

# Crossroads Resource Center

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**Tools for Community Self-determination**

## **Sicangu Lakota Oyate Nation Farm & Food Economy**

by

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for

Rosebud Economic Development Corporation

for its

## **Sicangu Lakota Oyate Nation Food Sovereignty Plan**

October 29, 2019

*Data compiled from public data sets covering Todd County in South Dakota  
and the Sicangu Lakota Oyate (Rosebud) Tribe*

### **Overview:**

The population of Todd County increased 66% in the past 49 years, from 6,058 to 10,065. Personal income has risen even faster, tripling from \$84 million (in 2017 dollars) to \$252 million. This means that Todd County residents have considerable spending power to purchase food items.

Yet farm income trends are very discouraging, with 223 Todd County farmers selling \$44.8 million of food products per year (1989-2017 average), spending \$45.7 million to raise them, for an average loss of \$921,000 each year. Most of these farm commodities are sold to distant buyers.

Todd County residents purchase \$21 million of food each year, including \$12 million to eat at home. Almost all of this food is purchased from sources outside the county.

At a time when health professionals recommend that consumers eat 5 fruits and vegetables each day, only one farm raised vegetables, and none raise fruit.

Even more starkly for a proud agricultural county, many people go hungry. About 7,000 residents (71%) of Todd County earn less than 185% of federal poverty guidelines. At this level of income, children qualify for free or reduced-price lunch at school. People earning such low incomes are the most likely to experience social and economic hardship.

Public programs do try to mitigate these shortfalls. Residents collected \$8 million in SNAP benefits (food stamps) in 2017, meaning that SNAP dollars are a more important source of income for Todd County residents than farming is. More than 60% of the households that qualify for SNAP benefits have at least one person working a job.

If each Todd County resident purchased \$5 of food each week directly from some farm in the county, this would generate \$2.6 million of farm income annually.

## **Background Data:**

### **Todd County Population Trends (Bureau of Economic Analysis, 2017)**

*Population in 1969: 6,058*

*Population in 2017: 10,065*

*Population increase since 1969: 66%*

### **Todd County Personal Income Trends (Bureau of Economic Analysis, 2017)**

*Personal Income in 1969: \$84 million (in 2017 dollars)*

*Personal Income in 2017: \$252 million*

*Personal Income increase since 1969: 200%*

*(That is, income tripled over this time, after adjusting for inflation)*

### **Details on Personal Income in Todd County (Bureau of Economic Analysis, 2017)**

The largest source of personal income is government jobs (this includes schools, colleges, and tribal government as well as state and local government) with workers earning \$119 million. Transfer payments (from government programs such as pensions) rank second, accounting for \$93 million of personal income [see detail below]. Capital income (from interest, rent or dividends) ranks third at \$37 million. Retail and Health Care workers each earn \$7 million. Several sources of income are not fully reported due to confidentiality concerns. Note that income from public sources makes up 84% of all personal income in the county.

Income earned from transfer payments includes \$12.4 million of retirement and disability insurance benefits; \$44.9 million of medical benefits; \$22.2 million of income maintenance benefits; \$495,000 of unemployment insurance; and \$1.8 million of veterans' benefits.

Government income includes \$24 million of income earned by federal workers and \$94 million earned by state and local government workers. Military personnel earn \$1.8 million of personal income.

Although the Todd County population and personal income have both risen considerably since 1969, there has been limited public planning to assure a secure and stable food supply.

### **Issues affecting low-income residents of Todd County:**

*Data from Federal Census of 2013-2017, Bureau of Labor Statistics, & Bureau of Economic Analysis.*

Unemployment rates among Todd County residents have not been consistently measured. Estimates vary from 7.4% to 85%. *Source: Collaborative Research Center.*

About 7,000 residents (71%) of Todd County earn less than 185% of federal poverty guidelines. *Source: Federal Census.* At this level of income, children qualify for free or reduced-price lunch at school. People earning such low incomes are the most likely to experience social and economic hardship. All Todd County students currently receive free or reduced lunch. *Source: 2018 Community Health Profile.*

However, only 1,140 households (approximately 4,024 people) were recorded by the U.S. Census as receiving SNAP benefits (formerly known as food stamps) on average during the years 2013-2017. Of these households, 60% had one or more workers. *Source: Federal Census.* The Bureau of Economic Analysis reports that SNAP recipients in Todd County received \$8 million of benefits in 2017, after peaking at \$10 million from 2010 to 2012, as a result of the global housing finance crisis.

This means average benefits were \$7,017 per household per year, or \$585 per month, for a household averaging 3.5 people. Presumably most of these benefits were used to purchase food items at local stores, so this also represents a stream of income for local grocers.

The Census further reports that 84% of those receiving SNAP benefits in Todd County were Native American, with another 10% reporting they were members of two or more races, presumably one of which was also Native American. This means 94% of SNAP recipients are tribal people.

Feeding America, the national organization serving food banks, estimates that more than 25% of the Todd County population is food insecure. This is twice the national average of 12.5%. More details are shown in Table 1 below.

**Table 1: Food Insecurity in Todd County, South Dakota**

County	Food insecurity rate	Number of food-insecure people	Cost of needed relief \$ millions
Todd	25%	2,540	\$1.4

*Source: Feeding America Map the Meal Gap. <https://map.feedingamerica.org/county/2017/overall/south-dakota/county/>. Cost of relief is an annual estimate.*

**Food-related health conditions in Todd County:**

84% of South Dakota residents reported in 2009 that they eat less than five servings of fruit or vegetables per day. This is a key indicator of health, since proper fruit and vegetable consumption has been connected to better health outcomes. Many providers recommend consumption of at least five servings of fruit and vegetables each day, while others suggest even higher rates. *Source: Centers for Disease Control and Prevention BRFSS.*

68% of South Dakota residents were overweight (38%) or obese (30%) in 2018. *Source: Centers for Disease Control and Prevention BRFSS.*

6.5% of South Dakota residents have been diagnosed with diabetes as of 2017. Medical costs for treating diabetes and related conditions in the state are estimated at \$690 million annually. *Source: American Diabetes Association.*

The Rosebud 2018 Community Health Profile found that residents of Todd County have fewer social connections than typical South Dakota residents.

Nearly half of the Todd County population has no access to places where they can enjoy physical activity. *Source: 2018 Community Health Profile.*

32% of the people on the Rosebud Indian Reservation are uninsured. Federal programs do provide some coverage through IHS, yet Todd County ranks 59<sup>th</sup> of the 60 counties in South Dakota for health outcomes. IHS also lacks staff or facilities to treat some common conditions. *Source: 2018 Community Health Profile.* Rosebud Indian Health Service (IHS) estimates that it has 12,276 listed users who carry limited or no health care coverage. Per capita spending by IHS was \$3,316. The median age at death for American Indians living in South Dakota was 56 years in 2015, compared with 80 years for all state residents. *Source: Center for Health Outcomes and Population Research (2017).*

### **Potential Institutional Purchasers**

REDCO may wish to explore working with tribal employers or schools to purchase food from tribal farms. Tribal entities hire about 2,000 people currently, and regional schools serve more than 3,500 students. *Source: Collaborative Research Center.*

### **Farms of the Sincangu Lakota Oyate Nation**

*The American Indian Census of Agriculture data for 2017 were released on August 26, 2019. Note that many tribes consider their own counts of farmers and crops more accurate than the Census of Agriculture. Yet this is the most readily available public data source.*

*Data are separated into two categories. The first includes farms that are part of the Rosebud reservation or on tribally owned lands. The second category is farms operated by American Indians. These two categories may or may not overlap.*

*The Census of Agriculture defines a “farm” as “an operation that produces, or would normally produce and sell, \$1,000 or more of agricultural products per year.”*

#### *Farms:*

- Rosebud Tribe lands include 354 farms, 107 (30%) of which were operated by American Indians.
- Total land in farms was 1.4 million acres. Of this, 545,838 acres (39%) were operated by American Indians.
- 617,492 acres of this farmland were located on reservations.
- 233,238 acres of reservation farmland were operated by American Indians.
- Rosebud cropland was worked by 278 farms covering 235,555 acres, of which 51,857 acres were operated by 71 American Indian farmers.
- 12,223 acres were irrigated by 43 farmers, with 1,933 acres irrigated by 9 American Indian operators.
- 85 of the 354 farmers farming on reservation lands were full owners. 35 of the 107 American Indian farmers were owners.
- 53 of the 354 farmers were tenants, while 24 of the 107 American Indian operators were tenants.

- 16 farms were owned by the Tribe.
- 3 farms drain their land using ditches.

*Sales:*

- Rosebud Tribe farms sold \$109 million of commodities in 2017. \$88 million of this was livestock and related products, while \$21 million was crops.
- Farms operated by American Indians sold \$23 million. \$18 million of this was livestock and related products, while \$6 million was crops.
- 32 farms sold less than \$10,000 of products in 2017. 17 American Indian farms sold less than \$10,000 of products.
- 207 farms sold \$100,000 or more of farm commodities. 41 American Indian farms sold more than \$100,000.
- 14 farms sold \$12,000 of food directly to household consumers. 2 American Indian farms directly to household consumers, but *sales figures were not disclosed by USDA in an effort to protect the confidentiality of individual farms.*
- 2 Rosebud farms, and 2 American Indian farms, sold directly to wholesale buyers. Sales figures were not disclosed by USDA in an effort to protect the confidentiality of individual farms.

*Production Expenses:*

- Aggregate production expenses for Rosebud-related farms were \$85 million in 2017.
- Aggregate production expenses for American Indian-operated farms were \$20 million.
- The top expense items were livestock and feed. Third was interest on loans, followed gasoline and oil purchases, then hired labor.

*Farming Practices:*

- 62 farms and 12 American Indian farms used no-till practices.
- 44 farms and 7 American Indian farms used reduced-tillage practices.
- 52 farms and 9 American Indian farms used intensive tillage practices.
- 41 farms and 9 American Indian farms planted cover crops.

*Livestock:*

- 3 farms, all owned by American Indians, held an inventory of 1,157 bison. Two farms sold bison. Sales figures were not disclosed by USDA in an effort to protect the confidentiality of individual farms.
- 299 farms and 82 American Indian farms held inventories of 132,383 and 21,420 cattle respectively. Most all of these are beef cows.
- 291 farms sold 77,431 cattle & calves, while 79 American Indian farms sold 15,959 cattle.
- 8 farms held an inventory of 65 hogs, none owned by American Indian farms. 72 hogs and pigs were sold.
- 7 farms sold 230 sheep and lambs, with no sales by American Indian farmers.

- 29 farms sold 314 horses and ponies, while 5 American Indian farms sold 100 horses and ponies.
- 3 farms sold 31 goats.
- 23 farms, and 3 American Indian farms, held inventories of 434 and 68 laying hens, respectively.
- 7 farms sold 601 broiler chickens.

*Crops:*

- The largest crop grown on Rosebud lands was corn, with 80 farmers producing 2.3 million bushels on 20,498 acres.
- The next most prevalent crop was sunflower seed, with 19 farms raising 8.1 million pounds on 6,190 acres, and 3 American Indian farms selling an undisclosed amount.
- 19 farms raised 687,168 bushels of soybeans on 19,608 acres. 2 American Indian farms raised soybeans.
- 486,602 bushels of wheat were raised by 26 farms on 13,441 acres. 3 American Indian farms raised wheat.
- 171,591 tons of forage were raised on 127,205 acres by 271 farms. 69 American Indian farms raised 31,823 tons of forage on 23,330 acres.
- Four farms raised 18,935 bushels of oats on 435 acres.
- 1 farm raised vegetables.

### **Farms in Todd County**

*Census of Agriculture data for 2017 were released on May 6, 2019*

*Data from Census of Agriculture unless otherwise noted*

- The county has 223 farms that operate 880,043 acres.
- Of these, 96,762 acres are harvested cropland.
- The Census of Agriculture reports that 63 of Todd County's principal farm operators were Native American in 2017, running 56 farms (25%) with a total of 407,727 acres (46%).
- The Census further reports that 221 of Todd County's principal farm operators were White, running 172 farms (77%) with a total of 469,142 acres (53%).
- 8 farms (4%) in the county are 50 acres or less.
- 131 farms (59%) are 1,000 acres or more.
- Average farm operation is 3,946 acres.
- Average value of a farm in the county is \$3.3 million including land and buildings
- 89% of farm product sales were animals and their products.
- 11% of farm product sales were crops.
- 35 farms (16%) sold less than \$10,000 of products.
- 104 farms (47%) sold more than \$100,000 of products.
- These larger farms sold \$49.9 million of crops and livestock, 93% of Todd County's farm product sales.

- 1 farm raised vegetables (*Acreage data for this Todd County farm were suppressed in an effort to protect confidentiality*). Crops tracked by USDA include sweet corn, tomatoes, and cucumbers.
- No farms raised fruits or nuts.
- One farm is certified for organic food production. Sales made by this farm were not disclosed.

**Table 4: Livestock Inventory**

Cattle and Calves	69,062
Chickens, Layers	326
Sheep & Lambs	325
Hogs	65

*Source: USDA Census of Agriculture for 2017.*

**Table 5: Todd County’s Top Farm Products in 2017**

<b>Commodity</b>	<b>Sales</b>
Cattle	\$ 45,866,000
Corn	2,126,000
Other grains	1,106,000
Soybeans	922,000
Wheat	760,000
Horses	387,000
Sorghum	71,000
Hogs & Pigs	14,000
Poultry & Eggs	10,000

**Note:** *The above numbers account for 96% of the county’s farm product sales. Source: USDA Census of Agriculture for 2017.*

**Direct sales made by Todd County farmers:**

- 13 farms (6%) sold \$12,000 of products directly to households (this includes value-added products).
- 2 farms sold products directly to retail stores and wholesalers, but these data were suppressed by USDA in an effort to protect confidentiality (this includes value-added products).

### **Net Cash Income for Todd County farmers:**

Sixty percent (133) of the farms in Todd County showed a positive net cash income in 2017. Forty percent (90) of the county's farms experienced net losses. *Source: USDA Census of Agriculture, 2017. Note that the Census calculates net cash income differently than the Bureau of Economic Analysis does.*

### **Balance of Cash Receipts and Production Costs (BEA):**

223 Todd County farmers sell \$44.8 million of food products per year (1989-2017 average), spending \$45.7 million to raise them, for an average loss of \$921,000 each year. This is a net loss of \$4,130 per farm per year. *Note that these sales figures compiled by the BEA may differ from cash receipts recorded by the USDA Census of Agriculture (above).*

Combined, the county's farmers sold \$1.298 billion of crops and livestock during the years 1989 to 2017, but spent \$1.325 billion to raise them, creating a loss of \$26.7 million to the sector. Farm production costs exceeded cash receipts for 16 years of that 29-year period. Moreover, 40% of the county's farms reported that they lost money in 2017 (*Census of Agriculture*), and Todd County farmers and ranchers earned \$21 million less by selling farm products in 2017 than they earned in 1969 (in 2017 dollars).

Helping to compensate for these losses, Todd County farmers and ranchers earned \$3.7 million per year of farm-related income (29-year average for 1989-2017; *Bureau of Economic Analysis*) — In the year 2017, this was made up of land rental income (\$6.3 million), “other farm-related income” (\$500,000); custom field work for a neighbor (\$305,000), insurance payments (not disclosed), and patronage dividends (\$82,000); (*These data from Census of Agriculture*).

Federal farm support payments are a far more important source of net income than commodity production, averaging \$1.8 million per year (*Bureau of Economic Analysis*) for the county for 1989 - 2017. All told, 127 (57%) of the county's 223 farmers (*Census of Agriculture*) receive subsidies, mostly to raise crops such as corn, wheat, or soybeans that are sold as commodities, not to feed local residents. Since so few farmers receive these subsidies, this income is not distributed evenly among the county's farms. Few of those raising food for local consumers receive any subsidies at all.

SNAP benefits received by low-income residents totaled \$8 million in 2017, far more than farm-related income or government payments to farmers. Both are more rewarding than farm production, with farmers' net loss totaling \$6.4 million in 2017.

### **Todd County's consumers:**

*See also information covering low-income food consumption and food-related health conditions, page 1-2 above.*

Todd County consumers spend an estimated \$21 million buying food each year, including \$12 million for home use. Most of this food is produced outside the county, so the county's consumers spend more than \$20 million per year buying food sourced far away. Lower-income residents of the county (those earning less than \$40,000 per year) purchase 49% of the food consumed in the County.

Rosebud Tribe members spend \$61 million buying food each year, including \$34 million for home use. Most of this food is produced outside the county, so tribal members spend more than \$60 million per year buying food sourced far away.

*Note: The data in this section estimate consumer markets for food among Todd County and Roesbud Tribal members, based on average food consumption in the Midwest. It is highly likely that, due to both limited incomes among county residents and tribal members, as well as wild food gathering, actual food consumption expenditures are less than these data would indicate. Yet these estimates are still valuable in showing how much economic value would be generated if more County residents and tribal members had higher incomes and better access to a wider array of foods. Data derived by Ken Meter from the Bureau of Labor Statistics Consumer Expenditure Survey data.*

Only \$12,000 of food products (0.03% of farm cash receipts and 0.06% of the county’s consumer market) are sold by farmers directly to consumers. This includes both raw farm products and value-added items sold by farms to household consumers, as stated above.

### **Consumer Markets for Food**

*Note: The data below estimate consumer markets for food among Todd County and Roesbud Tribal members, based on average food consumption in the Midwest. It is highly likely that, due to both limited incomes among county residents and tribal members, as well as wild food gathering, actual food consumption expenditures are less than these data would indicate. Yet these estimates are still valuable in showing how much economic value would be generated if more County residents and tribal members had higher incomes and better access to a wider array of foods. Data derived by Ken Meter from the Bureau of Labor Statistics Consumer Expenditure Survey data.*

#### **Todd County, South Dakota: Markets for Food Eaten at Home (2017):**

Based on Midwestern averages, Todd County residents purchase \$21 million of food each year, including \$12 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 2.4
Fruits & vegetables	2.2
Cereals and bakery products	1.5
Dairy products	1.3
“Other,” incl. sweets, fats, & oils	4.5
<b>Total</b>	<b>\$ 11.9</b>

*Source: Bureau of Labor Statistics Consumer Expenditure Survey for 2017. Calculation of state total by Ken Meter using population estimates from the Federal Census.*

If each Todd County resident purchased \$5 of food each week directly from some farm in the county, this would generate \$2.6 million of farm income annually.

**Rosebud Sioux Tribal Population, South Dakota: Markets for Food Eaten at Home (2017):**  
Based on Midwestern averages, 29,028 Rosebud Sioux members purchase \$61 million of food each year, including \$34 million to eat at home. Home purchases break down in the following way:

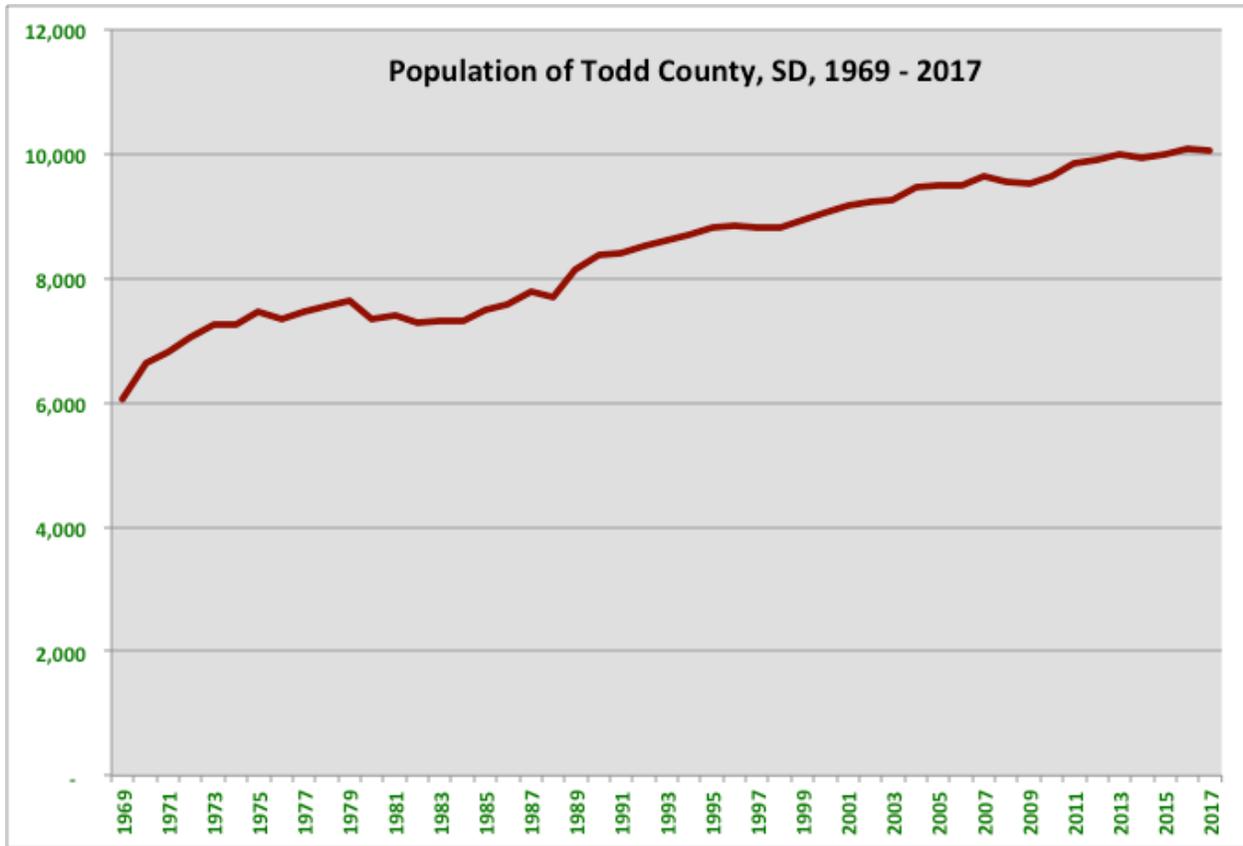
	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 7.1
Fruits & vegetables	6.2
Cereals and bakery products	4.5
Dairy products	3.8
“Other,” incl. sweets, fats, & oils	13.0
<b>Total</b>	<b>\$ 34.5</b>

*Source: Bureau of Labor Statistics Consumer Expenditure Survey for 2017. Calculation of state total by Ken Meter using population estimates from the Federal Census.*

If each Rosebud Tribe member purchased \$5 of food each week directly from some tribal farm, this would generate \$7.5 million of tribal farm income annually.

## Background Data

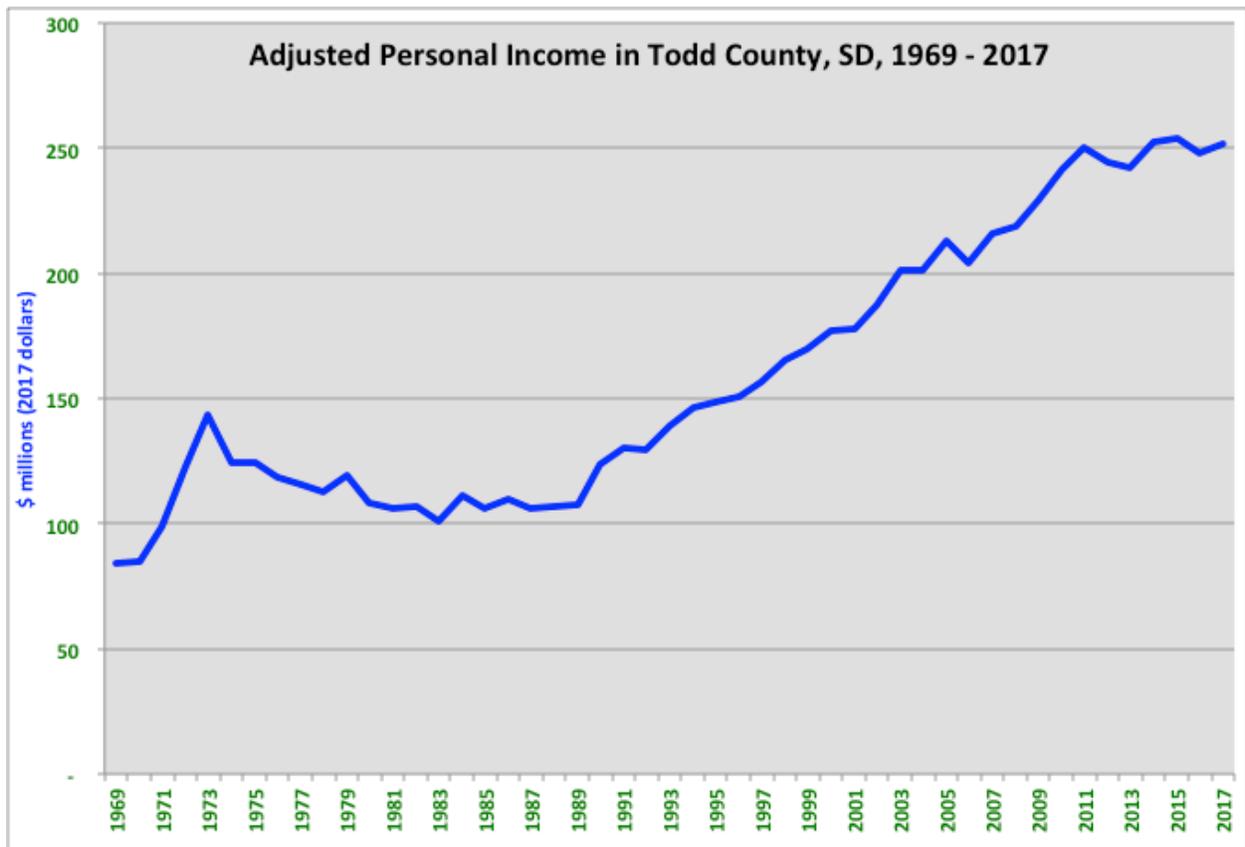
Chart 1: Population of Todd County, South Dakota, 1969 - 2017



Source: Bureau of Economic Analysis

The population of Todd County rose 66% from 1969 to 2017, growing steadily over that time.

**Chart 2: Adjusted Personal Income in Todd County, South Dakota, 1969 - 2017**

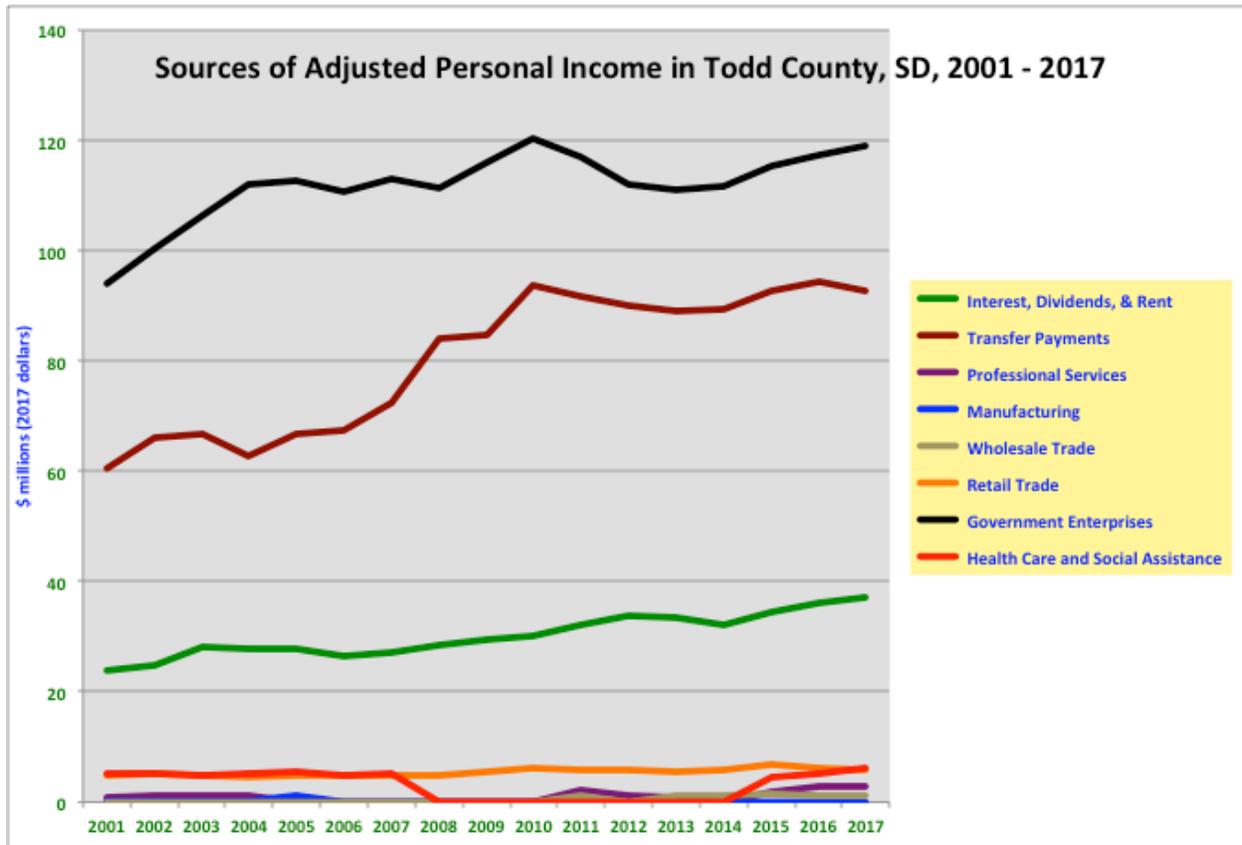


*Source: Bureau of Economic Analysis. Adjusted for inflation using Consumer Purchasing Index published by Minneapolis Federal Reserve.*

As a farming county, personal income in Todd County has been shaped closely by the fortunes of farmers, at least up to 1989, with higher incomes when crop and livestock prices were high, and declining until the farm credit crisis was resolved.

Despite these ups and downs, personal income tripled over the years 1969 – 2017.

**Chart 3: Adjusted Personal Income by Type in Todd County, South Dakota, 1969 - 2017**

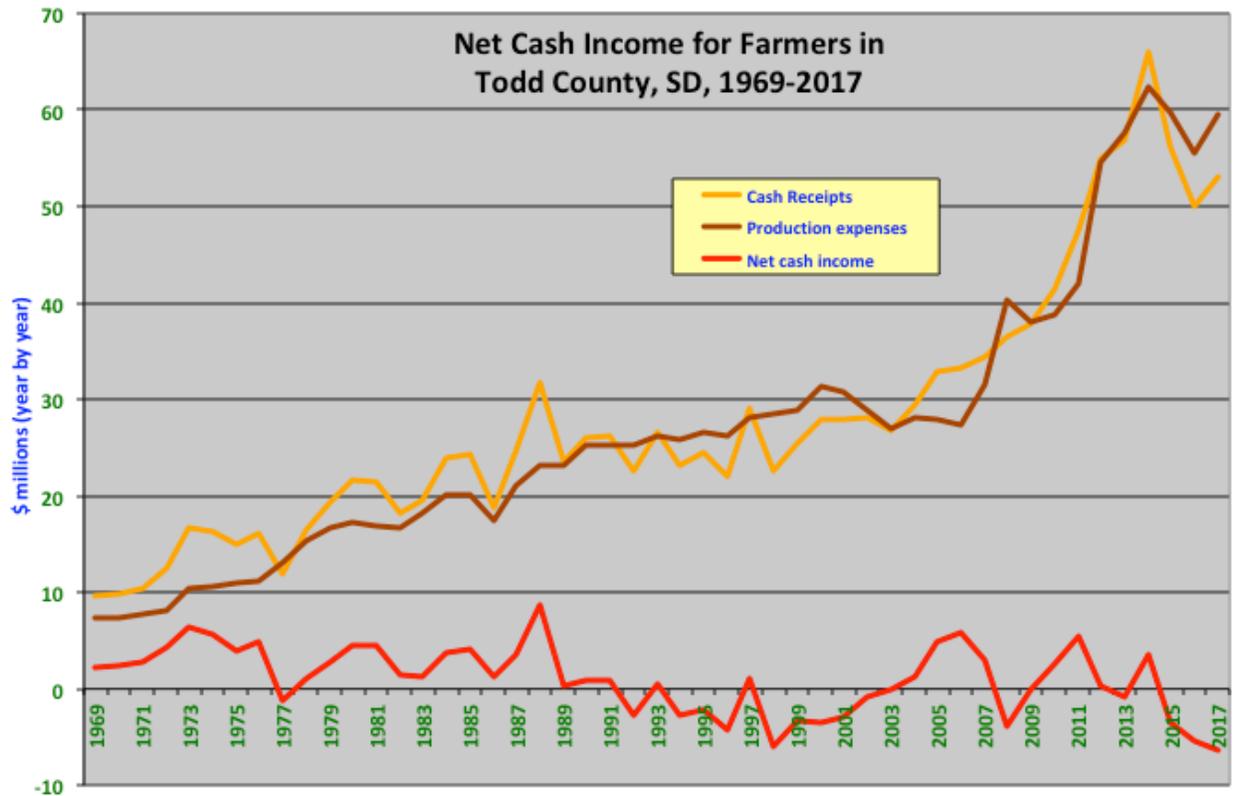


*Source: Bureau of Economic Analysis. Adjusted for inflation using Consumer Purchasing Index published by Minneapolis Federal Reserve.*

Chart 3 shows that the rising sources of income in Todd County were government jobs (mostly with the Rosebud Tribe itself), and increased transfer payments (benefits such as unemployment insurance, workmen’s compensation, or income supplements that are largely run through public programs). This means that 84% of personal income earned in the County derived from public programs, a strikingly high rate.

There was a solid increase in capital income from interest, dividends, and rents, showing that some residents had been able to build new wealth. Other types of income either held steady at low levels, or went unreported as the government suppressed data to protect confidentiality.

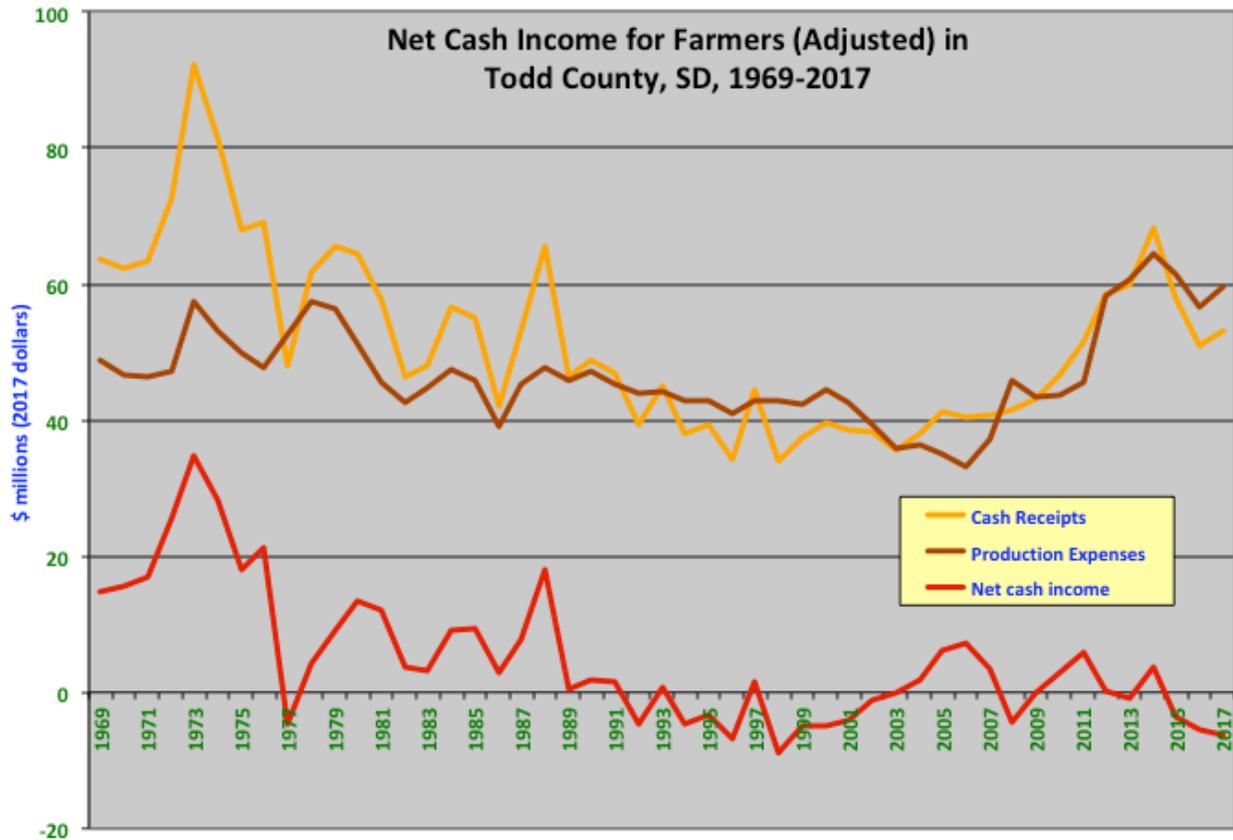
**Chart 4: Net Cash Income for Farmers in Todd County, South Dakota, 1969 - 2017**



*Source: Bureau of Economic Analysis*

Chart 4 shows that commodity farming in the Todd County has been far from profitable over the past 49 years, despite the fact that sales have risen steadily. Only in 13 of the past 29 years did farmers earn more selling crops and livestock than they spent to produce them. Since the end of the farm credit crisis, farmers have lost an average of \$921,000 each year while producing commodities, for an combined loss of \$27 million since 1989. Ironically, rising sales since 2004 have been accompanied by higher production costs, so farmers have lost more money even as sales increased. In 2017, farmers lost \$6.4 million by raising crops and livestock — about half of the money that would be needed to provide all the food Todd County residents need to eat at home in a year.

**Chart 5: Adjusted Net Cash Income for Farmers in Todd County, South Dakota, 1969 - 2017**

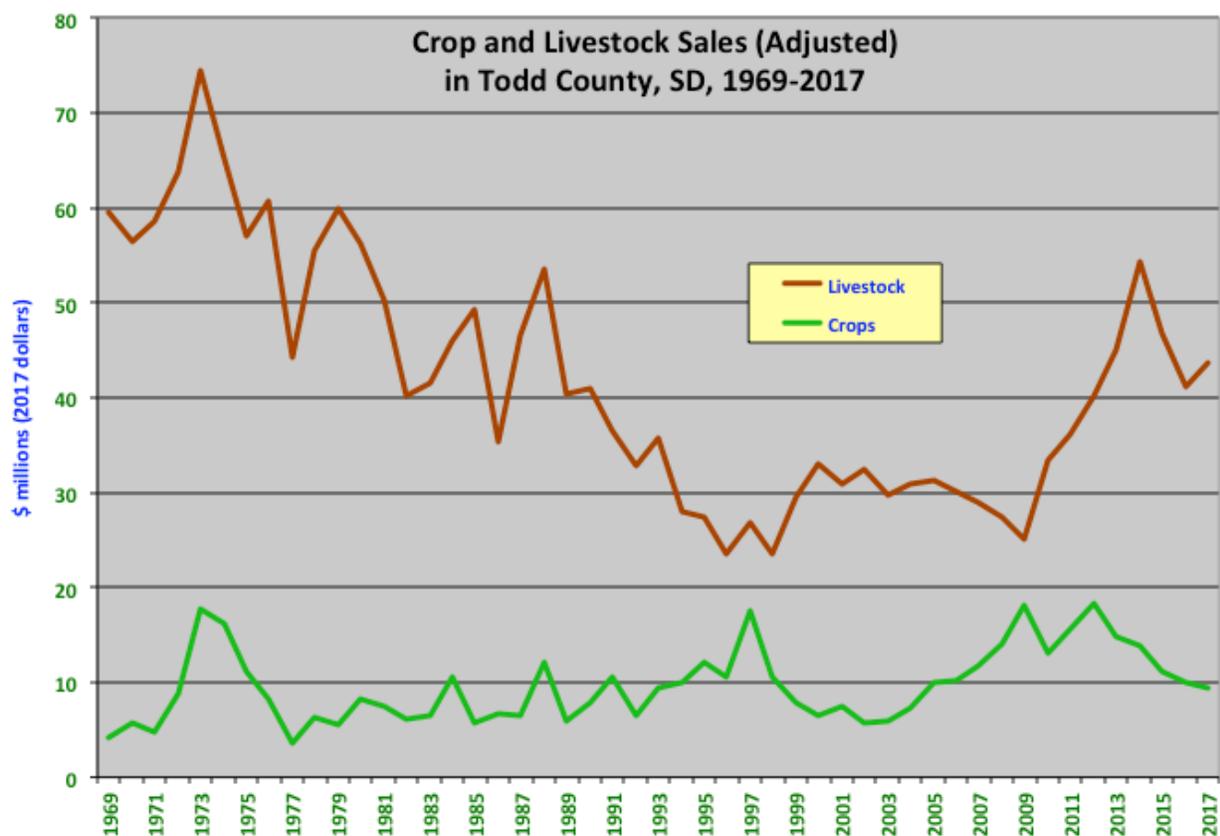


*Source: Bureau of Economic Analysis. Adjusted for inflation using Consumer Purchasing Index published by Minneapolis Federal Reserve.*

After the data in Chart 4 are adjusted for inflation, the losses endured by farmers appear even larger, because the value of the dollar was so much larger in earlier years (Currently the dollar is worth less than one-sixth of the value it held in 1969). These data, presented in Chart 5, also show that cash receipts are actually lower today than 49 years ago, despite the massive advances in productivity farmers have gained (Economic Research Service Farm Productivity data show that productivity more than doubled during this period). Moreover, production expenses are higher, so farmers earned \$21 million less in 2017 than they did in 1969.

In 1973, when grain and livestock prices were high due to the energy crisis, Todd County farmers earned a surplus of \$35 million by selling commodities. The years 1980 and 1988 were also relatively prosperous for farmers. Yet since 1989, farming has been a source of net losses to the County. Moreover, cash receipts are highly variable, as global markets fluctuate and weather changes.

**Chart 6: Crop and Livestock Sales (Adjusted) in Todd County, South Dakota, 1969 - 2017**

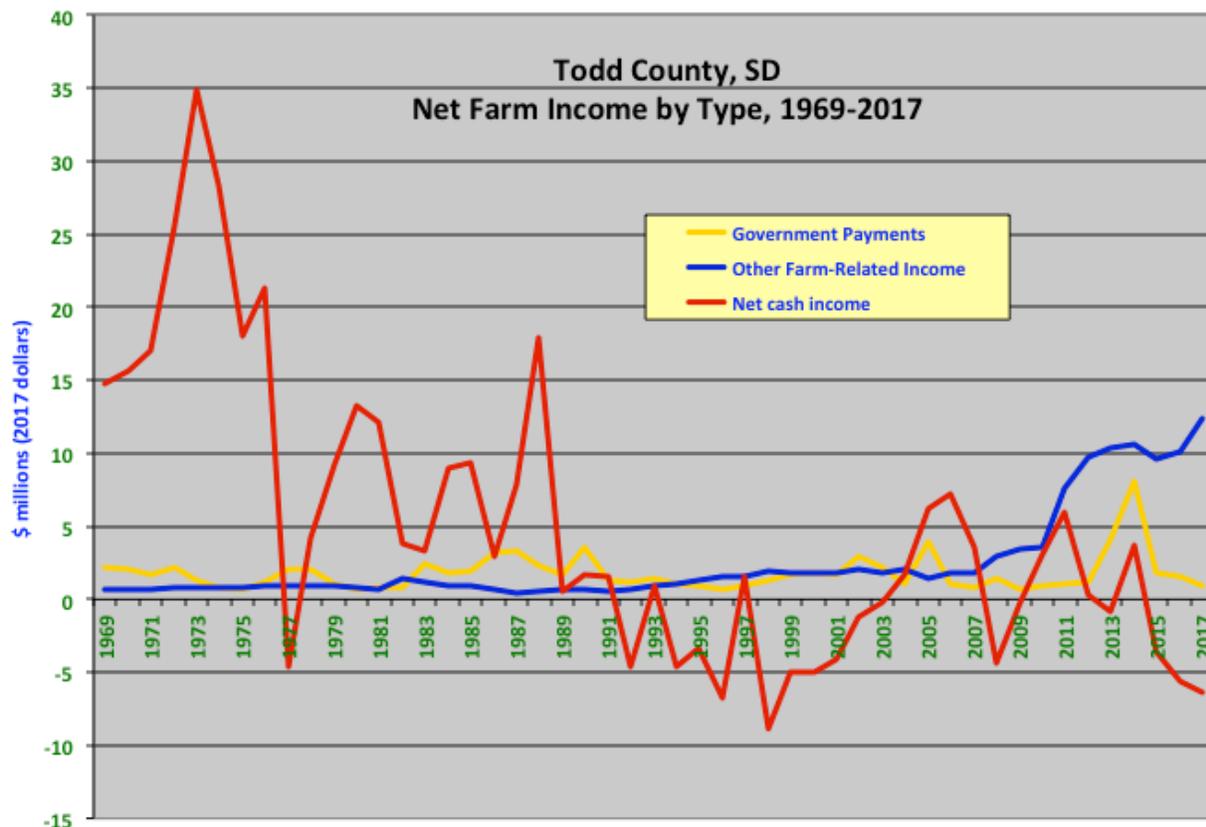


*Source: Bureau of Economic Analysis. Adjusted for inflation using Consumer Purchasing Index published by Minneapolis Federal Reserve.*

Chart 6 shows that livestock sales are the core of the Todd County farm economy, yet still fall well below 1969 levels after reaching significant peaks in 1973, 1979, 1988, and 2014. Farmers enjoyed a sharp increase in sales has been from 2010 to 2014, but cash receipts are now two-thirds of what they were in 1969, or \$16 million lower.

As far as crop sales are concerned, these are only slightly higher than 49 years ago, despite the advent of large-scale farm equipment and advanced technical knowledge. As the previous Chart 5 shows, even this advance in sales did not yield consistently positive returns.

Chart 7: Adjusted Net Farm Income by Type in Todd County, South Dakota, 1969 - 2017



Source: Bureau of Economic Analysis. Adjusted for inflation using Consumer Purchasing Index published by Minneapolis Federal Reserve.

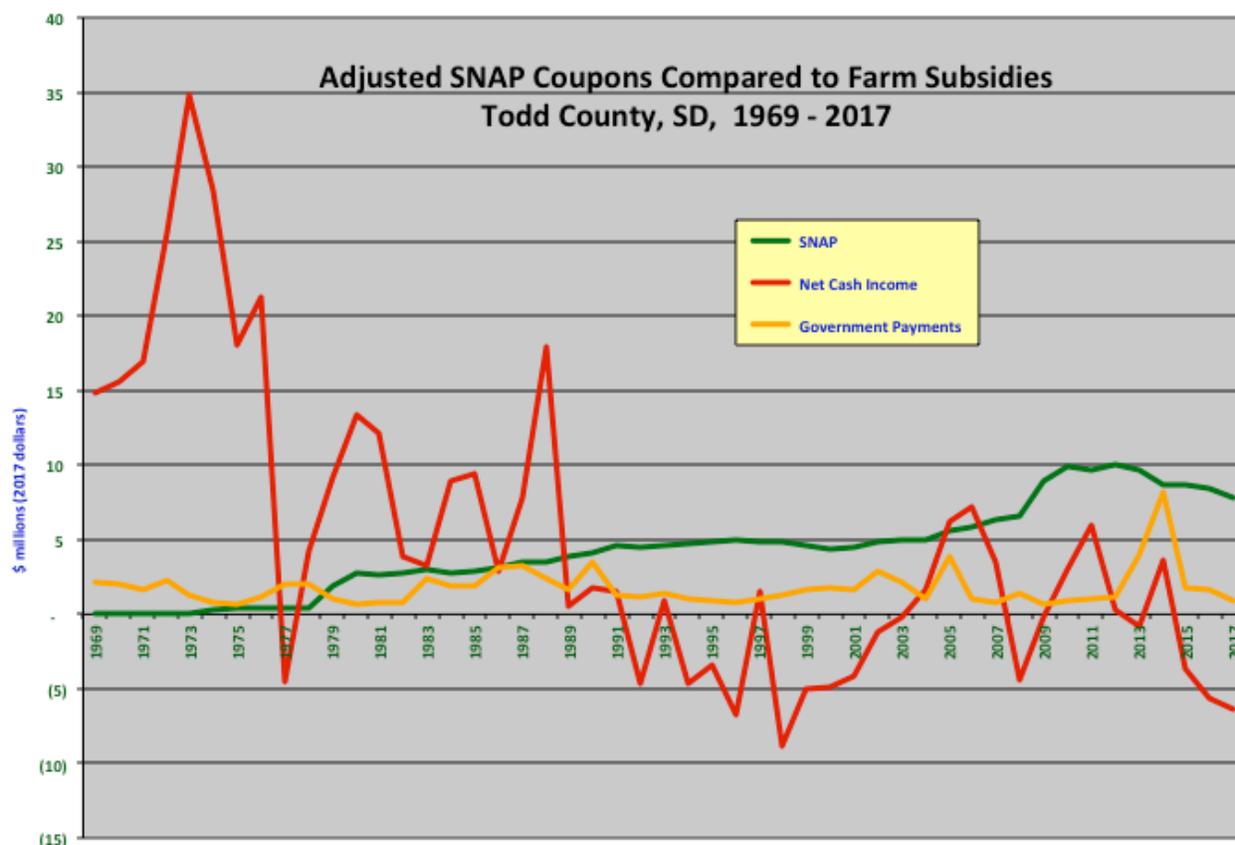
Chart 7 shows the three main sources of net income for farmers in Todd County. The primary source of income is not farming itself, but rather what is called “farm-related income.” This averaged \$3.7 million per year over the past 29 years. As explained above, most of this income (shown on the blue line) for the year 2017 is land rental income (\$6.3 million), “other farm-related income” (\$500,000); custom field work for a neighbor (\$305,000); insurance payments (not disclosed); and patronage dividends (\$82,000). *These data are drawn from the 2017 Census of Agriculture.*

The next largest source of net income for farm families is government subsidies (orange line), which averaged \$1.8 million over the years 1989 to 2017. Yet these subsidies only were given to about 53% of the county’s farmers.

As noted above, raising crops and livestock does not pay for itself, indeed incurred a \$921,000 dollar loss to the county each year for the past 29 years. This means Todd County farmers spent a combined \$27 million more to raise crops and livestock from 1989 – 2017 than they earned by selling these products.

Given these trends, many landowners find it is more lucrative to rent out land to someone else to farm, rather than shouldering the risks of farming themselves.

**Chart 8: Adjusted SNAP Benefits Received in Todd County, South Dakota, 1969 - 2017**



*Source: Bureau of Economic Analysis. Adjusted for inflation using Consumer Purchasing Index published by Minneapolis Federal Reserve.*

At the same time that farm income has been negative, more and more Todd County residents find themselves needing food assistance. SNAP benefits averaged \$6 million during the years 1989 - 2017, after peaking at \$10 million during the years 2010 – 2013. No one drew food assistance in 1969.

Chart 8 shows that SNAP benefits are actually a larger source of net income to county residents than either farm support programs (orange line) or farming itself (red line, the same results shown on Chart 5 but with a different scale so the line is more jagged). Moreover, this has largely been the case since 1990.

## **Prior Studies**

Rosebud Sioux Tribe Economic Development Association Department (2018). “Comprehensive Economic Development Strategy, 2018 to 2022.” Sicangu Lakota Oyate (Rosebud Sioux Tribe). This report outlines the following priorities for economic development among tribal members:

- Increase the local workforce pool in areas needed to sustain economic development
- Create steady employment in areas where people have interest and skill
- Preserve and regenerate cultural values, language, and traditions
- Increase environmental awareness, connection, and positive impact
- Adopt sustainable practices in land use and development, especially in agriculture
- Fully utilize Lakota Values in guiding the economic development of the Sicangu Lakota Oyate; specifically, Woohitika (courage), Wowacintanka (perseverance), Wacantognaka (generosity), and Woksape (Wisdom).

REDCO Community Food Sovereignty Initiative (2017). “Food Sovereignty Assessment.” Funded by First Nations Development Institute.

REDCO and the Rosebud Community Food Sovereignty Initiative (2017). “Community Action Plan.” Local Foods Local Places report, January 22.

Rosebud Sioux Tribe, REDCO, and Blue Star Studio (2016). “Keya Wakpala Master Plan: Green Development.”

### **Estimated Food Consumption by Rosebud Tribe Members**

The following table shows estimated food consumption for all 29,028 Rosebud Tribe Members. It is only a rough estimate, because it is based on national “average” consumption estimates, and does not take into account specific food preferences for Rosebud Tribe members. In particular, these estimates do not cover wild harvested animals, fish, or berries, since the data below cover only commercially produced foods. It also includes several foods that are difficult to grow, or unlikely to be eaten, by tribal members.

These data are based on national calculations of the food that is “available” after taking into account the amount produced in the U.S., amounts used in processing, and how much was exported. Those totals were then divided by the U.S. population to report consumption of each item per person. We then took these per capita estimates and multiplied them by the population of the tribe.

Even though they are not a totally satisfying summary of food consumption by Rosebud tribal members, the estimates of consumption for vegetables, fruits, and meats, in particular, may be useful for farmers who might wish to raise food for local residents. Certainly tribal farmers have sufficient land to grow most all of these crops, is that were desired.

**Table 2: Estimated Food Consumption by Rosebud Tribe members (2015)**

*Source: USDA Economic Research Service Food Availability Series, 2015.*

<b>Vegetables</b>	<b>Per Capita Availability Pounds, 2015</b>	<b>Total Pounds</b>
Artichokes	1.4	40,639
Asparagus	1.65	47,896
Beans, Lima	0.0018	52
Beans, Snap	1.47	42,671
Broccoli	6.64	192,746
Brussels Sprouts	0.46	13,353
Cabbage	6.68	193,907
Carrots	8.47	245,867
Cauliflower	1.29	37,446
Celery	5.53	160,525
Cucumbers	7.4	214,807
Eggplant	0.85	24,674
Escarole & Endive	0.17	4,935
Garlic	1.93	56,024
Green Peas	-	-
Greens, Collard	1.54	44,703
Greens, Mustard	0.39	11,321
Greens, Turnip	0.39	11,321
Kale	0.51	14,804
Lettuce: Head	14.46	419,745
Lettuce: Leaf & Romaine	10.78	312,922

	<b>Per Capita Availability Pounds, 2015</b>	<b>Total Pounds</b>
Mushrooms	2.98	86,503
Okra	0.4	11,611
Onions	18.3	531,212
Peppers, Bell	10.69	310,309
Potatoes	33.5	972,438
Pumpkins	5.32	154,429
Radishes	0.48	13,933
Spinach	1.67	48,477
Squash	4.59	133,239
Sweet Corn	7.63	221,484
Sweet Potatoes	7.51	218,000
Tomatoes	20.5	595,074
<b>Fruit</b>		
Grapefruit	2.43	70,538
Lemons	3.42	99,276
Limes	3.06	88,826
Oranges & Temples	9.35	271,412
Tangerines & Tangelos	5.04	146,301
Apples	18.94	549,790
Apricots	0.12	3,483
Avocados	6.52	189,263
Bananas	27.9	809,881
Blackberries	0.08	2,322
Blueberries	1.54	44,703
Cantaloupe	6.99	202,906
Cherries	1.19	34,543
Cranberries	0.07	2,032
Dates	0.5	14,514
Figs	0.21	6,096
Grapes	7.72	224,096
Honeydew	1.65	47,896
Kiwi	0.51	14,804
Mangoes	2.5	72,570
Olives	0.88	25,545
Papayas	1.14	33,092
Peaches & Nectarines	3.26	94,631
Pears	2.87	83,310
Pineapple	7.18	208,421
Prunes & Plums	0.58	16,836
Raspberries	0.49	14,224
Strawberries	7.95	230,773
Watermelon	13.47	391,007

	<b>Per Capita Availability Pounds, 2015</b>	<b>Total Pounds</b>
<b>Grains</b>		
Barley	0.73	21,190
Durum Flour	NA	-
Oats	4.5	130,626
Rice	NA	-
Rye	0.5	14,514
Wheat Flour	134.7	3,910,072
<b>Dairy &amp; Milk</b>		
Fluid Milk & Cream	173.7	5,042,164
Dry Milk Products	3.6	104,501
Cheese	30.7	891,160
Cottage Cheese	2.1	60,959
Condensed & Evaporated Milk	0.9	26,125
Frozen Dairy Products	21.9	635,713
<b>Eggs</b>		
Eggs	34.9	1,013,077
<b>Meats</b>		
Beef	76.9	2,232,253
Veal	0.3	8,708
Pork	59.1	1,715,555
Lamb	1.1	31,931
Chickens total	97.5	2,830,230
<b>Fish</b>		
Fresh/Frozen Fish and Shellfish	10.8	313,502
Canned Fish and Shellfish	3.3	95,792
Cured Fish and Shellfish	0.3	8,708
<b>Nuts</b>		
Almonds	1.7	49,348
Hazelnuts (filberts)	24.8	719,894
Peanuts	7	203,196
Pecans (filberts)	0.5	14,514
Pistachio Nuts	0.2	5,806
Coconuts	0.9	26,125
Walnuts	0.4	11,611
Other Tree Nuts	1.2	34,834

**Key data sources:**

**Bureau of Economic Analysis — Regional Income Data:**

<https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1>

**Food consumption estimates drawn from Bureau of Labor Statistics Consumer Expenditure Survey** (*Calculated by Meter using Federal Census population data*)

<http://www.bls.gov/cex/home.htm>

**U.S. Census of Agriculture**

<http://www.nass.usda.gov/census/>

**USDA/Economic Research Service — Food Consumption Data:**

<http://www.ers.usda.gov/data/foodconsumption/>

**Centers for Disease Control and Prevention — Behavior Risk Factor Surveillance System (BRFSS) data:**

[https://www.cdc.gov/brfss/data\\_documentation/index.htm](https://www.cdc.gov/brfss/data_documentation/index.htm)

**American Diabetes Association (2018).** “Economic Costs of Diabetes in the U.S. in 2017.”

Supplementary Data. <http://care.diabetesjournals.org/lookup/suppl/doi:10.2337/dci18-0007/-/DC1>

**Center for Health Outcomes and Population Research (2017).** “Sicangu Oyate: Rosebud Tribe Community Profile.” Collaborative Center for American Indian Health.

**Rosebud Sioux Tribe Health Administration (2018).** “2018 Community Health Profile: Sicangu Oyate Rosebud Sioux Tribe.”

**Citations:**

**When citing the data included in this report,  
please cite both the original source and this report.**

**For more information:**

To see results from *Finding Food in Farm Country* studies in other regions of the U.S.:

<http://www.crcworks.org/?submit=fffc>

To read the original *Finding Food in Farm Country* study from Southeast Minnesota (written for the Experiment in Rural Cooperation): <http://www.crcworks.org/ff.pdf>

For further information: <http://www.crcworks.org/>

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