Publication 60 Field Crop Budgets 2023

Ministry of Agriculture, Food and Rural Affairs



These crop budgets are a tool for estimating expenses. The sample costs are only a guide to illustrate a method of preparing your projections. They are based on many assumptions, including seeding rates, levels of fertilizer use, etc. Due to regional differences, there may be considerable variation in results. To project your break-even price after total costs, enter your farm figures in the spaces provided. The resulting estimate will help you choose your crop mix and set target prices and marketing strategies for your farm.

Electronic versions of these crop budget worksheets can be found at ontario.ca/agbusiness under Cost of Production Budgets.

The use of imperial and metric measurement in this publication reflects the way information is reported by industry. Fertilizer rates are typically reported in kilogram (kg)/hectare. See page 22 for metric and imperial conversions.

Front cover: Field of soybeans mid-season.

Back cover: Sprout of recently appeared corn. Photo source: Shutterstock.

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2023 FIELD CROP BUDGETS

Crop budgets are a management tool to estimate costs and evaluate cropping alternatives. The sample costs are not averages or recommended treatments. The budgets comprise treatments derived from crop advisors in the areas where the crops are commonly grown. There will be differences due to growing region, cropping practices, individual needs and yield expectations. The budgets, unless indicated otherwise, are based on conventional tillage practices. Seed costs, except for the *Bacillus thuringiensis* (Bt), Roundup Ready (RR) and herbicide-tolerant corn, spring canola and soybeans, are for non-genetically enhanced varieties. The budgets developed for Bt, RR or herbicide-tolerant varieties do not represent an endorsement of these products. They are included due to the current predominance of these production systems in field crop operations.

Identity Preserved (IP) crops require budgeting for any extra expenses and revenue, e.g., increased seed, weed control, storage and equipment cleaning costs. Some of the budgets provide a line item for this.

Interest rates were calculated at 6.95% for the period between planting and harvest.

These budgets will be most meaningful if you use your expected yields and specific costs in developing production plans. Input prices for seed, fertilizer, fuel and pesticides were based on the survey results reported in the Ontario Farm Input Monitoring Project conducted by the University of Guelph, Ridgetown campus. The production insurance and risk management program premiums shown are the producer premiums at the highest coverage level and at the floating price, if available.

The estimated costs for machinery are derived from agricultural engineering formulas and Ontario average custom rates. The Ontario average custom rates are allocated across the six machinery-related expenses. It is recommended that you use your records to derive your costs. Experience is the best guide to help budget machinery costs. Prior year's statements of income and expenses can provide information on equipment repairs, maintenance and fuel costs. The portion of those costs that relates to crop production can be divided by the acres of crop produced to arrive at a cost per acre.

Overhead expenses are a major part of the total cost of doing business. In addition to the depreciation of machinery, include depreciation on all related tools and storage buildings. Land costs would include property tax and any other land-related costs. Other overhead expenses should include insurance, professional fees, office, vehicles and storage. In all cases, divide overhead expenses by the acreage of crop to express costs on a per-acre basis. Interest on investment is an opportunity cost to you — the rate of return that you expect or want on your invested capital.

If there are significant debt commitments for land and equipment, an alternative method of budgeting overhead expenses is to use the debt servicing requirements. In this case, use the actual interest and principal payment commitments, rather than depreciation and expected return on invested capital.

"Total Revenue" is the yield you expect, multiplied by the price you expect. Yield information is most accurate if based on your experience with the land and techniques you will be using. If you do not have such records, check with AGRICORP or a local farm supply dealer. They can help you develop plans and reasonable expectations for your crops.

"Contribution Margin" is the difference between total operating expenses and total revenue. "Operating Expenses" (e.g., seed, fertilizer, fuel, repairs, etc.) change with the crop grown and the production blend used. "Fixed or overhead costs" will show little or no change whether one crop or another is grown. "Contribution Margin" is a quick and easy measure for comparing relative profitability among your cropping choices.

	N requiremen (kg/	
Type of crop	Corn	Other Crops
Perennial forage, less than one-third legume	0	0
Perennial forage, one-third to half legume	55	55
Perennial forage, half or more legume	110	110
Clover cover crop seeded/ploughed in same year	80	45 ¹
Soybean and field bean residue	30	0
¹ Applies where the legume stand is thick and over 40 cm (16 in.) high.		

	Corn	Herbicide- Tolerant	Non-GMO	Roundup Ready		White/	Soft Red Winter	Oats	Hard Red
Expense	Conventional Tillage	Spring Canola	Soybeans No Till	Soybeans No Till	Coloured Beans	Black Beans	Wheat No Till	(Southern Ontario)	Spring Wheat
Seed	116.40	93.25	60.95	86.05	137.05	101.40	82.70	51.65	85.50
Seed treatment	1.60	_	13.00	13.00	_		_	_	
Fertility	299.55	195.20	95.10	95.10	104.95	104.95	223.55	157.60	157.55
Pesticides	31.25	59.00	82.75	27.40	129.30	138.10	41.45	26.10	30.95
Total Inputs	448.80	347.45	251.80	221.55	371.30	344.45	347.70	235.35	274.00
Tillage	81.35	70.70		_	117.55	78.70	_	70.70	70.70
Planting	28.70	23.70	31.05	31.05	28.70	32.70	30.05	23.70	23.70
Spraying	12.80	38.35	25.60	25.60	51.15	63.95	38.35	38.35	25.60
Fertilizing	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85
Harvesting & trucking	115.95	72.45	72.80	72.80	149.20	84.50	83.85	72.00	73.70
Total Machinery	253.65	220.05	144.30	144.30	361.45	274.70	167.10	219.60	208.55
Drying	108.90	_		_	_	_	_	_	_
Production insurance	17.90	29.45	12.25	12.25	41.80	29.00	14.10	11.10	17.40
Risk management	7.15	10.35	3.15	3.15	0.25	1.45	3.85	10.00	4.55
Interest @ 6.95%	28.55	19.30	13.85	12.80	22.05	20.40	30.15	11.20	15.40
Marketing & other	44.95	4.00	14.50	14.50	7.20	7.10	2.15	1.80	1.30
Total Costs	909.90	630.60	439.85	408.55	804.05	677.10	565.05	489.05	521.20
Yield	1								
Price									
Gross Return									
Net Margin/Acre									
Less:									
Land cost/rent									
Utilities/acct/misc.									
Net Return per Acre									

* The crop comparison summary table is derived from the individual budgets in the publication. Some expense items have been combined in the summary table. For the break-out of the individual expenses, refer to the respective budget in the publication.

Crop Budgeting Tools

Market and input prices projected were as of November 2022. Given the variability of the markets expected for 2023, it is important to use current prices. Use the following tools to determine your cost of production:

- Ontario Enterprise Budgeting Tools: ontario.ca/agbusiness, search for "budgeting tools"
- Custom Farmwork Rates: <u>ontario.ca/agbusiness</u>, search for "custom farm rates"
- Custom Farmwork Rate calculator: ontario.ca/agbusiness, search for "custom farm rate calculator"
- Field Crop Statistics : Harvested Area, Production, Crop Prices, Corn Supply and Disposition: <u>ontario.ca/agbusiness</u>, search for "field crop statistics"
- Crop Nutrient Removal calculator (from IPNI): <u>www.ipni.net/article/IPNI-3346</u>
- Corn Nitrogen calculator: <u>www.gocorn.net</u>
- Mobile Apps: Cash Cropper, Pest Manager and Ontario Corn Nitrogen Calculator: <u>www.gfo.ca/apps</u>

DIRECT SEEDING E	STABLISH	MENT	Sample Costs/ Acre	Your Farm Budget
Seed	13.45 kg	g/ha alfalfa	99.65	
Other seed (timothy)	4.48 kg/	/ha	19.75	
Inoculant			1.05	
Fertility	crop	24 kg/ha P ₂ O ₅ (6.1 kg/tonne removal rate)	19.55	
5	removal	92 kg/ha K ₂ O (23.5 kg/tonne removal rate)	68.25	
Herbicide	broadlea	f weed control	16.55	
Production insuranc	e		5.85	
Tractor and	fuel (43	L) and lubricants	72.95	
machine expenses	repairs		46.30	
Custom work	· ·	de applications	25.60	
		er applications, mixing and delivery	29.75	
		pping — plastic — 50% yield	42.40	
Twine			3.10	
Operator labour (sel	f or bired)		31.30	
	i or nired)		31.30	
Interest		Tabal Patrick Marcel Varia		
		Total Establishment Year Expenses	513.40	
		ES (costs based on projected yield of 3.15 tonnes DM/acre	1	
, ,	т. Т.	— over 4 years (less establishment year sales)	41.10	
Fertility	crop	47 kg/ha P ₂ O ₅ (6.1 kg/tonne removal rate)	38.95	
	removal		136.05	
Tractor and	fuel (32	L) and lubricants	54.65	
machine expenses	repairs		43.30	
Twine			6.20	
Production insuranc	e		26.15	
Custom work	2 fertilize	er applications, mixing and delivery	29.75	
	bale wra	pping — plastic	84.80	
Other costs			_	
Land rent			_	
Operator labour (sel	f or hired)		34.55	
Interest on operating			18.05	
	5	Total Annual Operating Expenses	513.55	
REVENUE			515.55	
Expected yield				
Expected price		7.4.1 D		
			e (Yield x Price)	
		CONTRIBUTION MARGIN (Revenue – Ope	rating Expenses)	
OVERHEAD EXPENS				
Machinery	deprecia		50.05	
	interest	on investment	22.70	
Land				
Other overhead			10.50	
NITROGEN CREDIT	TO FOLLO	WING CROPS IN ROTATION		
Nitrogen credit (\$/a	cre = N ree	duction (from Table 1) x price of N)		
Grain yield increase				
Total benefits/year				
		TOTAL EXPENSES	596.80	
		Break-even price on your farm (total expenses		

ALFALFA-TIMOTHY HAY

BARLEY

		DAN		Feed Barley	Malting Barley	
OPERATING EXPENS	ES				Sample Costs/	Your Farm
	ected yield of 1.5 tonnes,	re))	Acre	Acre	Budget	
Expenses for Grain					71010	Duagot
Seed	1.0–1.4 million seeds/a	cre certified see	d	56.35	56.35	
Fertility	113 kg/ha N (246 kg/ha			125.15		
lorany	90 kg/ha N (196 kg/ha			99.70	_	
	56 kg/ha N (122 kg/ha			62.05	_	
	45–67 kg/ha N (98–146			-	62.05	
		5 (8.0 kg/tonne re		25.05	25.05	
		(6.3 kg/tonne re		17.70	17.70	
Herbicide	broadleaf weed control			10.95	10.95	
	grassy weed control			10.00	10.00	
Fungicide				20.40	20.40	
Tractor and machine	fuel (27 L) and lubricant	S		46.75	46.75	
expenses	repairs and maintenance			30.15	30.15	
Production insurance		-		11.10	11.10	
Risk Management Pro	ogram			12.10	12.10	
Marketing board fees				1.95	1.95	
Custom work	fertilizer application, mix	ing and deliverv	14.85	14.85		
	2 pesticide application		25.60	25.60		
	other					
Trucking (\$11.95/ton				16.20	16.20	
Storage	,					
Quality testing				_	_	
Land rent			_	_		
Operator labour (self	or hired)	14.25	14.25			
Interest on operating			20.00	18.85		
	Operating Expenses — Gi	ain (Feed (avera	ge of 3 regions))	429.05	394.30	
	costs based on projected					
Fertility		5 (2.6 kg/tonne re		10.10	10.10	
		(20.0 kg/tonne r		70.25	70.25	
Tractor and machine	fuel (7 L) and lubricants		,	11.45	11.45	
expenses	repairs and maintenance			5.60	5.60	
Twine	1	-		12.45	12.45	
Other				16.40	16.40	
	Тс	otal Operating Ex	penses — Straw	126.25	126.25	
			rating Expenses	555.30	520.55	
REVENUE		· · ·		1		
Expected barley yield						
Expected barley price						
		Total	Market Revenue	(Yield x Price)		
Program payment				· · · ·		
			Total I	Barley Revenue		
Expected straw yield						
Expected straw price						
		Tota	al Straw Revenue	(Yield x Price)		
				Total Revenue		
	CONTRIB	UTION MARGIN (Revenue – Opera	ting Expenses)		
		Feed	Barley	Malting	g Barley	
OVERHEAD EXPENSE	S	Barley Only	Barley & Straw	Barley Only	Barley & Straw	
Machinery	depreciation	41.60	49.00	41.60	49.00	
-	interest on investment	13.35	14.45	13.35	14.45	
Land		_	-	-	_	
Other overhead		6.85	8.85	6.85	8.85	
	TOTAL EXPENSES	490.85	627.60	456.10	592.85	
				expected yield):	1	

OPERATING EXPENSE (costs based on proje		Id of 1.0 tonnes/acre (2,200 lb/acre))	Sample Costs/ Acre	Your Farm Budget		
	-	a hybrid, treated	93.25			
	Ŭ,	N (155 kg/ha urea + 112 kg/ha ammonium sulphate) ¹	122.55			
-	crop	61 kg/ha P ₂ O ₅ (24.5 kg/tonne removal rate)	50.30			
	removal	30 kg/ha K ₂ O (12.0 kg/tonne removal rate)	22.35			
Herbicide	grass and	b broadleaf weed control	12.40			
Technology use agree	-		_			
		d (swede midge)	24.75			
	if required		21.85			
	-) and lubricants	53.25			
		nd maintenance	31.30			
		ancial Protection fees (\$4.00/tonne)	4.00			
Production insurance		· · · /	29.45			
	Risk Management Program					
	-	application, mixing and delivery	14.85			
		le applications	38.35			
	other					
Trucking (\$10.65/toni	ne)		10.65			
Storage			_			
Land rent			_			
Operator labour (self o	or hired)		15.45			
Interest on operating			19.30			
_		Total Operating Expenses	574.40			
REVENUE						
Expected yield						
Expected price						
		Total Market Revenu	e (Yield x Price)			
Program payment						
			Total Revenue			
		CONTRIBUTION MARGIN (Revenue – Operation of the second sec	rating Expenses)			
OVERHEAD EXPENSE	S					
Machinery d	depreciat	ion	36.90			
ii	nterest c	n investment	12.40			
Land			_			
Other overhead			6.90			
		TOTAL EXPENSES	630.60			
		Break-even price on your farm (total expenses	/expected yield):			

SPRING CANOLA (Herbicide Tolerant)

¹ Nitrogen rate is based on nitrogen price of \$2.77/kg (\$1.26/lb) N and a canola price of \$890/tonne. 112 kg/ha ammonium sulphate (21-0-0-24) supplies 27 kg/ha sulphur.

See the canola section of the OMAFRA Agronomy Guide for Field Crops, Publication 811, for more accurate nitrogen requirements for canola, adjusted for yield and fertilizer cost.

WINTER CANOLA

OPERATING EXPEN (costs based on pr	ISES ojected yield of 1.3 tonnes/acre)	Sample Costs/ Acre	Your Farm Budget					
Seed*	4.5 kg/ha — hybrid, treated	82.85						
Fertility**	202 kg/ha N (388 kg/ha urea + 112 kg/ha ammonium sulphate) ¹	241.05						
	crop 80 kg/ha P ₂ O ₅ (24.5 kg/tonne removal rate)	65.35						
	removal 39 kg/ha K ₂ O (12.0 kg/tonne removal rate)	29.00						
Herbicide	volunteer cereal control	11.30						
Insecticide	if required (cabbage seedpod weevil)	24.75						
Fungicide	if required	21.85						
Tractor and	fuel (26 L), lubricants	44.90						
machine expenses	repairs and maintenance	19.35						
Marketing board an								
Production insurance	ce	29.45						
Risk Management F	Program	13.45						
Custom work	fertilizer application, mixing and delivery	14.85						
	3 pesticide applications	38.35						
	other	_						
Trucking (\$10.65/te	onne)	13.85						
Storage		-						
Land rent		-						
Operator labour (se	If or hired)	12.55						
Interest on operatir	lg	23.20						
	Total Operating Expenses	691.30						
REVENUE								
Expected yield								
Expected price								
	Total Market Revenu	e (Yield x Price)						
Program payment								
	Total Revenue							
	CONTRIBUTION MARGIN (Revenue – Oper	rating Expenses)						
OVERHEAD EXPEN	SES							
Machinery	depreciation	24.20						
	interest on investment	7.75						
Land		_						
Other overhead		3.85						
	TOTAL EXPENSES	727.10						
	Break-even price on your farm (total expenses	(oxposted viold):						

** Additional nitrogen in the fall may be beneficial if seeding is delayed.

¹ 112 kg/ha ammonium sulphate (21-0-0-24) supplies 27 kg/ha sulphur.

OPERATING EXPEN	ISES ojected yield of 1.1 tonnes/acres (24 cwt/acre))	Sample Costs/ Acre	Your Farm Budget
			Buuget
Seed	78–90 kg/ha (4–5 seeds/ft row) certified, treated seed (with fungicide plus Cruiser insecticide)	137.05	
Fertility	40 kg/ha N	44.30	
rentinty		31.80	
		28.85	
Herbicide	annual grass and broadleaf weeds	75.70	
	other weed control, if required	-	
Insecticide		-	
Fungicide	if required (white mould)	45.60	
Crop pre-harvest		8.00	
Tractor and	fuel (46 L) and lubricants	77.85	
machine expenses	repairs and maintenance	58.55	
Marketing board fee		7.20	
Production insurance	41.80		
Risk Management F		0.25	
Custom work	fertilizer application, mixing and delivery 4 pesticide applications	14.85	
	51.15		
Trucking (\$10.65/te	onne)	11.80	
Drying		-	
Land rent		-	
Operator labour (se	If or hired)	26.30	
Interest on operatir	lg	22.05	
	Total Operating Expenses	683.10	
REVENUE			
Expected yield			
Expected price			
<u></u>	Total Market Revenu	e (Yield x Price)	
Less pick charges (, ,	
Program payment			
		Total Revenue	
	CONTRIBUTION MARGIN (Revenue – Oper		
OVERHEAD EXPEN		<u> </u>	
Machinery	depreciation	77.80	
· -···· J	interest on investment	28.15	
Land			
Other overhead	· · · · · · · · · · · · · · · · · · ·	15.05	
	TOTAL EVERNOES	804.10	
	TOTAL EXPENSES	804 10	

COLOURED BEANS

GRAIN CORN

				Tillage System		
			Conventional	Non-GMO Conventional	No-Till	Your
OPERATING EXPENS	ES		Sample	Sample	Sample	Farm
(costs based on proje	ected yield	d of 4.58 tonnes/acre (180 bu/acre))	Costs/Acre	Costs/Acre	Costs/Acre	Budget
Seed ¹ (average	32,000 k	kernels — treated — RR ²	116.55	-	116.55	
cost of 3 hybrids)	32,000	kernels — treated — Bt	103.45	-	103.45	
	32,000 k	kernels — treated — multi-trait	129.10	-	129.10	
	32,000 k	kernels — treated — non-GMO	_	92.30	_	
Insecticide seed treat	tment, if r	equired	1.60	1.60	1.60	
Fertility ³	156 kg/l	na N (557 kg/ha of 28-0-0 U.A.N.)	189.60	189.60	189.60	
	crop	83 kg/ha P ₂ O ₅	68.20	68.20	68.20	
	removal	(7.25 kg/tonne removal rate)				
		56 kg/ha K₂0	41.75	41.75	41.75	
		(4.9 kg/tonne removal rate)				
Herbicide	annual g	rass and broadleaf weed	31.25	32.80	31.25	
	burndow	n			11.40	
	other we	ed control, if required		-		
Insecticide/fungicide	if require	d	-	_	_	
Tractor and	fuel (37 l	conventional, 21 L no-till) and lubricant	62.35	62.35	35.05	
machine expenses	repairs a	nd maintenance	31.20	31.20	15.95	
Marketing board and	Grain Fina	ancial Protection fees (\$0.411/tonne)	1.90	1.90	1.90	
Production insurance			17.90	17.90	17.90	
Risk Management Pro	ogram		7.15	7.15	7.15	
-	-	application, mixing and delivery	14.85	14.85	14.85	
		applications	12.80	12.80	25.60	
	other		_	_	-	
Trucking (\$11.95/tor	ine)		54.70	54.70	54.70	
Drying (\$23.75/tonne		5)	108.90	108.90	108.90	
Land rent		· /		_	_	
Operator labour (self	or hired)		17.75	17.75	9.40	
Storage (\$2.35/tonn		(4 months)	43.05	43.05	43.05	
Interest on operating	o,,		28.55	27.75	27.60	
		Total Operating Expenses	849.85	826.55	822.20	
REVENUE						1
Expected yield	(Co	rn following corn: 8.5% corn yield decrea	ase)			1
Expected price	(***					
<u></u>			Total M	arket Revenue (Yield x Price)	
Program payment						
					Total Revenue	
		CONTRIBUTIO	N MARGIN (Re	evenue – Operat		
OVERHEAD EXPENSI	ES	Contrabolity		oporation oporation		1
Machinery	deprecia [.]	tion	40.00	40.00	20.55	
	-	on investment	13.50	13.50	7.10	
Land	merest	Shi muosunone	10.00	13.50	1.10	
Other overhead			6.50	6.50	2.95	
		TOTAL EXPENSES	909.85	886.55	852.80	
		IVIAL EAFENSES	303.65	000.00	052.00	

² Roundup Ready.

³ Nitrogen rate is based on the nitrogen rate calculator. Nitrogen recommendation is for corn grown in southwestern/central Ontario, 2,800 heat units, clay loam soil, following wheat with straw removed, with projected corn yield of 4.58 tonnes/acre (180 bu/acre), nitrogen cost of \$3.04/kg and corn price of \$295/tonne (\$7.50/bu). See www.gocorn.net for more accurate nitrogen requirements for corn.

OPERATING EXPENSE	S		Silage Corn	Sorghum- Sudangrass	
		of 9.02 tonnes DM/acre silage corn;	Sample	Sample	Your Farm
		sudangrass over two cuts)	Costs/Acre	Costs/Acre	Budget
Seed		ernels, with seed treatment silage corn;	118.15	45.45	
		a sorghum-sudangrass			
Insecticide seed treat		<u> </u>	1.60	_	
Fertility ¹	-	na N (557 kg/ha of 28-0-0 U.A.N.) silage corn;	189.60	155.05	
		na N sorghum-sudangrass			
	crop	5.5 kg P ₂ O ₅ /tonne DM removal rate	101.80	87.44	
	removal	11.7 kg K ₂ O/tonne removal rate)	195.50	170.14	
Herbicide	annual g	ass and broadleaf weeds	31.25	31.25	
	other we	ed control, if required	-	-	
Insecticide/fungicide	if require		_	_	
Tractor and machine expenses	fuel (19 l lubricant	_ silage corn; 5 L sorghum-sudangrass) and	32.35	8.90	
	repairs a	nd maintenance	21.80	5.95	
Silo repair and mainte		_	_		
Production insurance		17.90	5.85		
Silage inoculant		_	_		
Custom work	fertilizer	application, mixing and delivery	14.85	14.85	
	pesticide	applications	12.80	12.80	
	harvest		139.45	328.40	
	storage (ensiled)	306.70	252.95	
Land rent		,	_	_	
Operator labour (self c	or hired)		10.25	4.10	
Interest on operating	/		41.50	40.40	
		Total Operating Expenses	1,235.50	1,163.53	
REVENUE			,	,	
Expected yield					
Expected price					
·		Total Market Revenue (Yield x Price)			
Program payment					
		Total Revenue			
C	ONTRIBUT	ION MARGIN (Revenue – Operating Expenses)			
OVERHEAD EXPENSE		· · · · · ·			
Machinery	depreciat	ion	28.75	7.30	
-		on investment	10.90	2.45	
Land	1			_	
Other overhead			6.05	1.35	
		TOTAL EXPENSES	1,281.20	1,174.63	
		Cost per tonne on your farm (to			

FORAGES — WARM SEASON ANNUALS

¹ Nitrogen rate is based on the nitrogen rate calculator. Nitrogen recommendation is for corn grown in southwestern/central Ontario, 2,800 heat units, clay loam soil, following wheat with straw removed, with projected grain corn yield of 4.58 tonnes/acre (180 bu/acre), ensiled at 65% moisture, nitrogen cost of \$3.04/kg and corn price of \$295/tonne (\$7.50/bu). See www.gocorn.net for more accurate nitrogen requirements for corn.

			Fall Rye	Oats and Peas	
OPERATING EXPENSE (costs based on proje 1.50 tonnes DM/acr	ected yield	l of 2.43 tonnes DM/acre fall rye;	Sample Costs/ Acre	Sample Costs/ Acre	Your Farm Budget
Seed		na forage fall rye; 50 kg/ha oats and 50 kg/ha peas	39.40	55.10	Duuget
Fertility		a N fall rye; 55 kg/ha N oats	99.70	60.90	
, or entry	crop removal	54 kg/ha P_2O_5 (9.0 kg/tonne DM removal rate) fall rye; 24 kg/ha P_2O_5 (6.4 kg/tonne DM removal rate) oats/peas	45.15	19.70	
		240 kg/ha K ₂ O (40 kg/tonne DM removal rate) fall rye; 116 kg/ha K ₂ O (31.1 kg/tonne DM removal rate) oats/peas	180.45	87.45	
Herbicide	annual g	rass and broadleaf weeds	10.55	10.55	
	other we	ed control, if required	-	-	
Insecticide/fungicide	leaf dise	ase, if required	10.50	10.50	
Tractor and machine	fuel (5 L)	and lubricants	8.90	8.90	
expenses	repairs a	nd maintenance	5.95	5.95	
Silo repair and mainte	enance		_	_	
Production insurance	-	4.25			
Silage inoculant	_	_			
Custom work	fertilizer	application, mixing and delivery	14.85	14.85	
		de applications	25.60	25.60	
	Harvest		163.80	117.30	
	Storage (bale wrapping)	78.60	48.50	
Land rent			-	_	
Operator labour (self	or hired)		4.10	4.10	
Interest on operating			23.90	16.45	
		Total Operating Expenses	711.45	490.10	
REVENUE					
Expected yield					1
Expected price					
		Total Market Revenue (Yield x Price)			
Program payment					
		Total Revenue			
		CONTRIBUTION MARGIN (Revenue – Operating Expenses)			
OVERHEAD EXPENSE		outraile operating Expenses)			I
Machinery	Deprecia	tion	7.30	7.30	
indoninor y	-	on investment	2.45	2.45	
Land	interest (Ji investment	2.43	2.45	
Other overhead			1.35	1.35	
		TOTAL EXPENSES	722.55	501.20	
		Cost per tonne on your farm (total exp			

COOL SEASON ANNULALS

		FLAX			
OPERATING EXPEN				Sample Costs/	
(costs based on pr		0.61 tonnes/acre)		Acre	Your Farm Budget
Expenses for Grain	1			ГГ	
Seed	49 kg/ha certifi	ed, treated		52.20	
Fertility	45 kg/ha N			49.85	
	crop removal	24 kg/ha P ₂ O ₅ (7.5 kg/tonne		19.40	
		18 kg/ha K ₂ 0 (5.8 kg/tonne	removal rate)	13.60	
Herbicide	broadleaf weed			5.70	
	grass weed con	trol, if required		18.80	
	desiccant			9.90	
Fungicide				_	
Tractor and	fuel (27 L) and	lubricants		46.75	
machine expenses	repairs and mai	ntenance		30.15	
Production insurance	ce			18.70	
Custom work	fertilizer applica	tion, mixing & delivery		14.85	
	2 pesticide app		25.60		
other				_	
Trucking (\$10.65/to	ucking (\$10.65/tonne)			6.45	
Storage				-	
Land rent					
Operator labour (self or hired)				14.25	
Interest on operatir	,			11.35	
	16	Total Operating Ex	onsos — Grain	337.55	
Expenses for Straw	(costs based on	projected yield of 2.21 tonnes		001.00	
Fertility	crop removal	$18 \text{ kg/ha P}_20_5 (3.2 \text{ kg/tonne})$		14.50	
rentinty		105 kg/ha K ₂ 0 (19.0 kg/toni		78.05	
Tractor and	fuel (7 L) and lu			11.45	
machine expenses					
	repairs and mai	Internance		5.60	
Twine				14.55	
Other				16.40	
		Total Operating Exp		140.55	
		Total Oper	ating Expenses	478.10	
REVENUE					
Expected flax yield					
Expected flax price					
		Tota	I Market Revenu	ie (Yield x Price)	
Program payment					
				tal Flax Revenue	
		CONTRIBUTION MARGIN		rating Expenses)	
OVERHEAD EXPEN	SES		Flax Only	Flax & Straw	
Machinery	depreciation		41.60	49.00	
	interest on inve	stment	13.35	14.45	
Land			-		
Lanu					
Other overhead			6.85	8.85	

OATS

		UAIS			
OPERATING EXPI (costs based on		of 1.26 tonnes/acre (81 bu/acre))		Sample Costs/ Acre	Your Farm Budget
Seed	1.1 million	seeds/acre, certified treated		51.65	
Fertility	113 kg/ha	N (245 kg/ha Urea)		124.60	
	crop	24 kg/ha P_2O_5 (7.5 kg/tonne removal rate)		19.40	
	removal	18 kg/ha K ₂ 0 (5.8 kg/tonne removal rate)		13.60	
Herbicide	weed contr	ol, if required		5.70	
Fungicide				20.40	
Plant growth regu	lator			15.45	
Tractor and	fuel (27 L)	and lubricants		46.75	
machine expense	s repairs and	maintenance		30.15	
Production insura	nce			11.10	
Risk Managemen	t Program			10.00	
Marketing board f	fees (\$1.41/to	nne)		1.80	
Custom work		plication, mixing and delivery		14.85	
		applications		38.35	
Trucking (\$10.65	ucking (\$10.65/tonne)				
Storage				_	
Land rent				_	
Operator labour (self or hired)				14.25	
Interest on operation		11.20			
		Total Operating Expenses	s — Grain	442.65	
Expenses for Stra	aw (costs base	ed on project yield of 2.21 tonnes/acre)		· · · · ·	
Fertility	crop	18 kg/ha P ₂ O ₅ (3.2 kg/tonne removal rate)		14.50	
	removal	105 kg/ha K ₂ 0 (19.0 kg/tonne removal rate)		78.05	
Tractor and	fuel (7 L) a	nd lubricants		11.45	
machine expense	s repairs and	maintenance		5.60	
Twine				14.55	
Other				16.40	
		Total Operating Expenses	s — Straw	140.55	
		Total Operating	Expenses	583.20	
REVENUE				1 1	
Expected oat yield	dt				
Expected oat price					
· · · · · · · · · · · · · · · · · · ·		Total Mark	ket Revenu	e (Yield x Price)	
Program payment					
			Tot	al Oats Revenue	
Expected straw yi	eld				
Expected straw pr					
		Total Stra	aw Revenu	e (Yield x Price)	
				Total Revenue	
		CONTRIBUTION MARGIN (Reve	nue – Oper		
OVERHEAD EXPE	NSES	-	Oats Only	Oats & Straw	
Machinery	depreciatio		41.60	49.00	
· -······		investment	13.35	14.45	
Land	1				
Other overhead	·		6.85	8.85	
		TOTAL EXPENSES	504.45	655.50	
		Break-even price on your farm (total			

		SOYBEAN	S			
			1	Tillage System	I	
			Non-GMO Soybeans Conventional	Non-GMO Soybeans No-Till	Roundup Ready No- Till	
OPERATING EXPENS			Sample	Sample	Sample	Your Farm
		d of 1.33 tonnes/acre (49 bu/acre))	Costs/Acre	Costs/Acre	Costs/Acre	Budget
Seed		seeds/acre in 15-in. rows — drill) seeds/acre in 15-in. rows — planter)	60.95	60.95	86.05	
Fungicide seed treat	ment		13.00	13.00	13.00	
Additional seed treat	ments or	inoculants, If required	_	-	-	
Fertility	crop removal	47 kg/ha P ₂ O ₅ (14.0 kg/tonne removal rate)	38.20	38.20	38.20	
		76 kg/ha K ₂ O (23.0 kg/tonne removal rate)	56.90	56.90	56.90	
Herbicide	annual g	rass and broadleaf weeds	69.50	69.50	14.15	
	burndow			13.25	13.25	
		ed control, if required	_	-	-	
Insecticide/fungicide	if require		_	_	_	
Tractor and		conventional, 20 L no till) and lubricants	46.75	34.05	34.05	
machine expenses		nd maintenance	32.20	17.15	17.15	
	Marketing board and Grain Financial Protection fees (\$1.52/tonne)		2.00	2.00	2.00	
Production insurance			12.25	12.25	12.25	
Risk Management Pr			3.15	3.15	3.15	
Drying, if required	ogram				5.15	
Custom work	nesticide	applications	12.80	25.60	25.60	
	fertilizer application, mixing and delivery		14.85	14.85	14.85	
Added expense for IF						
Trucking (\$10.65/tor			14.20	14.20	14.20	
Storage (\$2.35/mon		(A months)	12.50	12.50	12.50	
Land rent				12.00	12.00	
Operator labour (self	or hired)		14.25	10.70	10.70	
Interest on operating			14.00	13.85	12.80	
)	Total Operating Expenses	417.50	412.10	380.80	
REVENUE						
Expected yield	(So	ybeans following soybeans: 10% soybea	n vield decreas	e)		
Expected price	(00			,,,,,		
			Total Mar	ket Revenue (Vield x Price)	
Additional revenue fr	om IP			(
Program payment						
oBrain paymont					otal Revenue	
		CONTRIBUTION	MARGIN (Reve			
OVERHEAD EXPENS	ES			and operation		
Machinery	deprecia	tion	42.90	19.30	19.30	
indomitory		on investment	14.80	6.00	6.00	
Land	moreat					<u> </u>
Other overhead			7.10	2.90	2.90	
		TOTAL EXPENSES	482.30	440.30	409.00	
		Break-even price on				

		Direct S	Seeded	
		Conventional	No-Till	
		Sample	Sample	Your Farm
ESTABLISHMENT EXP		Costs/Acre	Costs/Acre	Budget
Seed	11.25 kg/ha switchgrass	160.00	160.00	
Fertility	nitrogen, if required	-	_	
	crop P ₂ O ₅	-		
	removal K ₂ O	-	-	
Herbicide	annual grass and broadleaf control	15.05	15.05	
	burndown	-	13.25	
	other weed control, if required	-		
Insecticide/fungicide	if required	-	-	
Tractor and machine	fuel (14 L conventional, 6 L no till) and lubricants	23.30	9.50	
expenses	repairs and maintenance	24.55	6.60	
Custom work	pesticide applications	12.80	25.60	
	fertilizer applications, mixing and delivery		_	
Harvest and trucking		-	_	
Operator labour (self o	*	11.50	5.05	
Establishment failure	rate	-	_	
Interest on operating		8.20	8.00	
	Total Establishment Year Expenses	255.40	243.05	
	EXPENSES (costs based on projected yield of 4.0 tonnes/			
	penses — over 7 years (less establishment year sales)	52.20	44.10	
Fertility	76 kg/ha nitrogen	85.60	85.60	
	crop P_2O_5	-	-	
	removal K ₂ O	-	_	
Tractor and machine	fuel (26 L) and lubricants	44.40	44.40	
expenses	repairs and maintenance	39.15	39.15	
Custom work	fertilizer applications, mixing and delivery	14.85	14.85	
Trucking		_	_	
Removal and storage		102.30	102.30	
Twine		_	_	
Operator labour (self c	or hired)	15.55	15.55	
Interest on operating		12.30	12.00	
	Total Annual Operating Expenses	366.35	357.95	
REVENUE				
Expected yield				
Expected price				
		Total Revenue		
	CONTRIBUTION MARGIN (R	evenue – Operat	ing Expenses)	
OVERHEAD EXPENSE	S			
Machinery	depreciation	42.75	42.75	
	interest on investment	16.40	16.40	
Land				
Other overhead		9.45	9.45	

CIA/ITOUODACC

					Tillage	System	
					Conventional	No-Till	Your
OPERATING EXP	ENSES				Sample Costs/	Sample Costs/	Farm
		ld of 2.4 tonnes/a	acre (87 bu/a	cre))	Acre	Acre	Budge
Expenses for Gra				,	1010	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Duuge
Seed		nillion seeds/acre,	certified seed	4	82.70	82.70	
Fertility	135 kg/ha			A	149.55	149.55	
r or andy	crop	58 kg/ha P ₂ O ₅ (9	9.8 kg/tonne i	emoval rate)	47.50	47.50	
	removal	35 kg/ha K ₂ 0 (6			26.50	26.50	
Herbicide	broadleaf				10.55	10.55	
Fungicide		head blight			20.40	20.40	
rungiciue		se, if required			10.50	10.50	
Diant growth rage		se, il lequileu					
Plant growth regu					15.45	15.45	
Tractor and		conventional, 20	L no till) and li	ubricants	46.75	34.05	
machine expense		d maintenance			30.15	16.10	
Production insura					14.10	14.10	
Risk Managemen					3.85	3.85	
-		d Grain Financial Protection fees (\$0.90/tonne)			2.15	2.15	
Custom work				14.85	14.85		
	3 pesticid	e applications	applications		38.35	38.35	
Added expense for	or IP				-	-	
Trucking (\$10.65	/tonne)			25.25	25.25		
Land rent		,			_	-	
Operator labour (self or hired)	elf or hired)			14.25	10.70	
Interest on opera					31.90	30.15	
		Tota	Onerating Fi	penses — Grain	584.75	552.70	
Expenses for Str	aw (costs bas	sed on projected y		-			
Fertility	crop				8.40	8.40	
rorency	removal	10 kg/ha P2O5 (1.7 kg/tonne removal rate)72 kg/ha K2O (12.0 kg/tonne removal rate)			53.75	53.75	
Tractor and		and lubricants		Terrioval race,	11.45	11.45	
machine expense		id maintenance			5.60	5.60	
Twine					15.90	15.90	
						15.90	
Other					16.40		
		lotal		penses — Straw	111.50	111.50	
			Total Ope	rating Expenses	696.25	664.20	
REVENUE							
Expected wheat y							
Expected wheat p	price						
				Tota	al Market Revenu	e (Yield x Price)	
Additional income	e from IP						
Program payment	i						
		-			Total	Wheat Revenue	
Expected straw yi	eld						
Expected straw p							
· · · ·				To	tal Straw Revenu	e (Yield x Price)	
						Total Revenue	
			CONTRI	BUTION MARGIN	(Revenue – Oper		
				ional Tillage	<u> </u>	-Till	
			Wheat Only	Wheat & Straw	Wheat Only	Wheat & Straw	
	INSES					26.40	
	1	00	-	10 00			
	depreciati		41.60	49.00	19.00		
OVERHEAD EXPR	depreciati	on n investment	-	49.00 14.45	5.95	7.05	
Machinery Land	depreciati		41.60 13.35 -	14.45	5.95	7.05	
Machinery	depreciation interest or		41.60				

SOFT RED WINTER WHEAT

HARD RED WINTER WHEAT

						System	-
					Conventional	No-Till	Your
OPERATING EXPE					Sample	Sample	Farm
		l of 2.2 tonnes/acr	e (82 bu/acre	-))	Costs/Acre	Costs/Acre	Budget
Expenses for Gra							Υ.
Seed		illion seeds/acre, ce	ertified seed		81.70	81.70	ļ
Fertility	165 kg/ha				182.75	182.75	
	crop	55 kg/ha P ₂ O ₅ (9			44.55	44.55	
	removal	34 kg/ha K ₂ 0 (6.	0 kg/tonne rer	noval rate)	24.85	24.85	
Herbicide	broadleaf v				10.55	10.55	
		control, if required			-	-	
Fungicide	ungicide fusarium head blight				20.40	20.40	
	leaf disease, if required				10.50	10.50	
Plant growth regu					15.45	15.45	
Tractor and		conventional, 20 L r	no till) and lubr	icants	46.75	34.05	
machine expense	s repairs and	l maintenance			30.15	16.10	
Production insura	duction insurance				15.15	15.15	
Risk Managemen	t Program				3.60	3.60	
Marketing board a	and Grain Fina	ncial Protection fees	s (\$0.90/tonne	e)	2.00	2.00	
Custom work 2 fertilizer applications, mixing				29.75	29.75		
		applications	,		38.35	38.35	1
Added expense for						_	1
Trucking (\$10.65					23.70	23.70	
Land rent			_	_			
Dperator labour (self or hired)				14.25	10.70		
nterest on operating				34.30	32.55		
		Tot	al Anerating F	xpenses — Grain	628.75	596.70	
Expenses for Stra	w (costs has	ed on projected yiel			020110	000110	
Fertility	crop	10 kg/ha P ₂ O ₅ (1			8.40	8.40	1
rentinty	removal	72 kg/ha K ₂ 0 (12			53.75	53.75	
Tractor and		nd lubricants			11.45	11.45	
machine expense		a maintenance			5.60	5.60	
Twine					15.90	15.90	
Other					16.40	16.40	
Other		Tat	- Oneveting F	Ctrow			
		1000	<u> </u>	xpenses — Straw	111.50	111.50	
			lotal Op	erating Expenses	740.25	708.20	
	: a l al						r
Expected wheat y							
Expected wheat p	orice			T .4.1	Malato		
A 1 1	<u> </u>			Iotai	warket Revenu	e (Yield x Price)	
Additional income							
Program payment							
					Total	Wheat Revenue	ļ
Expected straw yield							
Expected straw pr	rice	_					
				Tota	al Straw Revenu	e (Yield x Price)	
						Total Revenue	
				BUTION MARGIN (-		
				ional Tillage		o-Till	
OVERHEAD EXPE	INSES		Wheat Only	Wheat & Straw	Wheat Only	Wheat & Straw	
Machinery	depreciatio	n	41.60	49.00	19.00	26.40	
	interest on	investment	13.35	14.45	5.95	7.05	
Land			-	_	_	-	
Other overhead			6.85	8.85	2.85	4.85	
		TOTAL EXPENSES	690.55	812.55	624.50	746.50	
				price on your farm			1

OPERATING EXPEN		tonnes/acre (52.0 bu/acre		Sample Costs/	Your Farm Budget
Expenses for Grain		Ftonnes/acre (52.0 bu/acre	;))	Acre	Budget
Seed	1	eeds/acre, certified seed		85.50	
Fertility	101 kg/ha N (22)			113.30	
rentinty	crop removal	35 kg/ha P ₂ O ₅ (9.8 kg/to	nne removal rate)	28.40	
		21 kg/ha K ₂ 0 (6.0 kg/tor		15.85	
Herbicide	broadleaf weeds			10.55	
		control, if required			
	other weed contro			_	
Fungicide	fusarium head bli			20.40	
Tractor and		27 L) and lubricants			
machine expenses				46.75	
Production insurand				17.40	
Risk Management I				4.55	
-		rotection fees (\$0.90/tonne)		1.30	
Custom work	1	on, mixing and delivery		14.85	
	2 pesticide application			25.60	
	other	auolis	20.00		
Addad avecase for				-	
Added expense for	•			15.10	
	king (\$10.65/tonne)			15.10	
Land rent	lf or birod			- 14.25	
Dperator labour (self or hired)					
Interest on operating 15.40					
-			Expenses — Grain	459.35	
		projected yield of 2.14 tonne		7.45	
Fertility	crop removal	9 kg/ha P ₂ O ₅ (1.7 kg/ton		7.45	
.		64 kg/ha K ₂ 0 (12.0 kg/to	onne removal rate)	47.70	
Tractor and	fuel (7 L) and lub			11.45	
machine expenses	repairs and maint	enance		5.60	
Twine				14.10	
Other				16.40	
			Expenses — Straw	102.70	
		Total O	perating Expenses	562.05	
REVENUE					
Expected wheat yie					
Expected wheat pri-	ce				
			otal Market Revenu	ie (Yield x Price)	
Additional income f	rom IP				
Program payment					
			Tota	Wheat Revenue	
Expected straw yiel					
Expected straw pric	e				
			Total Straw Revenu		
				Total Revenue	
		CONTRIBUTION MARC	GIN (Revenue – Ope	rating Expenses)	
OVERHEAD EXPEN	SES		Wheat Only	Wheat & Straw	
Machinery	depreciation		41.60	49.00	
	interest on invest	ment	13.35	14.45	
Land			-	_	
Other overhead			6.85	8.85	
		TOTAL EXPENSES	521.15	634.35	
				/expected yield):	

HARD RED SPRING WHEAT

OPERATING EXPE (costs based on p	NSES rojected yield of 24 cwt/acre)	Sample Costs/ Acre	Your Farm Budget
Seed	125,000–150,000 seeds/acre (67–78 kg/ha, 15–20-in. rows)	101.40	
	certified, treated seed (with fungicide plus Cruiser insecticide)		
Fertility	40 kg/ha N	44.30	
	crop 32 kg/ha P_2O_5 (14.0 kg/tonne removal rate)	31.80	
	removal 32 kg/ha K ₂ 0 (14.0 kg/tonne removal rate)	28.85	
Herbicide	annual grass and broadleaf weeds	75.70	
Crop pre-harvest		8.00	
Fungicide, if	white mould	45.60	
required	anthracnose	8.80	
Insecticide		_	
Tractor and	fuel (35 L) and lubricants	59.10	
machine expenses	repairs and maintenance	37.40	
Marketing board fe		7.10	
Production insuran		29.00	
Risk Management	Program	1.45	
Custom work	fertilizer application, mixing and delivery	14.85	
	5 pesticide applications	63.95	
Trucking (\$10.65/		11.65	
Drying		_	
Land rent		-	
Operator labour (se	elf or hired)	18.60	
Interest on operati		20.40	
	Total Operating Expenses	607.95	
REVENUE		1 1	
Expected yield			
Expected price			
· · · —	Total Market Revenu	ue (Yield x Price)	
Less pick charges		, ,	
Program payment	··· · · ·		
		Total Revenue	
	CONTRIBUTION MARGIN (Revenue – Ope	rating Expenses)	
OVERHEAD EXPEN	· · · · ·		
Machinery	depreciation	44.15	
-	interest on investment	17.60	
Land			
Other overhead		9.20	
	TOTAL EXPENSES	678.90	
	Break-even price on your farm (total expenses		

WHITE/BLACK BEANS

		Grain Corn	Soybeans	
OPERATING EXE (costs based on	PENSES 1 projected yield of 3.07 tonnes/acre (121 bu/acre) grain corn;	Sample Costs/	Sample Costs/	Your Farm
0.90 tonnes/ac	re (33.77 bu/acre) soybeans)	Acre	Acre	Budget
Seed	grain corn: 32,000 kernels, certified, organic;	114.00	110.15	
	soybeans: 200,000 seeds/acre, certified, organic in 21-30-in. rows			
Seed inoculant		-	6.40	
Fertility	manure, compost**	100.00	-	
	dry fertilizer	50.00	50.00	
Herbicide		-	-	
Insecticide		-	-	
Fungicide		-	-	
Soil maintenanc	e (cover crop, fallow etc.)**	40.00	20.00	
Tractor and	fuel (40 L corn, 41 L soybeans) and lubricants	68.45	69.80	
machine expense	es repairs and maintenance	41.80	57.70	
Marketing board \$1.52/tonne (so	and Grain Financial Protection fees (\$0.411/tonne (corn), bybeans))	1.25	1.40	
Certification fee	S	3.75	3.75	
Production insur	ance	29.55	25.70	
Risk Manageme	nt Program	4.75	2.15	
Custom work		-	-	
Added expense	for handling organic crops	-	_	
Trucking (\$11.9	5/tonne corn, \$10.65/tonne soybeans)	36.60	10.95	
Drying (\$23.75/	(tonne corn)	72.90	-	
Storage		9.00	9.00	
Land rent		-	_	
Operator labour	(self or hired)	23.70	25.35	
Labour — hand	weed	-	-	
Interest on oper	ating	20.70	13.65	
	Total Operating Expenses	616.45	406.00	
REVENUE				
Expected yield _				
Expected price _				
	Total Market	Revenue (Yie	eld x Price)	
Program paymer	nt			
		Tot	al Revenue	
	CONTRIBUTION MARGIN (Revenue	e – Operating	Expenses)	
OVERHEAD EXP		1		
Machinery	depreciation	52.90	71.40	
	interest on investment	17.10	26.75	
Land		-		
Other overhead		9.50	15.00	
		695.95	519.15	

ORGANIC — GRAIN CORN AND SOYBEANS*

* Organic budget estimates do not include transition period costs.

** Manure, compost and cover crop estimates are highly variable, depending on individual farm situations.

ORGANIC — WINTER	R WHEAT AND SPELT*
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OPERATING EXPE	NSES			Winter Wheat	Spelt	
(costs based on p 1.2 tonnes/acre s	rojected yield of 1.45 tonnes/acre pelt)	wheat;	Sample Costs/Acre	Sample Costs/Acre	Your Farm Budget	
Seed	wheat: 1.5–1.7 million seeds/ac spelt: 180 kg/ha certified, organi		ganic;	113.65	128.00	
Fertility	manure, compost**			100.00	100.00	
,	dry fertilizer			50.00	50.00	
Herbicide					_	
Fungicide				-	[
-	cover crop, fallow, etc.)**			40.00	40.00	
Tractor and	fuel (32 L) and lubricants			54.00	54.00	
machine expenses				37.00	37.00	
Production insuran	ce			56.65	36.90	
Risk Management	Program			2.35	_	
	nd Grain Financial Protection fee (\$	0.90/tonne (w	neat))	1.30	_	
Certification fees	• • • • •					
Custom work						
	handling organic crops				_	
Trucking (\$10.65/1				15.45	12.75	
• •	Storage				9.00	
Land rent				9.00	5.00	
Operator labour (self or hired)					18.75	
Labour — hand weed				18.75	10.75	
Interest on operati				28.95	28.25	
interest on operati	- T	erating Expen	coc Groin	530.85	518.40	
Expanses for Stra	v (costs based on projected yield o			530.85	516.40	
Tractor and	fuel (7 L) and lubricants		/aciej	11.45	11.45	
machine expenses						
•	repairs and maintenance			5.60	5.60	
Twine				15.90	15.90	
Other	7.4.10.		0	16.40	16.40	
	lotal Op	erating Expension		49.35	49.35	
		Total Operati	ng Expenses	580.20	567.75	
REVENUE						
Expected yield						
Expected price						
			Total Mark	et Revenue ()	field x Price)	
Program payment						
				T	otal Revenue	
Expected straw yie						
Expected straw price	ce					
			Total Stra	aw Revenue ()	-	
					otal Revenue	
	CON	TRIBUTION M	ARGIN (Reve	nue – Operatir	ng Expenses)	
OVERHEAD EXPEN	ISES	Wheat Only	Wheat & Straw	Spelt Only	Spelt & Straw	
Machinery	depreciation	43.35	50.75	43.35	50.75	
	interest on investment	17.95	19.05	17.95	19.05	
Land		_	-	_		
Other overhead		8.10	10.10	8.10	10.10	
	TOTAL EXPENSES	600.25	660.10	587.80	647.65	

 \ast $\;$ 0rganic budget estimates do not include transition period costs.

** Manure, compost and cover crop cost estimates are highly variable, depending on individual farm situations.

OPERATING EXP	INSES			Barley	Oats	
(costs based on p	projected yield of 1.2 tonne (65 bu/acre) oats)	/acre) barley;	Sample Costs/Acre	Sample Costs/Acre	Your Farm Budget	
Expenses for Gra					· · ·	
Seed	barley: 168 kg/ha certif	ied, organic		118.50	119.35	
	oats: 157 kg/ha certifie	d, organic				
Fertility	manure/compost**			-	_	
	dry fertilizer			50.00	50.00	
Herbicide				-	-	
Fungicide				-	-	
Soil maintenance	(cover crop, fallow etc.)**			40.00	40.00	
Tractor and	fuel (32 L) and lubricant	S		52.90	52.90	
machine expense	s repairs and maintenance	е		36.35	36.35	
Production insura	nce			11.10	11.10	
Risk Management	t Program			9.70	8.00	
Marketing board f	ee (\$1.29/tonne (barley), \$	1.41/tonne (oa	ts))	1.55	1.40	
Certification fees				3.75	3.75	
Custom work				-		
Added expense for	r handling organic crops			-	_	
Trucking (\$10.65				12.95	10.70	
Storage				9.00	9.00	
Land rent				-	_	
Operator labour (s	self or hired)			18.20	18.20	
Labour — hand w	-	_				
Interest on operat	ing			21.00	20.80	
		tal Operating Ex	penses — Grain	385.00	381.55	
Expenses for Stra	w (costs based on project			rley), 2.21 tonn	es/acre (oats))	
Tractor and	fuel (7 L) and lubricants	•		11.45	11.45	
machine expense			5.60	5.60		
Twine				12.45	14.55	
Other			16.40	16.40		
Total Operating Expenses — Straw				45.90	48.00	
			rating Expenses	430.90	429.55	
REVENUE			0			
Expected yield						
Expected price						
			Total M	larket Revenue	(Yield x Price)	
Program payment					(,	
					Total Revenue	
Expected straw yi	eld					
Expected straw pr						
	· ·		Total	Straw Revenue	(Yield x Price)	
					Total Revenue	
		CONTRIBU	TION MARGIN (Re	evenue – Operat		
OVERHEAD EXPE	NSES	Barley Only	Barley & Straw	Oats Only	Oats & Straw	
Machinery	depreciation	42.60	50.00	42.60	50.00	
	interest on investment	17.70	18.80	17.70	18.80	
Land						
Other overhead		8.30	10.30	8.30	10.30	
		0.50	10.50	0.50	10.00	
	TOTAL EXPENSES	453.60	510.00	450.15	508.65	

* Organic budget estimates do not include transition period costs.

** Manure, compost and cover crop cost estimates are highly variable, depending on individual farm situations.

OMAFRA RESOURCES

Selected Factsheets and Publications

<u>Agronomy Guide for Field Crops</u>, Publication 811 <u>Budgeting Farm Machinery Costs</u>, OMAFRA Factsheet <u>Guide to Custom Farmwork and Short-Term Equipment Rental</u>, OMAFRA Factsheet Ontario Farm Record Book, Publication 540 <u>Soil Fertility Handbook</u>, Publication 611

To obtain a digital copy of this publication, visit <u>ontario.ca</u> and search for the publication number and title.

To obtain print copies of this or any other OMAFRA publication, please order:

• online at ontario.ca/publications

Crop protection information on pest management and products registered for use is available through the <u>Ontario Crop Protection Hub</u>.

OMAFRA has excellent tools and information to help manage your farm business in the Agricultural Business Management section at <u>ontario.ca/agbusiness</u>. For results of the Custom Farmwork and Equipment Rental Rates survey, go to <u>ontario.ca/agbusiness</u> and search for "Ontario cost of production and budgets." The *Ontario Enterprise Budgets*, also found on the OMAFRA website, has budgets for cost of production, including field crops. You can download a Budgeting Tool Excel file, modify the numbers to reflect your operation, and the file will complete the calculations. The Budgeting Tool also lets you assess the potential effect of production and marketing risk factors and risk management strategies.

Publication 60, *Field Crop Budgets*, is updated by John Molenhuis, Business Analysis and Cost of Production Specialist, OMAFRA, Brighton (john.molenhuis@ontario.ca), and the OMAFRA Field Crops Unit.

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METRIC CONVERSION TABLES

Application rate conversions (approximate)

Metric to Imperial	Dry weight equivalents			
litres per hectare × 0.09 = gallons per acre	grams or kilograms/hectare ounces or pounds/acre			
litres per hectare × 0.36 = quarts per acre	100 g/ha = 1 ¹ / ₂ oz/acre			
litres per hectare × 0.71 = pints per acre	200 g/ha = 3 oz/acre			
millilitres per hectare × 0.015 = fluid ounces per acre	300 g/ha = 4¼ oz/acre			
grams per hectare × 0.015 = ounces per acre	500 g/ha = 7 oz/acre			
kilograms per hectare × 0.89 = pounds per acre	700 g/ha = 10 oz/acre			
tonnes per hectare × 0.45 = tons per acre	1.10 kg/ha = 1 lb/acre			
	1.50 kg/ha = 1¼ lb/acre			
Imperial to metric	2.00 kg/ha = 1 ³ /4 lb/acre			
gallons per acre × 11.23 = litres per hectare (L/ha)	2.50 kg/ha = $2\frac{1}{4}$ lb/acre			
quarts per acre × 2.8 = litres per hectare (L/ha)	3.25 kg/ha = 3 lb/acre			
pints per acre × 1.4 = litres per hectare (L/ha)	$4.00 \text{ kg/ha} = 3\frac{1}{2} \text{ lb/acre}$			
fluid ounces per acre × 70 = millilitres per hectare (mL/ha)	5.00 kg/ha = $4\frac{1}{2}$ lb/acre			
tons per acre × 2.24 = tonnes per hectare (t/ha)	$6.00 \text{ kg/ha} = 5\frac{1}{4} \text{ lb/acre}$			
pounds per acre × 1.12 = kilograms per hectare (kg/ha)	7.50 kg/ha = $6^{3}/_{4}$ lb/acre 9.00 kg/ha = 8 lb/acre			
ounces per acre × 70 = grams per hectare (g/ha)				
	11.00 kg/ha = 10 lb/acre			
Liquid equivalents	13.00 kg/ha = $11\frac{1}{2}$ lb/acre			
litres/hectare approximate gallons/acre 50 L/ha = 5 gal/acre	15.00 kg/ha = 13 ¹ / ₂ lb/acre			

Handy metric conversion factor

litres per hectare × 0.4 = litres per acre kilograms per hectare × 0.4 = kilograms per acre

Conversion tables imperial to metric (approximate)

100 L/ha = 10 gal/acre 150 L/ha = 15 gal/acre

200 L/ha = 20 gal/acre

250 L/ha = 25 gal/acre 300 L/ha = 30 gal/acre

Area	Volume (dry)	Volume (liquid)	Weight		
1 square foot = 0.09 m^2	1 cubic yard = 0.76 m^3	1 fluid ounce (imp.)= 28.41 mL	1 ounce = 28.35 g		
1 square yard = 0.84 m^2	1 bushel = 36.37 L	1 pint (imp.) = 0.57 L	1 pound = 453.6 g		
1 acre = 0.40 ha		1 gallon (imp.) = 4.55 L	1 ton = 0.91 tonne		
		1 gallon (U.S.) = 3.79 L			



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