

# **CROPS COSTS AND RETURNS 2020**

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## 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 Profit Monitor and Teagasc Machinery Costs Calculator.

There are some difference in margins between feed cereals, however, 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. 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) recorded in the eProfit monitor from 2016 to 2018 is €349/ha on average, 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.

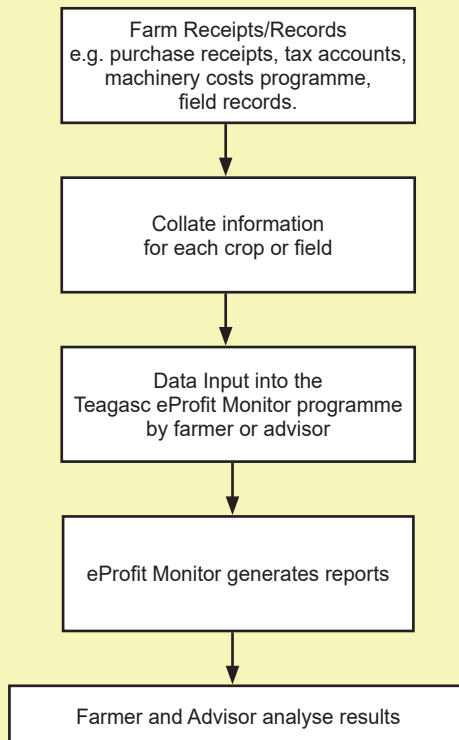
## Fixed Costs

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 margins of each individual crop on their 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 CROP €/ha

**Seed:** €530/t Blue Label (Extra dressings/ton: Latitude: €210 W. Barley, €310 W. Wheat)

**Rate:** W. Wheat - 150 kg/ha; W. Barley - 170 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)			€/ha
	N	P	K	CAN + S	Cmpnd*	50% K	
<b>W. Wheat</b>	250	37	110	15.8	7.4	1.4	€359
<b>W. Barley</b>	210	37	100	12.8	7.4	1.0	€315
<b>W. Oats</b>	150	37	130	8.4	7.4	2.2	€283
<b>S. Wheat</b>	190	29	110	9.3	9.8	0.5	€302
<b>S. Barley</b>	165	29	100	7.5	9.8	-	€271
<b>Malt Barley</b>	145	29	100	6.0	9.8	-	€252
<b>S. Oats</b>	131	29	111	5.0	9.8	0.5	€249

CAN + S @ €245/t; \*S. Cereals 13-6-20 @ €365/t; \*W. Cereals 10-10-20 @ €375/t; 50% K @ €375/t

N = Index 1 + yield bonus; P & K = Index 3 + yield bonus. Based on SI No. 31 of 2014.

**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

	€/ha
<b>Fungicides:</b>	
<b>Winter Wheat:</b>	
T0: Chlorothalonil (CTL) (Before 20/5/2020) +/- Morph	€11
T1: Eyespot + B.S. + multisite @ 3rd last leaf fully emerged	€61
T2: Broad Spectrum (B.S.) + multisite @ G.S. 39	€71
T3: B.S. (incl. triazole) @ G.S. 55-60	€50
} €193	
<b>Spring Wheat:</b>	
T1: 1/2 rate (B.S. + Morph. + multisite) @ G.S. 30-32	€31
T2: B.S. + multisite @ G.S. 37-39	€56
T3: B.S. (incl. triazole) @ G.S. 55-60	€40
} €127	
<b>S. Barley:</b> 2 Fungicides (Triazole/SDHI/Strob) G.S. 30, GS 37-49	€91
<b>Winter Barley:</b> 3 Fungicides (Triazole/SDHI/Strob) G.S. 30/31, 32-37, 49	€136
<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 (€5/ha)	€18
Winter barley: Aphicide €5/ha x 1	€5
Other Cereals: Aphicide (€5/ha)	€5
<b>Growth Regulators:</b> W. Wheat, W & S Oats	= €15
Spring Wheat	= €10
Winter Barley	= €30
<b>Hire Machinery:</b> Plough (€80/ha), Till, Sow & Roll (€105/ha) (+ €19/ha press spring crops) =	€185
Spraying (@ €23/ha):	
W. Wheat: Weeds + Aphids, PGR, Fungicide x 3	= €117
S. Wheat: Weeds + Aphids, PGR/Fungicide x 3	= €94
W. Barley: Weeds + Aphids, PGR/Fungicide x 3	= €94
S. Barley: Weeds + Aphids, Fungicide x 2	= €70
W. Oats: Weeds + Aphids, PGR/Fungicide x 3	= €94
Fertiliser Spreading (@ €18/ha)	= €33-50
Harvesting	= €117
<b>Interest 6%:</b> Seed + Fertiliser + 0.5 Agchem; Winter - 10 months; Spring - 6 months	

# 2020 CEREAL CROP MARGINS

## Variable Costs excl. VAT (€/ha)

	WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Winter	Spring	Winter	Spring		Winter	Spring
<b>MATERIALS</b>	<b>744</b>	<b>609</b>	<b>668</b>	<b>530</b>	<b>518</b>	<b>527</b>	<b>469</b>
Seed	78	90	87	88	90	84	85
Fertilisers	359	302	315	271	252	283	249
Sprays:							
Herbicides	81	75	96	75	75	35	35
Fungicides	193	127	136	91	96	105	80
Insecticides	18	5	5	5	5	5	5
Growth Regulators	15	10	30	0	0	15	15
<b>HIRE MACHINERY</b>	<b>469</b>	<b>465</b>	<b>446</b>	<b>425</b>	<b>425</b>	<b>429</b>	<b>448</b>
Plough, One-pass & Roll	185	204	185	204	204	185	204
Spray	117	94	94	70	70	94	94
Fertiliser Spreading	50	50	50	33	33	33	33
Harvesting	117	117	117	117	117	117	117
<b>MISCELLANEOUS</b>	<b>96</b>	<b>69</b>	<b>87</b>	<b>61</b>	<b>58</b>	<b>76</b>	<b>57</b>
Interest (6%)	30	15	27	13	13	22	12
Transport (€ 6/Tonne)	66	54	60	48	45	54	45
<b>TOTAL VARIABLE COSTS</b>	<b>1309</b>	<b>1142</b>	<b>1201</b>	<b>1016</b>	<b>1001</b>	<b>1033</b>	<b>974</b>
Break-even yield (grain only)	8.7	7.6	8.6	7.3	5.6	7.7	7.2
Cost per tonne @ target yields*	119	127	120	127	133	115	130
<b>Net Price (€/Tonne)</b>	150	150	140	140	180	135	135
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	<u>-91</u>	<u>31</u>	<u>9</u>	<u>144</u>	<u>419</u>	<u>93</u>	<u>119</u>
7.5	<u>59</u>	<u>181</u>	<u>149</u>	<u>284</u>	<u>599</u>	<u>228</u>	<u>254</u>
8.0	<u>134</u>	<u>256</u>	<u>219</u>	<u>354</u>	<u>689</u>	<u>295</u>	<u>322</u>
9.0	<u>284</u>	<u>406</u>	<u>359</u>	<u>494</u>	<u>869</u>	<u>430</u>	<u>457</u>
10.0	<u>434</u>	<u>556</u>	<u>499</u>	<u>634</u>	<u>1049</u>	<u>565</u>	
11.0	<u>584</u>		<u>639</u>				
12.0	<u>734</u>		<u>779</u>				

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

Totals may not agree due to rounding

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

## B. INPUT COSTS: NON CEREAL CROPS

€/ha

### Fertilisers/ha

<b>Beet:</b>	1,000 kg Beet cmpnd @	€340/t	=	€340	}	€438
	400 kg CAN + S @	€245/t	=	€98		
<b>Maize:</b>	620 kg 0-7-30 @	€380/t	=	€236	}	€400
	670 kg CAN + S	€245/t	=	€164		
<b>Potatoes:</b>	1235 kg 7.6.17 + S	€410/t	=	€506	}	€568
	250 kg CAN	€245/t	=	€61		
<b>Beans/Peas:</b>	370 kg 0-7-30	€380/t		€141		€141
<b>Winter OSR:</b>	370 kg 10-10-20 @	€375/t	=	€139	}	€303
	250 kg Urea @	€345/t	=	€86		
	280 kg ASN @	€280/t	=	€78		
<b>Spring OSR:</b>	370 kg 13-6-20 @	€365/t	=	€135	}	€216
	330 kg CAN+S @	€245/t	=	€81		

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. This does not include fixed costs or land rental.

Estimated cereal costs/tonne excl. straw							
T/ha	FEED WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Winter	Spring	Winter	Spring		Winter	Spring
6.5	201	176	185	156	154	159	150
7.5	174	152	160	135	133	138	130
8	164	143	150	127	125	129	122
9	145	127	133	113	111	115	108
10	131	114	120	102	100	103	97
11	119	109					
12	109						

Costs per tonne excl. straw or protein payments				
T/ha	Peas	Beans	Oilseed Rape	
			Winter	Spring
2.0	466	476	604	435
2.5	373	381	483	348
3.0	311	317	402	290
4.0	233	238	302	217
4.5	207	211	268	193
5.0	187	190	241	174
5.5	170	173	219	158
6.0	155	159	201	145

**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

# 2020 NON-CEREAL CROP MARGINS

## Variable Costs excl. VAT (€ /hectare)

	FODDER Beet	Potatoes Main Crop	MAIZE Covered	PEAS Feed	BEANS	OILSEED RAPE	
						Winter	Spring
<b>MATERIALS</b>	<b>866</b>	<b>2672</b>	<b>688</b>	<b>451</b>	<b>478</b>	<b>625</b>	<b>344</b>
Seed	173	1375	188	153	170	80	90
Fertilisers	438	568	400	141	141	303	216
Sprays:							
Herbicides	205	106	100	80	80	121	30
Fungicides	30	503	0	70	80	91	0
Insecticides	20	120	0	7	7	30	8
<b>HIRE MACHINERY</b>	<b>677</b>	<b>2488</b>	<b>670</b>	<b>429</b>	<b>426</b>	<b>527</b>	<b>499</b>
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	84	0	0	0	40	40
Harvesting (grading into store)	300	1175	300	120	117	117	117
<b>MISCELLANEOUS</b>	<b>480</b>	<b>4174</b>	<b>284</b>	<b>53</b>	<b>47</b>	<b>55</b>	<b>27</b>
Interest (6%)	30	94	24	11	14	22	9
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
<b>TOTAL VARIABLE COSTS</b>	<b>2023</b>	<b>9333</b>	<b>1642</b>	<b>933</b>	<b>951</b>	<b>1207</b>	<b>870</b>
Break-even yield (excl. BPS)	57.8	37.3	32.8	4.2	4.6	3.4	2.5
<b>Net Price (€ /Tonne)</b>	<b>35</b>	<b>250</b>	<b>50</b>	<b>220</b>	<b>205</b>	<b>350</b>	<b>350</b>
(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								-170
2.5								5
3.0			-1833	-142		-86		180
35			-583	108	197	119	-157	530
40		-623	667	358	307	221	368	705
50		-273	3167	858	417	324	543	
55		-98		1108	527	426		
65		252		1608	637	529		
70		427						
75		602						
80		777						

Totals may not agree due to rounding

\* Gross margin does not include storage costs for beet or maize. \*\* Transport cost of €/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.

# 2020 CEREAL CROP MARGINS

## Variable Costs excl. VAT (€/ac)

	FEED WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Winter	Spring	Winter	Spring		Winter	Spring
<b>MATERIALS</b>	<b><u>301</u></b>	<b><u>246</u></b>	<b><u>270</u></b>	<b><u>215</u></b>	<b><u>210</u></b>	<b><u>213</u></b>	<b><u>190</u></b>
Seed	32	36	35	36	36	34	34
Fertilisers	145	122	127	110	102	115	101
Sprays:							
Herbicides	33	30	39	30	30	14	14
Fungicides	78	51	55	37	39	42	32
Insecticides	7	2	2	2	2	2	2
Growth Regulators	6	4	12	0	0	6	6
<b>HIRE MACHINERY</b>	<b><u>190</u></b>	<b><u>188</u></b>	<b><u>180</u></b>	<b><u>172</u></b>	<b><u>172</u></b>	<b><u>174</u></b>	<b><u>181</u></b>
Plough, One-pass & Roll	75	83	75	83	83	75	83
Spray	47	38	38	28	28	38	38
Fertiliser Spreading	20	20	20	13	13	13	13
Harvesting	47	47	47	47	47	47	47
<b>MISCELLANEOUS</b>	<b><u>39</u></b>	<b><u>28</u></b>	<b><u>35</u></b>	<b><u>25</u></b>	<b><u>23</u></b>	<b><u>31</u></b>	<b><u>23</u></b>
Interest (6%)	12	6	11	5	5	9	5
Transport (€ 6/Tonne)	27	22	24	19	18	22	18
<b>TOTAL VARIABLE COSTS</b>	<b><u>530</u></b>	<b><u>462</u></b>	<b><u>486</u></b>	<b><u>411</u></b>	<b><u>405</u></b>	<b><u>418</u></b>	<b><u>394</u></b>
Break-even yield (grain only)	3.5	3.1	3.5	2.9	2.3	3.1	2.9
Cost per tonne @ target yields*	120	128	121	129	135	116	131
<b>Net Price (€/Tonne)</b>	150	150	140	140	180	135	135
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	FEED WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Winter	Spring	Winter	Spring		Winter	Spring
2.6	<u>-41</u>	<u>8</u>	<u>-1</u>	<u>54</u>	<u>164</u>	<u>33</u>	<u>44</u>
3.0	<u>19</u>	<u>68</u>	<u>55</u>	<u>110</u>	<u>236</u>	<u>87</u>	<u>98</u>
3.2	<u>49</u>	<u>98</u>	<u>83</u>	<u>138</u>	<u>272</u>	<u>114</u>	<u>125</u>
3.6	<u>109</u>	<u>158</u>	<u>139</u>	<u>194</u>	<u>344</u>	<u>168</u>	<u>179</u>
4.0	<u>169</u>	<u>218</u>	<u>195</u>	<u>250</u>	<u>416</u>	<u>222</u>	
4.4	<u>229</u>		<u>251</u>				
4.9	<u>304</u>						

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

Totals may not agree due to rounding

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



# 2020 NON-CEREAL CROP MARGINS

Variable Costs excl. VAT (€ /ac)

	FODDER	Potatoes	MAIZE	PEAS	BEANS	OILSEED RAPE	
	Beet	Main Crop	Covered	Feed		Winter	Spring
<b>MATERIALS</b>	<b>350</b>	<b>1081</b>	<b>278</b>	<b>182</b>	<b>193</b>	<b>253</b>	<b>139</b>
Seed	70	556	76	62	69	32	36
Fertilisers	177	230	162	57	57	123	87
Sprays:							
Herbicides	83	43	40	32	32	49	12
Fungicides	12	204	0	28	32	37	0
Insecticides	8	49	0	3	3	12	3
<b>HIRE MACHINERY</b>	<b>274</b>	<b>1007</b>	<b>271</b>	<b>174</b>	<b>172</b>	<b>213</b>	<b>202</b>
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/Dessication	0	34	0	0	0	16	16
Harvesting (grading into store)	121	476	121	49	47	47	47
<b>MISCELLANEOUS</b>	<b>194</b>	<b>1689</b>	<b>115</b>	<b>22</b>	<b>19</b>	<b>22</b>	<b>11</b>
Interest (6%)	12	38	10	5	6	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
<b>TOTAL VARIABLE COSTS</b>	<b>819</b>	<b>3777</b>	<b>664</b>	<b>378</b>	<b>385</b>	<b>489</b>	<b>352</b>
Break-even yield (excl. BPS)	23.4	15.1	13.3	1.7	1.9	1.4	1.0
<b>Net Price (€ /Tonne)</b>	<b>35</b>	<b>250</b>	<b>50</b>	<b>220</b>	<b>205</b>	<b>350</b>	<b>350</b>
(Protein Crop Subsidy)	0	0	0	101	101	0	0

## Gross Margins (€/ac) \*

	Tonnes/acre Tonnes/ac Pulses/OSR	BEET	Potatoes	MAIZE	PEAS	BEANS	OILSEED RAPE	
			Main Crop				Winter	Spring
(Maize, beet & potatoes)	1.0							-2
12	1.2		-777	-64			-69	68
14	1.4		-277	36	32	3	1	138
16	2.0	-259	223	136	164	126	211	348
20	2.2	-119	1223	336	208	167	281	
22	2.4	-49		436	252	208		
26	2.6	91		636	296	249		
28		161						
30		231						
32		301						

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
<b>MATERIALS</b> (A =B+C+D+E+F+G)	<b>A</b>		<u>301</u>		<u>215</u>		
Seed	<b>B</b>		32		36		
Fertilisers	<b>C</b>		145		110		
Sprays:							
Herbicides	<b>D</b>		33		30		
Fungicides	<b>E</b>		78		37		
Insecticides	<b>F</b>		7		2		
Growth Regulators	<b>G</b>		6		0		
<b>HIRE MACHINERY</b> (H = I+J+K+L)	<b>H</b>		<u>190</u>		<u>172</u>		
Plough, Till and Sow	<b>I</b>		75		83		
Spray	<b>J</b>		47		28		
Fertiliser Spreading	<b>K</b>		20		13		
Harvesting	<b>L</b>		47		47		
<b>MISCELLANEOUS</b> (M =N+O)	<b>M</b>		<u>39</u>		<u>25</u>		
Interest (6%)	<b>N</b>		12		5		
Transport (€6/Tonne)	<b>O</b>		27		19		
<b>TOTAL VARIABLE COSTS (P = A+H+M)</b>	<b>P</b>		<u>530</u>		<u>411</u>		
Tonnes to cover variable costs (Q = P/R)	<b>Q</b>		3.5		2.9		
<b>Net Price (€/Tonne)</b>	<b>R</b>		150		140		
AID (€/Acre)	<b>S</b>		0		0		
Straw (€/Acre)	<b>T</b>		98		101		
Projected yield	<b>U</b>		4.4		3.2		
<b>Gross Margins (€/Acre)</b> (V = (R*U)+S+T-P)	<b>V</b>		<u>229</u>		<u>138</u>		

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

## 2020 FORAGE CROP MARGINS

Variable Costs excl. VAT (€/hectare)

Crops for use on farm	F. BEET	W'CROP WINTER WHEAT	KALE	RAPE	STUBBLE TURNIPS	MAIZE
<b>MATERIALS</b>	<b>866</b>	<b>744</b>	<b>440</b>	<b>267</b>	<b>146</b>	<b>948</b>
Seed	173	78	78	20	28	188
Fertilisers	438	359	302	247	118	400
Plastic Film	0	0	0	0	0	260
Sprays:						
Herbicides	205	81	60	0	0	100
Fungicides	30	193	0	0	0	0
Insecticides	20	18	0	0	0	0
Growth regulator		15				
<b>HIRE MACHINERY</b>	<b>1007</b>	<b>637</b>	<b>225</b>	<b>202</b>	<b>97</b>	<b>670</b>
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
<b>MISCELLANEOUS</b>	<b>30</b>	<b>30</b>	<b>22</b>	<b>13</b>	<b>7</b>	<b>24</b>
Interest 6%	30	30	22	13	7	24
<b>TOTAL VARIABLE COSTS</b>	<b>1903</b>	<b>1410</b>	<b>687</b>	<b>482</b>	<b>250</b>	<b>1642</b>
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
<b>COST (€/Tonne utilised DM)</b>	146	113	115	138	100	109
<b>UFL Value (Kg DM)</b>	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 ([www.teagasc.ie](http://www.teagasc.ie)) which also displays example agreements. Contact your local advisor for more details.

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