

CROPS COSTS AND RETURNS 2021

Compiled by: **Ciaran Collins and Shay Phelan**, Tillage Crops Specialists



AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

CROP MARGINS

The Teagasc Crops Costs & Returns are intended as an indicative guide to crop margins; however land suitability, rotation, risk avoidance and husbandry skills must also be considered. As well as completing crop margins, all growers are strongly advised to complete a full financial appraisal of their business using the Teagasc eProfit Monitor and Teagasc Machinery Costs Calculator.

There is little difference in margins between the feed cereals. Non-cereal break crops offer benefits in terms of rotation, workload and risk-spreading but the sale of inter-farm produce needs careful planning to ensure profitable crops. In the case of malting barley, food-grade oats and milling wheat, the availability of contracts and fulfillment of specific contract requirements such as specified varieties, quality parameters and input purchases need to be appraised in conjunction with the guideline margins here.

Under the Basic Payment Scheme, payments are decoupled from the crop being grown. Crop changes as a result of Crop Diversification (2 or 3-Crop Rule) need to be considered over at least a 5-year time frame, to avoid future rotational issues such as pest, weed or disease build-up. The land, on which you claim entitlements, must be maintained in "good agricultural and environmental condition" as heretofore.

Leasing entitlements; where a farmer doesn't have enough land to claim their entitlements, these surplus entitlements can be leased out without land to a farmer who has surplus land.

Note: The margins shown here do not include the Basic or Greening payments or the straw incorporation scheme for 2021, (details of which have yet to be announced). For protein crops such as Beans/Peas the Protein Crop subsidy (€3 million over 12,000 ha = €250/ha) is included. However this payment will be reduced if the national threshold of 12,000ha is breached.

For more information see <https://www.teagasc.ie/crops/crops/greening/>

Conacre appraisal

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

1	Entitlement Value (€/ha)	
2	Gross Margin achievable (€/ha)	
3	Land issues* e.g. fertility, pH, P, K, trace elements, grass-weeds, other additional costs (€/ha)	
4	Total available for rent + contribute to fixed costs + profit (€/ha) (1+2) - 3	

* Growers also need to evaluate potential costs due to Greening when considering land rental.

Material Costs

Level of yield has a major influence on profitability. Decisions on input strategies must be tailored for individual fields and farms. The prices of grain (+ other crop output) and fertilisers may vary considerably from those predicted. The fertiliser strategies contained within are guidelines only, hence growers are advised to complete a Nutrient Management Plan and utilise organic manures where feasible. Timeliness and attention to detail in carrying out all operations are vital to maintaining profitability in crop production. All material costs should be optimised, consistent with good husbandry practices.

Machinery Costs

Investments in machinery require a thorough financial appraisal before any purchasing decision is taken. The average machinery cost (incl. repayments, depreciation, fuel and repairs) on 139 tillage farms (15,000 ha) in 2016 was €293/ha, this figure does not include labour. The cost of machinery is the largest single cost on tillage farms, typically about 30% of total growing costs and along with fertiliser and land rental account for approximately 70% of the total cost of growing crops. The total machinery costs on 14% of the farms surveyed in 2016 were higher than the estimated contractor costs, even before labour costs are taken into account. The machinery costs on these farms were analysed using the Teagasc Machinery Cost Calculator which is available from your local Teagasc Tillage Advisor.

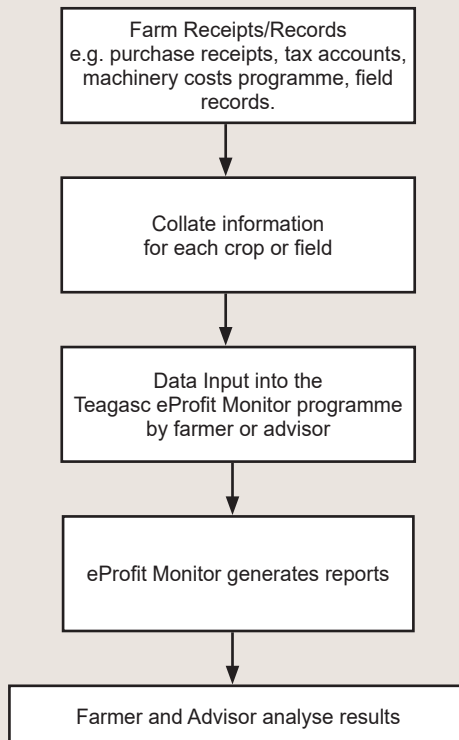
Fixed Costs

Fixed costs such as repairs and maintenance, insurance, car ESB & phone etc. (not incl. interest, machinery or land rental) are unique to each farm. The average fixed costs recorded in the 2016 and 2018 Teagasc eProfit Monitor results is approximately €195/ha. However the data from the both years results also show that there can be a large variation in fixed costs (€147 - 230/ha) depending on each individual situation. Therefore, since fixed costs are largely unique to each individual farm, all farmers should calculate their own costs rather than using standard industry figures. The eProfit Monitor can be used calculate these figures for farmers.

e-Profit Monitor

The Teagasc eProfit Monitor (ePM) is an online financial analysis tool that farmers can use to record the income and expenditure on farm for each specific enterprise and or crop in any given year. The ePM records both variable and fixed costs on the farm. The tool can help farmers to calculate both the gross and net profit of each individual crop on the own farm. The information is specific to the farmers own farm and the analysis simply shows what the farm made in terms of income from each crop and where your money was spent. The ePM records can then be used by the farmer to compare the performance of different crops on their own farm, these can also be compared against other farmers results with your advisor or in a discussion group format, they can also be compared against the national results which can be found here <https://www.teagasc.ie/crops/crops/reports--publications/crops-margins--ecrops/>. Farmers can then benchmark their own performance against their peers and then investigate areas in which they may improve. The results can also be compared over different years and in this way farmers can see trends in crop performance. For further details contact your local Teagasc office.

Four simple steps to farm completing EPM;



EXPLANATORY NOTES

Fixed or Overhead Costs per Hectare

Grassweed control (cultural/glyphosate) €18, Lime €20, Land maintenance, Car, ESB, Phone, regular hired labour & professional/agronomist fees etc. (Approx. €195/ha, Source 2016-2018 ePM)

VAT is excluded from input costs and outputs

A. INPUT COSTS: CEREAL CROPS

€/ha

Seed: €550/t Blue Label (Extra dressings/tonne: Latitude: €220 barley & wheat. Mn: €70)

Rate: W. Wheat - 170 kg/ha; W. Barley - 190 kg/ha

W + S Oats - 160 kg/ha; S. Barley & S. Wheat - 170 kg/ha

Fertiliser:	Total Fertiliser (kg/ha)			Fertiliser Bags (No. of 50kg bags/ha)			
	N	P	K	CAN + S	Cmpnd*	50% K	€/ha
W. Wheat	250	37	110	15.8	7.4	1.4	€345
W. Barley	210	37	100	12.8	7.4	1.0	€303
W. Oats	150	37	130	8.4	7.4	2.2	€271
S. Wheat	190	29	110	9.3	9.8	0.5	€391
S. Barley	165	29	100	7.5	9.8	-	€262
Malt Barley	145	29	100	6.0	9.8	-	€244
S. Oats	131	29	111	5.0	9.8	0.5	€241

CAN + S @ €235/t; *S. Cereals 13-6-20 @ €355/t; *W. Cereals 10-10-20 @ €365/t; 50% K @ €340/t

N = Index 1 + yield bonus; P & K = Index 3 + yield bonus. Based on SI No. 605 of 2017.

P & K Build Up – At soil Index 1 & 2 additional P & K will cost €55 & 35/ha respectively.

Herbicides: W. Wheat €81/ha; W. Barley €96/ha; S Wheat & S Barley €75/ha; Oats €35/ha

Fungicides:	<p>Winter Wheat: Leaf 4: Yellow rust control +/- Leaf 3: Eyespot + Broad Spectrum (B.S.) + multisite Flag leaf: Broad Spectrum (B.S.) + multisite Ear: B.S. (incl. Azole) @ G.S. 51-60</p> <p>Winter Barley: G.S. 25-30: 1/2 rate (Azole +SDHI) +/- G.S. 31-33: 1/2 rate (Azole + SDHI) G.S. 39-49: B.S. (incl. Azole/SDHI + multisite)</p> <p>S. Barley: 2 Fungicides (Azole/SDHI/Strob/multisite) G.S. 30 & 37-49</p> <p>S. Wheat: 3 Fungicides (Azole/SDHI/Multisite) G.S. 30/31, 37/39, 51/60</p> <p>W. Oats: Azole + morph at T1+T2, Triazole + SDHI at T3</p> <p>S. Oats: Reduced Rates W. Oats</p>	<p>€213</p> <p>€126</p> <p>€92</p> <p>€135</p> <p>€126</p> <p>€110</p>
Insecticides:	Winter wheat: Red. Slug Pellets (€13/ha) + Aphicide (€5/ha) Winter barley: contact €5/ha x 1 Other Cereals: Aphicide (€5/ha)	<p>€18</p> <p>€5</p> <p>€5</p>
Growth Regulators:	W. Wheat, W & S Oats = Spring Wheat = Winter Barley =	<p>€15</p> <p>€10</p> <p>€30</p>
Hire	Plough (€80/ha), Till, Sow & Roll (€105/ha) (+ €19/ha press spring crops)	€185
Machinery:	Spraying (@ €23/ha): W. Wheat: Weeds + Aphids, PGR, Fungicide x 3 = S. Wheat: Weeds + Aphids, PGR/Fungicide x 3 = W. Barley: Weeds + Aphids, PGR/Fungicide x 3 = S. Barley: Weeds + Aphids, Fungicide x 2 = W. Oats: Weeds + Aphids, PGR/Fungicide x 3 = Fertiliser Spreading (@ €17/ha) = Harvesting =	<p>€117</p> <p>€94</p> <p>€117</p> <p>€70</p> <p>€94</p> <p>€33-50</p> <p>€117</p>
Interest 6%:	Seed + Fertiliser + 0.5 Agchem; Winter - 10 months; Spring - 6 months	

2021 CEREAL CROP MARGINS

Variable Costs excl. VAT (€/ha)

	WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Winter	Spring	Winter	Spring		Winter	Spring
MATERIALS	765	614	660	528	523	539	496
Seed	94	98	101	94	102	86	90
Fertilisers	345	291	303	262	244	271	241
Sprays:							
Herbicides	81	75	96	75	75	35	35
Fungicides	213	135	126	92	97	126	110
Insecticides	18	5	5	5	5	5	5
Growth Regulators	15	10	30	0	0	15	15
HIRE MACHINERY	469	465	469	425	425	429	448
Plough, One-pass & Roll	185	204	185	204	204	185	204
Spray	117	94	117	70	70	94	94
Fertiliser Spreading	50	50	50	33	33	33	33
Harvesting	117	117	117	117	117	117	117
MISCELLANEOUS	96	69	87	61	58	76	57
Interest (6%)	30	15	27	13	13	22	12
Transport (€ 6/Tonne)	66	54	60	48	45	54	45
TOTAL VARIABLE COSTS	1330	1148	1216	1014	1006	1044	1001
Break-even yield (grain only)	8.1	7.0	7.9	6.6	5.2	7.0	6.7
Cost per tonne @ target yields*	121	128	122	127	134	116	134
Net Price (€/Tonne)	165	165	153	153	195	150	150
AID (BPS) = NOT included	0	0	0	0	0	0	0
Straw (€/ha)	243	198	300	250	250	248	216

Gross Margins (€/hectare)

(Incl. Straw)

Tonnes/hectare	FEET WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Winter	Spring	Winter	Spring		Winter	Spring
6.5	-15	123	78	231	511	179	190
7.5	150	288	231	384	706	329	340
8.0	233	370	308	460	804	404	415
9.0	398	535	461	613	999	554	565
10.0	563	700	614	766	1194	704	
11.0	728		767				
12.0	893		920				

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

Fertiliser requirements are based on target yields. Totals may not agree due to rounding. An online version of this calculator is available at <https://www.teagasc.ie/crops/crops/reports--publications/crops-margins--ecrops/>

B. INPUT COSTS: NON CEREAL CROPS

€/ha

Fertilisers/ha

Beet:	1,000 kg Beet cmpnd @	€330/t	=	€330	}	€424
	400 kg CAN + S @	€235/t	=	€94		
Maize:	620 kg 0-7-30 @	€350/t	=	€217	}	€374
	670 kg CAN + S	€235/t	=	€157		
Potatoes:	1235 kg 7.6.17 + S	€405/t	=	€500	}	€547
	250 kg CAN	€235/t	=	€47		
Beans/Peas:	370 kg 0-7-30	€350/t		€130		€130
Winter OSR:	370 kg 10-10-20 @	€365/t	=	€135	}	€293
	250 kg Urea @	€330/t	=	€83		
	280 kg ASN @	€270/t	=	€76		
Spring OSR:	370 kg 13-6-20 @	€355/t	=	€131	}	€209
	330 kg CAN+S @	€235/t	=	€78		

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

Forward selling

The selling price of the grain is the principal driver of profitability on tillage farms however often prices at harvest are at their lowest. Most companies now offer farmers the opportunity to sell grain at different times of the year in order to reduce the risk of selling below cost. In order to forward sell growers need to know the cost of producing the grain on the farm. The tables below are based on the variable costs in this booklet and show the cost per tonne of producing grain at different yields excluding straw. Obviously the higher the yield the lower the cost per tonne will be as generally most crops receive a similar spend on inputs.

Estimated cereal costs/tonne excl. straw							
T/ha	FEED WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Winter	Spring	Winter	Spring		Winter	Spring
6.5	205	175	189	156	155	161	154
7.5	177	152	163	135	134	139	134
8	166	142	153	127	126	131	125
9	148	127	136	113	112	116	111
10	133	114	123	101	101	104	100
11	121		111				
12	111						

Costs per tonne excl. straw or protein payments				
T/ha	Peas	Beans	Oilseed Rape	
			Winter	Spring
2.0	454	461	594	425
2.5	363	369	475	340
3.0	303	308	396	284
4.0	227	231	297	213
4.5	202	205	264	189
5.0	182	185	238	170
5.5	165	168	216	155
6.0	151	154	198	142

Note; Farmers should calculate the costs per tonne over the three most recent harvests before making any decision to forward sell. This will give a more realistic figure to base the calculations on. The calculation is based on the total variable costs, including machinery costs, divided by the average yield.

Note; Figures above based on total variable costs

2021 NON-CEREAL CROP MARGINS

Variable Costs excl. VAT (€ /hectare)

	FODDER Beet	Potatoes Main Crop	MAIZE Covered	PEAS Feed	BEANS	OILSEED RAPE	
						Winter	Spring
MATERIALS	854	2779	664	427	450	618	337
Seed	175	1500	190	140	150	80	90
Fertilisers	424	547	374	130	130	293	209
Sprays:							
Herbicides	205	106	100	80	80	121	30
Fungicides	30	505	0	70	84	94	0
Insecticides	20	120	0	7	7	30	8
HIRE MACHINERY	677	2568	670	429	426	515	487
Plough, Till and Sow	250	775	337	204	204	185	204
Roll	0	0	0	18	18	18	18
Spray	94	421	0	70	70	117	70
Fertiliser Spreading	33	33	33	17	17	50	50
Swathing/Dessication	0	164	0	0	0	28	28
Harvesting (grading into store)	300	1175	300	120	117	117	117
MISCELLANEOUS	480	4177	283	53	47	55	26
Interest (6%)	30	97	23	11	14	22	8
Transport (€/Tonne)**	450	240	0	30	33	27	18
Bird Control	0	0	0	12	0	6	0
Plastic Film/Potato storage***	0	3840	260	0	0	0	0
TOTAL VARIABLE COSTS	2011	9524	1618	909	923	1188	851
Break-even yield (excl. BPS)	57.4	38.1	32.4	4.1	4.4	3.1	2.3
Net Price (€ /Tonne)	35	250	50	220	210	385	375
(Protein Crops Scheme)	0	0	0	250	250	0	0

Gross Margins (€ /ha)*

Tonnes/ha Pulses/OSR	Tonnage/ha (Maize, beet & potatoes)	BEET	Potatoes Main Crop	MAIZE	PEAS	BEANS	OILSEED RAPE	
							Winter	Spring
2.0								-101
2.5								87
3.0			-2024	-118		-43		274
35			-774	132	221	167	-33	649
40		-611	476	382	331	272	545	837
50		-261	2976	882	441	377	737	
55		-86		1132	551	482		
65		264		1632	661	587		
70		439						
75		614						
80		789						

Note: Totals may not agree due to rounding

*Gross margin does not include storage costs for beet or maize. **Transport cost of €6/tonne at target yields. Maize harvesting cost includes transport to pit (4-5 trailers). ***Potato storage cost @ €16/t per month for 6 months at target yields

Note: Irrigation costs of approximately €175/ha per application can be added to machinery costs when needed.

2021 CEREAL CROP MARGINS

Variable Costs excl. VAT (€/ac)

	FEED WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Winter	Spring	Winter	Spring		Winter	Spring
MATERIALS	<u>310</u>	<u>248</u>	<u>267</u>	<u>214</u>	<u>212</u>	<u>218</u>	<u>201</u>
Seed	38	40	41	38	41	35	36
Fertilisers	140	118	123	106	99	110	98
Sprays:							
Herbicides	33	30	39	30	30	14	14
Fungicides	86	55	51	37	39	51	45
Insecticides	7	2	2	2	2	2	2
Growth Regulators	6	4	12	0	0	6	6
HIRE MACHINERY	<u>190</u>	<u>188</u>	<u>190</u>	<u>172</u>	<u>172</u>	<u>174</u>	<u>181</u>
Plough, One-pass & Roll	75	83	75	83	83	75	83
Spray	47	38	47	28	28	38	38
Fertiliser Spreading	20	20	20	13	13	13	13
Harvesting	47	47	47	47	47	47	47
MISCELLANEOUS	<u>39</u>	<u>28</u>	<u>35</u>	<u>25</u>	<u>23</u>	<u>31</u>	<u>23</u>
Interest (6%)	12	6	11	5	5	9	5
Transport (€ 6/Tonne)	27	22	24	19	18	22	18
TOTAL VARIABLE COSTS	<u>538</u>	<u>464</u>	<u>492</u>	<u>410</u>	<u>407</u>	<u>423</u>	<u>405</u>
Break-even yield (grain only)	3.3	2.8	3.2	2.7	2.1	2.8	2.7
Cost per tonne @ target yields*	122	129	123	128	136	117	135
Net Price (€/Tonne)	165	165	153	153	195	150	150
AID (SFP)=NOT included	0	0	0	0	0	0	0
Straw (€/ac)	98	80	121	101	101	100	87

Gross Margins (€/acre)

(Incl. Straw)

Tonnes/acre	FEET WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Winter	Spring	Winter	Spring		Winter	Spring
2.6	-11	<u>45</u>	<u>27</u>	<u>89</u>	<u>201</u>	<u>68</u>	<u>72</u>
3.0	<u>55</u>	<u>111</u>	<u>88</u>	<u>150</u>	<u>279</u>	<u>128</u>	<u>132</u>
3.2	<u>88</u>	<u>144</u>	<u>119</u>	<u>181</u>	<u>318</u>	<u>158</u>	<u>162</u>
3.6	<u>154</u>	<u>210</u>	<u>180</u>	<u>242</u>	<u>396</u>	<u>218</u>	<u>222</u>
4.0	<u>220</u>	<u>276</u>	<u>241</u>	<u>303</u>	<u>474</u>	<u>278</u>	
4.4	<u>286</u>		<u>302</u>				
4.9	<u>368</u>						

Note; *Crop margins are underlined for the various crop target yields. Fertiliser requirements are based on target yields Totals may not agree due to rounding. An online version of this calculator is available at <https://www.teagasc.ie/crops/reports--publications/crops-margins--ecrops/>

2021 NON-CEREAL CROP MARGINS

Variable Costs excl. VAT (€ /ac)

	FODDER	Potatoes	MAIZE	PEAS	BEANS	OILSEED RAPE	
	Beet	Main Crop	Covered	Feed		Winter	Spring
MATERIALS	346	1124	269	173	182	250	136
Seed	71	607	77	57	61	32	36
Fertilisers	172	221	152	52	52	119	85
Sprays:							
Herbicides	83	43	40	32	32	49	12
Fungicides	12	205	0	28	34	38	0
Insecticides	8	49	0	3	3	12	3
HIRE MACHINERY	274	1039	271	174	172	208	197
Plough, Till and Sow	101	314	136	83	83	75	83
Roll	0	0	0	7	7	7	7
Spray/Irrigation	38	170	0	28	28	47	28
Fertiliser Spreading	13	13	13	7	7	20	20
Swathing/Decssication	0	66	0	0	0	11	11
Harvesting (grading into store)	121	476	121	49	47	47	47
MISCELLANEOUS	194	1690	115	21	19	22	11
Interest (6%)	12	39	9	4	5	9	3
Transport (€/Tonne)**	182	97	0	12	13	11	7
Bird Control	0	0	0	5	0	3	0
Plastic Film/Potato Storage***	0	1554	105	0	0	0	0
TOTAL VARIABLE COSTS	814	3854	655	368	373	481	344
Break-even yield (excl. BPS)	23.2	15.4	13.1	1.7	1.8	1.2	0.9
Net Price (€ /Tonne)	35	250	50	220	210	385	375
(Protein Crop Subsidy)	0	0	0	101	101	0	0

Gross Margins (€/ac)*

	Tonnes/ac Pulses/OSR	BEET	Potatoes	MAIZE	PEAS	BEANS	OILSEED RAPE	
			Main Crop				Winter	Spring
Tonnes/acre (Maize, beet & potatoes)	1.0							31
12	1.2		-854	-55			-19	106
14	1.4		-354	45	41	22	58	181
16	2.0	-254	146	145	173	148	289	406
20	2.2	-114	1146	345	217	190	366	
22	2.4	-44		445	261	232		
26	2.6	96		645	305	274		
28		166						
30		236						
32		306						

Note: Totals may not agree due to rounding

* Gross margin does not include storage costs for beet, potatoes or maize

** Transport cost of €/6/tonne at target yields. ***Potato storage cost @ €16/t per month for 6 months at target yields

Note: Irrigation costs of approximately €70 /ac per application can be added to machinery costs when needed.

CROP BUDGETS & SHARE- FARMING

Variable Costs excl. VAT (€/Acre)

		WINTER WHEAT		SPRING BARLEY		SHARE FARMING	
		Your Figures	Teagasc Figures	Your Figures	Teagasc Figures	Landowner Share	
						WHEAT	BARLEY
MATERIALS (A =B+C+D+E+F+G)	A		<u>310</u>		<u>214</u>		
Seed	B		38		38		
Fertilisers	C		140		106		
Sprays:							
Herbicides	D		33		30		
Fungicides	E		86		37		
Insecticides	F		7		2		
Growth Regulators	G		6		0		
HIRE MACHINERY (H = I+J+K+L)	H		<u>190</u>		<u>172</u>		
Plough, Till and Sow	I		75		83		
Spray	J		47		28		
Fertiliser Spreading	K		20		13		
Harvesting	L		47		47		
MISCELLANEOUS (M =N+O)	M		<u>39</u>		<u>25</u>		
Interest (6%)	N		12		5		
Transport (€6/Tonne)	O		27		19		
TOTAL VARIABLE COSTS (P = A+H+M)	P		<u>538</u>		<u>410</u>		
Tonnes to cover variable costs (Q = P/R)	Q		3.3		2.7		
Net Price (€/Tonne)	R		165		153		
AID (€/Acre)	S		0		0		
Straw (€/Acre)	T		98		101		
Projected yield	U		4.4		3.2		
Gross Margins (€/Acre) (V = (R*U)+S+T-P)	V		<u>286</u>		<u>181</u>		

An excel version of this calculator is available (free) from
<https://www.teagasc.ie/crops/crops/reports--publications/crops-margins--ecrops/>
 Totals may not agree due to rounding

2021 FORAGE CROP MARGINS

Variable Costs excl. VAT (€/hectare)

Crops for use on farm	F. BEET	W'CROP WINTER WHEAT	KALE	RAPE	STUBBLE TURNIPS	MAIZE
MATERIALS	854	765	421	258	143	924
Seed	175	94	78	20	28	190
Fertilisers	424	345	283	238	115	374
Plastic Film	0	0	0	0	0	260
Sprays:						
Herbicides	205	81	60	0	0	100
Fungicides	30	213	0	0	0	0
Insecticides	20	18	0	0	0	0
Growth regulator		15				
HIRE MACHINERY	1007	637	225	202	97	670
Seedbed Prep + sow	250	185	185	185	80	337
Spray	94	117	23	0	0	0
Fertiliser Spreading	33	50	17	17	17	33
Harvesting +Covering	300	285	0	0	0	300
Washing and chopping	330	0	0	0	0	0
MISCELLANEOUS	30	30	21	13	7	23
Interest 6%	30	30	21	13	7	23
TOTAL VARIABLE COSTS	1891	1432	668	473	246	1618
GREEN YIELD (Tonnes/hectare)						
Leaves(+roots) Fresh wt.	124	30	37	42	25	55
DRY MATTER (Tonnes/hectare)	13.0	12.5	6.0	3.5	2.5	15.0
COST (€/Tonne utilised DM)	145	115	111	135	99	108
UFL Value (Kg DM)	1.12	0.8	1.05	1.1	1.2	0.8

Forage crops should be also evaluated on net energy, protein content and feeding system etc. to discern a more complete value.

Totals may not agree due to rounding. The table above is based on all crops being utilised on the farm on which they are grown therefore no transport charges apply.

Comment on Forage Crop Costs

The convenience of growing, storing, feeding and animal performance, are important considerations when deciding which fodder crop to grow. As well as costs per ton of dry matter, forage crops should also be evaluated on net energy (UFL), protein content and feeding system to discern a more complete value. One UFL equals the energy content of 1kg of dried barley.

The opportunity cost of land should be taken into account when making comparisons of fodder and bought in feed. Thus a rental charge of €400/ha may be applied for a full year in the case of grazed grass, maize and whole crop cereals but proportionally 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 EU/DAFM payments etc. in their own name as normal.

Key points:

- Share Farming is fully compliant with EU/DAFM schemes
- 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
- Share farming is compatible with the Basic Payment Scheme and Greening, subject to conditions.

A template of a Share Farm Agreement is available on

<https://www.teagasc.ie/rural-economy/farm-management/collaborative-farming/share-farming---crops/> which also displays example agreements. Contact your local advisor for more details.

Acknowledgements

We would like to thank all the Teagasc Staff and Industry stakeholders who contributed to the publication of this booklet.

January 2021