

was the average "opportunity cost" reported for operators' labor. Other fixed costs were personal taxes and machinery and building depreciation. Interest on fixed costs was charged at 6% per annum.

Yields.—Wheat yields on the study farms were taken from Agricultural Stabilization and Conservation Service records. Five year average (1961-1965) normal yields were used to avoid the problem of basing costs of production on one production year.

Prices.—Wheat prices were required in the calculation of some elements of cost and in analyzing costs and returns of the wheat enterprise. The average wheat price for the Panhandle for 1961-65 was \$1.79 per bushel. This includes market price plus average value of 44 cents per bushel for wheat certificates.

COST ANALYSIS

Total costs of producing wheat were determined for the wheat enterprises in each size class. A weighted average cost per acre of producing wheat was then found for all wheat enterprises in each size class for each of the three study areas. The data for the three study areas are combined in this article since our intent is to discuss the effect of wheat enterprise size on cost efficiency. In Table 1 the budgeted costs of wheat production are presented for the five wheat enterprise size classes. Wheat production costs were \$1.83, \$1.53, \$1.44, \$1.43, and \$1.44 per bushel for size classes 1 to 5 respectively.

TABLE 1.—BUDGETED COSTS PER ACRE BY SIZE CLASS, NEBRASKA PANHANDLE

Item	Size				
	Class 1, 11 growers	Class 2, 14 growers	Class 3, 15 growers	Class 4, 17 growers	Class 5, 10 growers
Range in acres.....	35-77	94-198	200-319	355-640	807-1,488
Average acres of wheat per farm.....	59	142	258	482	1,006
Fixed costs.....	\$33.14	\$28.68	\$26.64	\$26.76	\$23.83
Land charge.....	14.23	14.77	15.19	16.33	15.95
Personal taxes.....	.81	.46	.31	.44	.38
Depreciation.....	9.32	5.82	4.65	5.16	4.50
Operators' labor.....	7.71	6.84	5.84	4.24	2.56
Opportunity interest, fixed costs.....	1.07	.79	.65	.59	.44
Variable costs.....	15.64	12.95	13.00	13.19	14.63
Hired labor.....	.90	.47	.62	1.43	3.08
Harvesting ¹	2.51	2.38	2.31	2.36	2.38
Custom hauling.....	1.04	.77	1.25	.96	1.19
Own hauling.....	.92	.70	.51	.56	.44
Storage, commercial.....	.09	.33	.22	.17	.08
Crop insurance.....	1.14	1.02	1.62	1.24	1.27
Buildings maintenance and machinery repair.....	2.46	1.45	1.05	1.29	1.19
Miscellaneous.....	2.71	2.46	1.93	1.41	1.26
Seed.....	1.54	1.47	1.50	1.60	1.58
Fuel, oil, grease.....	1.01	.87	.73	.68	.61
Food and shelter for hired labor.....	.35	.13	.36	.42	.33
Fertilizer.....	.03	.02	.06	.07	.09
Chemicals.....	.08	.15	.13	.27	.32
Opportunity interest, variable cost.....	.86	.73	.71	.73	.81
Total costs.....	48.78	41.63	39.64	39.95	38.46
Cost.....	1.83	1.53	1.44	1.43	1.44

¹ The cost of custom harvesting was prorated over all wheat acres harvested. The typical custom harvesting charge was \$3.50 per acre plus 5 cents for each bushel of yield over 20 bushels per acre.

Fixed costs declined from \$33.14 per acre for size class 1 to \$23.83 for size class 5. Depreciation and operator labor were the cost items mainly accounting for a \$9.31 per acre decrease. Variable costs decreased from a high of \$15.64 per acre for size class 1 to a low of nearly \$13.00 per acre for size classes 2, 3, and 4, then increased to \$14.63 per acre for size class 5. Hired labor costs increased from \$.90 per acre to \$3.08 per acre from size class 1 to 5. Other variable costs remained nearly constant or declined.

Economies of size, therefore, result from more efficient uses of machinery, labor, and some of the variable cost items by larger farmers. Increased efficiency in operator labor for the larger wheat enterprises is partially offset by higher