This is Kansas Profile. I'm Ron Wilson, director of the Huck Boyd National Institute for Rural Development at Kansas State University.

Beef. That's the four-letter word which has been at the heart of a growing economy in southwest Kansas for decades, as beef cattle production and processing have expanded. But now there's another kind of cattle production going on in southwest Kansas that centers on a different four-letter word: Milk. It's today's Kansas Profile.

Last week we learned about Steve Irsik, the entrepreneurial agriculturist whose family has helped build the ag economy in southwest Kansas. For decades, their family operation has centered on the irrigated grain production and beef feedyards which have been the hallmark of agriculture in southwest Kansas.

One day Steve and his banker were on an eastern Kansas ag tour which visited a modern dairy. Steve said to his banker, "Do you think I should have one of these?" His banker replied, "You bet." Steve answered, "Well, call me if somebody comes along who can run one." Six weeks later, Steve got a call. A man with large dairy experience in Washington state was coming to Kansas.

That led to the creation of Royal Farms Dairy in the year 2000. Today, Royal Farms Dairy milks 6,300 head of dairy cows. Another 7,000 head are in heifer development.

One of the striking things about Royal Farm Dairy is the innovative way that water and nutrients are used in the operation. For example, the dairy cattle generate 30,000 tons of manure per year. The dairy is using that manure as organic fertilizer to fertilize the crops.

"We don't buy any commercial fertilizer," Steve Irsik said. "It is a win-win situation. Yields are increasing, organic matter is increasing in the soil, and we are cutting costs."

Use of water is another innovative practice at Royal Farms Dairy. At the beginning, the dairy moved 1,000 acre feet of water allocation from crop production to dairy use.

The dairy minimizes water usage by using each gallon multiple times. Water that is used to cool milk is also used to flush pens and holding areas. Ultimately, this nutrientenhanced water is then stored in a lagoon until it is used to strategically fertilize and irrigate 1,600 acres. "All the lagoon water comes back to the farm," Steve said. For its efforts, Royal Farms Dairy has been honored with the Kansas Banker's Association Environmental Stewardship Award.

"We know a bunch of people in the dairy business around the U.S.," Steve said. The Irsiks have also added a second dairy, called the Noble dairy, located south of Garden City. "There we are milking 2,400 cows twice a day."

What are the keys to success in agribusiness today? "It's really important for ag operations to think multigenerationally," Steve said. The Irsiks have organized their operations as businesses with family members involved.

"You must keep your capital together, work together to develop a shared vision, and nurture and protect what preceding generations have built," he said.

Over time, the beef and dairy production businesses in southwest Kansas have led to population growth, in contrast to the general population loss found in most of the rest

of rural Kansas. After feedyards began in the 1950s and `60s, major beef packing plants were built in Ford, Finney and Seward counties. Then came large dairies and milk processing. From 1971 to 2007, the population in Ford, Finney and Seward County grew by 64 percent. During that same time, the metropolitan counties of Kansas grew by 48 percent and other rural counties fell by 19 percent.

That's significant, because Royal Farms Dairy has brought growth to a rural community. The dairy is located between Garden City and the rural community of Ingalls, population 331 people. Now, that's rural.

Beef. It's the four letter word which is at the center of the agribusiness complex in southwest Kansas, which has now been joined by milk. We salute Steve Irsik and all those involved with Royal Farms Dairy for making a difference by building this business while conserving water and resources. Beef and milk have helped create another four letter word: Grow.

And there's more. The Irsiks have also helped bring about a new way of implementing an old organization. We'll learn about that next week.

For the Huck Boyd National Institute for Rural Development, this is Ron Wilson with Kansas Profile.