PURDUE UNIVERSITY

PURDUE EXTENSION
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2007 Purdue Crop Cost & Return Guide

(The numbers in this publication are best considered as general guidelines when beginning the process of generating one's own specific crop budgets for 2007.)

Table 1. Estimated per Acre Crop Budgets for Low, Average, and High Productivity Indiana Soils

	Crop Budgets for Three Yield Levels[1]														
	Low Productivity Soil					Average Productivity Soil					High Productivity Soil				
	Cont. Corn	Rot. Corn	Rot. Beans	Wheat	DC Beans	Cont. Corn	Rot. Corn	Rot. Beans	Wheat	DC Beans	Cont. Corn	Rot. Corn	Rot. Beans	Wheat	DC Beans
Expected yield per acre[2]	118.9	126.5	39.6	56.4	23.4	147.1	156.5	49.0	69.8	28.9	181.0	192.5	60.3	85.9	35.6
Harvest price[3]	$3.71	$3.71	$7.65	$4.05	$7.65	$3.71	$3.71	$7.65	$4.05	$7.65	$3.71	$3.71	$7.65	$4.05	$7.65
Market Revenue	$441	$469	$303	$228	$179	$546	$581	$375	$283	$221	$671	$714	$461	$348	$272
Less variable costs[4]															
Fertilizer[5]	$68	$63	$28	$44	$18	$85	$79	$34	$58	$21	$106	$98	$40	$75	$25
Seed[6]	39	39	39	26	45	43	43	39	26	45	45	45	39	26	45
Chemicals[7]	49	30	12	N/A	10	49	30	12	N/A	10	49	30	12	N/A	10
Dryer Fuel	22	18	N/A	N/A	3	27	22	N/A	N/A	3	34	27	N/A	N/A	4
Machinery Fuel @ $2.20	16	16	7	10	7	16	16	7	10	7	16	16	7	10	7
Machinery Repairs[8]	10	10	6	10	9	10	10	6	10	9	10	10	6	10	9
Hauling[9]	10	11	3	5	2	12	13	4	6	2	15	16	5	7	3
Interest[10]	11	9	6	5	5	12	11	6	6	6	14	12	6	7	6
Insurance/misc.	15	15	12	3	4	15	15	12	3	4	16	16	12	3	4
Total variable cost	$240	$211	$113	$103	$103	$269	$239	$120	$119	$107	$305	$270	$127	$138	$113
Contribution margin[11] (Revenue - variable costs)	$201	$258	$190	$125	$76	$277	$342	$255	$164	$114	$366	$444	$334	$210	$159

[1]Estimated yields and costs are for yields with average management for three different soils representing low, average, and high productivity soils. Historically, the high yield has been based on Brookston soil, which is one of the most productive soils in Indiana. The high rotation corn yield shown here is likely 5 to 10 bushels per acre higher than one would expect on average for the top one-third of corn yields in Indiana.

[2]These yields assume average weather conditions and timely plant/harvest date, except soybean double crop yield, which is based on July 1 plant date. Continuous corn, soybean, and wheat yields are a percent of rotation corn yield: continuous corn 94% assumes a chisel plow tillage system; drill soybeans 31.3%; and wheat 49.2% on low productivity soil and 44.6% on average and high productivity soils. Double crop soybeans (South-central Indiana) are 59% of rotation soybeans.

[3]Harvest corn price is December 2007 CBOT futures price less $0.25 basis. Harvest soybean price is November 2007 CBOT futures price less $0.30 basis. Harvest wheat price is July 2007 CBOT futures price less $0.75 basis. The prices shown here were estimated using closing prices on February 8, 2007. These prices will change.

[4]Seed, fertilizer, chemical, and fuel prices are based on January 2007 quotes.

[5]Fertilizer based on tri-state fertilizer recommendations (Source: Michigan Extension Bulletin E-2567, July 1995). Lime amounts represent the pounds of standard ag lime needed to neutralize the acidity from the nitrogen supplied from sources other than ammonium sulfate. Pounds of N-P_2O_5-K_2O-lime by crop and soil: continuous corn, 130-44-52-391, 169-54-60-506, 215-67-69-644; rotation corn, 111-47-54-332, 143-58-62-430, 180-71-72-540; rotation beans, 0-32-75-0, 0-39-89-0, 0-48-104-0; wheat, 51-36-41-154, 75-44-46-224, 102-54-52-308; double crop beans, 0-19-53-0, 0-23-61-0, 0-29-70-0. Fertilizer prices per lb.: NH_3 @ $0.28; urea @ $0.40; P_2O_5 @ $0.38; K_2O @ $0.21; lime @ $18/ton. 5-10% more nitrogen might be needed on poorly drained soils. All soil tests for phosphorus and potassium are in the maintenance range, and the pH is in the recommended range.

[6]Corn assumes non-GMO seed. Depending on variety and seeding rate, GMO corn would add $15 or more per acre. Soybean seed prices include Round-Up Ready® varieties.

[7]Corn rootworm insecticide @$18.90 per acre is included for continuous corn and should be added to rotation corn in northern Indiana.

[8]Repairs are based on approximately five-year-old machinery. For older machinery, per acre repairs and downtime cost will be higher and indirect machinery costs will be lower.

[9]Hauling charge represents moving grain from field to storage. Based on Machinery Cost Estimates: Harvesting, University of Illinois, Farm Business Management Handbook, FBM 0203, July 2006.

[10]Interest is based on 8.75% annual rate for 9 months for seed, fertilizer, and chemicals, and for 6 months for half the machinery fuel and repairs and all the insurance/misc.

[11]Contribution margin is the return to the unpaid operator labor/management, machinery services, and land resources.