labels.
- (b) Levy rates payable for the promotion of seed potato interests remain unchanged for 2007. The rates are £10 per hectare of growing crop, and £0.90 per tonne of seed potatoes certified for export.
- (c) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.
- (d) Seed cost depends on variety used and class of seed planted.
- (e) Potato sacks are supplied by the merchant.
- (f) Output of seed per hectare (£)

Price per tonne £	Seed Yield (tonnes per hectare)				
	14	17	20	22	25
100	1,400	1,700	2,000	2,200	2,500
120	1,680	2,040	2,400	2,640	3,000
140	1,960	2,380	2,800	3,080	3,500
160	2,240	2,720	3,200	3,520	4,000
180	2,520	3,060	3,600	3,960	4,500

FIRST EARLY POTATOES PER HECTARE

				LOW	TYPICAL	HIGH		
				£/t	£	£	£	
Ware () tonnes	@	170	(14)	2,380	(19)	3,230	(22)	3,740
Chats (1) tonne	@	10		10		10		10
OUTPUT					2,390	3,240		3,750
				£/t				
Seed 4.5t	@	140				630		
Fertiliser 120 : 130 : 200						248		
Sprays herbicide						35		
fungicide (blight x 2)						30		
Potato sacks	@	8.00		112		152		176
Total Variable Costs					1,055	1,095		1,119
GROSS MARGIN					1,335	2,145		2,631

- (a) Budget assumes haulm chopping rather than burning down.
- (b) Seed - cost depends on variety used and class of seed planted.
- (c) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.
- (d) Potato sacks - 25kg paper bags typically 20p per bag.
- (e) Output of ware per hectare (£)

Price per tonne £	Early Ware Yield (tonnes per hectare)			
	10	15	20	25
120	1,200	1,800	2,400	3,000
130	1,300	1,950	2,600	3,250
140	1,400	2,100	2,800	3,500
150	1,500	2,250	3,000	3,750
160	1,600	2,400	3,200	4,000

MAINCROP WARE POTATOES PER HECTARE

		LOW		TYPICAL		HIGH	
		£/t	£	£	£	£	£
Ware () tonnes	@ 120	(33)	3,960	(40)	4,800	(45)	5,400
Chats (2) tonnes	@ 10		20		20		20
OUTPUT			3,980		4,820		5,420
		£/t					
Seed 3.0t	• @ 180				540		
Fertiliser 100 :180 : 200					230		
Sprays herbicide					35		
fungicide (blight x 9)					135		
desiccant (burning down)					40		
Slug pellets					15		
Potato boxes	@ 6.00		198		240		270
Total Variable Costs			1,193		1,235		1,265
GROSS MARGIN			2,787		3,585		4,155

- (a) Seed - cost depends on variety used and class of seed planted.
- (b) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.
- (c) Potato boxes - £40.00 per 1 tonne with a 15% depreciation charge (i.e. £6 per tonne per year).
- (d) Output of ware per hectare (£)

Price per tonne £	Ware Yield (tonnes per hectare)				
	20	25	30	35	40
70	1,400	1,750	2,100	2,450	2,800
90	1,800	2,250	2,700	3,150	3,600
100	2,000	2,500	3,000	3,500	4,000
120	2,400	3,000	3,600	4,200	4,800
140	2,800	3,500	4,200	4,900	5,600

CEREAL SPRAYS

	Main use	Examples of proprietary products	Approximate cost per hectare (£)
Herbicides	Spring cereals (Broad spectrum)	Ally, Jubilee, Starane, Harmony M, Compitox, Sexator	10 to 30
	Winter cereals (Broad spectrum)	Pre-emergence – Crystal, Girebird.	15 to 30
	Winter cereals (Broad spectrum)	Post-emergence - Encore, Javelin, Ally, Jubilee	17 to 40
Fungicides	Barley (Broad spectrum)	Folicur, Amistar, Amistar Pro, Punch-C, Landmark, Gandango	15 to 50
	Wheat (Broad spectrum)	Foil, Folicur, Silvacur, Flamenco, Opera, Twist Opus, Amistar, Landmark, Proline	15 to 50
	(Mildew)	Corbel, Patrol, Orka	20 to 30
Insecticides	Spring cereals (leatherjackets)	Dursban, Cyren	12 to 25
	Winter barley (aphids - vector BYDV)	Decis, Toppel, Sumi-Alpha,	5 to 10

This list is not exhaustive and no criticism is implied of products which have been omitted. The products listed above are for example purposes only. **No pesticide should be used without careful reference to the manufacturer's label especially regarding crop suitability.**

GRAIN DRYING AND STORAGE

(i) Moist grain storage

- @ 16% moisture content requires 5.5 litres per tonne propionic acid.
- @ 20% moisture content requires 7.5 litres per tonne propionic acid.
- @ 24% moisture content requires 9.5 litres per tonne propionic acid.
- @ 28% moisture content requires 11.5 litres per tonne propionic acid.

Propionic acid costs approximately 75-85 pence per litre, contractors charge for treatment (excluding chemical) £1.30 per tonne.

(ii) Grain drying

- (a) Own drier. The cost of fuel to remove 5% moisture per tonne and electricity for fans and augers would amount to approximately £9.00.
- (b) Contract charges - handling charge approximately £5.00 per tonne plus £3.00 per 1% moisture removed.

(iii) Bulk storage requirements (whole grain)

Barley 1.45 cubic metres per tonne.

Wheat 1.35 cubic metres per tonne.

Oats 1.95 cubic metres per tonne.

(iv) Weight and weight loss on drying to 15% Moisture Content

Original MC	Equiv. Weight of 100t dried To 14% MC (t)	% Weight loss
15	100.0	0
17	97.7	2.3
19	95.3	4.7
21	92.9	7.1
23	90.6	9.4
27	88.2	11.8

(v) Anticipated growers prices for barley (ex-farm) 2007/2008

Feed Barley (£/tonne)

November 2007	164
January 2008	166
March	168
May	170

OILSEED RAPE SPRAYS

	Examples of proprietary products	Approximate cost per hectare (£)
Herbicides	Post-emergence - Kerb, Butisan S.	40 to 65
Fungicides	Folicur, Proline	28 to 42

This list is not exhaustive and no criticism is implied of products which have been omitted. The products listed above are for example purposes only. **No pesticide should be used without careful reference to the manufacturer's label especially regarding crop suitability.**

POTATO SPRAYS

		Examples of proprietary products	Approximate cost per hectare (£)
Herbicides	Broad Spectrum	Sencorex, Linuron, Opogard, Titus, PDQ	20 to 75
	Couchgrass	Glyphosate, Laser	10 to 70
Fungicides		Bravo 500, Tattoo, Dithane 945, Invader, Trustan, Fubol Gold, Merlin, Galben M, Shirlan, Curzate, Infinito	10 to 30
Desiccants		Reglone, Harvest, Sulphuric acid ¹ , Spotlight	35 to 40

(Haulm chopping can be an alternative to spraying.)

¹ Sulphuric acid normally applied by a contractor

This list is not exhaustive and no criticism is implied of products which have been omitted. The products listed above are for example purposes only. **No pesticide should be used without careful reference to the manufacturer's label especially regarding crop suitability.**

GRASSLAND VARIABLE COSTS

(i) Grazing Variable Costs

Stocking rate (ce/ha)	Fertiliser N kg/ha	£/ha	Other variable costs (£)	Total variable cost per hectare (£)
1.4	70	52	37	89
1.5	90	67	37	104
1.6	110	81	37	118
1.7	130	96	37	133
1.8	150	111	37	148
1.9	170	126	37	163
2.0	190	141	37	178
2.1	210	155	37	192
2.2	230	170	37	207
2.3	250	185	37	222
2.4	270	200	37	237
2.5	290	215	37	252

In the dairy cow and dairy follower budgets in this handbook, a stocking rate of 2 cow equivalents per hectare is used, i.e. the grazing variable costs are £178 per hectare. For other grazing livestock budgets a stocking rate of 1.8 cow equivalents per hectare is used i.e. the grazing variable costs are £148 per hectare. If these stocking rates are considered to be inappropriate for a specific farming situation a more appropriate stocking rate and variable costs per hectare can be selected. Readers should be aware that the implementation of the Nitrates Action Plan may impact on permitted stocking rates on farms (see pages 95 to 97 for further details)

(ii) Grazing - other variable costs

a) Grassland reseeding costs

	£ per hectare
Ground limestone	5 tonnes @ 15 £/t
Grass seed	35 kg @ 2.7 £/kg
Fertiliser 60 : 50 : 50	
Spray - sward kill	
- herbicide	
Total Cost	

75

95

73

30

30

303

- (1) The quantity of lime and fertiliser applied will depend on soil analysis.
- (2) For autumn reseeds the old sward may be burnt down with paraquat prior to ploughing.
- (3) With a sward life of 10 years the annual reseeding allowance would be £30.30 per hectare.

b) Grassland spraying costs

The annual cost of herbicide is estimated at £7.00 per hectare – assumes spray 1 year in 4 against grassland weeds at cost of £28.00 per hectare.

(iii) Silage Variable Costs

	£ per hectare	£ per tonne
Fertiliser 190 : 50 : 100	150	3.75
Other variable costs	37	0.93
Contractors charge	315	7.88
Additives	58	1.45
Polythene	5	0.13
Total Cost	565	14.13

- (1) The yield of silage is assumed to be 40 tonnes per hectare.
- (2) The sward life is assumed to be 10 years.
- (3) Contractor cost includes mowing, harvesting and buckraking 2.5 cuts into the silo.
- (4) The total variable cost per tonne of silage (assuming an unchanged yield) with the contractor taking 2 cuts is £12.56. This increases to £15.71 with 3 cuts.
- (5) When the farmer uses his own machinery, the total variable cost per tonne of silage is £6.25.
- (6) Costs per tonne for additive would be lower for systems involving fewer cuts. Additive costs range from £0.50 to £4.00 per tonne depending on the additive used and the conditions - typically £1.45 per tonne.
- (7) Silage as a cash crop. To achieve a gross margin of £200 per hectare, a farmer would require to sell at £19.13 per tonne.

(iv) Silage Additives

Category	Examples of products	Approximate cost per tonne Ensiled (£)
Acid based	Add-F, Add-safeR, Co-Sil.	0.50 - 4.00
Sugar based	Molasses, molassed sugar beet pulp Sweet n' Dry.	1.00 - 3.00
Enzymes	Exellex, Clampzyme.	1.50 - 3.00
Inoculants	Bactensil 2000, Bioferm Gold, Ecosyl	0.90 - 2.00
Salts	Ultrasile.	2.00 - 2.50
Enzymes plus inoculements	Axphast gold, Supersile gold	£1.15 - £1.75

This list is not exhaustive and there is no implied criticism of products omitted.

(v) Hay Variable Costs

	£ per hectare	£ per tonne	Pence per 20 kg bale
Fertiliser 130 : 40 : 40	110	14	28
Reseeding allowance	37	5	9
Contract - mowing	20	3	5
- turning (x2)	20	3	5
- bailing (inc. twine)	100	13	25
Total Cost	287	36	72

- (1) A yield of 8 tonnes per hectare is assumed.
- (2) The variable cost per 20 kg bale of hay for a farmer using his own machinery would be 37p.
- (3) A hay crop cut in mid July and sold for £1, £1.50 or £2 per 20 kg bale would generate gross margins of £113, £313 and £513 per hectare respectively. These figures rise to £253, £453 and £653 per hectare if contractor costs are disregarded. As approximately 60% of total grass production occurs by mid July these gross margins are effectively from 0.6 hectares.

(vi) Grassland sprays

Main Use	Examples of proprietary products	Approximate Cost per hectare (£)
Chickweed (non clover swards)	CMPP, (e.g. Optica) Banlene Super, Transfer, Mircam Plus.	12 to 22
Chickweed (will protect clover swards)	Alistell,	29 to 44
Ragwort	2-4D Ester, (e.g Depitox)	9 to 13
Thistle	2-4-D, MCPA	9 to 10
Nettle	Garlon 2, Nushot Grazon, Blaster.	60 to 120
Docks (non clover swards)	Doxstar, Starane, Forefront Dockmaster Grassland.	35 to 40
Docks (will protect clover swards)	Squire.	30 to 35
Sward Kill	Roundup Biactive, Clinic, Glyphosate.	10 to 30

This list is not exhaustive and there is no criticism implied of products omitted.

(vii) Seasonality of production

	% of Harvestable Dry Matter
April	11
May	19
June	20
July	17
August	14
September	12
October	3
November to March	4
Total	100.0

(viii) Stocking rates on farms in Northern Ireland

Average stocking rates and the corresponding range on Northern Ireland farms are shown for the main enterprises. The differences illustrate the variation in stocking rates found in practice.

	Stocking rate (ce/ha)	
	Average	Range
Dairy cows	1.98	1.54 to 2.31
Dairy followers	2.08	1.69 to 2.35
Sucklers cows (new LFA)	1.55	1.30 to 1.73
Calf to beef systems	2.07	1.88 to 2.04
Calf to store systems	1.68	1.62 to 1.78
Breeding ewes (lowland)	1.71	1.56 to 1.90

Source: Northern Ireland Farm Business Survey, 2006/07.

(ix) Coefficients for converting into cow equivalents (ce)

Type of Livestock	ce
Dairy cow	1.0
Beef cow (excluding calf)	0.8
Breeding bull	1.0
Other cattle	
under 1 year old	0.4
between 1 and 2 years old	0.6
over 2 years old	0.8
Breeding ewe and lamb(s)	0.2
Breeding ram	0.2
Lamb 6 months to 1 year old	0.1
Other sheep over 1 year old	0.2

- (1) One cow equivalent is usually defined in terms of annual metabolizable energy requirements to maintain a 625 kg Friesian cow, produce 4,500 litres of milk and a 45 kg calf.
- (2) To calculate the total cow equivalents on a farm, the annual average livestock numbers should be multiplied by the appropriate cow equivalent coefficient.
- (3) To calculate the stocking rate on a farm (cow equivalents per hectare) the total cow equivalents are divided by the area of grassland plus the adjusted areas of rough grazing and forage crops.

- (4) To calculate stocking rate of grazing livestock, allowances should strictly be made for variation in output, e.g. yield per cow or liveweight gain per head and also for quantities of non-forage feed consumed by each category of livestock.

(x) **Typical nutrient content of animal manures at spreading**

Manure		Total Nutrient			Available Nutrient ¹		
Form	% DM	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
Fresh FYM ²		----- (kg/t) -----					
Cattle	25	6.0	3.5	8.0	0.3- 1.2	2.1	4.8
Pig	25	7.0	7.0	5.0	0.3- 1.4	4.2	3.0
Poultry Manure		----- (kg/t) -----					
Layer Manure	30	15	13	9	0.1- 5.2	7.9	6.8
Broiler Litter	60	29	25	18	0.3- 10.1	15.0	14.0
Slurries		----- (kg/m ³) -----					
Dairy ³	6	3.0	1.2	3.5	0.1- 0.9	0.6	3.2
Beef ³	6	2.3	1.2	2.7	0.1- 0.7	0.6	2.4
Pig ³	6	5.0	3.0	3.0	0.2- 1.8	1.5	2.7

¹ Nutrients available for utilisation by the next crop. In the case of nitrogen availability is dependent on soil type and time of application. Figures given assume surface application and higher figures relate to spring application.

² N and K₂O values will be lower if farm yard manure (FYM) is stored under open conditions for long periods.

³ Undiluted slurry typically contains 10% dry matter (DM), but with rain dilution the DM content may be lowered to 6% and under.

(xi) **Approximate conversion factors**

1 m³ = 220 gallons

1 hectare = 2.47 acres

100 kg/ha = 80 units/acre

4,500 litres = 1,000 gallons

DAIRY COWS - JAN/FEB CALVING (60% SUMMER MILK)

			LOW	TYPICAL	HIGH
Milk yield (litres)			5,100	5,800	6,300
	ppl		£	£	£
Milk sales	@ 21.5		1,097	1,247	1,355
Calves				70	
Less herd replacement cost				166	
OUTPUT			1,001	1,152	1,259
	£/t				
Concentrates	@ 180		285	271	238
Grazing	0.275 @ 178			49	
Silage	9.0 @ 14.13			127	
Sundries (AI, vet, misc)				100	
Total Variable costs			561	548	514
GROSS MARGIN PER COW			440	604	745
GROSS MARGIN PER HECTARE @ (2 ce/ha)			881	1,208	1,489
GROSS MARGIN PER 1,000 LITRES			86	104	118

- (1) Milk price forecast on the basis of compositional quality and the seasonality of production. Net of all deductions.
- (2) 93 calves sold or transferred per 100 dairy cows.
- (3) Herd replacement cost: - 24% replacement rate and 1% mortality are typical.
- replacement cost £950; cull cow value £300.
- (4) Concentrate usage for low performance 0.31kg/litre, typical 0.26kg/litre, and high 0.21kg/litre.
- (5) For details of grazing and silage variable costs, see pages 18 and 19.

(6) Sensitivity analysis

Change in typical gross margin (£)

	per cow	per hectare
± 1 ppl in milk	58.00	116.00
± £5/t in concentrates price	7.54	15.08
± 100 litres milk	12.06	24.12

DAIRY COWS - MARCH/APRIL CALVING (70% SUMMER MILK)

		LOW	TYPICAL	HIGH
Milk yield (litres)		4,800	5,300	5,800
	ppl	£	£	£
Milk sales	@ 21.3	1,022	1,129	1,235
Calves			70	
Less herd replacement cost			166	
OUTPUT		927	1,033	1,140
	£/t			
Concentrates	@ 180	225	200	198
Grazing	0.275 @ 178		49	
Silage	7.0 @ 14.13		99	
Sundries (AI, vet, misc)			100	
Total Variable costs		473	448	446
GROSS MARGIN PER COW		454	585	694
GROSS MARGIN PER HECTARE @ (2 ce/ha)		909	1,170	1,387
GROSS MARGIN PER 1,000 LITRES		95	110	120

- (1) Milk price forecast on the basis of compositional quality and the seasonality of production. Net of all deductions.
- (2) 93 calves sold or transferred per 100 dairy cows.
- (3) Herd replacement cost: - 24% replacement rate and 1% mortality are typical.
- replacement cost £950; cull cow value £300.
- (4) Concentrate usage for low performance 0.26kg/litre, typical 0.21kg/litre, and high 0.19kg/litre.
- (5) For details of grazing and silage variable costs, see pages 18 and 19.
- (6) Sensitivity analysis

Change in typical gross margin (£)

± 1 ppl in milk
 ± £5/t in concentrates price
 ± 100 litres milk

per cow	per hectare
53.00	106.00
5.57	11.13
12.84	25.69

DAIRY COWS - OCT/NOV CALVING (55% SUMMER MILK)

		LOW	TYPICAL	HIGH
Milk yield (litres)		6,100	6,800	7,300
	ppl	£	£	£
Milk sales	22.0	1,342	1,496	1,606
Calves			70	
Less herd replacement cost			179	
OUTPUT		1,234	1,388	1,498
	£/t			
Concentrates	@ 180	340	318	315
Grazing	0.250 @ 178		45	
Silage	10.0 @ 14.13		132	
Sundries (AI, vet, misc)			120	
Total Variable costs		637	615	612
GROSS MARGIN PER COW		597	773	886
GROSS MARGIN PER HECTARE @ (2 ce/ha)		1,193	1,546	1,771
GROSS MARGIN PER 1,000 LITRES		98	114	121

- (1) Milk price forecast on the basis of compositional quality and the seasonality of production. Net of all deductions.
- (2) 93 calves sold or transferred per 100 dairy cows.
- (3) Herd replacement cost: - 26% replacement rate and 1% mortality are typical.
- replacement cost £950; cull cow value £300.
- (4) Concentrate usage for low performance 0.31kg/litre, typical 0.26kg/litre, and high 0.24kg/litre.
- (5) For details of grazing and silage variable costs, see pages 18 and 19.
- (6) Sensitivity analysis

Change in typical gross margin (£)

	per cow	per hectare
± 1 ppl in milk	68.00	136.00
± £5/t in concentrates price	8.84	17.68
± 100 litres milk	12.96	25.92

DAIRY COWS - AVERAGE CALVING PATTERN (58% SUMMER MILK)

		LOW	TYPICAL	HIGH
Milk yield (litres)		5,800	6,300	6,800
	ppl	£	£	£
Milk sales	22.0	1,276	1,386	1,496
Calves			70	
Less herd replacement cost			166	
OUTPUT		1,181	1,291	1,401
	£/t			
Concentrates	@ 180	303	272	257
Grazing	0.262 @ 178		47	
Silage	9.5 @ 14.13		134	
Sundries (AI, vet, misc)			110	
Total Variable costs		594	563	548
GROSS MARGIN PER COW		587	727	853
GROSS MARGIN PER HECTARE @ (2 ce/ha)		1,174	1,455	1,705
GROSS MARGIN PER 1,000 LITRES		101	115	125

(1) Average calving pattern in Northern Ireland:-

January/February	25%	May to September	15%
March/April	20%	October to December	40%

(2) Milk price forecast on the basis of compositional quality and the seasonality of production. Net of all deductions.

(3) 93 calves sold or transferred per 100 dairy cows.

(3) Herd replacement cost: - 24% replacement rate and 1% mortality are typical.
- replacement cost £950; cull cow value £300.

(5) Concentrate usage for low performance 0.29kg/litre, typical 0.24kg/litre, and high 0.21kg/litre.

(6) For details of grazing and silage variable costs, see pages 18 and 19.

(7) Sensitivity analysis

Change in gross margin(£)

	per cow	per hectare
± 1 ppl in milk	63.00	126.00
± £5/t in concentrates price	7.56	15.12
± 100 litres milk	13.06	26.13

DAIRY HEIFER REPLACEMENTS - AUTUMN BORN (2008)

	30 MONTH CALVING		24 MONTH CALVING	
	Physical	Financial	Physical	Financial
		£		£
Value of heifer (allowing for barreners and rejects)		950		950
Less value of calf (plus 2% mortality allowance)		175		175
OUTPUT PER HEIFER		775		775
Calf rearing costs to 3 months		65		65
4-6 months (indoors)		£/t		
Concentrates (17% protein)	125 kg @194	24	250 kg	49
Silage	0.7 tonnes @14.13	10	0.7 tonnes	10
Bedding straw	0.15 tonnes	9	0.15 tonnes	9
Veterinary and miscellaneous		6		8
7-12 months (at grass)				
Concentrates (15% protein)	25 kg @176	4	180 kg	32
Grazing	0.15 ha	27	0.17 ha	30
Veterinary and miscellaneous		11		11
13-18 months (indoors)				
Barley and minerals	160 kg @175	28	360 kg	63
Silage	5 tonnes @14.13	71	4.5 tonnes	64
AI, Veterinary and miscellaneous		10		26
19-24 months (at grass)				
Grazing	0.21 ha	37	0.23 ha	41
AI, Veterinary and miscellaneous		32		10
25-30 months (indoors)				
Barley and minerals	180 kg @175	32		
Silage	6 tonnes @14.13	85		
Veterinary and miscellaneous		3		
Total Variable Costs		454		417
GROSS MARGIN PER HEIFER		321		358
GROSS MARGIN PER HECTARE @ (2 ce/ha)		460		716

DAIRY HEIFER REPLACEMENTS - AUTUMN BORN (CONTINUED)

- (1) See page 32 for details of calf rearing costs.
- (2) For details of grazing & silage variable costs, see pages 18 and 19.
- (3) Sensitivity analysis

Change in gross margin (£)

	30 month calving	
	per head	per hectare
± £50 in heifer value	50	71
± £10 in calf price	10	15

Change in gross margin (£)

	24 month calving	
	per head	per hectare
± £50 in heifer value	50	100
± £10 in calf price	10	20

(4) Targets weights (kilograms)

Age (months)	Autumn born	
	24 month calving	30 month calving
3	85	85
6	155	145
12	290	260
18	415	355
24	560	460
30	-	580

Target daily liveweight gain (kgs/day)

Age (months)	Autumn born	
	24 month calving	30 month calving
3-6	0.78	0.67
6-12	0.75	0.64
12-18	0.69	0.53
18-24	0.81	0.58
24-30	-	0.67

DAIRY HEIFER REPLACEMENTS - SPRING BORN (2008)

		27 MONTH CALVING		24 MONTH CALVING	
		Physical	Financial	Physical	Financial
			£		£
Value of heifer (allowing for barreners and rejects)			950		950
Less value of calf (plus 2% mortality allowance)			175		175
OUTPUT PER HEIFER			775		775
Calf rearing costs to 3 months			65		65
4-9 months (at grass)					
			£/t		
Concentrates (17% protein)	100 kg	@194	19	180 kg	35
Grazing	0.14 ha		25	0.15 ha	27
Veterinary and miscellaneous			11		11
10-15 months (indoors)					
Barley and minerals	360 kg	@175	63	405 kg	71
Silage	3.5 tonnes	@14.13	49	3.75 tonnes	53
AI, Veterinary and miscellaneous			6		8
16-21 months (at grass)					
Barley and minerals	0 kg	@175	0	50 kg	9
Grazing	0.21 ha		37	0.22 ha	39
AI, Veterinary and miscellaneous			32		27
22-24 months (indoors)					
Barley and minerals	25 kg	@175	4	135 kg	24
Silage	2.75 tonnes	@14.13	39	2.50 tonnes	35
Veterinary and miscellaneous			5		3
25-27 months (indoors)					
Barley and minerals	65 kg	@175	11		
Silage	2.75 tonnes	@14.13	39		
Veterinary and miscellaneous			5		
Total Variable Costs			412		406
GROSS MARGIN PER HEIFER			363		369
GROSS MARGIN PER HECTARE @ (2 ce/ha)			607		737

DAIRY HEIFER REPLACEMENTS - SPRING BORN (CONTINUED)

- (1) See page 32 for details of calf rearing costs.
- (2) For details of grazing & silage variable costs, see pages 18 and 19. It is assumed that silage is harvested by contractor.
- (3) Sensitivity analysis

Change in gross margin (£)

	27 month calving	
	per head	per hectare
± £50 in heifer value	50	84
± £10 in calf price	10	17

Change in gross margin (£)

	24 month calving	
	per head	per hectare
± £50 in heifer value	50	100
± £10 in calf price	10	20

- (4) Target weights (kgs)

Age (months)	Spring born	
	24 month calving	27 month calving
3	85	85
9	215	195
15	345	300
21	485	435
24	560	500
27	-	580

- Target daily liveweight gain (kgs/day)

Age (months)	Spring born	
	24 month calving	27 month calving
3-9	0.72	0.61
9-15	0.72	0.58
15-21	0.78	0.75
21-24	0.83	0.72
24-27	-	0.89

BULL CALF REARING (TO 3 MONTHS)

	kg	£/tonne	TYPICAL £/head
Milk substitute	20	@ 1550	31
Concentrates (18% Protein)	85	@ 208	18
(17% Protein)	25	@ 194	5
Hay	20	@ 80	2
Bedding Straw	70	@ 60	4
Veterinary & sundries			11
Total variable costs			<hr/> 70

- (1) Intake per calf of milk substitute depends on the system of feeding. A calf would consume 35 kg of milk substitute in 6 weeks on ad libitum feeding system whereas on a bucket rearing system the intake per calf would be between 16 and 24 kg.
- (2) When whole milk is fed to calves, 135 litres would provide the same energy and protein as 20 kg of milk substitute.
- (3) A heifer calf will consume less concentrates over the first 3 months (80 to 90 kg). The rearing cost for a dairy heifer calf would be approximately £65.
- (4) Vaccination will cost approximately £5 per calf.
- (5) The daily liveweight gain during the first 3 months will average 0.7 kg.
- (6) Typical liveweights at 3 months of age are 100 kg for bull calves and 85 kg for heifer calves.

LIVEWEIGHT TO DEADWEIGHT PRICE CONVERSION TABLE

Liveweight Price (pence per kg)	Deadweight Price (pence per kg)							
	Kill out							
	48%	50%	52%	54%	56%	58%	60%	62%
80	166.7	160.0	153.8	148.1	142.9	137.9	133.3	129.0
82	170.8	164.0	157.7	151.9	146.4	141.4	136.7	132.3
84	175.0	168.0	161.5	155.6	150.0	144.8	140.0	135.5
86	179.2	172.0	165.4	159.3	153.6	148.3	143.3	138.7
88	183.3	176.0	169.2	163.0	157.1	151.7	146.7	141.9
90	187.5	180.0	173.1	166.7	160.7	155.2	150.0	145.2
92	191.7	184.0	176.9	170.4	164.3	158.6	153.3	148.4
94	195.8	188.0	180.8	174.1	167.9	162.1	156.7	151.6
96	200.0	192.0	184.6	177.8	171.4	165.5	160.0	154.8
98	204.2	196.0	188.5	181.5	175.0	169.0	163.3	158.1
100	208.3	200.0	192.3	185.2	178.6	172.4	166.7	161.3
102	212.5	204.0	196.2	188.9	182.1	175.9	170.0	164.5
104	216.7	208.0	200.0	192.6	185.7	179.3	173.3	167.7
106	220.8	212.0	203.8	196.3	189.3	182.8	176.7	171.0
108	225.0	216.0	207.7	200.0	192.9	186.2	180.0	174.2
110	229.2	220.0	211.5	203.7	196.4	189.7	183.3	177.4
112	233.3	224.0	215.4	207.4	200.0	193.1	186.7	180.6
114	237.5	228.0	219.2	211.1	203.6	196.6	190.0	183.9
116	241.7	232.0	223.1	214.8	207.1	200.0	193.3	187.1
118	245.8	236.0	226.9	218.5	210.7	203.4	196.7	190.3
120	250.0	240.0	230.8	222.2	214.3	206.9	200.0	193.5
122	254.2	244.0	234.6	225.9	217.9	210.3	203.3	196.8
124	258.3	248.0	238.5	229.6	221.4	213.8	206.7	200.0
126	262.5	252.0	242.3	233.3	225.0	217.2	210.0	203.2
128	266.7	256.0	246.2	237.0	228.6	220.7	213.3	206.5
130	270.8	260.0	250.0	240.7	232.1	224.1	216.7	209.7
132	275.0	264.0	253.8	244.4	235.7	227.6	220.0	212.9
134	279.2	268.0	257.7	248.1	239.3	231.0	223.3	216.1
136	283.3	272.0	261.5	251.9	242.9	234.5	226.7	219.4
138	287.5	276.0	265.4	255.6	246.4	237.9	230.0	222.6
140	291.7	280.0	269.2	259.3	250.0	241.4	233.3	225.8

18 MONTH HEIFER BEEF

(October/November 2008 born continental type calves)

			TYPICAL	HIGH
	kg(dwt)	p/kg	£/head	£/head
Finished Heifer	285	@ 190	542	542
Less Value of calf plus 2% mortality allowance			120	120
OUTPUT			422	422
Calf rearing costs to 3 months			65	65
4-6 months (indoors)		£/t		
Concentrates (17% protein)	2.0 to 1.0 kg/day	@ 194	35	17
Silage	1.5 tonnes	@ 14.13	21	21
Veterinary and miscellaneous			6	6
7-12 months (at grass)		£/t		
Concentrates (15% protein)	100 kg to 30 kg	@ 176	18	5
		£/ha		
Grazing	0.15 ha	@ 148	22	22
Veterinary and miscellaneous			8	8
13-18 months (indoors)		£/t		
Barley and minerals	4.3 to 2.0 kg/day	@ 175	135	63
Silage	4.5 to 5 tonnes	@ 14.13	64	71
Veterinary and miscellaneous			6	6
Total variable costs			380	285
GROSS MARGIN PER HEAD			41	136
GROSS MARGIN PER HECTARE @ 1.8 ce/ha			110	365
Number of cattle finished per hectare			3.3	3.2
Interest charge per head (@ 8%)			37	32

- (1) Sale price is after deduction of marketing expenses which include fees for meat inspection, grading, insurance, offal disposal, clipping, R&D and LMC levies.
- (2) Two levels of concentrate requirements are given. The lower quantity is required with 'GOOD' quality silage (6 to 7 weeks regrowth, 70 D) and the higher level with 'MEDIUM' quality silage (10 weeks regrowth, 60 D).

18 MONTH HEIFER BEEF (CONTINUED)

- (3) Number of housed and grazing days and daily liveweight gain (DLWG)

	1st Winter Housed	Grass	2nd Winter Housed
Days	90	180	180
DLWG (kg)	0.75	0.9	0.9

- (4) For details of grazing & silage variable costs, see pages 18 and 19. Where silage is harvested by the farmer, gross margins would increase by approximately £6 per tonne of silage used.

- (5) Sensitivity analysis

Change in gross margin (£)

	Quality of silage			
	MEDIUM		GOOD	
	per head	per hectare	per head	per hectare
± £10 in calf value	10	27	10	27
± 5p/kg in sale value	14	38	14	38

22 MONTH STEER BEEF

(October/November 2008 born continental type calves)

			TYPICAL	HIGH
	kg(dwt)	p/kg	£/head	£/head
Finished steer	345	@ 180	621	621
Less Value of calf plus 2% mortality allowance			160	160
OUTPUT			461	461
Calf rearing costs to 3 months			70	70
4-6 months (indoors)		£/t		
Concentrates (17% protein)	2.5 to 1.0 kg/day	@ 194	44	17
Silage	1.2 tonnes	@ 14.13	17	17
Veterinary and miscellaneous			6	6
7-12 months (at grass)		£/t		
Concentrates (15% protein)	110 kg to 40 kg	@ 176	19	7
		£/ha		
Grazing	0.15 ha	@ 148	22	22
Veterinary and miscellaneous			8	8
13-18 months (indoors)		£/t		
Concentrates (15% protein)	2.0 to 0.5 kg/day	@ 176	63	16
Silage	4.5 to 5 tonnes	@ 14.13	64	71
Veterinary and miscellaneous			6	6
19-22 months (at grass)		£/t		
Barley and minerals	130 kg to 60 kg	@ 175	23	11
		£/ha		
Grazing	0.17 ha	@ 148	25	25
Veterinary and miscellaneous			7	7
Total variable costs			374	283
GROSS MARGIN PER HEAD			87	178
GROSS MARGIN PER HECTARE @ 1.8 ce/ha			180	371
Number of cattle finished per hectare			2.2	2.1
Interest charge per head (@ 8%)			51	44

22 MONTH STEER BEEF (CONTINUED)

- (1) Sale price is after deduction of marketing expenses which include fees for meat inspection, grading, insurance, offal disposal, clipping, R&D and LMC levies.
- (2) Two levels of concentrate requirements are given. The lower quantity is required with 'GOOD' quality silage (6 to 7 weeks regrowth, 70 D) and the higher level with 'MEDIUM' quality silage (10 weeks regrowth, 60 D).
- (3) Weight at turnout 135 kg lwt.

Daily liveweight gain (kg)	
0.75 (3 months to turnout)	0.6 Housed (1st winter)
0.90 At grass (1st summer)	1.10 At grass (2nd summer)

- (4) Grazing and silage costs - see pages 18 and 19.
- (5) Sensitivity analysis

Change in gross margin (£)

	Quality of silage			
	MEDIUM		GOOD	
	per head	per hectare	per head	per hectare
± £10 in calf value	10	21	10	21
± 5p/kg in sale value	17	36	17	36

24 MONTH STEER BEEF

(January/February 2008 born continental type calves)

		TYPICAL	HIGH
	kg(dwt) p/kg	£/head	£/head
Finished steer	335 @ 190	637	637
Less Value of calf plus 2% mortality allowance		160	160
OUTPUT		477	477
Calf rearing costs to 3 months		70	70
4-9 months (at grass)	£/t		
Concentrates (15% protein)	100 to 50 kg @ 176	18	9
	£/ha		
Grazing	0.11 ha @ 148	16	16
Veterinary and miscellaneous		8	8
10-15 months (indoors)	£/t		
Concentrates (15% protein)	1.8 to 0.5 kg/day @ 176	57	16
Silage	4 to 4.5 tonnes @ 14.13	57	64
Veterinary and miscellaneous		5	5
16-21 months (at grass)	£/ha		
Grazing	0.20 ha @ 148	30	30
Veterinary and miscellaneous		8	8
22-24 months (indoors)	£/t		
Barley and minerals	6.7 to 3.0 kg/day @ 175	106	47
Silage	2.75 to 3.0 tonnes @ 14.13	39	42
Veterinary and miscellaneous		4	4
Total variable costs		417	319
GROSS MARGIN PER HEAD		60	157
GROSS MARGIN PER HECTARE @ 1.8 ce/ha		108	283
Number of cattle finished per hectare		2.09	2.0
Interest charge per head (@ 8%)		59	51

24 MONTH STEER BEEF (CONTINUED)

- (1) Sale price is after deduction of marketing expenses which include fees for meat inspection, grading, insurance, offal disposal, clipping, R&D and LMC levies.
- (2) Two levels of concentrate requirements are given. The lower quantity is required with 'GOOD' quality silage (6 to 7 weeks regrowth, 68 D) and the higher levels with 'MEDIUM' quality silage (10 weeks regrowth, 60 D).
- (3) Weight at turnout 100 kg lwt.

Daily liveweight gain (kg)	
0.75 At grass (1st summer)	0.90 At grass (2nd summer)
0.60 Housed (1st winter)	1.10 Housed (2nd winter)

- (4) Grazing and silage costs - see pages 18 and 19.

- (5) Sensitivity analysis

Change in gross margin (£)

	Quality of silage			
	MEDIUM		GOOD	
	per head	per hectare	per head	per hectare
	± £10 in calf value	10	18	10
± 5p/kg in sale value	17	30	17	30

28 MONTH STEER BEEF
(April/May 2008 born continental type calves)

			TYPICAL	HIGH
	kg(dwt)	p/kg	£/head	£/head
Finished steer	355	@ 190	675	675
Less Value of calf plus 2% mortality allowance			160	160
OUTPUT			515	515
Calf rearing costs to 3 months			70	70
4-5 months (at grass)		£/t		
Concentrates (17% Protein)	60 to 30 kg	@ 194	12	6
		£/ha		
Grazing	.04 ha	@ 148	6	6
Veterinary and miscellaneous			8	8
6-11 months (indoors)		£/t		
Concentrates (15% Protein)	2 to 1 kg/day	@ 176	63	32
Silage	3 to 4 tonnes	@ 14.13	42	57
Veterinary and miscellaneous			5	5
12-17 months (at grass)		£/ha		
Grazing	0.16 ha	@ 148	24	24
Veterinary and miscellaneous			8	8
18-23 months (indoors)		£/t		
Concentrates (15% Protein)	2 to 1 kg/day	@ 176	63	32
Silage	5 to 5.5 tonnes	@ 14.13	71	78
Veterinary and miscellaneous			5	5
24-28 months (outdoors)		£/ha		
Grazing	0.25 ha	@ 148	37	37
Veterinary and miscellaneous			8	8
Total variable costs			422	374
GROSS MARGIN PER HEAD			92	140
GROSS MARGIN PER HECTARE @ 1.8 ce/ha			132	201
Number of cattle finished per hectare			1.5	1.5
Interest charge per head (@ 8%)			69	65

28 MONTH STEER BEEF (CONTINUED)

- (1) Sale price is after deduction of marketing expenses which include fees for meat inspection, grading, insurance, offal disposal, clipping, R&D and LMC levies.
- (2) To be sold on the commercial market the steer must be marketed under 30 months of age.
- (3) Two levels of concentrate requirements are given. The lower quantity is required with 'GOOD' quality silage (6 to 7 weeks regrowth, 68 D) and the higher level with 'MEDIUM' quality silage (10 weeks regrowth, 60 D).
- (4) Weight at turnout 110 kg lwt.

Daily Liveweight Gain (kg)	
0.75 At grass	0.50 Housed (2nd Winter)
0.60 Housed (1st Winter)	1.00 At grass
0.90 At grass	

- (5) Grazing and silage costs - see pages 18 and 19.

- (6) Sensitivity Analysis

Change in Gross Margin (£)

		Quality of silage			
		MEDIUM		GOOD	
		per head	per hectare	per head	per hectare
± £10 in calf value		10	14	10	14
± 5p/kg in sale value		18	25	18	25

CEREAL BULL BEEF
(Friesian type calves)

	kg(dwt)	p/kg	TYPICAL £ /head
Finished Bull	260	@ 170	442
Less Value of calf plus 2% mortality allowance			35
OUTPUT			407
Calf rearing costs to 3 months			70
4-13 months		£/t	
Concentrates (13-15% Protein)	2 tonnes	@ 176	352
Straw			12
Veterinary and miscellaneous			33
Total variable costs			467
GROSS MARGIN PER HEAD			-60
Interest charge per head (@ 8%)			23

- (1) Sale price is after deduction of marketing expenses which include fees for meat inspection, grading, insurance, offal disposal, clipping, R&D and LMC levies.
- (2) Bulls are potentially dangerous. Guidance on the handling of bulls can be obtained from DARD.
- (3) **Market outlets for bull beef should be identified before production is commenced.**
- (4) Friesian type bull calves finished at 13 months of age. DLWG of 1.15 kg between 4 and 13 months of age, with a feed conversion ratio of 6.1:1.

(5) Sensitivity analysis

Change in gross margin (£)

	per head
± £10 in calf value	10
± 5p/kg in sale value	13.0
± £10/t in concentrate price	20

GRASS SILAGE BULL BEEF
(Born spring 2008 continental type calves)

	kg(dwt)	p/kg	TYPICAL £/head	HIGH £/head
Finished Bull	325	@ 190	618	618
Less Value of calf plus 2% mortality allowance			160	160
OUTPUT			458	458
Calf rearing costs to 3 months			70	70
4-6 months		£/t		
Concentrates (17% Protein)	0.5 to 0.3 tonnes	@ 194	97	58
Silage	0.5 to 1.0 tonnes	@ 14.13	7	14
Veterinary and miscellaneous			10	10
7-14 months				
Concentrates (15% Protein)	1.4 to 0.9 tonnes	176	246	158
Silage	5.0 to 6.0 tonnes	14.13	71	85
Veterinary and miscellaneous			14	14
Total variable costs			515	410
GROSS MARGIN PER HEAD			-58	48
GROSS MARGIN PER HECTARE @ 2 ce/ha			-193	119
Number of cattle finished per hectare			6.7	5.0
Interest charge per head (@ 8%)			39	34

- (1) Sale price is after deduction of marketing expenses which include fees for meat inspection, grading, insurance, offal disposal, clipping, R&D and LMC levies.
- (2) Bulls are potentially dangerous. Guidance on the handling of bulls can be obtained from DARD.
- (3) **Market outlets for bull beef should be identified before production is commenced.**
- (4) Two levels of concentrate requirements are given. The lower quantity is required with 'GOOD' quality silage (6 to 7 weeks regrowth, 68 D) and the higher level with 'MEDIUM' quality silage (10 weeks regrowth, 60 D). Care should be exercised with silage intake levels to avoid under finished animals at 15 months.

GRASS SILAGE BULL BEEF (CONTINUED)

(5) Continental type bull calves born during the spring and finished at 14 months of age. DLWG of 1.40 kg between 4 and 14 months of age.

(6) Silage costs - see page 19.

(7) Sensitivity Analysis

Change in Gross Margin (£)

	Quality of silage			
	MEDIUM		GOOD	
	per head	per hectare	per head	per hectare
± £10 in calf value	10	33	10	25
± 5p/kg in sale value	16	54	16	41
± £10/t in concentrate price	19	63	12	30

CALF TO STORE SYSTEM
(January 2008 born continental type calves)

	kg(lwt)	£/100kg	TYPICAL £/head
Sale	390	@ 120	468
Less value of calf plus 2% mortality allowance			160
OUTPUT			308
Calf rearing cost to 3 months			70
4 - 10 months (at grass)		£/t	
Concentrates (17% protein)	100 kg	@ 194	19
Grazing	0.15 ha	@ 148	22
Veterinary and miscellaneous			9
11 - 16 months (indoors)			
Concentrates (15% protein)	1.5 kg/day	@ 176	48
Silage	4.5 tonnes	@ 14.13	64
Veterinary and miscellaneous			5
Total Variable Costs			237
GROSS MARGIN PER CALF			71
GROSS MARGIN PER HECTARE @ 1.8 ce/ha			98
Interest per head (@ 8%)			30

(1) January born continental type bull calves sold during the following spring ; 3.0 cattle per hectare.

(2) Weight at turnout 135 kg lwt
 Daily liveweight gain (kg): - At grass 0.8
 - Housed 0.6

LOWLAND SUCKLER COWS - MAY/JUNE CALVING (2008)

TYPICAL

	sold per cow		kg(lwt)		£/100kg	£/head
Calves	0.98	@	320	@	120	376
Less herd replacement cost						18
calf purchases	0.08					11
OUTPUT						347
					£/t	
Concentrates - cow & calf			150 kg	@	175	26
					£/ha	
Grazing			0.31 ha	@	148	46
					£/t	
Silage - cow			8 tonnes	@	14.13	113
- calf			2.5 tonnes	@	14.13	35
Veterinary and miscellaneous						50
Total Variable Costs						270
GROSS MARGIN PER COW						76
GROSS MARGIN PER HECTARE @ 1.8 ce/ha						121

- (1) Calves weaned during March/April (10 months old) at a liveweight between 300 and 340 kg. 0.96 calves born per cow and 6 per cent mortality birth to weaning.
- (2) Herd replacement cost
- | | | |
|--------------------|------|---|
| Cow purchase price | £600 | 15% replacement rate and 1% mortality per annum |
| Cull cow price | £440 | Bull depreciation £10 per cow/year |
- (3) Daily liveweight gain
- | | | |
|---------|----------|--------|
| | At grass | Housed |
| Bulls | 1kg | 0.9kg |
| Heifers | 1kg | 0.9kg |
- (4) For details of grazing & silage variable costs, see pages 18 and 19.
- (5) Sensitivity analysis

Change in Gross Margin (£)

	per cow	per hectare
± £10/t in concentrate price	2	2
± £5/100 kg in sale price	16	25

LOWLAND SUCKLER COWS - FEBRUARY/MARCH CALVING (2008)

				TYPICAL
	sold per cow	kg(lwt)	£/100kg	£/head
Calves	0.98 @	270 @	120	318
Less herd replacement cost				38
calf purchases	0.10			14
OUTPUT				265
			£/t	
Concentrates - calf		50 kg @	194	10
- cow		50 kg @	175	9
			£/ha	
Grazing		0.30 ha @	148	44
			£/t	
Silage - cow		7 tonnes @	14.13	99
Veterinary and miscellaneous				54
Total Variable Costs				216
GROSS MARGIN PER COW				49
GROSS MARGIN PER HECTARE @ 1.8 ce/ha				84

- (1) Calves weaned during October. DLWG of 0.95 kg. 0.94 calves born per cow and 6 per cent mortality birth to weaning.
- (2) Herd replacement cost

Cow purchase price	£600	15% replacement rate and 1% mortality per annum
Cull cow price	£440	Bull depreciation £10 per cow/year
- (3) For details of grazing & silage variable costs, see pages 18 and 19.
- (4) Sensitivity analysis

Change in gross margin (£)

	per cow	per hectare
± £10/t in concentrate price	1	2
± £5/100 kg in sale price	13	22

LOWLAND SUCKLER COWS - SEPTEMBER/OCTOBER CALVING (2008)

TYPICAL

	sold per cow	kg(lwt)	£/100kg	£/head
Calves	0.98	@ 280	@ 120	329
Less herd replacement cost				38
calf purchases	0.10			14
OUTPUT				277
			£/t	
Concentrates - calf		150 kg	@ 194	29
- cow		200 kg	@ 175	35
			£/t	
Silage - cow		8 tonnes	@ 14.13	113
- calf		1 tonnes	@ 14.13	14
			£/ha	
Grazing		0.28 ha	@ 148	41
Veterinary and miscellaneous				58
Total Variable Costs				291
GROSS MARGIN PER COW				-14
GROSS MARGIN PER HECTARE @ 1.8 ce/ha				-23

- (1) Calves weaned during June. DLWG of 0.95 kg. 0.94 calves born per cow and 6 per cent mortality birth to weaning.
- (2) Herd replacement cost

Cow purchase price	£600	15% replacement rate and 1% mortality
Cull cow price	£440	per annum.
		Bull depreciation £10 per cow/year
- (3) For details of grazing & silage variable costs, see pages 18 and 19.
- (4) Sensitivity analysis

Change in gross margin (£)

	per cow	per hectare
± £10/t in concentrate price	4	6
± £5/100 kg in sale price	14	23

HILL SUCKLER COWS - SPRING CALVING (2008)

				TYPICAL
	sold per cow	kg(lwt)	£/100kg	£/head
Calves	0.94	@ 230	@ 120	259
Less herd replacement cost				41
calf purchases	0.06			8
OUTPUT				210
		kg	£/t	
Barley and minerals		110	@ 175	19
Grazing				22
		tonnes	£/t	
Silage		6	@ 14.13	85
Veterinary and miscellaneous				50
Total Variable Costs				176
GROSS MARGIN PER COW				34

(1) Calves weaned during October. 0.92 calves born per cow and 4 per cent mortality birth to weaning.

(2) Herd replacement cost

Cow purchase price	£600	15% replacement rate and 1% mortality
Cull cow price	£420	per annum.
		Bull depreciation £10 per cow/year

(3) For details of grazing & silage variable costs, see pages 18 and 19.

Change in gross margin (£)

	per head
± £10/t in concentrate price	1
± £5/100 kg in sale price	11

BEEF HEIFER REPLACEMENTS - SPRING BORN 2008
24 MONTH CALVING

TYPICAL

		£/head
Value of heifer (allowing for barreners & rejects)		600
Less Value of calf plus 2% mortality allowance		120
OUTPUT		480
Calf rearing costs to 3 months		65
4-9 months (at grass)	£/t	
Concentrates (17% protein)	20 kg @ 194	4
	£/ha	
Grazing	0.11 ha @ 148	16
Veterinary and miscellaneous		7
10-15 months (indoors)	£/t	
Barley and minerals	400 kg @ 175	70
Silage	4.5 tonnes @ 14.13	64
Veterinary and miscellaneous		3
16-21 months (at grass)		
Grazing	0.19 ha @ 148	28
AI Bull charges, veterinary and miscellaneous		22
22-24 months (indoors)	£/t	
Barley and minerals	40 kg @ 175	7
Silage	3 tonnes @ 14.13	42
Veterinary and miscellaneous		7
Total variable costs		335
GROSS MARGIN PER HEAD		145
GROSS MARGIN PER HECTARE @ 1.8 ce/ha		256

(1) Production of a continental cross Friesian heifer. Target weights:-

320 kg at 15 months

520 kg at 24 months

(2) 2.1 heifer replacements per hectare.

**BEEF HEIFER REPLACEMENTS - SPRING BORN - 24 MONTH CALVING
(CONTINUED)**

(3) For details of grazing & silage variable costs, see pages 18 and 19.

(4) Sensitivity analysis

Change in gross margin (£)

	per head	per hectare
± £10 in heifer values	10	18
± £10 in calf prices	10	18

FINISHING SUCKLED STEER CALVES

(Purchased Autumn 2008)

TYPICAL

	kg (dwt)	p/kg	£/head
Sale of finished steer	340	@ 195	663
	kg (lwt)	£/100 kg	
Less Value of calf plus 2% mortality allowance	265	@ 120	318
OUTPUT			345
9-14 months (indoors)		£/t	
Concentrates (17% Protein)	2.0 kg/day	@ 194	70
Silage	3.5 tonnes	@ 14.13	49
Veterinary and miscellaneous			9
15-20 months (at grass)		£/t	
Barley and minerals	40 kg	@ 175	7
		£/ha	
Grazing	0.19 ha	@ 148	28
Veterinary			10
21-24 months (indoors)			
Barley and minerals	6 kg/day	@ 175	126
Silage	3 tonnes	@ 14.13	42
Veterinary and miscellaneous			9
Total variable costs			351
GROSS MARGIN PER HEAD			-6
GROSS MARGIN PER HECTARE @ 1.8 ce/ha			-14
Interest charge per head (@ 8%)			49

- (1) Continental calves born during the spring 2008, purchased at the autumn suckler sales and sold at 2 years of age. 2.8 steers finished per hectare.

	1st Winter Housed	Grass	2nd Winter Housed
Days	180	180	120
DLWG (kg)	0.6	0.9	1.0
Concentrates (kg)	360	40	720

FINISHING SUCKLED STEER CALVES (CONTINUED)

(2) Sale price is after deduction of marketing expenses which include fees for meat inspection, grading, insurance, offal disposal, clipping, R&D and LMC levies.

(3) Sensitivity analysis

Change in gross margin (£)

	per head	per hectare
± £5/100 kg in purchase price	13	32
± 5p/kg in sale prices	17	42

**WINTER (2008/2009) STEER FINISHING
400 KG STORE**

			TYPICAL	
	kg (dwt)		p/kg	£/head
Sale of finished steer	330	@	190	627
	kg(lwt)		p/kg	
Less Purchase	400	@	120	480
OUTPUT				147
			£/t	
Barley and minerals	4 kg/day	@	175	161
Silage	7 tonnes	@	14.13	99
Veterinary and miscellaneous				7
Total Variable Costs				267
GROSS MARGIN PER HEAD				-120
GROSS MARGIN PER HECTARE @ 1.8 ce/ha				-571
Interest charge per head (@ 8%)				31

- (1) Continental cross steers purchased during the autumn of 2008 and finished in 230 days in house with a DLWG of 0.95kg. 5.7 steers finished per hectare. Deadweight price is net of marketing expenses.
- (2) Cattle are sold at 22 months.
- (3) Gross margin under various purchase and sale price scenarios.

Gross margin (£ per head)

	Purchase Price p/kg (lwt)				
	80	90	100	110	120
150	-92	-132	-172	-212	-252
160	-59	-99	-139	-179	-219
170	-26	-66	-106	-146	-186
180	7	-33	-73	-113	-153
190	40	0	-40	-80	-120

**Sale price
(pence per
per kg (dwt))**

WINTER (2008/2009) STEER FINISHING
500 KG STORE

		TYPICAL
	kg(dwt) p/kg	£/head
Sale of finished steer	350 @ 190	665
	kg(lwt) p/kg	
Less Purchase	500 @ 110	550
OUTPUT		115
	£/t	
Barley and minerals	4 kg/day @ 175	105
Silage	5 tonnes @ 14.13	71
Veterinary and miscellaneous		12
Total Variable Costs		188
GROSS MARGIN PER HEAD		-73
GROSS MARGIN PER HECTARE @ 1.8 ce/ha		-532
Interest charge per head (@ 8%)		21

(1) Continental cross steers. Purchased during the autumn 2008 and housed for 150 days with a daily liveweight gain of 1.0 kg. An average of 8.0 steers finished per hectare. Deadweight price is net of marketing expenses.

(3) Silage costs - see page 19.

(3) Gross margin under various purchase and sale price scenarios.

Gross margin per head

	Purchase Price p/kg (lwt)				
	70	80	90	100	110
140	-48	-98	-148	-198	-248
150	-13	-63	-113	-163	-213
160	22	-28	-78	-128	-178
170	57	7	-43	-93	-143
180	92	42	-8	-58	-108

Sale price
(pence per
per kg (dwt))

SUMMER STEER FINISHING 2008
420 KG STORE

		TYPICAL
	kg(dwt) p/kg	£/head
Sale of finished steer	345 @ 185	638
	kg(lwt) £/100kg	
Less Purchase	420 @ 125	525
OUTPUT		113
	£/t	
Barley and Minerals	20 kg @ 175	4
	£/ha	
Grazing	0.25 ha @ 148	37
Veterinary and miscellaneous		8
Total Variable Costs		49
GROSS MARGIN PER HEAD		65
GROSS MARGIN PER HECTARE @ 1.8 ce/ha		389
Interest charge per head (@ 8%)		22

- (1) Sale price is after deduction of marketing expenses which include fees for meat inspection, grading, insurance, offal disposal, clipping, R&D and LMC levies.
- (2) Continental cross steers. Purchased during the spring 2008 and grazed for 180 days with a daily liveweight gain of 0.9 kg. An average of 4.0 steers grazed per hectare.
- (3) Grazing variable costs - see page 18.
- (4) Average Northern Ireland stocking rates for summer cattle finishing would typically be lower with approximately 2.6 cattle finished per hectare.
- (5) Gross margin under various purchase and sale price scenarios.

Gross margin per head

	Purchase price p/kg (lwt)				
	80	90	100	110	120
140	98	56	14	-28	-70
150	133	91	49	7	-35
160	168	126	84	41	-1
170	202	160	118	76	34
180	237	195	153	111	69

**Sale price
(pence per
per kg (dwt))**

'TRADITIONAL' STORE TO BEEF SYSTEM

(Purchased October 2008)

		TYPICAL
	kg(dwt) p/kg	£/head
Sale of finished steer	350 @ 185	648
	kg(lwt) £/100kg	
Less Purchase	360 @ 120	432
OUTPUT		216
	£/t	
Barley and minerals	300 kg @ 175	53
Silage	5.5 tonnes @ 14.13	78
	£/ha	
Grazing	0.22 ha @ 148	33
Veterinary and miscellaneous		32
Total Variable Costs		195
GROSS MARGIN PER HEAD		21
GROSS MARGIN PER HECTARE @ 1.8 ce/ha		62
Interest charge per head (@ 7%)		42

- (1) Continental cross steers. Purchased during October 2008 and finished one year later.
2.8 cattle finished per hectare. Deadweight price is net of marketing expenses.

	Housed	Grass 2nd year
Days	180	180
DLWG (kg)	0.55	0.9
Concentrates (kg)	300	NIL

- (2) Grazing and silage costs - see pages 18 and 19.
- (3) Average Northern Ireland stocking rates for summer cattle finishing would typically be lower with approximately 1.6 cattle finished per hectare.
- (4) Sensitivity analysis

Change in gross margin (£)

± £5/100kg in purchase price
± 1p/kg in sale price

per head	per hectare
18	50
4	11

SUMMER GRAZING OF STORE CATTLE 2008

TYPICAL

	kg(lwt)	£/100kg	£/head
Sale of store steer	450	@ 115	518
Less Purchase	300	@ 125	375
OUTPUT			143
		£/t	
Barley and minerals	40 kg	@ 175	7
		£/ha	
Grazing	0.18 ha	@ 148	27
Veterinary and miscellaneous			12
Total Variable Costs			46
GROSS MARGIN PER HEAD			97
GROSS MARGIN PER HECTARE @ 1.8 ce/ha			580
Interest charge per head (@ 7%)			16

- (1) Continental cross steer purchased during the Spring 2008 and grazed for 180 days with a daily liveweight gain of 0.85 kg. An average of 5.6 steers grazed per hectare.
- (2) Grazing variable costs - see page 18.
- (3) At the average Northern Ireland stocking rate of 1.65 cow equivalents per hectare, 4.5 steers would be stocked per hectare.
- (4) Gross margin under various purchase and sale price scenarios.

Gross margin per head

		Purchase Price p/kg (lwt)				
		75	85	95	105	115
Sale price (pence per per kg (lwt))	75	67	37	7	-23	-53
	85	112	82	52	22	-8
	95	157	127	97	67	37
	105	202	172	142	112	82
	115	247	217	187	157	127

LOWLAND BREEDING EWES - MID MARCH LAMBING

				LOW	TYPICAL	HIGH
	kg	p/kg		£	£	£
Lambs (no.) sold finished	21 @	230	(1.20)	58	(1.40) 68	(1.60) 77
Wool					2	
Less Flock replacement cost					13	
OUTPUT				47	57	67
	kg	£/t				
Concentrates	55 @	183			10	
Grassland (including hay/silage)					15	
Veterinary and miscellaneous					8	
Total Variable Costs					33	
GROSS MARGIN PER EWE				14	24	34
GROSS MARGIN PER HECTARE @ 1.8 ce/ha				130	216	303

(1) Lamb sales pattern (%)

	June	July	Aug	Sept	Oct to Dec
Mid March lambing	17	19	14	13	37
Mid April lambing	4	14	21	25	36

(2) Sale price of lambs is net of marketing expenses.

(3) A stocking rate of 9 ewes per hectare is assumed in this budget.

(4) Flock replacement cost. Ewe replacement rate of 25% (inclusive of 5% ewe mortality).
Ewes purchased at £70 and culls sold at £30. Rams purchased at £150 and sold after 3 years at £30.

(5) If replacements are retained rather than purchased, the flock replacement cost will fall, but so too will lamb output.

(6) Flocks in the new LFA will have a similar physical performance.

(7) Grazing, silage and hay costs - see pages 18 - 20.

(8) Sensitivity analysis

Change in gross margin(£)

	TYPICAL	
	per ewe	per hectare
± 0.1 in lambs reared per ewe	4.8	43
± 10p/kg in sale value	2.9	26
± £20/t in concentrate price	1.1	10

LOWLAND BREEDING EWES - EARLY (DECEMBER/JANUARY) LAMBING

			LOW	TYPICAL	HIGH
	kg	p/kg	£	£	£
Lambs (no.) sold finished	21	@ 260	(1.05) 57	(1.30) 71	(1.45) 79
Wool				2	
Less Flock replacement cost				13	
OUTPUT			47	60	69
	kg	£/t			
Concentrates - ewe	70	@ 183		13	
lambs	35	@ 175		6	
Grazing and hay/silage				18	
Veterinary and miscellaneous				11	
Total Variable Costs				48	
GROSS MARGIN PER EWE			-1	13	21
GROSS MARGIN PER HECTARE @ 2.5 ce/ha			-14	157	259

(1) Lamb sales pattern (%)

April	May	June	July	Aug to Nov
15	20	20	15	30

Some producers may be able to sell up to 90% of their lambs before the end of June.

- (2) Sale price of lambs is net of marketing expenses.
- (3) A stocking rate of 12.5 ewes per hectare is assumed in this budget. Stocking rate is higher than that achieved by 'Mid March' lambing due to the earlier lamb sales.
- (4) Flock replacement cost . Ewe replacement rate of 25% (inclusive of 5% ewe mortality). Ewes purchased at £70 and culls sold at £30. Rams purchased at £150 and sold after 3 years at £30.
- (5) With this production system, housing is normally required at lambing. Approximately 0.10 fewer lambs will be reared per ewe than for 'Mid March' lambing.

LOWLAND BREEDING EWES - EARLY (DECEMBER/JANUARY) LAMBING (CONTINUED)

(6) Flocks in the new LFA will have a similar physical performance.

(7) Grazing, silage and hay costs - see pages 18 - 20.

(8) Sensitivity analysis

Change in gross margin (£)

	TYPICAL	
	per ewe	per hectare
± 0.1 in lambs reared per ewe	5.5	68
± 10p/kg in sale value	2.7	34
± £20/t in concentrate price	2.1	26

UPLAND BREEDING EWES - CROSSBRED TYPE IN SDA

		LOW		TYPICAL		HIGH	
		£		£		£	
	kg @ p/kg						
Lambs sales (no.)	21 @ 220	(0.74)	34	(0.98)	45	(1.12)	52
	16 @ 220	(0.31)	11	(0.42)	15	(0.48)	17
Wool					2		
Less Flock replacement cost					13		
OUTPUT			35		50		58
	kg £/t						
Concentrates	65 @ 183				12		
Grazing and hay					15		
Veterinary and miscellaneous					7		
Total Variable Costs					34		
GROSS MARGIN PER EWE			1		16		24

- (1) For the typical flock, 70% of lambs are sold fat at 21kg halfweight, 30% as stores at 16kg halfweight.
- (2) Sale price of lambs is net of marketing expenses.
- (3) Flock replacement. Ewe replacement rate of 25% (inclusive of 5% mortality).
Ewe replacements purchased at £70 each and culls sold at £30 each. Rams purchased at £150 each and sold after 3 years for £30.
- (4) Sensitivity analysis

Change in gross margin(£)

	TYPICAL
	per ewe
± 0.1 in lambs reared per ewe	4.3
± 10p/kg in sale value	2.7
± £20/t in concentrate price	1.3

HILL BREEDING EWES - MOUNTAIN TYPE IN SDA

			LOW	TYPICAL	HIGH	
			£	£	£	£
	kg	@ p/kg				
Lamb sales (no.)	20	215	(0.21)	9	(0.27)	12
	14	@ 215	(0.49)	15	(0.63)	19
		£/head				
Cull ewes (0.18)	@	20				4
Wool						1
Less Flock replacement cost						1
OUTPUT			27	34		41
	kg	£/t				
Concentrates	55	@ 183				10
Grazing						13
Veterinary and miscellaneous						7
Total Variable Costs						30
GROSS MARGIN PER EWE			-3	4		11

- (1) 25 lambs per 100 ewes retained as replacements.
- (2) Lambs sales, 30% sold fat at 20kg halfweight and 70% sold as stores at 14kg halfweight.
- (3) Sale price of lambs is net of marketing expenses.
- (4) Flock replacement. Rams purchased at £150 each and sold after 3 years for £30
- (5) Ewe mortality of 7% per annum.
- (6) Sensitivity analysis

Change in gross margin (£)

	TYPICAL
	per ewe
± 0.1 in lambs reared per ewe	3.4
± 10p/kg in sale value	2.0
± £20/t in concentrate price	1.1

STORE LAMB (16 kg +) FINISHED ON GRASS

	kg (halfweight)	p/kg	TYPICAL £
Lamb sale	21	@ 210	44
Less lamb purchase	16	@ 220	35
OUTPUT (feeder's margin)			9
Grazing			2
Veterinary and miscellaneous			1
Total Variable Costs			3
GROSS MARGIN PER LAMB			6

- (1) Store lambs are purchased at an average half weight of 16 kg during the summer/autumn and typically grazed for approximately 100 days. Approximately 70% of the finished lambs are sold in the period October to December. Price for finished lambs is net of marketing deductions.
- (2) Average weekly liveweight gain of 0.7 kg. However, some producers could achieve a liveweight gain of 1.0 kg per week.
- (3) A mortality rate of less than 1% is typical.
- (4) Own grazing is charged at £0.60 per month for each lamb. Rented grass keep would cost approximately £0.45 per lamb per week.
- (5) Sensitivity analysis

Change in gross margin (£)

± 10p per kg halfweight in purchase price
 ± 10p per kg halfweight in sale price

per lamb
1.60
2.10

STORE LAMB (14 kg +) FINISHED ON GRASS AND CONCENTRATES

	kg (halfweight)	p/kg	TYPICAL £
Lamb sale	21	@ 225	47
Less lamb purchase	14	@ 230	32
OUTPUT (feeder's margin)			15
	kg	£/tonne	
Concentrates	45	@ 175	8
Grazing			3
Veterinary and miscellaneous			1
Total Variable Costs			12
GROSS MARGIN PER LAMB			3

- (1) Store lambs are purchased during the summer/autumn at an average half weight of 14kg and typically grazed for 150 days. Approximately 66% of the finished lambs are sold in the period December to February. Price for finished lambs is net of marketing expenses.
- (2) Average weekly liveweight gain of 0.66 kg.
- (3) A mortality rate of 1% is typical.
- (4) Typically 15kg of concentrates per month are fed for 3 months. However, up to 25kg of concentrates may be fed per month.
- (5) Own grazing is charged at £0.60 per month for each lamb. Rented grass keep would cost approximately £0.45 per lamb per week.
- (6) Sensitivity analysis

Change in gross margin(£)

	per lamb
± 10p/kg in purchase price	1.40
± 10p/kg in sale value	2.10
± £10/t in concentrate price	0.45
± 10 kg in concentrate use	1.75

STORE LAMB (14 kg) FINISHED ON FORAGE CROPS

	kg (halfweight)			TYPICAL
	kg	p/kg		£
Lamb sale	21	@ 235		49
Less lamb purchase	14	@ 230		32
OUTPUT (feeder's margin)				17
	kg/day	£/tonne	days	
Concentrates	0.2	@ 175	125	4
		p/day	@	
Grazing		3	@ 100	3
Veterinary and miscellaneous				1
Total Variable Costs				8
GROSS MARGIN PER LAMB				9

- (1) Store lambs are purchased at an average halfweight of 14kg during the autumn of and typically fed during a 125 day finishing period on forage crops. The finished lambs are assumed to be sold in February.
- (2) Price for finished lambs is net of marketing expenses.
- (3) Average weekly liveweight gain of 0.8kg.
- (4) A mortality rate of 1% is typical.
- (5) Forage costs include seed, fertiliser and spray expenses only. No allowance for crop cultivations has been included. Typical contractor charges for cultivations would be £65 per hectare for swedes and £50 per hectare for stubble turnips, or approximately £1/ lamb.
- (6) Swedes sown in May and fed from November provide 6,500 lamb grazing days per hectare at a typical variable cost of £115 per hectare or 2.9 pence per lamb grazing day. Stubble turnips sown in July and grazed from November provide 4,000 grazing days per hectare at a typical variable cost of £125 per hectare or 1.9 pence per lamb grazing day.
- (7) Sensitivity analysis

Change in gross margin (£)

	per lamb
±10p/kg in purchase price	1.40
±10p/kg in sale value	2.10

STORE LAMBS FINISHED INDOORS

	kg (halfweight)	TYPICAL
	kg @ p/kg	£
Lamb sale	22 @ 235	52
Less lamb purchase	15 @ 220	33
OUTPUT (feeder's margin)		19
	kg £/tonne	
Concentrates	85 @ 175	15
Veterinary and miscellaneous (including fodder)		3
Total Variable Costs		18
GROSS MARGIN PER LAMB		1

(1) Store lambs are housed in November at an average half weight of 15kg. They are typically finished after 100 (up to 140) days concentrate only feeding period. The finished lambs are sold in the early spring.

(2) Price for finished lambs is net of marketing deductions.

(3) Concentrate intake and liveweight gain

	Store lamb	
	30 kg (lwt)	40 kg (lwt)
Concentrate intake per month (kg)	25	35
Typical weekly liveweight gain (kg)	0.8	1.1

(4) A mortality rate of 2.5% is typical.

(5) Sensitivity analysis

Change in gross margin (£)

	per lamb
± 10p/kg in purchase price	1.50
± 10p/kg in sale value	2.20
± £10/t in concentrate price	0.85
± 10 kg in concentrate use	1.75

PIG REARING

		LOW	TYPICAL	HIGH
	£/head	£	£	£
Sales (no.) of 39 kg weaners	@ 39	(18.0) 702	(20.0) 780	(22.0) 858
	number £/head			
Plus cull sows	0.36 @ 80		29	
Less boar charge			3	
OUTPUT		728	806	884
	£/t			
Sow meal	190	246	247	247
Creep and link feeds	345	124	138	152
Grower pellets	219	177	197	217
A.I. Costs		8	8	8
Veterinary and miscellaneous		50	50	50
Total Variable Costs		606	640	673
GROSS MARGIN PER SOW		122	166	211
GROSS MARGIN PER WEANED PIG		6.8	8.3	9.6

- (1) Herd replacement. It is assumed that sows and boars have an average breeding life of 2.5 years; 1 boar per 75 sows; sow mortality 4.0% and 100% of replacements retained.
- (2) As the number of weaners sold per sow increases, the sow meal allocation per weaner falls.

Number of weaners sold per sow per year

LOW	TYPICAL	HIGH
18	20	22

Meal consumption per weaner (kg)

Sow meal

Creep & link feeds

Grower pellets

Total feed

LOW	TYPICAL	HIGH
72	65	59
20	20	20
45	45	45
137	130	124

- (3) A.I. Costs - semen cost £3 per bottle. Each sow inseminated on average 2.6 times per year
- (4) 'Veterinary and miscellaneous' costs do not include 'fixed costs' such as electricity, water and transport which are directly associated with the pig enterprise - typically £50 per sow

- (5) Sensitivity analysis

Change in gross margin (£ per sow)

	LOW	TYPICAL	HIGH
± £1 in sale price	18	20	22
± £5 in average feed price	12	13	14

- (6) At a typical level of performance an average weaner price of £32 is required to cover the variable costs of production.

PIG FINISHING

			TYPICAL
	kg (dwt)	p/kg	£
Sale	78	@ 100	78
	kg (lwt)		
Less purchase	39		39
OUTPUT			39
	kg	£/t	
Finisher meal	175	@ 195	34
Veterinary and miscellaneous			3
Total variable cost			37
GROSS MARGIN PER PIG			2

(1) Conversion table for converting liveweight to deadweight

kg lwt.	Killing out (KO)%
79 - 87	74
88 - 95	75
96 - 102	76

(2) Prices for finished animals are net of marketing deductions.

(3) The mortality rate is typically 1%. On average 1 pig in 120 sold is condemned and no payment is received.

(3) Typical feed conversion rate (FCR) of 2.7 : 1. There is a large variation in FCR between units depending on management practices adopted, genetics, slaughter weight and health status.

(4) 'Veterinary and miscellaneous' costs do not include 'fixed costs' such as electricity, water and transport which are directly associated with the pig enterprise - typically £2 per pig.

(5) Sensitivity analysis

Change in gross margin

± 1p/kg in sale price
± £5/tonne in average feed price (FCR 2.7:1)

£ per pig
0.78
0.88

PIG REARING AND FINISHING

		LOW	TYPICAL	HIGH
		£	£	£
	kg (dwt) p/kg			
Sales of pigs (no.) @	78 @ 100	(18) 1,404	(20) 1,560	(22) 1,716
	Number £/head			
Plus cull sows	0.36 @ 80		29	
Less boar charge			3	
OUTPUT		1,430	1,586	1,742
	£/t			
Sow meal	190	246	247	247
Creep & link feeds	345	124	138	152
Grower pellets	219	268	289	308
Finisher meal	195	597	624	665
A.I. Costs		8	8	8
Veterinary and miscellaneous		85	85	85
Total Variable Costs		1,328	1,391	1,465
GROSS MARGIN PER SOW		102	195	277
GROSS MARGIN PER FINISHED PIG		5.66	9.75	12.60

- (1) Sale price for finished animals are net of marketing expenses.
- (2) Herd replacement. It is assumed that sows and boars have an average breeding life of 2.5 years; 1 boar per 75 sows; sow mortality 4.0% and 100% of replacements retained.
- (3) Mortality 4% weaning to sale. In addition, 1 pig in 120 sold is condemned for which no payment is received.
- (4) High performing herds have significantly better FCR than low performing herds.
- (5) A.I. Costs - semen cost £3 per bottle. Each sow inseminated on average 2.6 times per year

	LOW	TYPICAL	HIGH
Number of weaners sold per sow per year	18.0	20.0	22.0

Meal consumption per finished pig (kg)	LOW	TYPICAL	HIGH
Sow meal	72	65	59
Creep & link feed	20	20	20
Grower pellets	68	66	64
Finisher pellets	170	160	155
Total feed	330	311	298

PIG REARING AND FINISHING (CONTINUED)

- (5) 'Veterinary and miscellaneous' costs do not include 'fixed costs' such as electricity, water and transport which are directly associated with the pig enterprise - typically £12.50 per pig.

- (6) Sensitivity analysis

Change in gross margin

	£ per sow		
	LOW	TYPICAL	HIGH
± 1p/kg in sale price	14.0	15.6	17.2
± £5/tonne in average feed price	30	31	33

CAGED LAYING HENS

PER HEN HOUSED	TYPICAL pence/dozen	GOOD pence/dozen
Sales	51.00	51.00
Less pullet	9.81	9.44
OUTPUT	41.19	41.56
Concentrates @£170/t	30.79	29.14
Miscellaneous	1.92	1.85
Total Variable Costs	32.71	30.99
GROSS MARGIN PER DOZEN (pence)	8.48	10.57
GROSS MARGIN PER BIRD (£)	2.20	2.85

- (1) In Northern Ireland, most caged birds are kept under contract to an egg packer. Farmers receive a fee (typically around £1.80 per bird per laying cycle) from which they must meet labour, electricity, water and other miscellaneous costs. In addition bonuses may be paid based on production performance. An alternative method of payment is where farmers are paid an agreed price per dozen eggs depending on size and quality.

- (2) Average data per hen housed over the typical 58 week laying cycle

Type of production	Yield (dozen eggs)	Feed used (g. per day)	Mortality (%)
Typical production	26	116	10
Good production	27	114	5

- (3) The egg price is a weighted average (by class of egg and market destination) and excludes packaging and marketing costs. Fluctuations in egg prices make it imperative that up to date information is obtained in the preparation of any budget.
- (4) Miscellaneous costs are comprised of electricity, water, insurance, repairs, maintenance and sundries. Labour, rent and depreciation are not included in miscellaneous costs.

- (5) Sensitivity analysis

	Change in gross margin (£)	
	per hen housed	
	TYPICAL	GOOD
± 1p in sale price/dozen	0.26	0.27
± £5/t in feed price	0.24	0.23

- (6) Further information and advice may be obtained from DARD's Poultry Technology Service.

FREE RANGE LAYING HENS

PER HEN HOUSED	TYPICAL pence/dozen	GOOD pence/dozen
Sales	65.00	65.00
Less pullet	10.62	10.20
OUTPUT	54.38	54.80
Concentrates @£180/t	38.67	35.66
Miscellaneous	4.17	4.00
Total Variable Costs	42.84	39.66
GROSS MARGIN PER DOZEN (pence)	11.54	15.14
GROSS MARGIN PER BIRD (£)	2.77	3.78

(1) Average data per hen over the typical 58 week laying cycle

Type of production	Yield (dozen eggs)	Feed Used (g. per day)	Mortality (%)
Typical production	24	127	15
Good production	25	122	10

(2) The egg price is a weighted average and excludes packaging and marketing costs.

(3) Miscellaneous costs are comprised of electricity, water, insurance, repairs, maintenance, litter and sundries. Labour, rent and depreciation are not included in miscellaneous costs.

(5) Sensitivity analysis

	Change in gross margin (£)	
	per hen housed	
	TYPICAL	GOOD
± 1p in sale price/dozen	0.24	0.25
± £5/t in feed price	0.26	0.25

(6) Further information and advice can be obtained from DARD's Poultry Technology Service.

BROILERS

	kg	p/kg	TYPICAL pence/bird
Sales	2.1	@ 59.08	124.07
	No.	£/100	
Less Day Old Chicks	1.03	@ 25.00	25.75
OUTPUT			98.32
	kg	£/t	
Concentrates	3.6	@ 224	80.64
Miscellaneous			10.23
Total Variable Costs			90.87
MARGIN PER BIRD (pence)			7.45
MARGIN PER 1,000 BIRDS (£)			74.48

- (1) Most broilers in Northern Ireland are produced under contract to poultrymeat processors. Where growers have invested in new or modernised housing, additional payments may be made.
- (2) 40 day production period of mixed sex birds.
- (3) 3% mortality is typical
- (4) Feed Conversion Ratio of 1.7:1.
- (5) Miscellaneous costs include litter, medication, electricity, gas, and cleaning and washing, insurance, maintenance, repairs and sundries. Labour, rent and depreciation are not included.

- (6) Sensitivity analysis

Change in gross margin

	per bird (p)	per 1,000 birds (£)
± 1p/kg in sale price	2.10	21.00
± £5/t in concentrate price	1.80	18.00
± 0.01 in FCR	0.45	4.50

- (7) Further information and advice may be obtained from DARD's Poultry Technology Service.

NON-THOROUGHBRED HORSES

	TYPICAL		HIGH	
	£/mare		£/mare	
	sold per mare	£	sold per mare	£
Sales - (3 year old)	0.60	@ 3,000	0.75	@ 5,000
Less mare depreciation				
		1,800		3,750
		250		450
OUTPUT		1,550		3,300
Stud fees		200		500
Registration		25		25
Bedding		100		115
Fodder		215		250
Concentrates		250		285
Veterinary and medicines		280		310
Farrier		225		260
Grazing		50		50
Transport and marketing		125		160
Total Variable Costs		1470		1,955
GROSS MARGIN PER MARE		80		1,345

- (1) The output and gross margins of horse production are subject to more variation than most farming enterprises.
- (2) 'High' performance is associated with premium level efficiency and judgement.
- (3) Typical production level - 3 Foals produced every 5 years, High - 3 foals every 4 years.
- (4) Variable costs include costs of rearing offspring (yearling, 2 year old and 3 year old). They are calculated on an average year basis i.e. total associated costs multiplied by 0.6 (typical) and 0.75(high).
- (5) Mare Depeciation Typical Purchase Price £3000 Cull Value £500 Average Life 10 years
 High Purchase Price £5000 Cull Value £500 Average Life 10 years

FARMED DEER

				Venison Sale
	sold finished	kg	£/kg (dwt)	£/hind
Stags	0.43 @	56 @	3.10	75
Hinds	0.38 @	48 @	2.90	53
	culls		£/head	
Stags	0.01 @		104	1
Hinds	0.07 @		95	7
Less stags	0.01 @		450	5
Output per hind				131
	kg		£/t	
Concentrates	150 @		175	26
Forage cost				23
Veterinary, medicine				6
Sundries - including haulage				12
Total Variable Costs				67
GROSS MARGIN PER HIND				63

- (1) Deer farming is a small enterprise in Northern Ireland. Careful planning, including the identification of possible market outlets, should be undertaken before commencing production.
- (2) Hinds sold as breeding stock generally attract a higher price than those sold for venison, although the market for breeding stock is very limited. This budget assumes that replacement hinds are retained rather than bought in.
- (3) A stocking rate of up to 7 hinds per hectare is possible.
- (4) Farmed deer require fencing but this is not included in the calculation of gross margin per hind

MUSHROOMS - TRADITIONAL

			per crop
	lbs	p/lb	
Sales	11,000 @	53	£ 5,830 pence per lb 53
<hr/>			
		£/t	
Compost	20t @	90	1,800 16
Casing			230 2
		p/tray	
Plastic trays (6lb)	@	27	495 5
Fuel for heating			350 3
		p/lb	
Picking - 11,000 lbs	@	10.0	1,100 10
Electricity			80 1
Fungicides and insecticides			50 1
Disinfection/fumigation (at end of crop)			15 1
Casual Labour			375 3
Miscellaneous			80 1
Total Variable Cost			<hr/> 4,575 40
GROSS MARGIN			<hr/> 1,255 11

- (1) Polythene-clad house (33.5 m x 8.5 m) filled with approximately 1,100 bags of ready pasteurised and spawned compost. Cropping 550 lbs per tonne of phase II compost.
- (2) 5.5 crops per house per year.
- (3) No contract charges included for laying out casing or emptying house.
- (4) No charge for disposal of spent compost.
- (5) The success of any horticultural enterprise is very dependent on marketing.
- (6) Figures are based on a 10 house unit.

MUSHROOMS - DUTCH SHELVING

			per crop
	lbs	p/lb	£ pence per lb
Sales	19,500 @	55	10,725 55
<hr/>			
		£/t	
Compost - Phase III	30t @	135	4,050 21
Casing			383 2
		p/tray	
Plastic trays (6lb)	@	27	878 5
Fuel for heating			680 3
		p/lb	
Picking - 19,500 lbs	@	10.0	1,950 10
Electricity			75 0
Fungicides and insecticides			83 0
Disinfection/fumigation (at end of crop)			25 0
Casual Labour			575 3
Miscellaneous			80 0
Total Variable Cost			8,779 45
<hr/>			
GROSS MARGIN			1,946 10

- (1) Polythene-clad house (33.5 m x 8.5 m) filled with approximately 30 tonnes of phase III compost. Cropping 650 lbs per tonne of phase III compost on Dutch Shelving.
- (2) 7.5 crops per house per year.
- (3) No contract charges included for laying out casing or emptying house.
- (4) No charge for disposal of spent compost.
- (5) The success of any horticultural enterprise is very dependent on marketing.
- (6) Figures are based on a 10 house unit.

BRUSSELS SPROUTS PER HECTARE

	tonnes	£ per net	nets per tonne	£
Sales	14	@ 3.00	@ 160	6,720
<hr/>				
	Number	£ per 1,000		
Plants	28,000	@	22.50	630
Fertiliser	230 : 90 : 100			200
Sprays	herbicides			65
	fungicides			145
	insecticides			75
Casual labour	planting			120
	harvesting			1,450
Sundries	nets			165
Total Variable Costs				2,850
<hr/>				
GROSS MARGIN				3,870

(1) Fertiliser 600 kg/ha of 15 : 15 : 17
 500 kg/ha 27½% N

(2) The success of any horticultural enterprise is very dependent on marketing.

(3) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.

CARROTS PER HECTARE

	tonnes	£ per tonne	£
Sales	50 @	190	9,500
<hr/>			
Seed			350
Fertiliser	50 : 80 : 115		110
Sprays	herbicides		190
	fungicides		220
	insecticides		100
Casual labour	harvesting		350
	washing and grading		545
Sundries			700
Total Variable Costs			2,565
<hr/>			
GROSS MARGIN			6,935

(1) Fertiliser 500 kg/ha of 10 : 16 : 23

(2) The success of any horticultural enterprise is very dependent on marketing.

(3) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.

LEEKs PER HECTARE

	tonnes	£ per 5kg net	£
Sales	18	@ 3.5	12,600
<hr/>			
Variable costs			
	Number	£ per 1,000	
Plants	125,000	@ 16	2,000
Fertiliser	230 : 90 : 100		200
Sprays	herbicides		130
	fungicides		165
Casual labour	planting		425
	harvesting		2,645
Sundries	nets		465
Total Variable Costs			6,030
<hr/>			
GROSS MARGIN			6,570

(1) Fertiliser 600 kg/ha of 15 : 15 : 17
 500 kg/ha 27½% N

(2) The success of any horticultural enterprise is very dependent on marketing.

(3) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.

SUMMER/AUTUMN CAULIFLOWER PER HECTARE

		Dozen	£ per 10	£
Sales		1,700 @	2.50	5,100
<hr/>				
	Number		£ per 1,000	
Plants	28,000	@	23	644
Fertiliser	230 : 90 : 100			200
Sprays	herbicides			40
	fungicides			55
	insecticides			45
Casual labour	planting			120
	harvesting			970
Sundries	boxes			875
Total Variable Costs				2,949
<hr/>				
GROSS MARGIN				2,151
<hr/>				

(1) Fertiliser 600 kg/ha of 15 : 15 : 17
 500 kg/ha 27½% N

(2) The success of any horticultural enterprise is very dependent on marketing.

(3) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.

WHITE CABBAGE PER HECTARE

	tonnes	per tonne	£
Sales	40	@ £80	3,200
<hr/>			
	Number	£ per 1,000	
Plants	25,000	@ 17	425
Fertiliser	230 : 90 : 100		200
Sprays	herbicides		65
	fungicides		95
	insecticides		30
Casual labour	planting		120
	harvesting		550
Total Variable Costs			<hr/> 1,485
<hr/>			
GROSS MARGIN			1,715

- (1) Fertiliser 600 kg/ha of 15 : 15 : 17
 500 kg/ha 27½% N

(2) The success of any horticultural enterprise is very dependent on marketing.

(3) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.

WINTER BROCCOLI PER HECTARE

		Dozen	£
Sales		1550 @ 4.20	6,510
<hr/>			
	Number	£ per 1,000	
Plants	70,000	@ 23	1,610
Fertiliser	155 : 100 : 140		180
Sprays	herbicides		40
	fungicides		50
	insecticides		15
Casual labour	planting		120
	harvesting		1,150
Sundries	boxes		775
Total Variable Costs			3,940
<hr/>			
GROSS MARGIN			2,570

(1) Fertiliser 600 kg/ha of 10 : 16 : 23
 350 kg/ha 27½% N

(2) The success of any horticultural enterprise is very dependent on marketing.

(3) Fertiliser - For individual farms, fertiliser application rates must be in accordance with the 2007 Nitrate and Phosphorous Regulations. See pages 95 to 97 for further details.

The Single Farm Payment Scheme

The Single Farm Payment (SFP) Scheme was introduced in the United Kingdom on 1 January 2005 and replaced most existing crop and livestock payments.

To claim SFP the applicant must be a farmer undertaking agricultural activity, hold SFP Entitlements on 15 May in any scheme year and have eligible agricultural land at their disposal for at least 10 months. Individual field parcels declared to activate SFP entitlements must be at least 0.1 hectares and applicants need to be registered with DARD as a farm business before an application can be processed.

SFP Payment Entitlements

SFP Entitlements were allocated to farmers in 2005 for each eligible hectare of land they entered into the scheme. No further entitlements can be allocated.

If a farm business did not establish entitlements in 2005 and wishes to claim SFP it will have to obtain entitlements by transfer from another farm business. This transfer could be sale with or without land, by lease with leased land or through inheritance. To trade entitlements and/ or claim SFP, the applicant needs to be registered and approved by DARD as a farm business. Applications to transfer entitlements must be received by DARD on or before 2 April in the year in which they are to be used in order to be eligible for payment (a guidance booklet on the transfer of entitlements is available on request from the Trading Section, Single Farm Payment Branch, Orchard House).

In 2005 there were five types of Entitlements

- Standard – allocated to most applicants. These must be used at least once every 3 years otherwise they will be returned to the National Reserve
- Set-aside entitlements – these must be used before any other entitlements held. If they are not used within a 3-year period they will be taken away and put in the National Reserve. See below for details of set-aside requirements in 2008.
- National Reserve entitlements - either allocated directly from the National Reserve or other entitlements which have been increased in value by more than 20% as a result of a successful National Reserve application. These must be used each year for 5 years from the date they are allocated otherwise they will be returned to the National Reserve.
- Special Entitlements (subject to special conditions) – to be eligible for payment on these the applicant must maintain the level of agricultural activity notified to them by DARD. Special Entitlements can be changed to Standard Entitlements by declaring one eligible hectare of eligible land; once changed over they cannot be changed back.
- Entitlements with Horticultural Authorisations – these allow SFP to be claimed on land in horticultural use (Fruit, Vegetables and Potatoes – FVP) . FVP can be grown on any area of land but, if authorisations are not held , this land will be ineligible for SFP. See below for details of Horticultural Authorisations in 2008.

To activate all the entitlements held and maximise the SFP, the farm business must have an equal number of eligible hectares of land at its disposal for a consecutive 10 month period (this is under review by the European Commission). Unless the business states otherwise, DARD will activate entitlements on behalf of the business. This ensures that the payment is maximised each year and, in addition, minimises the value of entitlements returned to the National Reserve.

2008 Set-Aside Requirements

In response to the market situation the EU has decided to have a zero set-aside rate in 2008. For the 2008 SFP scheme, land on which set-aside entitlements are claimed may be used for production provided the crop grown is eligible for SFP. However, set-aside entitlements must continue to be claimed first and the land on which they are claimed must be set-aside eligible (ie have been used for an arable crop in at least one of the years 1998 – 2003). Information about set-aside in 2008 is available from local DARD offices.

2008 Entitlements with Horticultural Authorisations

From the 2008 scheme year, land used to grow fruit, vegetables and potatoes, will be eligible to support SFP claims, on the same basis as any other eligible land use. Land used for top fruit, orchards (e.g. apples, pears, plums) and hardy nursery stock production will similarly be eligible to support claims using existing SFP entitlements.

SFP entitlements which currently have horticultural authorisations attached to them will have these removed but will remain unchanged in terms of value and in all other aspects.

Applications

Claims for payment of SFP Entitlements held by the farm business must be made each year on a Single Application Form (SAF). Farmers who completed a SAF in the previous year will automatically be issued with a SAF in March of the scheme year. Forms are also available on request from local DARD offices.

Completed applications will be accepted until 15 May and with penalty until 9 June. Other than on grounds of force majeure/ exceptional circumstances late applications will be rejected.

DARD offers an online application service. Anyone wishing to use the online service should contact Single Farm Payment Branch at least three weeks in advance of the closing date for applications so that they can be provided with a Personal Identification Code (PIN) and other information about the service.

Verification of Applications

Administrative and on-farm checks are carried out to ensure applications have been completed correctly and eligibility rules have been met. Penalties will be applied if scheme rules have not been met or discrepancies are identified.

On-farm Inspections

A minimum of 5% of claims each year are required to be inspected to verify that the details of the claim (including the usage and area of each field parcel) and to confirm that scheme eligibility criteria has been met. There is also a requirement to carry out on-farm inspections on at least 1 % of claims to verify compliance with Cross-Compliance standards (see below). In some cases there is a higher inspection rate set by EU law, for example, in the area of Cattle Identification and Registration. Farmers to be inspected are selected mainly using a risk analysis method with a smaller element chosen on a random basis. Complaints and referrals from members of the public and other Government Bodies will also be investigated.

Cross Compliance

In return for receipt of direct agricultural support farmers are required to observe certain responsibilities towards the protection of the environment, animal health and welfare and public health. This is known as Cross Compliance.

Cross Compliance is made up of two elements; Statutory Management Requirements (SMRs) and Good Agricultural and Environmental Conditions (GAEC).

Statutory Management Requirements are specific articles contained within 19 European regulatory requirements covering the environment, food safety, animal and plant health and animal welfare. They were phased in over three years beginning from 1 January 2005 and all 19 SMRs are now in force.

The Good Agricultural and Environmental Conditions were developed from a framework set out by the European Commission to address soil erosion, soil organic matter, soil structure and minimum level of maintenance. The GAECs fall into 6 measures; soil management, supplementary feeding, overgrazing, under grazing, field boundaries and protection of habitats, archaeological sites and permanent pasture.

The Cross Compliance Standards are set out in a series of booklets available from the Department.

In Northern Ireland, compliance with the Cross-Compliance requirements is checked by four Competent Control Authorities (see below). Each Competent Control Authority is responsible for inspecting the Cross-Compliance standards that falls under its area of responsibility.

1. Department of Agriculture and Rural Development (DARD)

- Good Agricultural and Environmental Condition Requirements (GAEC's);
- Feed and Food Law SMR

2. Environment and Heritage Service (EHS)

- Environmental SMR's

3. Health and Safety Executive Northern Ireland (HSENI)

- Safe use of pesticides SMR

4. Veterinary Service

- Animal Identification SMRs;
- Illegal hormone use SMR;
- Disease notification SMRs;
- Animal welfare SMRs.

Payments

The EU rules provide for full payments to be made between 1 December of the scheme year and 30 June of the following year. The Department aims to complete the vast majority of payments as early as possible within the seven-month payment window provided for in the EU regulations. The payment timetable for each scheme year is published in November.

The fixed exchange rate to be applied each year is announced by the European Commission in October. To meet EU requirements, DARD has decided that from 31 March 2008 payments will only be made direct to the applicant's bank account through the BACS system

Payment will normally be made in sterling. If an applicant wishes they can receive their payment in euro into a UK Euro bank account. An application for payment in euro must be made on the Single Application Form for the year in question.

Modulation

Modulation is the transfer of funds from farming subsidies to agri-environment and other rural development schemes. It is applied on a compulsory basis in all EU Member States. The level of compulsory modulation set from 2007 to 2012 is 5%.

An additional national (voluntary) rate of modulation has also been applied in the UK since 2006. Modulation is currently match funded 100% by the Exchequer which doubles the amount of money available for agri-environment measures.

The Voluntary Modulation rates that will apply in Northern Ireland from 2007-2012 are as follows.

2007 :	4.5%
2008 :	6%
2009 :	7%
2010 :	8%
2011 and 2012 :	9%

Penalties

There can be serious consequences for breaching scheme rules, including a reduction in the amount payable, the loss of the entire payment for the scheme year, the repayment of any subsidy already paid, and even exclusion from the scheme in future years. DARD does not have discretion to waive penalties, except in cases of force majeure/ exceptional circumstances or obvious error.

Circumstances when a penalty may be applied include:

- Late applications
- All land on the holding not declared (an under declaration)
- Ineligible land declared (an over declaration)
- fields duplicated with another farmer (an over declaration)
- The 10-month start date chosen for any field parcel overlaps with the date selected for the same field in the previous scheme year
- cross-compliance requirements breached

However, if the applicant has provided the Department with factually correct information or can show that they were not at fault, the claim will be adjusted to the actual situation and a penalty will not be applied.

Changes to the SFP Scheme

In 2008 the European Commission will be reviewing the SFP scheme and will be changing certain elements of the rules. DARD will advise farmers of these changes as they become known. It is therefore, important that SFP applicants read all notifications about scheme changes particularly those outlined in the scheme guidance booklet which is usually available from late March each year.

Further information and advice on the Single Farm Payment Scheme can be obtained from Single Farm Payment Branch. Contacts details are provided on page 133.

LESS FAVOURED AREA COMPENSATORY ALLOWANCES 2008

Less Favoured Area Compensatory Allowances (LFACA) is an annual subsidy scheme designed to contribute to the continuation of farming in the Less Favoured Areas (LFA) in Northern Ireland and thus to the maintenance of viable rural communities. As well as contributing towards the maintenance of the countryside it promotes the everyday use of good environmental practices complementary to maintaining sustainable farming.

Applicants have to maintain a minimum stocking density during a control period which for the 2008 scheme is 01 April 2007 to 31 October 2007 and must farm at least three hectares of eligible forage land (which may include a share of common land) lying within the LFA designation. There are comparable schemes in the rest of the UK and in other member states.

The minimum stocking density requirement of 0.2 livestock units per hectare comprising suckler cows, heifers, ewes, breeding female deers and breeding female goats must be maintained throughout the entire 7 month period 01 April - 31 October. To be eligible for the cattle bonus enhancement 25% of eligible livestock units must be suckler cows or heifers throughout the entire 7 month period 01 April - 31 October.

Those farm businesses eligible to apply will have submitted a 2007 IACS return; and;

- Indicated in that return that they wished to apply for LFACA, and
- Completed LFACA information in that return

At the time of going to press, no payment rates in respect of 2008 LFACA have been made.

AGRI-ENVIRONMENT SCHEMES

Agri-environment schemes reward farmers for environmentally sensitive land management. They are considered crucial in delivering Government's commitment to:

- Deliver on biodiversity;
- Enhance the landscape;
- Protect our heritage;
- Promote responsible management of farm nutrients.

There are currently over 13,000 participants in the Environmentally Sensitive Areas (ESA) Scheme and Countryside Management Scheme (CMS). These schemes are now closed for new applications but existing agreements will remain in place.

(A) Northern Ireland Countryside Management Scheme (NICMS)

This new and improved agri-environment scheme will open for applications from farm businesses throughout Northern Ireland in early 2008.

(B) Organic Farming Scheme (OFS)

The OFS was introduced in 1999 to assist farmers converting from conventional production methods to organic production. This scheme is now closed for new applications but existing agreements will remain in place. A new scheme will open for applications in late spring/early summer 2008.

Applicants may enter parcels of land into five year agreements. The land must be registered with an approved Organic Sector Body.

The scheme also imposes additional environmental conditions. Participants are required to adhere to a set of rigorous environmental conditions, contained within the 'Compendium of UK Organic Standards', which are more rigorous than those enforced on other farmers.

Further information on agri-environment schemes may be obtained from any DARD office.

FORESTRY

(1) WOODLAND GRANT SCHEME

Grants are available under this scheme for the establishment, restocking and natural regeneration of broadleaved, conifer and mixed woodlands.

1.1 New Planting (Establishment Grant)

A minimum area of 0.2 hectares must be planted. Grants for new planting at the rates shown below are payable in 2 installments; 70% on completion of planting and the remaining 30% at year 5.

SPECIES	GRANT (£/HA)
Conifer	1,250
Broadleaves	1,850

1.2 Restocking

Grants are payable in one installment on completion of planting as follows:-

SPECIES	GRANT (£/HA)
Conifer	400
Broadleaves	600

1.3 Natural Regeneration

A discretionary payment of 50% of the agreed initial costs is payable on completion of the approved work. A 'fixed payment', equivalent to the rate for restocking, is payable when the regeneration has been successfully established.

1.4 Community Woodland Supplement

The purpose of this supplement is to encourage the creation of new woodlands close to towns and cities which will be of value for informal public recreation. Full public access is required. In addition to receiving the establishment grant, a supplement of £1,000 per hectare is payable as a lump sum once the initial planting is completed and the agreed facilities are in place.

1.5 Sustainable Forestry Operations Grant (SFOG)

SFOG is intended to help towards some of the cost of eligible investment work necessary in special woodlands of high environmental potential and to enhance social and environmental benefits. A grant of £50 per hectare is payable at the end of each year for an agreed 5 year plan. For areas of 5 hectares or less, SFOG will be payable in one installment at the end of the first year. The minimum area eligible is one hectare per application.

1.6 Woodland Environment Grant

This is a discretionary payment, to assist work in existing woodlands requiring one-off remedial measures to bring them up to Forest Service Conservation standards. A grant of 50% of the cost of the agreed operations is payable on completion of all work. The minimum area eligible is one hectare per application.

1.7 Short Rotation Coppice (SRC)

Support for the planting of SRC crops, for renewable energy purposes, will be available over a limited period of time and will be considered in the context of development of the renewable energy market in Northern Ireland. The provision of support will be at the discretion of the Forest Service, and a number of conditions apply.

The rate of grant for establishment of SRC is £1000/ha.

Grant will be paid in two installments, 70% on completion of planting, and the remaining 30% after the plantation has been cut back and residual herbicide applied.

The minimum qualifying area for SRC IS 3.0 hectares.

SRC will not qualify for either Restocking or Natural Restocking grants nor for Farm Woodland Premium Schemes payments. Further information on SRC grants may be obtained from your local Private Woodlands Forester.

1.8 Livestock Exclusion Annual Premium

This Scheme is now closed to new applicants.

(2) FARM WOODLAND PREMIUM SCHEME

This is designed to encourage the establishment of new woodland on farms by providing an annual payment to farmers to compensate for income forgone. Payments are made for 10 or 15 years depending on the type of woodland.

Entry to the Scheme will only be possible if the planting proposed for the new woodland is eligible under the Woodland Grant Scheme.

ANNUAL PREMIA RATES PAYABLE (£ PER HECTARE)

LAND TYPE	LAND CATEGORY		
	SDA	DA	ELSEWHERE
Arable and other improved land	160	220	270
Unimproved Land (Including Rough Grazing)	60	60	Nil

Woodlands in the landscape

All new planting grant Schemes must be designed to ensure that they will not have an adverse effect on the environment, e.g. because of size, nature or location. Each application will be assessed as to its likely impact before being approved.

Further Details

Further details of all Forestry grants are available from **Private Woodlands & Plant Health Branch, Room 23 Dundonald House, Upper Newtownards Road, Belfast, BT4 3SB.**

Aid For Energy Crops 2008

Aid for Energy Crops (AEC) is paid on crops used for the production of energy products. The crops must be grown on non-set-aside land. Payment is €45/ha but may be reduced if area grown in the EU exceeds the ceiling of 2.0 million hectares.

Applicants can use short rotation willow coppice, winter/spring rapeseed, miscanthus, wheat and reed canary grass as fuel for heating their agricultural holding or for the production of power or biofuels on their holding. Applicants may also use any crop for processing under contract into energy products off farm. If you use land for AEC you will also be eligible to claim SFP.

If you want to claim AEC payments for 2008 you must enter the total area claimed at Section 2, Question 4 of your Single Application (SAF1). If you are supplying a collector or processor you must enter into a contract and send a copy of that contract when you return your Single Application. This contract/declaration is to be made by the Single Application deadline of 15 May. A contract may be needed for each raw material. The collector or first processor with whom you are contracted must also send a copy of the contract and lodge a security of €60 per hectare with the Rural Payments Agency in England for all areas covered by the contract. They must do this at the same time as you submit your Single application. If you process your own crop on-farm to produce an energy product you only have to submit a completed ECS/DEC1 with your Application.

A Guide to the scheme and further information can be obtained from Environmental Policy Branch, Room 651, Dundonald House, Upper Newtownards Road, BELFAST, BT4 3SB Tel: 028 905 24130 Fax: 028 9052 4059

New Entrants Scheme

Since June 2005, the Department has operated the Financial Assistance for Young Farmers Scheme (known as the New Entrants Scheme) to promote additional investment to farming by new entrants under the age of 40. Under the Scheme, participants are encouraged to come forward with innovative agricultural projects that will add value and make a positive impact on the farming industry and the Northern Ireland rural economy.

Financial assistance takes the form of an interest rate subsidy on loans taken out in pursuance of an agreed agricultural project as detailed in the applicant's business plan. The maximum amount of interest rate subsidy available is £17,000 and the maximum duration of subsidised interest payment is five years.

The Scheme will close for applications on 5 June 2008 or when all available funds have been committed, whichever is the sooner. A total of £4.5 million has been allocated to the Scheme.

Anyone interested in applying should contact Orchard House on Tel 028 7131 9900 or CAFRE on 028 7772 1819 or 028 7930 2138

Nitrates and Phosphorus Regulations

The Nitrates Action Programme Regulations (Northern Ireland) 2006 and the Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2006 bring into operation measures to improve the use of these nutrients on farms and reduce their input to Northern Ireland's water environment from agricultural sources. The introduction of the Nitrates Action Programme Regulations meets Northern Ireland's legal and environmental obligations and the Phosphorus Regulations support these obligations. Both sets of Regulations apply to all farmers in Northern Ireland, from 1 January 2007.

The following is a summary of the Nitrates Action Programme and the Phosphorus Regulations:

1. Closed Spreading Periods

- Chemical Nitrogen fertiliser must not be applied between 15 September to 31 January.
- Organic manures, excluding farmyard manure and dirty water, must not be applied between 15 October to 31 January. This organic manure closed spreading period applies from the date at which the required storage capacity is in place, which must be 31 December at the latest.

2. Land Application Restrictions

- All fertilisers, chemical and organic, must not be applied:
 - on waterlogged soils, flooded land or land liable to flood;
 - on frozen ground or snow covered ground;
 - if heavy rain is forecast;
 - on steep slopes where other significant risks of water pollution exist.
- Prevent entry of fertilisers to waters and ensure application is accurate, uniform and not in a location or manner likely to cause entry to waters.
- Chemical fertilisers must not be applied within 1.5m of any waterway.
- Organic manures including dirty water must not be applied within:
 - 20m of lakes;
 - 50m of a borehole, spring or well;
 - 250m of a borehole used for a public water supply;
 - 15m of exposed cavernous or karstified limestone features;
 - 10m of a waterway other than lakes; This distance may be reduced to 3m where slope is less than 10% towards the waterway and where organic manures are spread by bandspreaders, trailing shoe, trailing hose or soil injection or where adjoining area is less than 1 hectare in size or not more than 50m in width
- Application rates:
 - No more than 50m³/ha (4500 gal/ac) or 50 tonnes/ha (20t/ac) of organic manures to be applied at one time, with a minimum of three weeks between applications;

- No more than 50m³/ha (4500 gal/ac) of dirty water to be applied at one time, with a minimum of two weeks between applications.
- Slurry can only be spread by inverted splashplate, bandspreaders, trailing shoe, trailing hose or soil injection.
- Dirty water to be spread by same methods as slurry and by irrigation.
- Sludgigators must not be used.

3. Nitrogen (N) Fertiliser Crop Requirement

Maximum kg N/ha on grassland

Year	2007	2009	2010
Dairy farms*	289 (8 ³ / ₄ bags/ac)**	281 (8 ¹ / ₂ bags/ac)	272 (8 ¹ / ₄ bags/ac)
Other farms	239 (7 ¹ / ₄ bags/ac)	231 (7 bags/ac)	222 (6 ³ / ₄ bags/ac)

(N from organic manures other than livestock must be subtracted)

*More than 50% of N in livestock manure comes from dairy cattle

** Approximate number of 50kg bags of a 27% N type fertiliser

- For non-grassland crops, the crop requirement as determined by RB209, must not be exceeded. The fertiliser technical standards in RB209 can be found at www.defra.gov.uk

4. Chemical Phosphorous Fertiliser

- Can only apply chemical fertiliser if soil analysis shows a requirement as per the fertiliser technical standards which are currently found in RB209 at www.defra.gov.uk

5. Nitrogen Livestock Manure Limits

- 170kg/ha/year farm limit.
- Farms with at least 80% grassland may apply for a derogation to allow applications of up to 250kg/ha/year of grazing livestock manure.

6. Livestock Manure Storage Requirements

- 26 weeks for pig and poultry enterprises. 22 weeks for other enterprises. Required storage capacity must be in place by 31 December 2008 at the latest.
- Provided certain criteria are met there are allowances for out-wintering, animals in bedded accommodation, separated cattle slurry, renting additional tanks and exporting slurry to approved outlets.
- Storage must be maintained to prevent seepage run-off

- New or substantially enlarged or reconstructed stores must comply with Silage, Slurry and Agricultural Fuel Oil (SSAFO) (Northern Ireland) Regulations, 2003.
- Farmyard manure and poultry litter can be stored in fields where the next application is to take place but for no longer than 180 days. It must not be stored in the same location of the field year after year. Poultry litter must be covered with an impermeable membrane within 24 hours of placement in the field. The field storage of poultry litter will be reviewed 31 December 2008. Heaps must not be stored within:
 - 50m of lakes
 - 20m of waterway
 - 50m of a borehole, spring or well
 - 250m of a borehole used for a public water supply
 - 50m of exposed cavernous or karstified limestone features.
- Provide storage for dirty water during periods when conditions for land application are unsuitable

7. Land Management

- Crop and soil management to minimise soil erosion and nutrient run off.

8. Record Keeping

- Agricultural area, field size and location
- Cropping regimes and areas, Soil Nitrogen Supply (SNS) index for crops other than grassland.
- Livestock numbers, type, species and time kept.
- Organic and chemical fertiliser details including imports and exports.
- Evidence of a Phosphorous requirement if chemical Phosphorous fertiliser sown.
- Storage capacity and where applicable associated evidence to support allowances to reduce capacity
- Evidence of right to graze common land.
- Records to be ready by 30 June each year for period 1 January to 30 December of previous year. Records to be retained for inspection from previous five calendar years.

Full details of these Regulations can be found in the Guidance Booklet and Workbook that can be accessed online at www.dardni.gov.uk

Further information and advice on these Nitrates and Phosphorous Regulations can be obtained from the local DARD offices or the Environment and Heritage Service. Contacts details are provided on page 132.

AVERAGE FERTILISER PRICES 2007

		£ per tonne
C.A.N (27% N)		150
Urea (46% N)		202
Cereal fertiliser	15:15:20	176
	16.16.16	180
	0.20.30	198
Grassland fertiliser	20:10:10	169
	27.6.6	179
	25.5.5	169
	27.0.6	163
	26.0.6	160
Silage fertiliser	24:6:12	178
	23.4.13	172
	22.4.14	170
	25.0.13	168
Ground limestone (delivered and spread)		15

(1) All prices one tonne lots ex-store.

(2) Figures used in the budgets in this publication are based on anticipated prices for 2008.

FEEDINGSTUFF PRICES AT AUGUST 2007

	% protein	£ per tonne
Dairy nuts	16	180
	18	178
Calf milk replacer(bags)	23	1550
Calf starter/weaner meal	18	208
Calf rearing nuts	17	194
Cattle fattening nuts	15	176
Cattle concentrate	34	188
Sheep feed (bulk)	18	183
(bags)	18	210
Lamb feed	16	175
Pig creep pellets (bulk)	24	394
(bags)	24	489
Pig link/early grower	20	266
Pig grower/rearer meal	20	219
Pig fattening meal	19	195
Sow meal	18	190
Barley meal		175
Maize meal		190
Soya bean meal		192
Whole wheat		187

(1)The prices quoted above are for bulk purchase except where stated.

(2) Figures used for the budgets in this publication relate to the year of usage.

RELATIVE FEED VALUES

These relative feed values are calculated using unit costs for metabolisable energy and crude protein derived from the reference feedstuffs of barley and soya. The value of the rumen degradable protein (if applied) is allowed for by calculating a unit cost based on the price of urea. If a particular feedstuff price is lower than the relative value then it is a 'good buy' and vice versa. Two feedstuffs may be compared with each other in terms of the differences between the price of each foodstuff and its relative value.

CAUTIONS

These relative values are only a guide:-

- (1) They are based on average analysis, actual samples may differ from the averages used.
- (2) The unit values for metabolisable energy and crude protein depend on the balance of nutrients in the reference feedstuff. Barley and soya have been chosen as the most appropriate; other reference feedstuffs would give different answers.
- (3) The real unit values of metabolisable energy and crude protein depend on the feeding situation and not entirely on the feedstuffs. For example, undegradable protein has a low value for mature growing cattle but a high value for fast growing young stock.
- (4) Energy density is also an important consideration, i.e. straw may be a 'good buy' compared with flaked maize, but would be entirely unsuitable for high yielding dairy cows.

Relative feed values therefore only give a crude guide to feedstuff values.

Feed	Relative Value
Barley	100.00
Wheat	103.80
Hipro soya	170.00
Maize	105.60
Oats	92.10
Urea	185.00
Grass	25.00
Hay (Good)	63.75
Hay (Average)	56.25
Silage (Good)	24.10
Silage (Average)	22.47
Barley straw	35.00
Maize gluten meal	184.30
Maize gluten feed	113.00
Herring fish meal	213.50

Feed	Relative Value
Linseed meal	129.00
Rapeseed meal	125.90
Soya bean meal 44	141.80
Potatoes	23.10
Molasses	73.90
Dried molassed sugar beet pulp	101.00
Brewers' grains	27.90

ENTERPRISE MARGINAL CAPITAL REQUIREMENTS (EMCR)

(a) Arable Enterprises

EMCR £ per hectare

Spring barley (6 months)	224
Spring oats (6 months)	228
Winter barley (10 months)	315
Winter oats (10 months)	289
Winter wheat (10 months)	370
Spring oilseed rape (6 months)	256
Winter oilseed rape (10 months)	301
Seed potatoes (6 months)	1,380
First early potatoes (6 months)	1,095
Maincrop ware potatoes (6 months)	1,235

(b) Livestock Enterprises

Initial Capital	Variable Costs per livestock	Total EMCR Per livestock
(1)	place (2)	place (3)
(£)	(£)	(£)

Dairy cows (1 month)	950	37 – 53	987 – 1003
Dairy heifer replacements	175	406 – 454	581 – 629
18 month heifer beef	120	380	500
22 month steer beef	160	374	534
24 month steer beef	160	417	577
28 month steer beef	160	422	582
Cereal bull beef	35	467	502
Grass silage bull beef	160	515	675
Calf to store system	160	237	397
Lowland suckler cows - May calving	600	270	870
- Feb calving	600	216	816
- Oct calving	600	291	891
Hill suckler cows	600	176	776
Beef heifer replacements	120	335	455
Finishing suckled calves	318	351	669
Winter cattle finishing 400kg (230 days)	480	267	747
Winter cattle finishing 500kg (150 days)	550	188	738
Summer cattle finishing 420kg (180 days)	525	49	574
Traditional store to beef system (12 mths)	432	195	627
Summer grazing of store cattle (6 mths)	375	46	421
Lowland breeding ewes - March lambing	70	33	103
Lowland breeding ewes - Dec lambing	70	48	118
Upland breeding ewes	70	34	104
Hill breeding ewes	70	30	100
Store lamb finishing (3-5 mths)	32 - 35	3 – 18	38 – 51

	Initial Capital	Variable Costs	Total EMCR
	(1)	Livestock per	Livestock per
	(£)	place (2)	place (3)
		(£)	(£)
Pig rearing (per sow) (5mths)	120	267	387
Pig finishing (per pig) (3 mths)	39	37	76
Pig rearing/finishing (per sow) (6 mths)	120	696	816
Horses – half bred mares	3,000	1,470	4,470
Deer – Hinds	200	67	267

(c) Horticultural Enterprises

	EMCR
	£ per ha
Mushrooms	2965
Brussels sprouts	1,225
Carrots	1,027
Leeks	2,910
Summer/autumn cauliflower	1,094
White cabbage	925
Winter broccoli	2,000

- (1) For livestock enterprises the initial capital is the purchase price of the animal.
- (2) The variable costs quoted for a livestock enterprise are the total variable costs invested in the enterprise until the point of first sale. In the case of a dairy cow this represents one month's variable costs. Details of total variable costs for each enterprise can be found under the appropriate enterprise gross margin budget.
- (3) For an arable or horticultural enterprise the marginal capital requirement equates with the total variable costs for the enterprise excluding any contractor charges and harvesting and marketing costs.

**FIXED COSTS (EXCLUDING LABOUR AND CONACRE COSTS)
BY TYPE OF FARM BUSINESS 2006//2007⁽¹⁾ „**

	Dairying			
	Very Small	Small	Medium	Large
Area farmed (hectares) ⁽²⁾	27	44	68	123
FIXED COSTS (£ per ha)				
Depreciation of machinery	179	100	132	119
Machinery running costs	171	134	143	117
Electricity and heating fuels	37	34	33	31
Miscellaneous (inc. farm rates)	73	67	49	47
Depreciation of buildings/work etc	117	110	116	148
Building repairs	15	46	33	46
TOTAL	593	491	507	509

	Beef Cattle & Sheep			Cereals
	SDA	DA	Non LFA	
Area farmed (hectares) ⁽²⁾	104	63	55	68
FIXED COSTS (£ per ha)				
Depreciation of machinery	52	100	133	128
Machinery running costs	55	86	118	98
Electricity and heating fuel	5	9	13	9
Miscellaneous (inc. farm rates)	22	38	21	43
Depreciation of buildings/work etc	36	46	52	19
Building repairs	19	28	40	21
TOTAL	188	306	377	318

(1) Farm types

Dairying	Farms with more than two-thirds of their total Standard Gross Margin (SGM) from dairying (including associated young stock).
Cattle and Sheep	Farms which do not qualify as Dairy farms but have more than two-thirds of their total Standard Gross Margin from cattle and sheep.
Cereals	Farms with more than two-thirds of their total SGM from cereals, oilseeds and set-aside.

(2) Area farmed has been adjusted for conacre taken or let. Planning for 2008 should take account of any anticipated changes in fixed costs. As the level of fixed costs per hectare differ considerably between farms, the data quoted above should be treated with caution. Since the incidence of conacre and the composition of the labour force between family and hired workers is so variable between farms, no attempt has been made to produce data for comparison.

ANNUAL TRACTOR COSTS - Estimates for 2008

	4-Wheel drive						2-Wheel drive			
Horse power	120		100		80		90		80	
Initial Cost (£)	34,000		28,500		25,000		22,000		21,000	
	Per year	Per hour	Per year	Per hour	Per year	Per hour	Per year	Per hour	Per year	Per hour
Repairs	1,360	2.72	1,140	2.28	1200	2.40	880	1.76	840	1.68
Depreciation (average charge)	2,900	5.8	2,430	4.86	2130	4.26	1,880	3.76	1,790	3.58
Insurance	875	1.75	780	1.56	730	1.46	710	1.42	670	1.34
Fuel & Oil	3,400	6.80	3,000	6.00	2400	4.80	2,800	5.60	2,200	4.40
TOTAL	8,535	17.07	7,350	14.70	6,460	12.92	6,270	12.54	5,500	11.00

- (1) Initial cost based on purchase price.
- (2) Based on annual use of 500 hours. Higher annual use will result in higher annual, but lower hourly costs. Heavy operations, e.g. slurry mixing, will result in a greater cost than light work.
- (3) Annual repair costs have been estimated using 4% of the initial cost.
- (4) Depreciation has been calculated by reducing balance method, using 15% depreciation and a life of 9 years.
- (5) Insurance costs are for comprehensive cover with up to 5% contracting. Costs will also depend on excesses, claims history and the need for cover on implements
- (6) Fuel has been costed at 40 pence per litre.
- (7) No interest or leasing charges have been included.

NEW MACHINERY PRICES

Tractors

(See Page 96)

	£			£	
Quad (4WD Bike)	4,000	7,000	Plough	5,000	17,000
Rough terrain forklift	15,000	40,000	Harrow	1,000	1,300
4 WD utility vehicle	6,000	10,000	Power harrow	5,500	8,000
Pick-up	9,000	20,000	Land roller	800	1,300
Slurry tanker	3,000	10,000	Land leveller	250	1,000
Slurry pump	1,500	3,500	Fertiliser sower	1,000	5,000
Manure rotaspreader	2,500	14,000	Crop sprayer	1,000	10,000
Yard scraper	250	800	Potato harvester	20,000	60,000
Mower conditioner	5,000	17,000	Box tipper	2,500	4,000
Precision chop harvester	15,000	30,000	Cattle trailer	2,500	5,000
Double chop harvester	5,500	6,500	Link box	250	750
Silage trailer	4,500	7,000	Welder	250	1,000
Buckrake	1,000	1,600	Compressor	300	800
Bale spike	150	250	Generator	600	1,500
Grass topper	700	3,000	Power washer	400	1,250
Sheargrab	1,000	1,500	Water pump	1,000	2,500
Tractor loader	3,500	6,000	Hedge cutter	5,500	25,000
Silage feeding trailer	700	1,200	Chain saw	350	600
Diet feeder wagon	10,500	25,000	Bulk meal bin	1,500	2,500

AGRICULTURAL CONTRACTORS' CHARGES

	Cost (£)	
1. Cultivations		
Ploughing - Lea	45 to 65	per hectare
- Stubble and other	40 to 50	"
Discing	14	per hour
Chain harrowing	10	"
Power harrowing	25 to 30	per hectare or
	22	per hour
Ground driven rotary harrowing	14	"
Springtine harrowing	14	"
Rotavating - Large types 100"	28 to 35	per hectare or
	22 to 24	per hour
Land Levelling	18	per hour
Rolling - Light	9 to 13	per hectare
- Heavy	11 to 14	"
Reseeding (Complete operation not including seed/fertiliser)	275 to 350	"
2. Seeding and Planting		
- combined drilling	17 to 20	per hectare
- precision seeding	40 to 55	"
- potato planting (automatic)	18 to 22	per hour
- direct drilling	40 to 45	per hectare
- one pass cultivation and drilling	40 to 45	"
- destoning	130 to 160	"
3. Spraying and Spreading		
Crop spraying (excluding chemicals)	12 to 20	per hectare
Fertiliser	13 to 20	per tonne
	5 to 10	per hectare
	17 to 22	per hour
Lime spreading	14 to 16	per tonne
Farmyard Manure		
- Entire operation	30 to 40	per hour
Slurry spreading (1,100-1,500) gallon tanker	14 to 18	"
Slurry spreading (2,000 gallon tanker)	17 to 22	"
Slurry spreading (self-propelled tanker)	33 to 48	"
Slurry Spreading (umbilical system)	55 to 70	"
Slurry Spreading (umbilical system)	4 to 5	per 1000 gallons
Pumping and agitating (tanks)	20 to 22	per hour

	Cost (£)	
4. Harvesting		
Forage, including harvester, tractor and trailer		
- precision (complete operation)	115 to 135	per hectare
- precision (without buckraking)	100 to 115	"
- double chop (complete operation)	95 to 105	"
Buckraking into silo	15 to 20	"
Additional tractor and trailer for haulage	10 to 17	per hectare or
	14 to 16	per hour
Mowing hay or grass (conventional)	16 to 22	per hectare
Mowing hay or grass (Conditioner/auto swather)	20 to 30	per hectare
Topping grass	15	per hectare
Tedding, turning or raking	10	"
Pick-up baling - including twine	0.25 to 0.30	per small bale
- excluding twine	0.16 to 0.20	"
Big bale silage - round, chop, net and wrap	6	per bale
Big bale straw	1.70 to 2.20	"
Combine harvesting	60 to 100	per hectare
Threshing	13	per hour
Potato harvesting (ground destoned)	220 to 320	per hectare
Forage Maize harvesting (complete operation)	145 to 160	per hectare
5. Grain Drying		
Minimum charge	12	per tonne
Drying - Handling charge	5	"
per 1% moisture removed,	3	"
6. Milling and Mixing		
Rolling - at Millers' premises	10	per tonne
Rolling - on farm service	11	"
Milling	14	"
Mixing	5	"
Cubing	12	"

	Cost (£)	
7. Ditching and Field Drainage		
Wheeled digger - bucket type	16 to 20	per hour
Tracked digger	22 to 28	"
Bulldozing	45 to 65	"
Opening field drains only	0.40	per metre
Laying drains (excluding stones)	0.65 to 0.75	"
Mole draining	80 to 90	per hectare
Laying water piping	13 to 14	per hour
Subsoiling	14	"
Stoner	14 to 17	"
8. Miscellaneous		
Hedge cutting - flail	17 to 20	per hour
- saw	14 to 18	"
Sawing logs - chainsaw	11	"
Haulage - tractor and trailer (higher prices for larger tractors and 4WD)	14 to 18	per hour
Relief milking - typical (largely dependent on size of herd and milking system)	22 to 35	per milking or
	12	per hour
Hoof paring dairying cows - rear feet only	8	per cow
- all feet	12	"
Sheep shearing	0.80 to 1.00	per ewe
Fencing: assume strainers max 30m apart, and double strainers on corners		
5 rows of barbed wire		
- total cost	3.75 to 4.25	"
- labour only	1.20 to 1.70	"
Sheep fence plus 3 lines of barbed wire		
- total cost	4.20 to 5.20	per metre
- labour only	1.50 to 2.20	"

These contract charges are considered to be reasonable for operations carried out in normal circumstances. The rates include fuel, oil lubricant and operator's wages. Prices will differ from one district to another and will be affected by the contracted area. If a farmer supplies fuel, the price may be lower. The charges may be subject to VAT.

TYPICAL HIRE CHARGES

	Capacity	Per Day (£)	Per Week (£)
Quad		40	150
Plough		50	225
Chain harrow		30	100
Power harrow (3m plus blades)		70	350
Rotavator (plus blades)		50	230
Land roller		15 to 20	80
Fertiliser sower		20 to 25	100
Crop sprayer		25 to 30	130
Lagoon mixer		25	70
Slurry pump		35	125
Sludgicator		40	225
Rotary spreader	7.3 cu yard	30 to 40	175
Slurry tanker	1300 gall	35	150
“ “	1100 gall	30	130
Bale lifter		8 to 10	30
Telescopic handler	13m	100	425
Rough terrain forklifts	3t	50	175
Single axle dump trailer	8t	25	90
Twin axle dump trailer	10t	25 to 30	130
Tractor	80hp		200
Tractor (4wd)	100hp		350
Mini digger	3t	90	300
Strimmer	40cc	15 to 17	35
Chain saw		25	60
Welder (diesel)	350 amp	50	200
Generator diesel	5kw	25	60
“ “	10kw	35	150
Power washer	3000 si	35	80
“ “	1500 psi	20 to 30	60
Steam washers		30	80
Compressor/Jack hammers	100 ctm	25 to 30	75
Round bale trailer		25 to 30	90
Yard sweeper		40	
Silage trailer	6t	25 to 30	90
Post driver		20	
Low loader		25	
Grassseed sower		25	100
Weed wiper		35	150
Grass topper		35	125
Rush topper		40	150

Prices do not include VAT.

Prices listed above are intended for guidance only, considerable variation may be expected.

BUILDING COSTS

	Area per head (sq metres)	Cost per sq metre	Cost £
Dairy cows			
Portal framed cubicle house, slatted floors, tanked completely 2.4m deep(shuttered tank)	7.0		2,750/head
Portal framed cubicle house, solid floors, excluding slurry storage	7		1,150/head
Suckler cows			
Bedded house with calf creep, excluding slurry storage	Cow 7.5 Calf 1.5		1,500/head
Cubicles with calf creep, feeding passage, excluding slurry storage	Cow 6.0 Calf 1.5		1,050/head
Finishing cattle			
Slatted house with feeding passage, completely tanked(shuttered tank)	2.75 to 3.25		1,550/head
Bedded house with feeding passage (excluding slurry storage)	4.0		600/head
Pigs			
Loose housing for dry sows	2.5 to 3.7		550-600/head
Farrowing accommodation with slatted floors	5.0		1,500-1,700/head
Weaner house, flat deck	0.45		130/head
Finishing house, fully slatted (natural ventilation)	0.65		120-140/head
Finishing house, fully slatted (controlled environment)	0.65		140-160/head
Grower accommodation	0.75		100-110/head
Sheep			
Portal frame, slatted floor, shallow tanks	1.3		140/head
Silo (Excluding effluent collection)			
Roofed silo (300 - 400m ²)			
Shuttered, reinforced concrete walls and floor		£150/m ²	
Open silo (300 - 400m ²)			
Shuttered, reinforced concrete walls and floor		£90/m ²	
General purpose house			
150 sq metres, with concrete floor		£110/m ²	
200 sq metres, with concrete floor		£100/m ²	
Slurry storage			
Shuttered Slatted tank, 2.4 m deep with piers, heads and slats (narrow and small tanks cost more)		£65 - £120	per cubic metre
Above ground store with reception tank, pump etc. (small tanks cost more proportionally)		£35 - £60	per cubic metre

AMORTIZATION TABLE

(Annual charge to write off £1,000, repayment includes capital and interest assuming payment by one annual instalment)

Write off
period
(years)

Year	Rate of interest %																		
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
5	231	237	244	250	257	264	271	278	284	291	299	305	313	320	327	334			
6	197	203	210	216	223	230	237	243	250	257	265	271	279	286	293	301			
7	173	179	186	192	199	205	212	219	226	233	240	248	255	262	270	278			
8	155	161	167	174	181	187	194	202	208	216	223	230	238	245	253	261			
10	130	136	142	149	156	163	170	177	184	192	200	207	215	223	231	239			
12	113	119	126	133	140	147	154	162	169	177	185	192	201	209	217	226			
15	96	103	110	117	124	132	139	147	155	163	171	179	188	196	205	214			
20	80	87	94	102	110	118	126	134	142	151	160	168	178	187	196	205			
25	71	78	86	94	102	110	119	128	136	146	155	164	173	183	193	202			
30	65	73	81	89	97	106	113	124	133	143	153	161	172	181	191	202			
40	58	66	75	84	93	102	111	121	131	141	150	160	170	180	190	200			

Example : £10,000 is borrowed. (The equivalent annual cost factor at 8% over 8 years is £174 per £1,000) Therefore, the annual service charge to service interest and capital repayment on the £10,000, repayable over 8 years is $10 \times £174 = £1,740$

LOAN OUTSTANDING

(Amount outstanding on a 10 year loan of £1000 at the end of each year)

Year	Rate of interest %																		
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
1	920	924	928	931	934	937	940	943	946	948	951	954	957	960	963	966			
2	836	843	850	856	862	868	874	879	884	889	894	900	905	910	916	922			
3	747	758	768	776	784	792	800	808	815	822	829	836	844	852	860	867			
4	655	667	680	689	699	709	718	728	737	746	754	763	772	782	792	801			
5	558	571	585	595	606	617	628	638	648	658	668	678	688	698	708	718			
6	456	469	484	494	505	516	527	538	548	559	569	580	591	601	611	622			
7	348	362	376	384	395	405	415	425	435	445	455	465	476	486	496	506			
8	236	247	261	266	274	283	291	299	307	316	324	333	341	350	358	367			
9	117	126	137	138	143	148	153	158	163	168	173	178	183	188	193	198			

The annual charge to write-off the loan must first be calculated.

The equivalent annual cost factor at 8% over 10 years = £149. At the end of the first year the amount to repay, at 8% interest, will equal £1,080. When the annual charge of £149 is deducted, the amount outstanding on the loan is $£1,080 - £149 = £931$.

INTEREST RATES - ANNUAL PERCENTAGE RATE (APR)

It is important to distinguish between nominal rates which are often quoted by lending institutions and true rates of interest. The Annual Percentage Rate (APR) allows for the fact that interest is usually charged at less than annual intervals, and hence an element of compounding will occur, i.e. interest will be charged on the accumulated interest. The higher the annual nominal interest rate and the more frequently the interest charges are applied to the loan, the more pronounced will this compounding be and the higher the APR.

Loans from all sources should be converted to APR, which shows the effective rate of interest calculated on an annual basis. This allows a true comparison to be made between different sources of borrowed finance.

The approximate annual percentage rate is given by:

$$\left[\left(1 + \frac{n}{p} \right)^p - 1 \right] \times 100$$

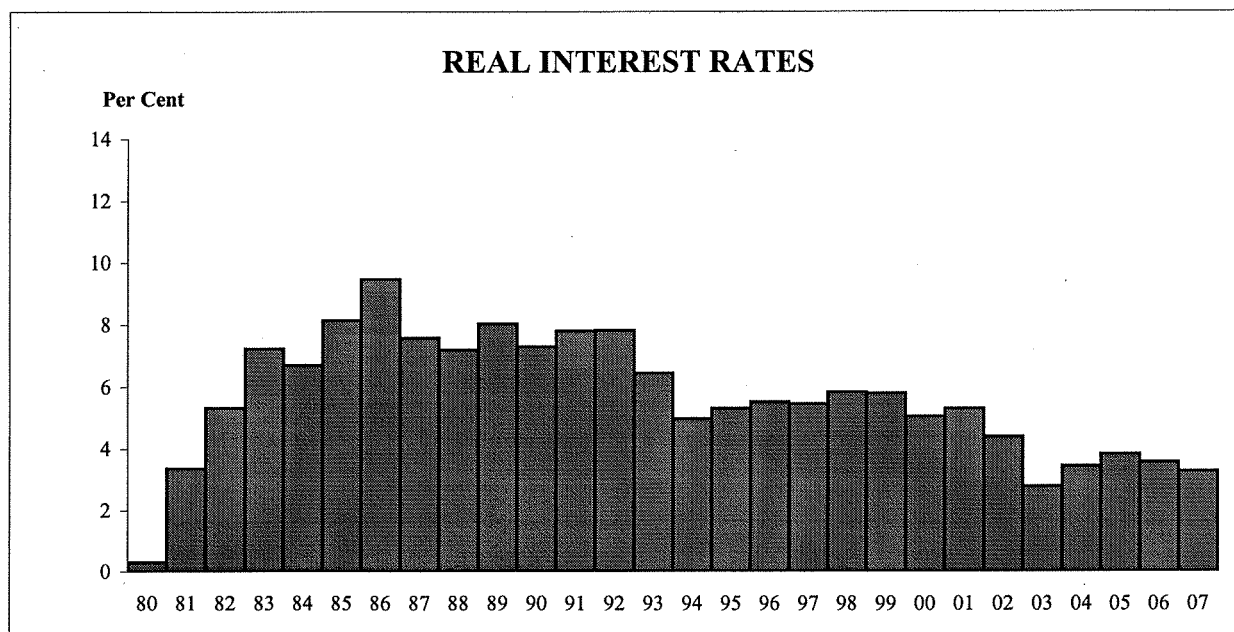
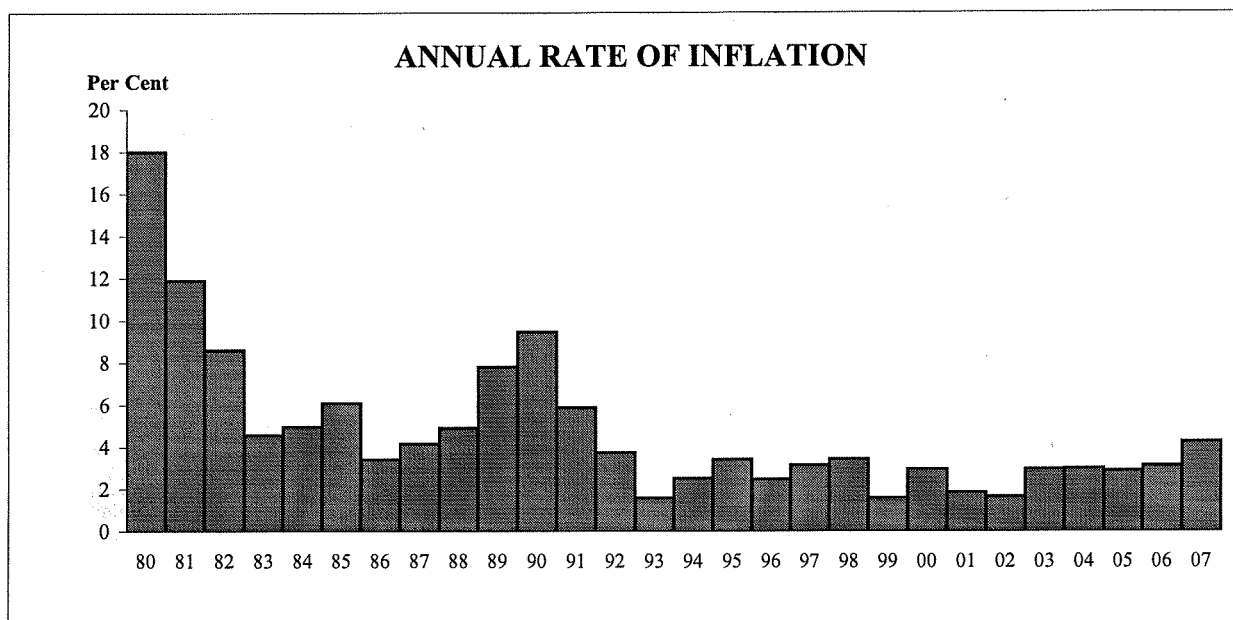
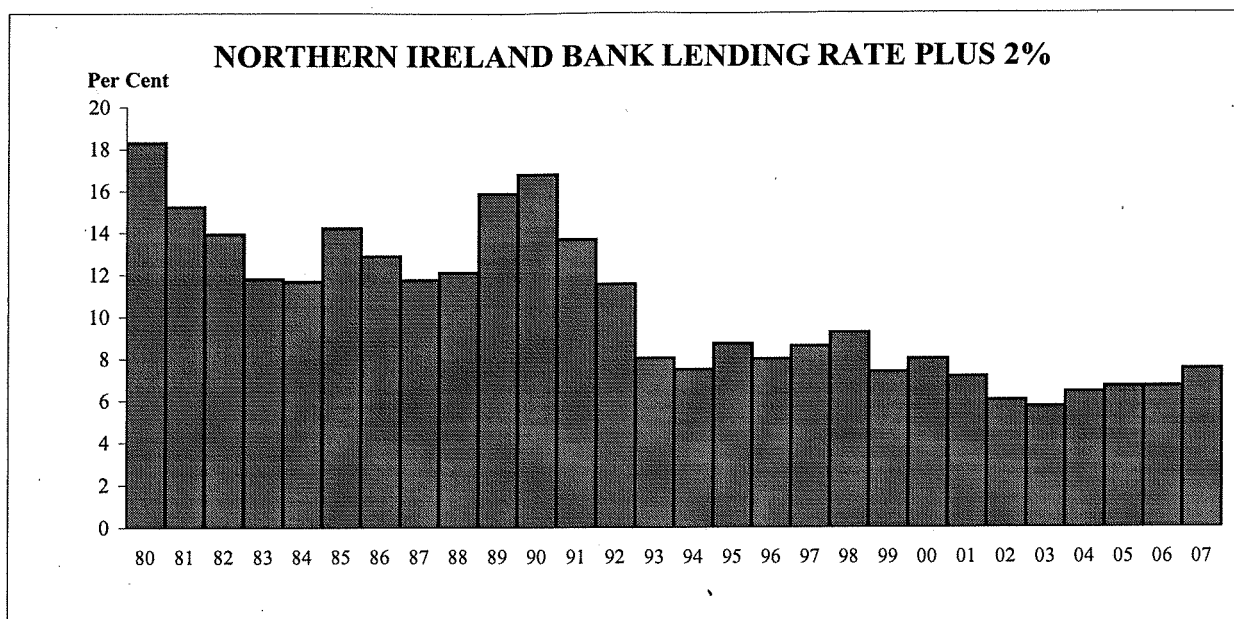
where n = nominal interest rate expressed as a decimal
 p = number of instalments per year

example : A nominal interest rate of 14% with monthly charging gives an approximate annual percentage rate of 14.9%

REAL INTEREST RATES

When preparing budgets to estimate the viability of an investment, it is common to include costs and returns at present day values, even though these may be expected to rise due to inflation over the life of the investment. Where this real terms approach is adopted, a more realistic estimate of the effect on profitability can be gained by basing capital charges on the real rate of interest rather than the APR. On the other hand it is important to remember that all costs and returns may not increase or, indeed decrease at the same rate. Also some allowance should be made in decision making for possible changes in inflation rates. Often in times of rising or falling inflation, nominal interest rates will rise or fall. This will clearly have consequences for cash flow.

The real rate of interest is the APR adjusted for the annual rate at which costs and prices relating to the investment are expected to increase. A crude estimate of the real rate of interest may be made by subtracting the expected inflation rate from the APR (see figure overleaf).



**AGRICULTURAL WAGES (REGULATION)
(NORTHERN IRELAND) ORDER 2007**

The Agricultural Wages Board for Northern Ireland by Order No. 86 dated 2nd April 2007 established a new grading system for minimum Agricultural wages. This Order replaces Order No. 85 which operated from 3rd April 2006. Under the new system advancement is conditional on a workers experience and qualifications. The Agricultural Wages Board then amended the minimum rates of wages for Grade 1 agricultural workers and the holiday entitlement for all workers on 17th September 2007. These changes were effective from 1 October 2007.

Minimum wage rate

The minimum wage rates (£ per hour) - effective from 1st October 2007 are as follows:

Grade	AGE (years)			
	<16	16-17	18-21	22+
Grade 1-Minimum (Applicable for first 40 weeks cumulative employment)	2.76	3.40	4.60	5.52
Grade 2-Standard Worker	-	3.70	4.85	5.70
Grade 3-Lead Worker	-	4.33	5.67	6.26
Grade 4-Craft Grade	-	4.37	5.72	6.72
Grade 5-Supervisory Grade	-	4.62	6.06	7.12
Grade 6-Farm Management Grade	-	4.99	6.55	7.70

Workers entering the agricultural industry on or after 2 April 2007 will start at the new "Minimum Rate", those currently working within the industry will move to the rate set out at Grade 2 "Standard Worker". No current agricultural worker should have their pay reduced by the change.

To advance to the next grade, a worker has to attain additional experience or qualifications. The definitions for the grades and the qualifications required for each grade are available at: www.dardni.gov.uk/new-grading-system-for-agricultural-minimum-wage.htm.

Overtime

The overtime rates (£ per hour) effective from 1st October 2007 are as follows:

Grade	AGE (years)			
	<16	16-17	18-21	22+
Grade 1-Minimum	4.14	5.10	6.90	8.28
Grade 2-Standard Worker	-	5.55	7.28	8.55
Grade 3-Lead Worker	-	6.50	8.51	9.39
Grade 4-Craft Grade	-	6.56	8.58	10.08
Grade 5-Supervisory Grade	-	6.93	9.09	10.68
Grade 6-Farm Management Grade	-	7.49	9.83	11.55

For the purpose of this Order, the following employment is defined as the employment which is to be treated as overtime employment:-

- (a) employment in excess of 39 hours per week for which a minimum weekly rate as set out in the above table is payable;
- (b) employment on the weekly day off;
- (c) employment on Sunday;
- (d) employment on a day on which a worker is entitled to be allowed a holiday in accordance with the holiday provisions of the Order.

“Week” means any 5 days from Monday until Saturday inclusive on which it is agreed between an employer and a worker that the worker shall be required to work.

“Weekly day off” means such a day in each week (not being a Sunday or additional holiday in accordance with the provisions of the holidays entitlement) as may be agreed between an employer and a worker as being the day on which the worker shall not be required to work.

Holiday Entitlements

An agricultural worker who has been in continuous employment with the same employer for **more than** 52 weeks is entitled to a total holiday entitlement of 29 days made up of 24 days holiday leave plus 5 of the additional days listed in Agricultural Wages legislation. This holiday entitlement is proportionate to the number of days worked.

An agricultural worker (who has been in continuous employment with the same employer for **less than** 52 weeks) will be entitled to holiday entitlement proportionate to the number of days worked as detailed below:

- works 1 day per week = 5 days holiday;
- works 2 days per week = 10 days holiday;
- works 3 days per week = 15 days holiday;
- works 4 days per week = 20 days holiday; and
- works 5 days per week = 24 days holiday.

Accommodation Offset

The Board also introduced an additional ‘Accommodation Offset’, this is for agricultural workers on a contract of less than 52 weeks, these workers will be defined as “Temporary and Harvest workers”. The Accommodation Offset for “Temporary and Harvest workers” will be £29.05 per week.

Further information on Agricultural Wages Board Orders or matters relating to Agricultural Wages is available from: The Secretary, Agricultural Wages Board, Room 916, Dundonald House, Upper Newtownards Road, Belfast, BT4 3SB or telephone: 028 9052 0813.

ALTERNATIVE ENTERPRISES

A wide range of alternative enterprises is found on individual farms in Northern Ireland. Some of these developments are relatively new, while others are simply being more widely publicised. Such enterprises may be seen to be attractive, however, they should not be undertaken without a considerable amount of research. Substantial capital may be required and new skills in production and marketing may have to be acquired. With alternative enterprises there is often a high level of risk and the potential market outlets should be thoroughly investigated before production is started.

The main groups of alternative enterprises are agricultural contracting; tourism and recreation (bed and breakfast, open farms, horse breeding); value-adding enterprises (on-farm processing, farm shops and stalls); unconventional agricultural enterprises (Christmas trees, amenity turf, game birds, ostriches, rabbits, snails, goats' and sheep's milk); ancillary resources (letting buildings for non-agricultural use, forestry); and the production of environmental goods in return for government grants - see page 110 (wildlife diversity, public access, landscape value).

ORGANIC FARMING

Organic farming aims to produce high quality food using sustainable methods of production and avoids the use of artificial fertilisers and chemicals which minimises damage to the environment and wildlife. Organic produce must comply with organic food standards and, in general, there is a minimum two year conversion period from non-organic methods.

It is difficult to be specific about the margins from organic farming. There is a specific market (that should be identified before production is commenced) and it is possible to obtain a premium for organically produced food. However, any premium can, at least in part, be offset by lower yields.

LIVESTOCK WELFARE

Animal welfare is an important and emotive subject. The previous welfare codes have been strengthened with the 'Welfare of Livestock Regulations (Northern Ireland) 1995'. A number of the recommendations from the previous welfare codes have been turned into legal requirements and implement European Union Directives on the welfare of calves, pigs and battery hens. Any person who causes unnecessary pain or distress to any livestock situated on agricultural land and under their control, or permits any such livestock to suffer any such pain or distress of which they know or may be reasonably expected to know, shall be guilty of an offence. In addition, ignorance of the regulations is no longer a legitimate excuse. The following basic points are common to all regulations. Livestock systems must be designed to provide:-

- Comfort and shelter;
- Readily accessible fresh water;
- Nutritionally adequate food;

Freedom of movement;
 The company of other animals - particularly of like kind;
 The opportunity to exercise most normal patterns of behaviour;
 Light during daylight hours;
 Flooring which neither harms nor causes undue strain;
 The prevention of, or rapid diagnosis and treatment of vice, injury, parasitic infestation or disease;
 The avoidance of unnecessary mutilation; and
 Emergency arrangements to cover outbreaks of fire, the breakdown of mechanical services (including artificial ventilation equipment) and the disruption of supplies.

Detailed advice on the application of the regulations in individual circumstances is available from local Divisional Veterinary Offices.

AVERAGE CONACRE RENTS BY TYPE OF USE 2001 - 2006

Use	£ per hectare					
	2001	2002	2003	2004	2005	2006
Grass	192	201	199	198	180	174
Potatoes	406	412	479	433	453	567
Cereals	233	246	208	247	156	186
Rough grazing	49	51	54	53	45	44
All uses	184	174	166	165	158	165

Source:- Farm Business Survey

SALES OF AGRICULTURAL LAND 1981 - 2006^{(2) (3) (4) (5) (6)}

Year	Number of sales	Area sold (ha)	Price ⁽¹⁾ (£/ha)
1981	696	7,081	2,897
1982	921	8,950	2,683
1983	863	7,870	2,866
1984	815	8,105	2,958
1985	709	7,785	3,130
1986	725	7,682	3,128
1987	660	7,179	3,204
1988	660	7,791	2,855
1989	639	7,695	3,359
1990	489	5,249	3,313
1991	462	5,243	3,362
1992	467	4,552	3,383
1993	467	4,721	4,330
1994	420	4,605	5,056
1995	355	4,050	5,950
1996	223	3,425	5,419
1997	257	2,912	7,858
1998	223	2,151	8,746
1999	163	1,672	8,267
2000	174	1,614	9,634
2001	67	597	9,961
2002	55	550	12,456
2003	44	520	14,950
2004	40	562	16,286
2005	63	1,095	19,837
2006	85	2,303	24,870

(1) Calculated by dividing the total value of sales by the total area sold.

(2) Source:- DARD, compiled from Valuations and Lands Agency data.

(3) Excludes individual sales under 2 hectares (5 acres) up to 2001 and sales outside agriculture.

(4) There is a delay (estimated to be 3 months) between the date on which a sale is agreed and when it appears in this series.

(5) Figures for 2002 are estimates due to lack of data.

(6) Land sales of less than 5 hectares are not included for 2003, 2004, 2005 and 2006.

TAXATION 2007-2008

These notes on taxation are a summary only. A series of booklets giving details of tax related matters are available from any tax office on request. All booklets and other information are also available on the internet at www.hmrc.gov.uk. Alternatively, a professional adviser may be approached.

1. Income Tax

1.1 Income Tax Allowances

	£
Personal allowance	5,225
Personal allowance for people aged 65-74 ^{1,3}	7,550
Personal allowance for people aged 75 and over ^{1,3}	7,690
Married couple's allowance (born before 6th April 1935 but aged under 75) ^{1,2,3}	6,285
Married couple's allowance - aged 75 and over ^{1,2,3}	6,365

¹ These allowances reduce where the income is above the income limit by £1 for every £2 of income above the limit. They will never be less than the basic Personal allowance or minimum amount of Married Couple's allowance

² Tax relief for the Married Couple's allowance is given at the rate of 10 per cent.

³ Income limit for age-related allowances is £20,900

1.2 Income Tax rates (%)

Taxable Income (£)	Dividends	Interest	Other Income
Starting rate up to £2,230	10	10	10
Basic rate £2,231 to £34,600	10	20	22
Higher Rate over £34,600	32.5	40	40

2. Corporation Tax

Profits are chargeable at the following rates:

	Profits band	Tax rate and allowances
Small companies' rate	Up to £300,000	20%
Marginal small companies rate	£300,001 to £1,500,000	30% less relief
Main companies' rate	Above £1,500,000	30%

*The relief is £1,500,000 minus the amount of profits multiplied by 1/40

3. Capital Gains Tax (CGT)

Applies to capital gains made by an individual. Capital gains accruing to companies are chargeable to Corporation Tax.

- (a) Annual exemption of £9,200 for individuals with independent taxation.
- (b) The amount chargeable to CGT is added onto the top of income liable to income tax for individuals and is charged to CGT at these rates: 10% to starting rate limit (£2,230), 20% to basic rate limit (£34,600) and 40% when basic rate limit is exceeded.

4. Inheritance Tax

Inheritance Tax (IHT) may be payable on an estate when someone dies, or when assets are transferred into a discretionary trust or to a company.

Amount of the estate on which there is no Inheritance Tax to pay - £300,000 (effective from 6th April 2007)

Tax Rate - 40% (most farms in Northern Ireland get 100% property relief).

5. Value Added Tax (VAT)

Annual turnover threshold for registration £64,000 from 1 April 2007.

Three rates of VAT:

Standard rate - 17½% - Most goods and services

Reduced Rate - 5% - Home fuel and power

Zero Rate - 0% - Certain goods and services e.g. food,

6. Stamp Duty

Transfers of property on or after 23rd March 2006 carry the following rates of stamp duty: 1% on sales of property if between £125,000 and £250,000; 3% between £250,001 and £500,000; and 4% if consideration is above £500,000. Transfers of property in disadvantaged residential areas (as specified for this purpose) or non-residential areas on or after 23rd March 2006, which do not exceed £150,000, are exempt from stamp duty. (Contact Inland Revenue for further details).

7. Forestry - wholly removed from income and corporation tax from 14 March 1988.

8. National Insurance

Class 2 Self employed, flat rate £2.20 per week (small earnings exemption £4,635 per year).

Class 4 8.0% of profits/gains between £5,225 and £34,840.
 1.0% of profits/gains over £34,840.

SELF ASSESSMENT AND CURRENT YEAR ASSESSMENT OF TAX

A new tax return form was issued in April 1997. Two main changes were introduced by the Inland Revenue:-

1. Self assessment.

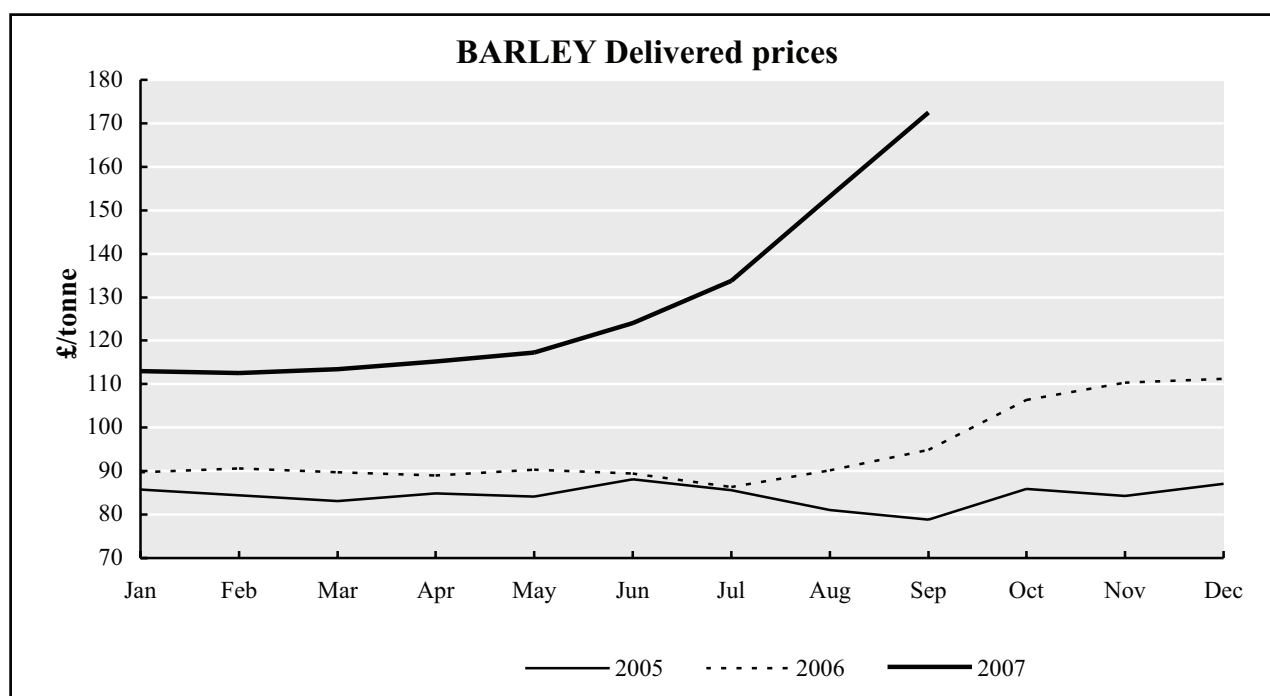
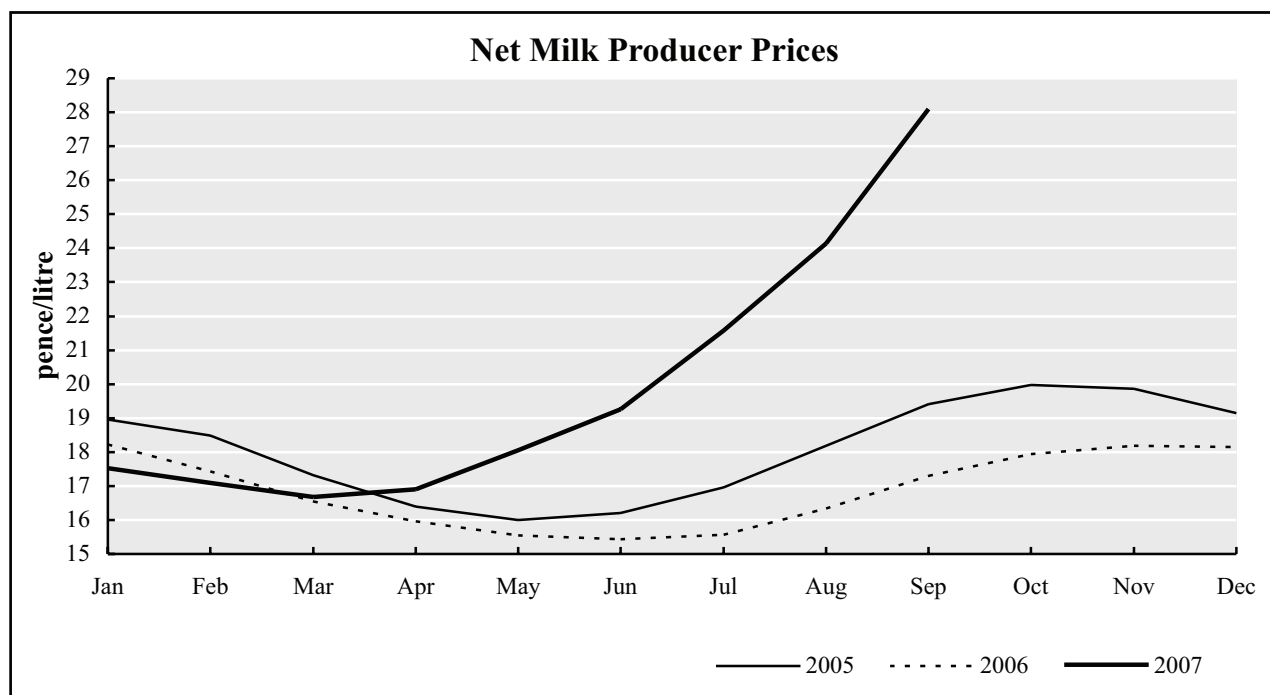
Everyone who receives a tax return (i.e. their income is not taxed at source) will be able to calculate their own tax liability or have the Inland Revenue do it for them. The tax return relating to 2007/08 must be sent back by 31 January 2009. If you want the Inland Revenue to calculate your tax liability for you, then you should send your return back by 30 September 2008 to guarantee having a statement of your tax liability sent out in time to make payment on the 31 January 2009. You can however send your tax return in at any time and still request the Revenue to calculate your tax.

Fixed automatic penalties will apply to late returns and interest and penalties for late payments. There is now a statutory requirement to keep records including relevant receipts, invoices etc. to support the figures entered on the return.

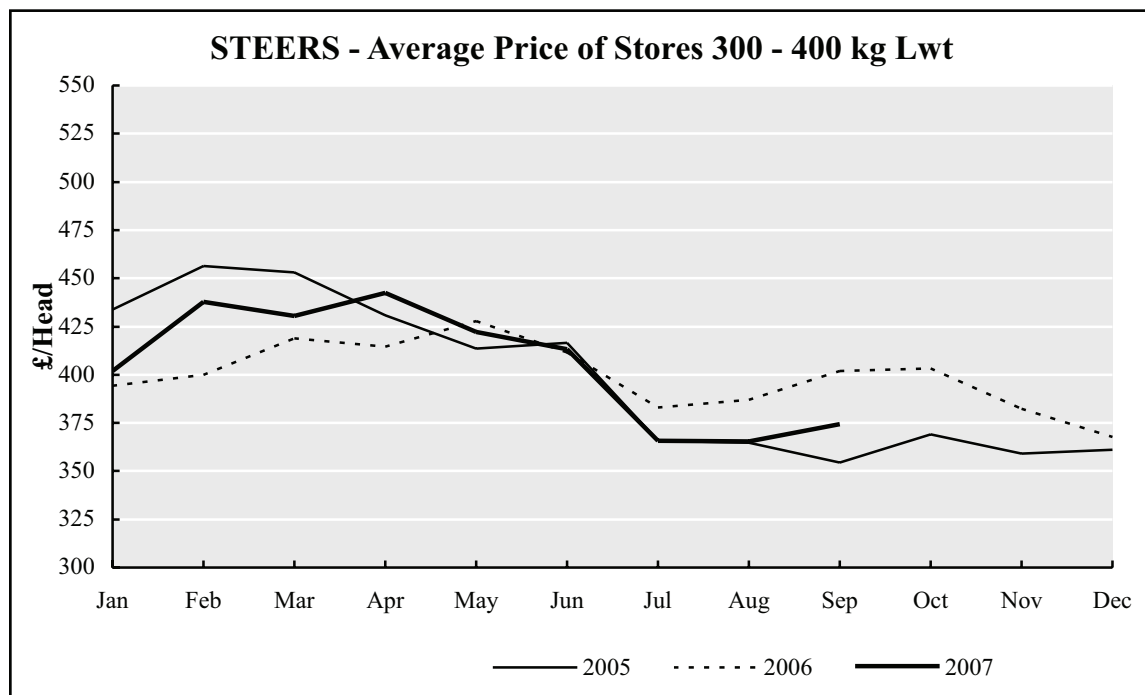
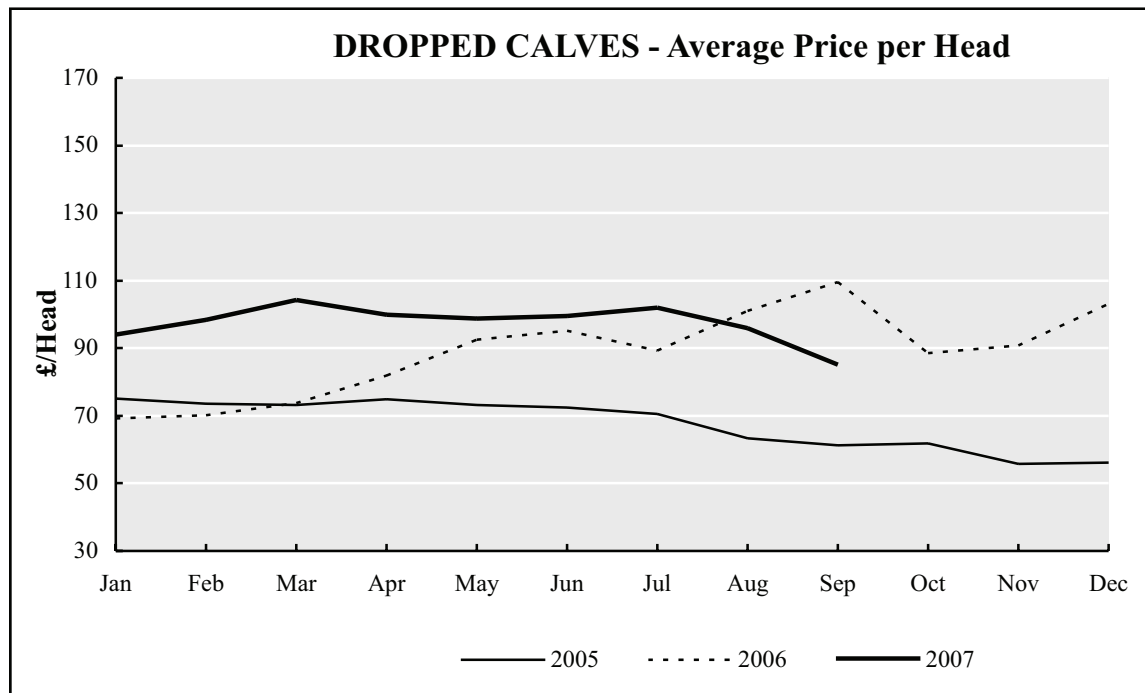
2. Current (same) year assessment.

The tax liability will be based on the profit arising in the same year. Therefore, taxable business profits for any year will be those shown on a set of yearly accounts ending in that tax year.

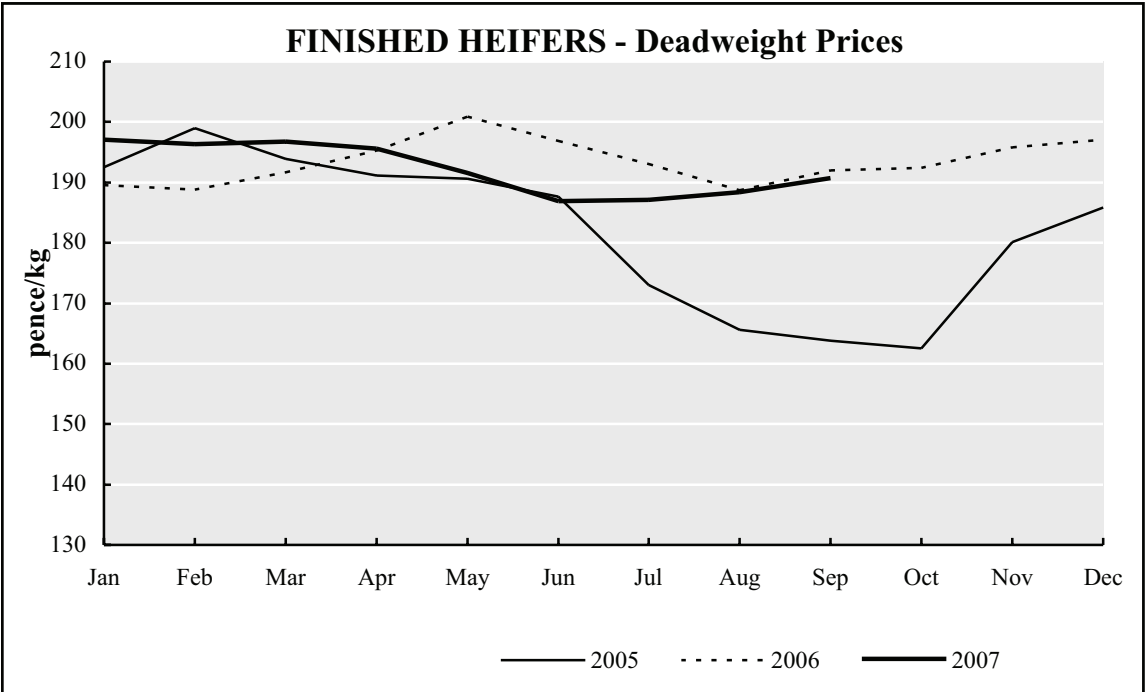
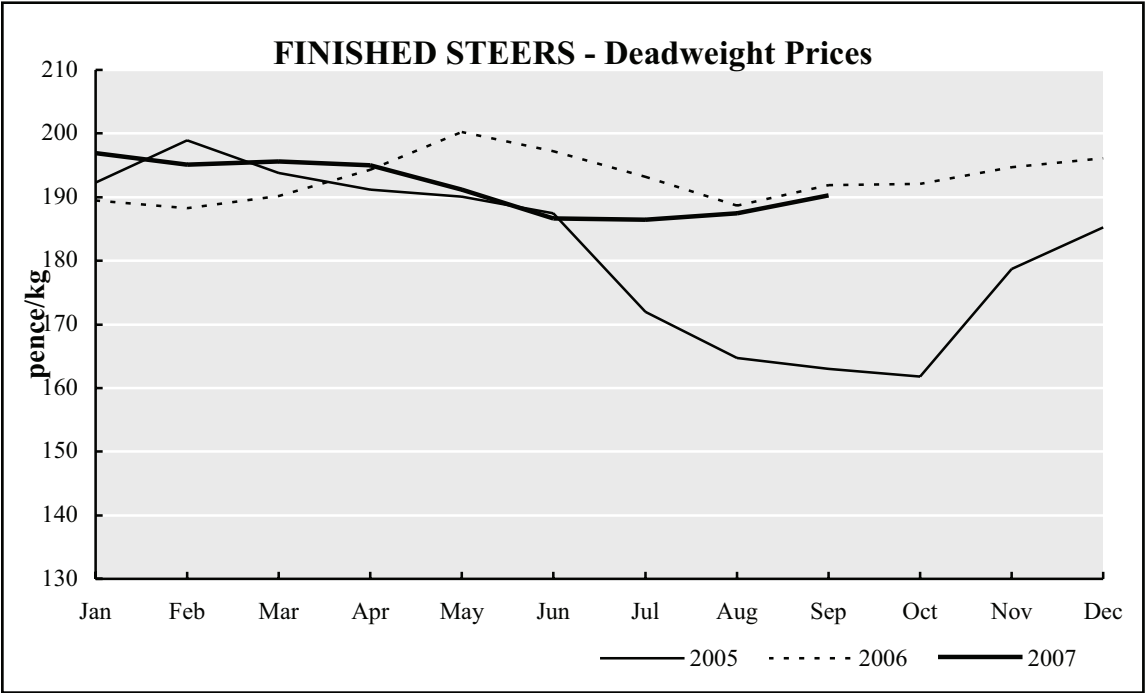
MILK AND BARLEY PRICES, 2005 - 2007



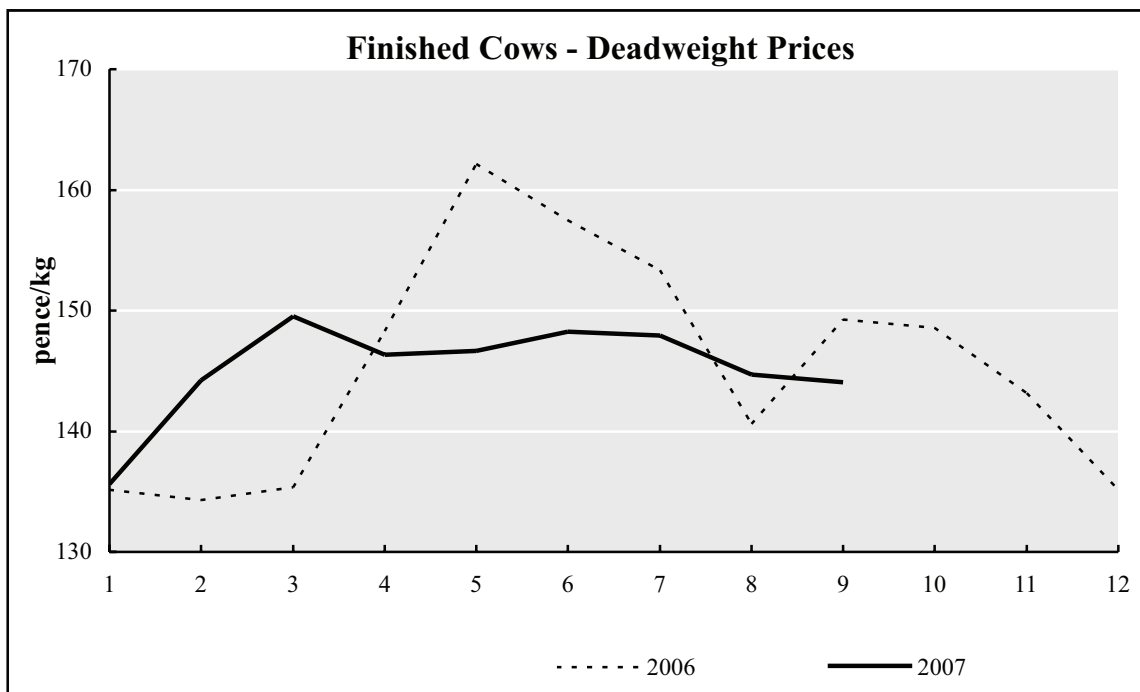
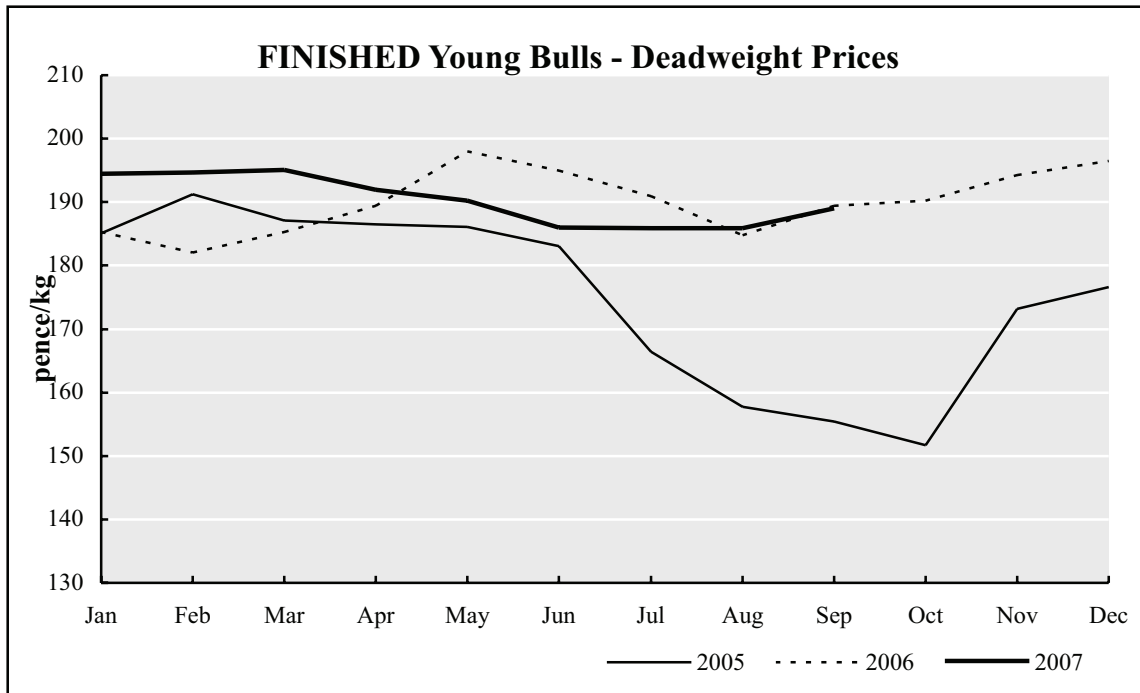
CATTLE PRICES, 2005 - 2007



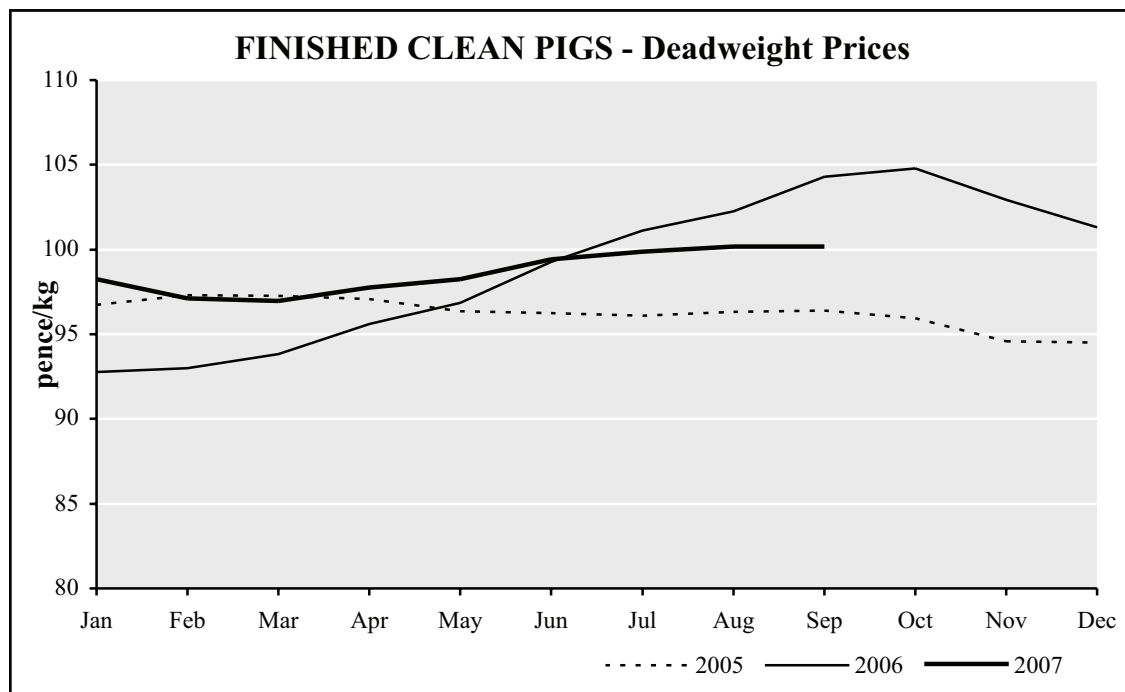
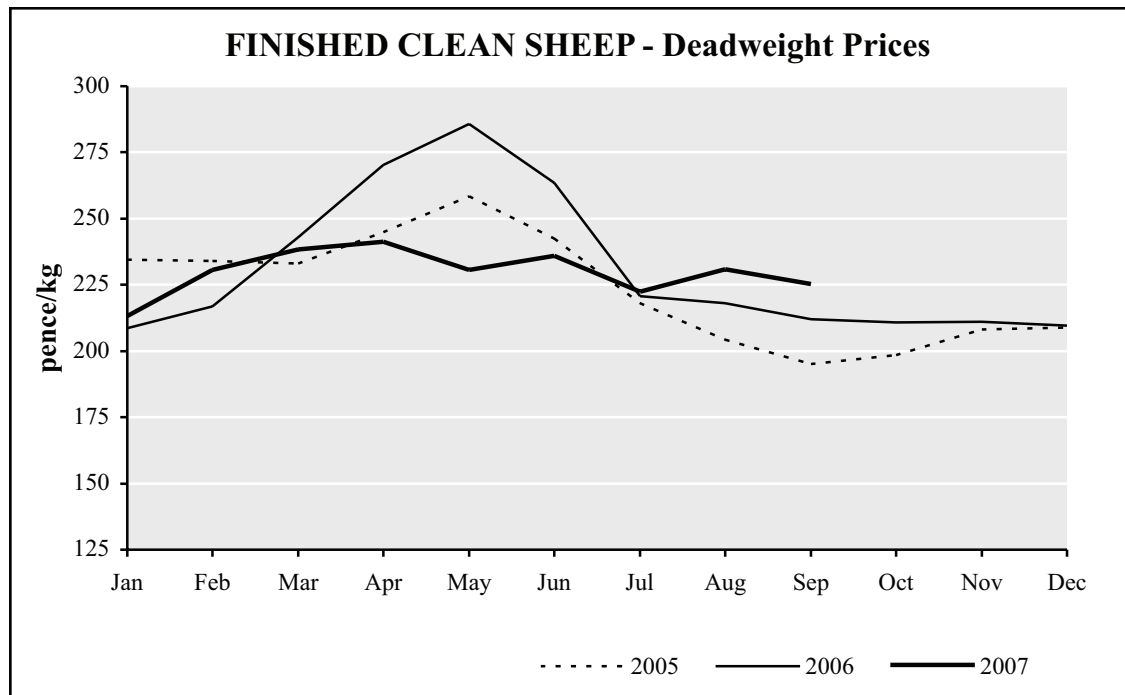
BEEF PRICES, 2005 - 2007



BEEF PRICES, 2005 - 2007



LAMB AND PIGMEAT PRICES, 2005 - 2007



DARD and AFBI CONTACT LIST

DARD Headquarters

Dundonald House
Upper Newtownards Road
BELFAST BT4 3SB
Tel: 028 90 520100

Policy and Economics Division

Dundonald House
Farm Business Survey 028 9052 4721
Weekly & Quarterly Market Reports 028 9052 4785
Farm Census 028 9052 4528 or 9052 4855

College of Agriculture, Food and Rural Enterprise (CAFRE)

Greenmount College of
Agriculture and Horticulture
ANTRIM BT41 4PU
Tel: 028 9442 6666
e-mail: enquiries@dardni.gov.uk
Internet: www.greenmount.ac.uk

Enniskillen College of Agriculture
Levagh
ENNISKILLEN BT74 4GF
Tel: 028 6634 4853
e-mail: enquiries@dardni.gov.uk
Internet: www.enniskillencollege.ac.uk

Loughry College – The Food Centre
COOKSTOWN
Co. Tyrone BT80 9AA
Tel: 028 8676 8100
e-mail: enquiries@dardni.gov.uk
Internet: www.loughrycollege.ac.uk

Veterinary Service

Room 716
Dundonald House
Upper Newtownards Road
BELFAST BT4 3SB
Tel: 028 9052 4580

Mall West
ARMAGH
BT61 9DL
Tel: 028 3752 9900

Crown Buildings
Pound Street
LARNE BT40 1SH
Tel: 028 2826 3222

Kilpatrick House
38 - 54 High Street
BALLYMENA
BT43 6DP

Crown Buildings
Asylum Road
LONDONDERRY
BT48 7EB
Tel: 028 7131 9500

Crown Buildings
Thomas Street
DUNGANNON
BT70 1HR
Tel: 028 8775 4777

9 Robert Street
NEWTOWNARDS
BT23 4DN
Tel: 028 9182 5825

Inishkeen House
Killyhevlin
ENNISKILLEN
BT74 4EJ
Tel: 028 6632 5004

Sperrin House
Sedan Avenue
OMAGH
BT79 7AQ
Tel: 028 8225 1020

Animal Health Division
Room 715
Dundonald House
Upper Newtownards Road
BELFAST BT4 3SB
Tel: 028 9052 4650

Food Policy Division
Room 140
Dundonald House
Upper Newtownards Road
BELFAST BT4 3SB
Tel: 028 9052 4879

Quality Assurance Division
Now responsible on behalf of the Food
Standards Agency for the issue of milk
licences.
Tel: 028 9052 4685

Milk Quotas
Room 137
Dundonald House
Upper Newtownards Road
BELFAST BT4 3SB
Tel: 028 9052 4680 (quotas)
Tel: 028 9052 4624 (marketing, food
safety and export certification)

Poultry and Eggs Branch
(Administers EC Regulations on egg and
poultry production and processing)
Room 1019
Dundonald House
Upper Newtownards Road
BELFAST BT4 3SB
Tel: 028 9052 5001 (general and
technical enquiries)

Meat Hygiene Section
Room 730
Dundonald House
Upper Newtownards Road
BELFAST BT4 3SB
Tel: 028 9052 4662

Farm Policy Division
Seeds and Horticulture Branch
(general enquiries - quality standards)
Rooms 136 & 139
Dundonald House
Upper Newtownards Road
BELFAST BT4 3SB
Tel: 028 9052 4488 or 9052 4876

Plant Health Branch
(general enquiries)
Room 142
Dundonald House
Upper Newtownards Road
BELFAST BT4 3SB
Tel: 028 9052 4468

Potatoes Branch
(general enquiries)
Room 140 Dundonald House
Upper Newtownards Road
BELFAST BT4 3SB
Tel: 028 9052 4498

Pesticides Branch
(general enquiries)
Room 657
Dundonald House
Upper Newtownards Road
BELFAST BT4 3SB
Tel: 028 9052 4704

Agri-Food and Biosciences Institute (AFBI)

**Agri-Food and Biosciences Institute
Headquarters**
(Agri-Environment, Economics, Fisheries,
Food Science, Plant Science, Statistics)
18A Newforge Lane
BELFAST BT9 5PX
Tel: 028 9025 5689
Website: www.afbini.gov.uk
e-mail: info@afbini.gov.uk

AFBI Crossnacreevy
(Seed Certification Plant Testing Station)
50 Houston Road
Crossnacreevy
Castlereagh
BELFAST BT6 9SH
Tel: 028 9054 8000

AFBI Hillsborough
(Agricultural Research Institute)
Large Park
HILLSBOROUGH BT26 6DR
Tel: 028 9268 2484

AFBI Stormont
(Veterinary Sciences Division)
Stoney Road
BELFAST BT4 3SD
Tel: 028 9052 0011

AFBI Omagh
(Veterinary Sciences Division)
43 Beltany Road
Coneywarren
OMAGH BT78 5NF
Tel: 028 8224 3337

AFBI Loughgall
(Horticulture and Plant Breeding Station)
Manor House
Loughgall
ARMAGH BT61 8JA
Tel: 028 3889 2300

Agri-Food and Biosciences Institute (AFBI) was created on 1st April 2006 as the amalgamation of DARD Science Service and the Agricultural Research Institute of Northern Ireland.

Forest Service
Customer Services Manager
Forest Service
Room 237
Dundonald House
Upper Newtownards Road
BELFAST BT4 3SB
Tel: 028 9052 4480

**Private Woodlands & Private Health
Branch**
Room 23
Dundonald House
Upper Newtownards Road
BELFAST BT4 3SB

Local DARD Agriculture Offices

Kilpatrick House
38-54 High Street
BALLYMENA BT4 6DT
Tel: 028 2566 2800

Crown Buildings
John Street
BALLYMONEY BT53 6DS
Tel: 028 2766 0160

50-56 The Square
BALLYCLARE BT39 9BB
Tel: 028 9332 2399

2 Newry Road
ARMAGH BT60 1EN
Tel: 028 3751 5659

Rathkeltair House
Market Street
DOWNPATRICK BT30 6LZ
Tel: 028 4461 2211

2B Portaferry Road
NEWTOWNARDS BT23 3NT
Tel: 028 9181 3570

Glenree House, Unit 2
Springhill Road,
Carnbane Industrial Estate
NEWRY BT35 6EF
Tel: 028 3025 5990

Innishkeen House
Killyhevlin
ENNISKILLEN BT74 4EJ
Tel: 028 6632 5004

4 – 6 Killane Road
LIMAVADY BT49 0DS
Tel: 028 7776 2521

31 Station Road
MAGHERAFELT BT44 5DN
Tel: 028 7930 2112

Sperrin House
Sedan Avenue
OMAGH BT79 7AQ
Tel: 028 8225 1020

Crown Buildings
Thomas Street
DUNGANNON BT70 1HR
Tel: 028 8775 4777

Rural Development Centres

ECOS Centre
Kernaghan's Lane
Droughshane Road
BALLYMENA BT43 7QA
Tel: 028 2563 3800
21 Hospital Road
OMAGH BT79 0AN
Tel: 028 8224 7727
Internet: www.dardni.gov.uk

Glenree House
Unit 2 Springhill Road
Carnbane Industries Estate
NEWRY BT35 6EF
Tel: 028 3025 3266

**GRANTS AND SUBSIDIES INSPECTION BRANCH
COUNTY AGRICULTURE OFFICES**

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Area Manager

Mr Mervyn Johnston
Kilpatrick House, 38-54 High Street
BALLYMENA
Co Antrim BT43 6DP
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Fax. 2566 2838

Armagh

Area Manager

Mr Martin Flavelle
2 Newry Road
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Tel. 3751 5600
Fax. 3751 5611

Down

Area Manager

Mr Martin Flavelle
Rathkeltair House, Market Street
DOWNPATRICK
Co. Down BT30 6LZ
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Fax. 4461 8226

Fermanagh

Area Manager

Mr Aidan McEvoy
Inishkeen House, Killyhevlin
ENNISKILLEN
Co. Fermanagh BT74 4EJ
Tel. 6632 5004
Fax. 6634 3000

Londonderry

Area Manager

Mr Mervyn Johnston
Crown Buildings, Artillery Road
COLERAINE
Co. Londonderry BT52 2AJ
Tel. 7034 1111
Fax. 7034 1140

Tyrone

Area Manager

Mr Aidan McEvoy
Sperrin House, Sedan Avenue
OMAGH
Co. Tyrone BT79 7AQ
Tel. 8225 1020
Fax. 8225 3500

**Department of the Environment (DOE)
Environment and Heritage Service (EHS)**

Water Management Unit, 17 Antrim Rd, Lisburn, BT28 3AL

Internet - www.ehsni.gov.uk

General Enquiries Tel: 028 9262 3100

Fax Number: 028 9267 6054

Nitrates Regulations Tel: 028 9262 3184

SSAFO Regulations Tel: 028 9262 3102

Groundwater Authorisations Tel: 028 9262 3278

Sewage Sludge to Land Tel: 028 9262 3278

Water Pollution Hotline Tel: 0800 80 70 60

(A 24-hour confidential hotline for reporting pollution incidents)

Grants and Subsidies Payments Branch

Orchard House, 40 Foyle Street, Derry / Londonderry BT48 6AT

Tel: 028 7131 9900 Fax: 028 7131 9800

Website: www.dardni.gov.uk/grantsandsubsidies

Single Farm Payment Branch

Single Farm Payments & Inspections

Surnames A - Marshall

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Room 218, Orchard House

Tel: 028 71 319822

E-mail: gsps.sfps@dardni.gov.uk

Single Farm Payment Entitlements

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Orchard House

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Legacy Schemes

Suckler Cow Premium

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Arable Area Payments

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Extensification Premium

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Sheep Quota

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LFA Compensatory Allowances

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Beef Special Premium

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Suckler Cow Quota

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Slaughter Premium

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Sheep Annual Premium

Scheme Manager: Mr John McGrath
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Weather Aid

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ISBN 978-1-84807-030-1

£7.50

DMS 07.08.162