

# CROPS COSTS AND RETURNS 2014

*Compiled by:* **Tim O'Donovan**, Crops Specialist  
and **Jim O'Mahony**, Head of Crops - KT Department



AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

## Crop Margins

Awareness of crop margins is vitally important since under the decoupled regime the Single Farm Payment (SFP) will be paid irrespective of what crop is grown. Moreover, it makes no sense to produce the crop at a loss. The bottom line is that the land must be maintained in "good agricultural and environmental condition".

**Note: The margins shown here do not include the SFP. Prices of grain and fertilisers may vary considerably from those predicted under the present volatile market conditions.**

The margins given here should provide a useful guide to profits but land suitability, rotation, risk avoidance and convenience should also be considered. There is little difference in margins between spring and winter feed cereals. Bonuses for quality are important.

In the case of malting barley the availability of contracts and fulfilment of contract requirements may limit the attainment of these margins.

Stacking (consolidation) is a provision where Irish farmers can get their full Single Farm Payment without the need to farm all the land they farmed in the reference years 2000-2002. At least 50% of the allocated entitlements from the reference years must be farmed. Farmers can only stack if they dropped rented or leased land, afforested land since 2000 or lost land due to compulsory acquisition for public good (CPO). Stacking applies to all farming enterprises. As over ½ of arable land farmed is on rented ground this provision has major implications for the price of rented land for tillage.

Stacking is available in 2014. In future years the stacked grower may rent additional land (if profitable) without compromising his stacked (consolidated) entitlements.

### Conacre appraisal

The following table will provide a transparent exposition for growers and land owners as to the value of conacre.

1	Entitlement Value	
2	Gross Margin achievable	
3	Land problems, fertility, pH, P, K, trace elements, weeds, scutch, wild oats, other grass weeds	
4	€ available for rent + farming	(1+2)-3

### Costs

Level of yield has a major influence on profitability. Decisions on input strategies must be tailored for individual fields and farms.

Timeliness and attention to detail in carrying out all operations are vital to maintaining profitability in crop production. All costs (direct and fixed) need to be kept to a minimum, consistent with good husbandry practices. Fixed costs will need closer attention. In particular, investments in machinery and land/conacre will need thorough financial appraisal before a decision is taken. Labour efficiency must be scrutinised.

The average machinery cost (incl. repayments, depreciation, fuel and repairs) on 38 tillage farms (7,000 ha) in 2013 was €314/ha. The machinery costs on these farms was analysed using the Teagasc Machinery Cost Program and is available from your local Teagasc Tillage Advisor.

## 2014 CEREAL CROP MARGINS

Variable Costs excl. VAT (€/ha)

	WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Feed Winter	Milling Spring	Winter	Spring		Winter	Spring
<b>MATERIALS</b>	<b><u>756</u></b>	<b><u>597</u></b>	<b><u>640</u></b>	<b><u>493</u></b>	<b><u>498</u></b>	<b><u>554</u></b>	<b><u>470</u></b>
Seed	74	87	85	80	80	82	82
Fertilisers	403	329	349	283	283	320	261
Sprays:							
Herbicides	56	45	56	45	45	27	27
Fungicides	185	115	120	80	85	105	80
Insecticides	23	10	10	5	5	5	5
Growth Regulators	15	10	20	0	0	15	15
<b>HIRE MACHINERY</b>	<b><u>452</u></b>	<b><u>433</u></b>	<b><u>414</u></b>	<b><u>395</u></b>	<b><u>395</u></b>	<b><u>414</u></b>	<b><u>414</u></b>
Plough, Till, Sow & Roll	170	170	170	170	170	170	170
Spray	95	76	76	57	57	76	76
Fertiliser Spreading	57	57	38	38	38	38	38
Harvesting	130	130	130	130	130	130	130
<b>MISCELLANEOUS</b>	<b><u>91</u></b>	<b><u>69</u></b>	<b><u>81</u></b>	<b><u>58</u></b>	<b><u>58</u></b>	<b><u>78</u></b>	<b><u>57</u></b>
Interest (6%)	31	15	27	13	13	24	12
Transport (€/Tonne)	60	54	54	45	45	54	45
<b>TOTAL VARIABLE COSTS</b>	<b><u>1299</u></b>	<b><u>1099</u></b>	<b><u>1135</u></b>	<b><u>945</u></b>	<b><u>950</u></b>	<b><u>1046</u></b>	<b><u>941</u></b>
Break-even yield (grain only)	8.7	6.9	8.1	6.8	5.6	7.5	6.7
<b>Cost per tonne @ <u>target yields</u>*</b>	<b><u>130</u></b>	<b><u>122</u></b>	<b><u>126</u></b>	<b><u>126</u></b>	<b><u>127</u></b>	<b><u>116</u></b>	<b><u>126</u></b>
Net Price (€/Tonne)	150	160	140	140	170	140	140
AID (SFP) = NOT included	0	0	0	0	0	0	0
Straw (€/ha)	90	80	140	100	100	100	90

## Gross Margins (€/hectare)

(Incl. Straw)

Tonne/hectare	WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Feed Winter	Milling Spring	Winter	Spring		Winter	Spring
<b>6.0</b>	<b><u>-309</u></b>	<b><u>-59</u></b>	<b><u>-155</u></b>	<b><u>-5</u></b>	<b>170</b>	<b><u>-106</u></b>	<b><u>-11</u></b>
<b>7.0</b>	<b><u>-159</u></b>	<b>101</b>	<b><u>-15</u></b>	<b>135</b>	<b>340</b>	<b>34</b>	<b>129</b>
<b>7.5</b>	<b><u>-84</u></b>	<b>181</b>	<b>55</b>	<b>205</b>	<b>425</b>	<b>104</b>	<b>199</b>
<b>9.0</b>	<b>141</b>	<b><u>421</u></b>	<b>265</b>	<b>415</b>	<b>680</b>	<b>314</b>	<b>409</b>
<b>10.0</b>	<b>291</b>	<b>581</b>	<b>405</b>			<b>454</b>	
<b>10.5</b>	<b>366</b>						

\*Crop margins are underlined for the various crop target yields.

Totals may not agree due to rounding-off.

An online version of this calculator is available at [www.teagasc.ie/crops/crops\\_margins](http://www.teagasc.ie/crops/crops_margins)

## EXPLANATORY NOTES

**Fixed or Overhead Costs per Hectare** (not included in Crop Margins)

Scutch Control €17, Lime €17, Maintenance of Land and Fences, Car, Phone, ESB, professional fees and regular hired labour Total (€155/ha). Fixed costs and land land rental should be subtracted from gross margin.

**Vat is excluded from input costs and outputs**

### A. INPUT COSTS: CEREAL CROPS

€/ha

**Seed:** €530 /t Blue Label

W. Wheat - 140 kg/ha; W. Barley - 160 kg/ha; W + S Oats - 155 kg/ha

S. Barley - 150 kg/ha; S. Wheat - 165 kg/ha

Fertiliser:	Total Fertiliser (kg/ha)			Fertiliser Bags (No. of 50kg bags/ha)			€/ha
	N	P	K	CAN + S	Cmpnd*	50%K	
<b>W. Wheat</b>	<b>230</b>	<b>37</b>	<b>110</b>	<b>14.3</b>	<b>7.4</b>	<b>1.4</b>	<b>€403</b>
<b>W. Barley</b>	<b>190</b>	<b>37</b>	<b>75</b>	<b>11.3</b>	<b>7.4</b>	-	<b>€349</b>
<b>W. Oats</b>	<b>145</b>	<b>37</b>	<b>130</b>	<b>8.0</b>	<b>7.4</b>	<b>2.2</b>	<b>€320</b>
<b>S. Wheat</b>	<b>170</b>	<b>29</b>	<b>110</b>	<b>7.8</b>	<b>9.8</b>	<b>0.4</b>	<b>€329</b>
<b>S. Barley</b>	<b>135</b>	<b>29</b>	<b>85</b>	<b>5.3</b>	<b>9.8</b>	-	<b>€283</b>
<b>S. Oats</b>	<b>110</b>	<b>29</b>	<b>110</b>	<b>3.4</b>	<b>9.8</b>	<b>0.4</b>	<b>€261</b>

CAN + S €310/t; \*S. Cereals 13-6-20 €410/t; \*W. Cereals 10-10-20 €420/t; 50% K €370/t

N = Index 1; P & K = Index 3 based on S.I. 610 of 2010.

<b>Herbicides:</b> W. Wheat & W. Barley €56/ha; S Wheat & S Barley €45/ha; Oats €27/ha		€/ha
<b>Fungicides:</b>		
<b>Winter Wheat:</b> T0: Chlorothalonil (CTL)+/- Morph	€10	€185
T1: Eyespot + B.S. + CTL Growth Stage (G.S.) 31-32	€55	
T2: Broad Spectrum (B.S.) + CTL. G.S. 37-39	€70	
T3: B.S. (incl. triazole) Growth Stage 55-60	€50	
<b>Spring Wheat:</b>		
T1: 1/2 rate (B.S. + Morph. + CTL) GS 30-32	€25	€120
T2: B.S. + CTL. Growth Stage 37-39	€55	
T3: B.S. (incl. triazole) Growth Stage 55-60	€40	
<b>S. Barley:</b> T1: Red rate (Triazole + mildew); T2: SDHI + triazole+ CTL	= €80	
<b>Winter Barley:</b> 3 Fungicides (Triazole/SDHI/Strob) G.S. 30/31, 32-37, 49	= €120	
<b>W. Oats:</b> Triazole + morph at T1+T2, Triazole + Strob at T3	= €105	
<b>S. Oats:</b> Reduced Rates W. Oats	= €80	
<b>Insecticides:</b> Winter wheat; Red. Slug Pellets (€13/ha) + Aphicide (€10/ha) Other Cereals: Aphicide (€5 - €10/ha) +/- Leatherjackets €11/ha		
<b>Growth Regulators:</b> W. Wheat, W & S Oats	=	€15
Spring Wheat	=	€10
Winter Barley	=	€20
<b>Hire Machinery:</b> Plough (€80/ha), Till, Sow & Roll (€90/ha)	=	€170
Spraying (@ €19/ha):		
W. Wheat: Weeds + Aphids, PGR, Fungicide x 3	=	€95
S. Wheat: Weeds + Aphids, Fungicide x 3	=	€76
W. Barley: Aphids + Weeds, Fungicide x 3	=	€76
S. Barley: Weeds + Aphids, Fungicide x 2	=	€57
W. Oats: Weeds Aphids, Fungicide x 3	=	€76
Fertiliser Spreading (@€19/ha)	=	€38-57
Harvesting (€130/ha)	=	€130
<b>Interest 6%:</b> Seed + Fertiliser + 0.5 Sprays; Winter - 10 months; Spring - 6 months		

## 2014 CEREAL CROP MARGINS

Variable Costs excl. VAT (€/ac)

	WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Feed Winter	Milling Spring	Winter	Spring		Winter	Spring
<b>MATERIALS</b>	<b><u>306</u></b>	<b><u>241</u></b>	<b><u>259</u></b>	<b><u>199</u></b>	<b><u>201</u></b>	<b><u>224</u></b>	<b><u>190</u></b>
Seed	30	35	34	32	32	33	33
Fertilisers	163	133	141	115	115	130	106
Sprays:							
Herbicides	23	18	23	18	18	11	11
Fungicides	75	47	49	32	34	42	32
Insecticides	9	4	4	2	2	2	2
Growth Regulators	6	4	8	0	0	6	6
<b>HIRE MACHINERY</b>	<b><u>183</u></b>	<b><u>175</u></b>	<b><u>168</u></b>	<b><u>160</u></b>	<b><u>160</u></b>	<b><u>168</u></b>	<b><u>168</u></b>
Plough, Till, Sow & Roll	69	69	69	69	69	69	69
Spray	38	31	31	23	23	31	31
Fertiliser Spreading	23	23	15	15	15	15	15
Harvesting	53	53	53	53	53	53	53
<b>MISCELLANEOUS</b>	<b><u>37</u></b>	<b><u>28</u></b>	<b><u>33</u></b>	<b><u>23</u></b>	<b><u>23</u></b>	<b><u>32</u></b>	<b><u>23</u></b>
Interest (6%)	12	6	11	5	5	10	5
Transport (€ 6/Tonne)	24	22	22	18	18	22	18
<b>TOTAL VARIABLE COSTS</b>	<b><u>526</u></b>	<b><u>445</u></b>	<b><u>459</u></b>	<b><u>383</u></b>	<b><u>385</u></b>	<b><u>423</u></b>	<b><u>381</u></b>
Break-even yield (grain only)	3.5	2.8	3.3	2.7	2.3	3.0	2.7
<b>Cost per tonne @ target yields*</b>	<b>131</b>	<b>124</b>	<b>128</b>	<b>128</b>	<b>128</b>	<b>118</b>	<b>127</b>
<b>Net Price (€/Tonne)</b>	150	160	140	140	170	140	140
AID (SFP) = NOT included	0	0	0	0	0	0	0
Straw (€/ha)	36	32	57	40	40	40	36

## Gross Margins (€/ac)

(Incl. Straw)

Tonne/acre	WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Feed Winter	Milling Spring	Winter	Spring		Winter	Spring
2.4	-129	-28	-67	-6	64	-47	-9
2.8	-69	36	-11	50	132	9	47
3.0	-39	68	17	78	166	37	75
3.6	51	164	101	162	268	121	159
4.0	111	228	157			177	
4.5	186						

\*Crop margins are underlined for the various crop target yields.

Totals may not agree due to rounding-off.

An online version of this calculator is available at [www.teagasc.ie/crops/crops\\_margins](http://www.teagasc.ie/crops/crops_margins)

## 2014 NON CEREAL CROP MARGINS

Variable Costs excl. VAT (€/acre)

	F. BEET	Potatoes Main Crop	MAIZE	PEAS	BEANS	OILSEED RAPE	
						Winter	Spring
<b>MATERIALS</b>	<b><u>378</u></b>	<b><u>975</u></b>	<b><u>281</u></b>	<b><u>184</u></b>	<b><u>180</u></b>	<b><u>244</u></b>	<b><u>155</u></b>
Seed	65	421	73	65	61	32	36
Fertilisers	208	222	182	58	58	139	103
Sprays:							
Herbicides	77	57	26	28	28	38	12
Fungicides	12	223	0	29	29	24	0
Insecticides	16	53	0	3	3	10	3
<b>HIRE MACHINERY</b>	<b><u>248</u></b>	<b><u>933</u></b>	<b><u>225</u></b>	<b><u>163</u></b>	<b><u>159</u></b>	<b><u>203</u></b>	<b><u>187</u></b>
Plough, Till and Sow	101	304	101	69	69	69	69
Roll	0	0	0	7	7	7	7
Spray	31	138	8	23	23	31	23
Fertiliser Spreading	15	15	15	8	8	23	15
Swathing/Dessication	0	0	0	0	0	20	20
Harvesting	101	476	101	57	53	53	53
<b>MISCELLANEOUS</b>	<b><u>159</u></b>	<b><u>131</u></b>	<b><u>131</u></b>	<b><u>22</u></b>	<b><u>19</u></b>	<b><u>22</u></b>	<b><u>11</u></b>
Interest (6%)	13	34	10	5	5	9	4
Transport (€/Tonne)	146	97	121	12	13	11	7
Bird Control	0	0	0	5	0	3	0
<b>TOTAL VARIABLE COSTS</b>	<b><u>785</u></b>	<b><u>2039</u></b>	<b><u>638</u></b>	<b><u>369</u></b>	<b><u>358</u></b>	<b><u>469</u></b>	<b><u>353</u></b>
Break-even yield	19.6	10.2	14.2	1.5	1.7	1.5	1.1
<b>Net Price (€/Tonne)</b>	<b>40</b>	<b>200</b>	<b>45</b>	<b>250</b>	<b>215</b>	<b>310</b>	<b>310</b>
AID (SFP) = NOT included	0	0	0	0	0	0	0

## Gross Margins (€/ac)

Tonnes/acre (Beet, Potatoes & Maize)	Tonnes/acre Pulses/ OSR	F. BEET	Potatoes Main Crop	MAIZE	PEAS	BEANS	OILSEED RAPE	
							Winter	Spring
	1.0							-43
12	1.2		361	-98			-97	19
14	1.6		761	-8	31	-14	27	143
16	2.0	-145	1161	82	131	72	151	267
20	2.2	15	1961	262	181	115	213	
24	2.4	175		442	231	158		
26	2.6	255		532	281	201		
28		335						

Totals may not agree due to rounding-off.

An online version of this calculator is available at [www.teagasc.ie/crops/crops\\_margins](http://www.teagasc.ie/crops/crops_margins)

# GROWER'S OWN CROP BUDGET

Variable Costs excl. VAT (€/Acre)

		WINTER WHEAT		SPRING BARLEY		ANOTHER CROP	
		Your Figures	Teagasc Figures	Your Figures	Teagasc Figures	Your Figures	Teagasc Figures
<b>MATERIALS</b> (A =B+C+D+E+F+G)	<b>A</b>		<b>306</b>		<b>199</b>		
Seed	<b>B</b>		30		32		
Fertilisers	<b>C</b>		163		115		
Sprays:							
Herbicides	<b>D</b>		23		18		
Fungicides	<b>E</b>		75		32		
Insecticides	<b>F</b>		9		2		
Growth Regulators	<b>G</b>		6		0		
<b>HIRE MACHINERY</b> (H = I+J+K+L)	<b>H</b>		<b>183</b>		<b>160</b>		
Plough, Till and Sow	<b>I</b>		69		69		
Spray	<b>J</b>		38		23		
Fertiliser Spreading	<b>K</b>		23		15		
Harvesting	<b>L</b>		53		53		
<b>MISCELLANEOUS</b> (M =N+O)	<b>M</b>		<b>37</b>		<b>23</b>		
Interest (6%)	<b>N</b>		12		5		
Transport (€6/Tonne)	<b>O</b>		24		18		
<b>TOTAL VARIABLE COSTS (P = A+H+M)</b>	<b>P</b>		<b>526</b>		<b>383</b>		
Tonnes to cover variable costs (Q = P/R)	<b>Q</b>		3.5		2.7		
<b>Net Price (€/Tonne)</b>	<b>R</b>		150		140		
AID (€/Acre)	<b>S</b>		0		0		
Straw (€/Acre)	<b>T</b>		36		40		
Projected yield	<b>U</b>		4		3.0		
Gross Margins (€/Acre) (V = (R*U)+S+T-P)	<b>V</b>		<b>111</b>		<b>78</b>		
Gross Margins (€/Acre)							

An excel version of this calculator is available (free) from [www.teagasc.ie/crops/crops\\_margins](http://www.teagasc.ie/crops/crops_margins)  
Totals may not agree due to rounding

# Share Farming Crop Budget

		Crop Budget (€/ac)	=	Land- owner Share (€/ac)	+	Share Farmer Share (€/ac)
<b>Variable Costs excl. VAT (€/Acre)</b>						
<b>MATERIALS</b> (A= B+C+D+E+F+G)	A					
Seed	B					
Fertilisers	C					
Sprays:						
Herbicides	D					
Fungicides	E					
Insecticides	F					
Growth Regulators	G					
<b>MACHINERY COSTS</b> (H =I+J+K+L)	H					
Plough, Till and Sow	I					
Spray	J					
Fertiliser Spreading	K					
Harvesting	L					
<b>MISCELLANEOUS COSTS</b> (M =N+O)	M					
Interest	N					
Transport	O					
<b>TOTAL VARIABLE COSTS</b> (P =A+H+M)	P					
Tonnes to cover variable costs (Q =P/R)	Q					
<b>Net Price (€/Tonne)</b>	R					
AID (€/Acre)	S					
REPS €/Acre)	T					
Straw (€/Acre)	U					
Projected yield	V					
<b>Gross Margins (€/Acre)</b> (W = (R*V)+S+T+U-P)	W					



## 2014 NON CEREAL CROP MARGINS

Variable Costs excl. VAT (€/hectare)

	F. BEET	Potatoes Main Crop	MAIZE	PEAS	BEANS	OILSEED RAPE	
						Winter	Spring
<b>MATERIALS</b>	<b>934</b>	<b>2408</b>	<b>695</b>	<b>454</b>	<b>445</b>	<b>603</b>	<b>382</b>
Seed	160	1040	180	161	152	80	90
Fertilisers	514	548	450	144	144	343	254
Sprays:							
Herbicides	190	140	65	70	70	95	30
Fungicides	30	550	0	72	72	60	0
Insecticides	40	130	0	7	7	25	8
<b>HIRE MACHINERY</b>	<b>614</b>	<b>2305</b>	<b>557</b>	<b>404</b>	<b>394</b>	<b>501</b>	<b>463</b>
Plough, Till and Sow	250	750	250	170	170	170	170
Roll	0	0	0	18	18	18	18
Spray	76	342	19	57	57	76	57
Fertiliser Spreading	38	38	38	19	19	57	38
Swathing/Dessication	0	0	0	0	0	50	50
Harvesting(grading into store incl)	250	1175	250	140	130	130	130
<b>MISCELLANEOUS</b>	<b>393</b>	<b>324</b>	<b>324</b>	<b>53</b>	<b>46</b>	<b>54</b>	<b>28</b>
Interest (6%)	33	84	24	11	13	21	10
Transport (€6/Tonne)	360	240	300	30	33	27	18
Bird Control	0	0	0	12	0	6	0
<b>TOTAL VARIABLE COSTS</b>	<b>1941</b>	<b>5038</b>	<b>1576</b>	<b>912</b>	<b>885</b>	<b>1158</b>	<b>873</b>
Break-even yield	48.5	25.2	35.0	3.6	4.1	3.7	2.8
<b>Net Price (€/Tonne)</b>	<b>40</b>	<b>200</b>	<b>45</b>	<b>250</b>	<b>215</b>	<b>310</b>	<b>310</b>
AID (SFP) = NOT included	0	0	0	0	0	0	0

## Gross Margins (€/ha)

	Pulse/ OSR	BEET	Potatoes Main Crop	MAIZE	PEAS	BEANS	OILSEED RAPE	
							Winter	Spring
Tonnes/hectare	2.0							-253
(Maize, beet & potatoes)	2.5							-98
30	3.0		962	-226			-228	57
35	4.0		1962	-1	88	-25	82	367
40	4.5	-341	2962	224	213	82	237	522
50	5.0	59	4962	674	338	190	392	
60	5.5	459		1124	463	297		
65	6.0	659		1349	588	405		
70		859						

Covering Maize with plastic mulch will cost an extra €300/ha but will improve quality and increase yield.

Totals may not agree due to rounding-off.

An online version of this calculator is available at [www.teagasc.ie/crops/crops\\_margins](http://www.teagasc.ie/crops/crops_margins)

B. INPUT COSTS: NON CEREAL CROPS				€/ha		
<b>Beet:</b>	1,000 kg Beet cmpnd @	€390 /t	=	€390	}	€514
	400 kg CAN + S @	€310 /t	=	€124		
<b>Maize:</b>	620 kg 0-7-30 @	€390 /t	=	€242	}	€450
	670 kg CAN		=	€208		
<b>Beans/Peas:</b> 370 kg 0-7-30						€144
<b>Winter OSR:</b>	370 kg 10-10-20 @	€420 /t	=	€155	}	€343
	250 kg Urea @	€380 /t	=	€95		
	280 kg ASN @	€330 /t	=	€92		
<b>Spring OSR:</b>	370 kg 13-6-20 @	€410 /t	=	€152	}	€254
	330 kg CAN+S @	€310 /t	=	€102		

Interest 6%: Beet, Maize, WOSR & Potatoes = 7 Months; Beans = 6 Months; SOSR & Peas = 5 Months

## 2014 FORAGE CROP MARGINS

Variable Costs excl. VAT (€/Hectare)

	F. BEET	SWEDES	KALE	RAPE	STUBBLE TURNIPS	MAIZE
<b>MATERIALS</b>	934	478	504	271	214	695
Seed	160	80	102	30	78	180
Fertilisers	514	233	342	241	136	450
Sprays:						
Herbicides	190	105	60	0	0	65
Fungicides	30	35	0	0	0	0
Insecticides	40	25	0	0	0	0
<b>HIRE MACHINERY</b>	664	255	208	189	99	607
Seedbed Prep + sow	250	200	170	170	80	250
Spray	76	36	19	0	0	19
Fertiliser Spreading	38	19	19	19	19	38
Harvesting+COVERING	300	0	0	0	0	300
<b>TOTAL VARIABLE COSTS</b>	1598	733	712	460	313	1302
<b>GREEN YIELD (Tonnes/hectare)</b>						
Leaves(+roots)	124	74	37	42	25	55
<b>DRY MATTER (Tonnes/hectare)</b>						
UTILISED	13.0	5.2	6.0	3.5	2.5	12.5
COST (€/Tonne util DM)	123	141	119	132	125	104

Covering Maize with plastic mulch will cost an extra €300/ha but will improve quality and increase yield. Forage crops should be also evaluated on net energy, protein content etc. to discern a more complete value Totals may not agree due to rounding-off.

## **COMMENT ON FORAGE CROP COSTS**

Grazed Grass is likely to continue to be the cheapest fodder at about €50/tonne DM utilised. It has the advantage of producing very good yields in most locations and of course is extremely convenient to produce and utilise.

**Grass Silage:** First cut grass silage can be produced at reasonable costs – approximately €130/tonne DM utilised. Grass silage costs vary considerably depending on yields. Second and third cut silage are more expensive forms of fodder (circa €150/t). Moreover, the variability in yield and quality of second and third cut silage has forced many farmers to consider alternatives such as maize, whole crop wheat and fodder beet.

**Non Grass Silage:** The cost per tonne dry matter utilised for maize is approximately €104 and whole crop wheat is €130. Fodder Beet roots are estimated to cost €123/tonne DM utilised.

Production from Brassicas such as swedes, kale and stubble turnips will not match the main fodder crops and have a reasonable cost at around €130 per tonne of DM utilised. Recent trial work in Moorepark has achieved high kale yields from excellent husbandry.

Maize produces a high yield of quality feed at lower costs than grass silage giving improved animal performance. It is convenient as sowing and harvesting are done by contractor. Feeding can be done with existing grass silage facilities. Moreover, there are no rotational constraints and it utilises slurry very efficiently.

The convenience of growing, storing and feeding as well as animal performance are important considerations when deciding which fodder crop to grow.

The opportunity cost of land needs to be taken into account when making comparisons of fodder and bought in feed. Thus a rental charge of €350/ha may be applied for a full year in the case of grazed grass but somewhat less in the case of grass silage and brassicas.

## Share farming

Share Farming is an agreement between two individuals (or two businesses) to jointly manage a farming operation. This legal agreement allows both the grower and the landowner to farm as separate legal entities but share in the risks and rewards of growing crops. As both individuals remain separate business entities, they can continue to claim the Single Farm Payment, REPS etc in their own name as normal.

Key points:

- ◆ Share Farming is fully compliant with EU/DAFM schemes (incl. REPS)
- ◆ The agreement is not land rental or a Partnership agreement
- ◆ The output generated from the land are to reward the
  - ◆ Landowner for the land, labour and inputs supplied
  - ◆ Share farmer for labour, expertise and inputs supplied
- ◆ Both parties are separate business entities and must not open or operate joint accounts to run the farming operation

All tillage growers and landowners who are currently involved in land rental should familiarise themselves with this agreement and assess whether it is a viable option for the future.

A template of a Share Farm Agreement is available ([www.teagasc.ie](http://www.teagasc.ie)) and sets out how an example agreement can operate. Contact your local advisor for more details.

## Organic Tillage

Organic tillage has been a profitable enterprise over the last number of years. A stockless tillage system can be practised; however a mixed stock and tillage organic system is most sustainable due to the availability of slurry and farmyard manure.

Rotations are used to:

1. replenish Nitrogen (with clover or other legumes)
2. manage weeds and diseases
3. build organic matter
4. allow diversity and spread financial risk

Crop nutrients include legumes and permissible organic manures and mineral fertilisers. Pests, diseases and weeds are controlled by planting disease resistant varieties, mechanical weeding and false/stale seedbed techniques. There is a strong demand for organic cereals both for livestock and human consumption. The demand for organic cereals is expected to continue for the foreseeable future.

The Organic Farming Scheme (OFS) and organic capital scheme for on and off-farm investment are support payments that may be claimed by organic farmers. At present new schemes are being developed and are due to open in early 2015. Output is lower than conventional units but prices for grain are higher.

Further information on organic farming can be obtained from the Teagasc organic specialist advisers.

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AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY