

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

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Introduction:

Agriculture is an integral part of Minnesota’s economy. Collectively the production, processing, marketing, and distribution of agricultural products accounts for billions of dollars of state revenue. Minnesota ranks 5th in the U.S. for total agricultural receipts. Minnesota ranks 5th in crops sold and 8th in livestock products sold in the U.S. Minnesota ranks 4th in farm exports from the U.S. Agricultural and employment in Minnesota is second only to that of manufacturing. Over 57,000 jobs are directly or indirectly associated with agriculture in Minnesota.

The agricultural industry has changed drastically in the past several years, including the farms where raw agricultural products are produced. Land values have increased. Land rent and costs of production inputs have also increased. Swings in crop and livestock commodity prices create challenges for Minnesota farmers. This annual shift in income coupled with increasing family living expenses also causes challenges. In addition, in 2014 a new USDA Farm Bill has taken effect.

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 and are renting their land to someone else to operate. 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 an ever adapting agricultural industry.

The following data is presented not to justify or support the changes occurring 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 thousand 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 negative returns for enterprises reflecting very slim or negative profits over the five year period reflected in the data. A five year period is used to compensate for large annual fluctuations in costs and prices.

Data Sources:

The data used in the comparisons originates from the data recorded by farm families who are members of the University of Minnesota Extension Southwestern Minnesota Farm Business Management Association (SWMFBMA) and the Minnesota State College and University (MnSCU) Farm Business Management Program. 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 2011-15 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 below as well as above the numbers shown here.

SOUTHWESTERN MINNESOTA FARM BUSINESS MANAGEMENT ASSN.

In 2015, a total of 32 of the 103 farm families submitting farm records for the University of Minnesota SWMFBMA kept household and personal expense records. Their average household and personal expense for the year was \$158,913 with an average family size of 3.1 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 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 farm families from these counties who kept household and personal expense records.

The chart below illustrates how many acres of crop or number of head of livestock needed to earn the 2015 average family living amount of \$158,913. 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 2011-15 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. For example, to earn \$158,913 from raising corn only, the farm family would have to have 915 acres of corn. To earn all family living expenses from contract finishing hogs only, the family would have to market 56,958 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.)	\$ 173.74	915 Acres
Soybeans/Ac. (incl. govt. pmts.)	\$ 81.26	1,956 Acres
Note: If a farmer plants a strict 50/50 corn & soybean rotation, here is the approximate number of acres required to meet family living expenses of \$158,913. A farmer would have to have approximately <u>623 acres of corn and 623 acres of soybeans</u> or a total of 1,246 acres to earn the family living amount.		
Alfalfa Hay/Acre	\$ 268.18	593 Acres
Hogs, Weaning to Finish /Head	\$ 9.83	16,166 Head
Contract Wean to Finish/Head	\$ 2.79	56,958 Head
Beef Finish Calves/Head	-\$ 2.20	????? Head
Beef Cow-Calf/Cow	\$ 179.91	883 Cows

Information/Data Source:

*University of Minnesota Extension Southwestern Minnesota Farm Business Management Association
http://www.cffm.umn.edu/Publications/Pubs/FBMA/SW_MN-FBMA_2015.pdf*

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

In 2015, a total of 368 of the 1,287 farm families submitting farm records for the southern Minnesota MnSCU Farm Business Management Program kept household and personal expense records. Their average household and personal expense for the year was \$101,316 with an average family size of 2.9 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 chart below illustrates how many acres of crop or number of livestock units needed to earn the 2015 average family living amount of \$101,316. 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 2011-15 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. For example, to earn \$101,316 from raising corn only, the farm family would have to have 873 acres of corn. To earn all family living expenses from contract finishing pigs only, the family would have to market 34,344 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)	\$ 116.04	873 Acres
Soybeans/Ac. (incl. govt. pmts.)	\$ 97.05	1,044 Acres
Note: If a farmer plants a strict 50/50 corn & soybean rotation, here is the approximate number of acres required to meet family living expenses of \$101,316. A farmer would have to have approximately <u>476 acres of corn and 476 acres of soybeans</u> or a total of 952 acres to earn the family living amount.		
Alfalfa Hay/Acre	\$ 317.22	319 Acres
Hogs, Weaning to Finish/Head	\$ 3.58	28,301 Head
Finish Feeder Pigs/Head	\$ 7.20	14,072 Head
Contract Wean to Finish Hogs/Head	\$ 2.95	34,344 Head
Beef Finish Calves/Head.	\$ 205.59	493 Head
Dairy Steer Finishing	\$ 179.87	563 Head
Beef Cow-Calf/Cow	\$ 164.27	617 Cows
Dairy Cows/Cow	\$ 528.39	192 Cows

Information/Data Source:

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

<http://www.fbm.mnscu.edu>