Irrigation Can Pay In Tennessee

Larger Field Size Can Make Irrigation Work In Tennessee

BETTY VALLE GEGG
MidAmerica Farmer Grower

JACKSON, TENN.

The economics of irrigation in Western Tennessee is somewhat different than in other states, according to Chuck Danehower, UT area farm management specialist located in Ripley, Tenn. Danehower works in Lauderdale County and covers eight counties in western Tenn.

"What drives the economics of irrigation in Tennessee is the cost of wells," he said. "We have a fairly high well cost. The water is deeper in Tennessee with most wells averaging 300 to 500 feet deep. In some of the Mississippi river bottoms the depth might be less than that and the well cost is less there, but on the upland type ground the well cost can be $40,000 to $50,000. A farmer needs a large acreage to be able to spread that cost out."

These costs do not include the center pivot which will run $300 to $400 an acre.

"If you are going to put 100 acres out then you have say $40,000 in a pivot plus $50,000 in a well, that is $90,000 spread over 100 acres and that is just not going to work very well economically," Danehower said. "If it is spread over 200 or 300 acres, then of course you can maybe make it feasible."

There are some farmers in Western Tennessee that do irrigate almost 100 percent of their land. They have found a way to make it economical and are doing better with it than when they dryland farmed. The need for irrigation here is less intense than in other areas because normally Tennessee gets good rainfall.

"I looked at some of the data from irrigated and non-irrigated fields and out of 10 years you will have two years where you will make way above average yields with irrigation," he said. "That will be like last year, 2007. The difference between the irrigated and the non-irrigated will be quite a bit higher, then one year out of 10 you probably won't have a difference in yield, then the other seven years it is going to bounce around. The difference between irrigated and non irrigated yields will be about average, plus or minus a little bit."

Danehower said irrigation is economical over the 10-year stretch, but it is going to depend on field size and how much can be put under pivot.

"It is going to depend on the field size and the well cost, but if you get a large enough field you can make it feasible," he said.

Most of the fields are small in Western Tennessee. Some farmers have cleared some trees to make a larger field for a pivot circle a larger area.

"Sometimes they may do a windshield-wipe type on a pivot in order to cover more acres," Danehower said. "Those seem to be working pretty well for them."

Chuck Danehower, UT area Farm Management Specialist located in Ripley, Tenn. explains the economics of irrigation in Tennessee. Photo by John LaRose

He said a field needs to be somewhere in the 125-175 acre size to make it feasible.

With fields that size and the water available, Danehower recommends a farmer look at it from an economic standpoint and see if it is feasible.

"With the higher prices we have on crops, which we don't know if we are going to continue in that upward trend, but certainly those prices are helping to make the system feasible," he said. "Prices have steadily increased the last three to five years on pivots. We are seeing a lot of landowner interest in pivots with their producers that are farming the ground that they are willing to go in and share some of that cost of putting the pivot in because they can see that they are going to get a higher return on their money on that land. Those are all encouraging signs and it takes only a year like last year, 2007 and the drought, to spur some interest on for the next year."

If producers have enough cash flow to get into a system, Danehower feels the investment will bring a good return. Δ