

**Computer Use in Agriculture Increasing: Access to the Internet Driving Increased Interest;
Use for Farm Business Management Should Increase**

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According to a recent survey by USDA-NASS, computer use in farms and ranches increased to 64 percent in 2009 compared to 47 percent in 1999. Access to the Internet to keep up with the information age appears to be one of the motivating reasons for increased farm computer usage. According to the study, about 59 percent of U.S. farms now have Internet access, compared with 57 percent in 2007, 29 percent in 1999 and 13 percent in 1997. Sixty percent of crop farms have Internet access in 2009, compared with 58 percent of livestock farms.

The use of computers for farm business management, however, increased only one percent since 2007 to thirty-seven percent in 2009, compared to 23 percent in 1999 and 21 percent in 1997. This use remains relatively low and should increase, especially as the weakened economy increases financial risk in the farm and ranch sector. Forty-five percent of the crop farms use computers for farm business management, compared to only 37 percent of livestock farms.

The increased availability of Digital Subscription Line (DSL) service, which improved and substantially increased access to the Internet, had a significant impact in the increased use of computers in farm/ranch applications. Satellite and wireless were each reported as the primary internet access methods on 13 percent of those U.S. farms with Internet access. Cable was reported as the primary access method on 11 percent of the farms.

Computer Use Concentration on Large Farms

Computer usage is concentrated primarily on large farms. In 2009, 81 percent of U.S. farms/ranches with annual sales and government payments of \$250,000 or more now have computer access, compared to about 70 percent of farms/ranches with sales and government payments between \$100,000 and 250,000 and slightly less than 62 percent of farms/ranches with sales and government payments of less than \$100,000.

Computer Use in Texas

In Texas, the results of the survey indicated that 61 percent of the farms/ranches have access to a computer, up from 48 percent in 1999. Only 30 percent of farms/ranches in Texas use a computer for their farm business, compared to 20 percent in 1999. Access to the internet also appears as the prime reason for the increased computer usage since computerizing farm business management appears to be growing very slowly. Farms in Texas with internet access increased from 31 percent in 1999 to 57 percent in 2009.

Computers in Farm/Ranch Business Management

The use of computers to gain access to and process information is being credited as one of the primary reasons that the U.S. economy has prospered and will probably recover very quickly from the recent economic down-turn. The farm sector is following the same information access process which has been so successful in the urban business sector. Information technology, first introduced on a large scale in the 1980's, has made a big difference in better business performance. Widespread and effective application of information and other technologies appears to have had a significant effect to increase productivity and the reduction in business costs. Agriculture's ultimate benefit will most likely be more efficient crop production. While most producers adopt new technology to increase production, increased profit is more likely with the adoption of increased data processing and analysis at the farm.

Computers can be used very effectively to coordinate revenue and cost management, such as calculating break-even yields/prices to recapture capital exposure, conduct sensitivity analysis to evaluate the impact of alternative outcomes and to monitor progress and the actual financial performance of the business as a production plan is executed.

In terms of collecting, digesting and analyzing production data, Dr. Danny Klinefelter, Professor and Extension Economist, contends that most producers have no real clue how well they stack up against their competition. The majority think they're average or a little above. It's not enough to know how an operation compares to the average. How does it stack up against the top 25 or the top 10 percent is a better comparison. Numerous university studies have found \$100 or more differences in net income per acre between the top 25 percent and the bottom 25 percent of farmers in the same region, producing the same crops even after adjusting for differences resulting from owning versus renting. A Kansas State study found about half the difference was due to revenue and about half due to costs. The use of a computer in farm/ranch business management could help to improve performance efficiency.

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