

“WHAT DOES IT TAKE TO EARN A LIVING ON THE FARM?”

Gary A. Hachfeld, Extension Educator

Introduction:

Agriculture is an integral part of Minnesota's economy. Collectively the production, processing, marketing, and distribution of agricultural products accounts for approximately \$16 billion dollars of state revenue. Minnesota is the seventh largest agricultural producer overall in the US. Minnesota ranks 4th in crops sold and 8th in livestock products sold. Agricultural production, processing and distribution entities employ thousands of workers in Minnesota as well. Agricultural employment in Minnesota is second only to that of manufacturing. Over 40,000 jobs are directly or indirectly associated with agriculture in Minnesota. Surprisingly, only 19% of all agricultural employment is at the farm or production level. All other agricultural employment is in processing, marketing, ag services whole sale and retail trade.

The agricultural industry has changed drastically in the past several years, including the farms where raw agricultural products are produced. Also, land values have increased dramatically. Cash rent land has skyrocketed to a level of \$300.00 per acre or more in places. Costs of inputs, especially energy based products such as fertilizer and chemicals, have increased dramatically in price. Minnesota crop farmers have experienced unprecedented crop prices.

As input costs increase and commodity prices farmers receive fluctuate, profit margins change over time. As these changes occur, farmers have had to change their businesses. Some farmers have gone out of business. Some are farming part-time and work off the farm to supplement their income. Others have gone to alternative farming methods in order to remain in farming. Yet others still farm full-time and they have increased the size of their farms or looked to alternative enterprises in order to remain profitable. Whether we agree or disagree with these changes, the changes are a function of the changing agricultural industry.

The following data is presented not to justify or support the changes in agriculture. Rather, it is put forth as one approach to quantifying and explaining what is happening. The numbers presented are real numbers from several hundred real farm families throughout the southern one-third of Minnesota. These families have kept records on their farm business as well as their household and personal expenses. As you study the data, it becomes clear that agriculture is changing. Appearing in the data are more negative returns for enterprises reflecting very slim or negative profits.

Data Sources:

The data used in the comparisons originates from the data recorded by farm families who are members of the Minnesota State College and University (MnSCU) Adult Farm Business Management Program and the Extension Southwestern Minnesota Farm Business Management Programs. These are real numbers from real farm families operating their farm businesses.

The introduction for each set of regional data gives an explanation of data size, average household and personal expense, family size, what the family living expenditures cover, which counties are involved in the comparison, and a short description of what the enterprise data calculation includes. The data includes the average numbers for the 2007-11 production years. All data is presented on a per acre or per head of livestock basis.

Note: The data listed is an average of all the farm families reporting. Keep in mind that there are farm families performing above as well as below the numbers shown here.

SOUTHWESTERN MINNESOTA FARM BUSINESS MANAGEMENT ASSN.

In 2011, a total of 43 of the 114 farm families from the Extension Southwestern Minnesota Farm Business Management Association kept household and personal expense records. Their average household and personal expense for the year was \$119,913 with an average family size of 3.0 persons. This family living expense includes: food, medical care, charitable donations, supplies, furnishings, clothing, educational costs, recreation expenses, gifts, utilities, child care, house rent and upkeep of the house. Also included are expenses for the purchase of non-farm vehicles, investments, savings, life insurance premiums, income/social security taxes, and non-farm capital purchases.

The Extension Southwestern Minnesota Farm Business Management Association includes farm families from Brown, Cottonwood, Faribault, Jackson, Lincoln, Lyon, Martin, Murray, Nicollet, Nobles, Pipestone, Redwood, Renville, Rock, Watonwan, and Yellow Medicine counties. The following calculations include actual numbers reported by those farm families.

The chart below illustrates how many acres of crop or number of livestock units needed to earn the 2011 average family living amount of \$119,913. The calculations are based upon five year average net return values for the crop and livestock enterprises listed. The net return values are dollars remaining after all farm expenses are paid, **excluding** a charge for labor and management. The numbers are an average of all farm records included in the Southwestern Farm Business Management Association for the 2007-10 years. Also, there are three assumptions related to the calculations. The first assumption is that all income to earn the family living amount would come from one enterprise. That is, to earn \$119,913 from raising corn only, the farm family would have to have 428 acres of corn. To earn all family living expenses from contract finishing hogs only, the family would have to market 31,066 contract fed hogs annually. The second assumption is that all family living income would come from the farm and there is no off-farm income included in the calculation. The third assumption is that the net return values for corn, soybeans, and alfalfa hay are for cash rented land (most producers rent more land than they own) and the crop values include government payments where applicable but do not include a charge for labor and management.

<u>Enterprise</u>	<u>5 Yr. Ave. Net Return</u>	<u>Units Required To Earn Living</u>
Corn/Ac. (incl. govt. pmts.)	\$ 280.36	428 Acres
Soybeans/Ac. (incl. govt. pmts.)	\$ 164.64	728 Acres

Note: If a farmer plants a 50/50 corn & soybean rotation, here is the approximate number of acres required to meet family living expenses. Using the net return numbers and the 2011 family living cost of \$119,913, a farmer would have to have approximately 270 acres of corn and 270 acres of soybeans or a total of 540 acres to earn the family living amount.

Alfalfa Hay/Acre	\$ 213.57	561 Acres
Hogs, Weaning to Finish /Head	-\$ 3.38	???
Contract Finish Hogs/Head	\$ 3.86	31,066 Head
Beef Finish Calves/Head	\$.81	148,040 Head
Beef Cow-Calf/Cow	\$ 19.96	6,008 Cows
Dairy Cows/Cow	\$ 710.40	169 Cows

MnSCU SOUTH CENTRAL/MINNESOTA WEST/RIVERLAND ADULT FARM BUSINESS MANAGEMENT PROGRAM

In 2011, a total of 343 of the 1,207 farm families from the MnSCU South Central/Minnesota West/Riverland Adult Farm Business Management Program kept household and personal expense records. Their average household and personal expense for the year was \$96,315 with an average family size of 3.0 persons. This family living expense includes: food, medical care, charitable donations, supplies, furnishings, clothing, educational costs, recreation expenses, gifts, utilities, child care, house rent and upkeep of the house. Also included are expenses for the purchase of non-farm vehicles, investments, savings, life insurance premiums, income/social security taxes, and non-farm capital purchases.

This MnSCU Adult Farm Business Management Program data includes farm business numbers from farm families in 36 southern Minnesota counties. Calculations include actual numbers reported by farm families.

The chart below illustrates how many acres of crop or number of livestock units needed to earn the 2011 average family living amount of \$96,315. The calculations are based upon five year average net return values for the crop and livestock enterprises listed. The net return values are dollars remaining after all farm expenses are paid, **excluding** a charge for labor and management. The numbers are an average of all farm records included in the MnSCU South Central/Minnesota West Adult Farm Business Management Program for the 2007-11 years. Also, there are three assumptions related to the calculations. The first assumption is that all income to earn the family living amount would come from one enterprise. That is, to earn \$96,315 from raising corn only, the farm family would have to have 519 acres of corn. To earn all family living expenses from contract finishing pigs only, the family would have to market 14,863 contract fed hogs annually. The second assumption is that all family living income would come from the farm and there is no off-farm income included in the calculation. The third assumption is that the net return values for corn, soybeans, and alfalfa hay are for cash rented land (most producers rent more land than they own) and the crop values include government payments where applicable but do not include a charge for labor and management.

<u>Enterprise</u>	<u>5 Yr. Ave. Net Return</u>	<u>Units Required To Earn Living</u>
Corn/Ac. (incl. govt. payments)	\$ 185.44	519 Acres
Soybeans/Ac. (incl. govt. pmts.)	\$ 144.00	669 Acres

Note: If a farmer plants a 50/50 corn & soybean rotation, here is the approximate number of acres required to meet family living expenses. Using the net return numbers and the 2011 family living cost of \$96,315, a farmer would have to have approximately 292 acres of corn and 292 acres of soybeans or a total of 584 acres to earn the family living amount.

Alfalfa Hay/Acre	\$ 224.41	429 Acres
Farrow to Finish Hogs/Head	-\$ 1.54	???
Hogs, Weaning to Finish/Head	-\$ 7.82	???
Finish Feeder Pigs/Head	-\$.34	???
Contract Finish Hogs/Head	\$ 6.48	14,863 Head
Beef Finish Calves/Head.	\$ 77.27	1,246 Head
Dairy Steer Finishing	-\$ 8.48	???
Beef Cow-Calf/Cow	-\$ 15.68	???
Dairy Cows/Cow	\$ 375.24	257 Cows

Information/Data Source:

Extension Southwestern Minnesota Farm Business Management Association

MnSCU South Central/Minnesota West/Riverland College, Farm Business Management Program