Introduction

The South Dakota Cooperative Extension Service (CES) has been serving its purpose in South Dakota for over 100 years. The CES focuses on several distinct core programs, while providing outreach and support through field specialists across the state and the iGrow.org website. The continual building of strong links between external groups, both public and private, is essential to the viability and growth of the Cooperative Extension Service.

The role and purpose of the Cooperative Extension Service in South Dakota

Congress created the Cooperative Extension System with the Smith Lever Act of 1914, when America was in the infancy of its modern agricultural development. In 1915, the South Dakota Legislature enacted legislation for the formation of the South Dakota CES with the function to disseminate agricultural college-generated knowledge beyond the campus to farmers and consumers.

Today, the CES fulfills its purpose through fostering a learning community environment that empowers citizens to advocate for sustainable change that will strengthen agriculture, natural resources, youth, families, and the communities of South Dakota. Through this purpose, the South Dakota State University (SDSU) Extension serves as South Dakota's educational outreach source of unbiased, objective, and relevant new knowledge generated from research discoveries. The core values of the CES include:

- A culture that embraces change
- A setting that is inclusive, collaborative, and sustainable
- Access for all citizens
- Prioritized effort
- A learning community-focus
- A defined public value

While the CES has a defined role and purpose, there have been reviews and studies of the CES over the years. The Joint Committee on Appropriations in both 1987 and 1998 sought to improve operations, programs, and priorities at the CES. The 1988 interim review made several recommendations regarding ongoing operations at both the local and state level. The 1998 review sought to create a vision for the extension service in the 21st century by beginning a comprehensive planning effort aimed at values, programs, and operations.

Structure and Programs of the Cooperative Extension Service

The CES is set up as a three-way partnership between federal, state, and county governments. The Federal partnership provides program direction and goals from the national perspective, as well as yearly appropriations and opportunities for competitive funds. The state contributes general fund appropriations as well as the resources to develop and inform the public regarding the core programs of CES. The county aspect provides partial funding for local 4-H and office space, as well as a grassroots connection to the local area.

The CES is structured to focus on the education and outreach of several core program areas across the state. Today, the CES has 4 core program areas including:

- Agriculture
- Food and Families
- Community Development
- 4-H/Youth Development

**Community Development**

Extension received a request from Governor Rounds in 2004 to explore establishing community development programs as a part of SDSU Extension’s outreach portfolio. The community development program identifies and builds on the skills, assets, and opportunities available to and inherent within those communities, with the goal
of strengthening community sustainability and vibrancy. The program provides research-based knowledge and skills in the processes, tools, and techniques within four core areas:

- Leadership development and coaching
- Community visioning, strategic planning, and capacity building
- Civic engagement training
- Entrepreneurship

4-H/Youth Development

The South Dakota 4-H program is supported by an integrated staffing model that includes a state event management team, field specialists who focus on curriculum and training, and 4-H Advisors who focus solely on youth development education and volunteer development at the county/community level. Youth can join a 4-H club or participate in non-club activities like school enrichment activities, after school activities, or 4-H sponsored camps and conferences. The South Dakota 4-H and Youth Development program enables youth to be engaged in the following:

- Partnerships with caring adults
- Positive learning environments
- Developing their fullest potential
- Learning life skills

A strategic futures report for 2016-2021 on the 4-H program identified the following four major goals:

1. Create more opportunities for 4-H youth to grow life and work skills
2. Improve organizational communications and 4-H marketing
3. Enhance 4-H program delivery and provide more learning experiences
4. Focus on fiscal accountability and plan for growth and sustainability

The table below provides the participation and involvement in the CES 4-H program over the past few years.

<table>
<thead>
<tr>
<th>4-H Participation in South Dakota</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-H Club Enrollment</td>
<td>8,911</td>
<td>9,141</td>
<td>9,441</td>
</tr>
<tr>
<td>Non-Club Youth Participation</td>
<td>38,930</td>
<td>28,432</td>
<td>36,793</td>
</tr>
<tr>
<td>Adult &amp; Youth Volunteers</td>
<td>3,228</td>
<td>2,885</td>
<td>3,838</td>
</tr>
</tbody>
</table>

Food and Families

Extension Food and Families programs are committed to improving the quality of life of consumers and families. The knowledge and resources through Extension provide South Dakotans with access to knowledge, research, and unbiased information. Information is available on aging, food, families, health and nutrition, physical activity, finances, and food safety.

The field and state specialists work with the College of Education and Human Sciences at SDSU, and in partnership with other organizations and agencies, to create learning communities that meet the needs of South Dakota families. Multiple delivery systems are utilized to educate youth, families, and consumers.

Agriculture

Agriculture is an important industry in South Dakota, and the successful management of it, and its resources, is essential to the long-term viability of the state and its citizens. Extension specialists and field specialists work together in a systems approach to help solve current problems as well as develop plans for future success. Information is shared by a variety of methods, ranging from printed publications and producer meetings to
podcasts, webpages, and other electronic media. Most disciplines in the ANR program area also work closely with their colleagues in state commodity groups and other state universities, thereby increasing the depth and breadth of expertise available.

Extension Staffing

To fulfill the core program areas of the CES, there are currently 153 full-time equivalent employees (FTE) with a range of specialties at several locations across the state. The following provides a historic staffing breakout of the CES at both the county and state level.

Historical Staffing (FTE) Breakout of the CES

<table>
<thead>
<tr>
<th></th>
<th>FY1988</th>
<th>FY2000</th>
<th>FY2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>County Staff</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>52.0</td>
<td>60.0</td>
<td></td>
</tr>
<tr>
<td>Livestock/Dairy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agronomy/Horticulture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family &amp; Consumer Science</td>
<td>40.0</td>
<td>44.0</td>
<td>31.0</td>
</tr>
<tr>
<td>Farm Management/Marketing</td>
<td>16.0</td>
<td>6.0</td>
<td>31.0</td>
</tr>
<tr>
<td><strong>State Staff</strong></td>
<td>48.7</td>
<td>50.7</td>
<td>122.0</td>
</tr>
<tr>
<td>Economics</td>
<td>4.6</td>
<td>8.6</td>
<td>6.96</td>
</tr>
<tr>
<td>Dairy</td>
<td>1.1</td>
<td>1.1</td>
<td>4.02</td>
</tr>
<tr>
<td>Animal &amp; Range Sciences</td>
<td>4.2</td>
<td>6.4</td>
<td>14.5</td>
</tr>
<tr>
<td>Veterinary Science</td>
<td>1.0</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Agricultural Biosystems Engineering</td>
<td>3.8</td>
<td>4.1</td>
<td>4.8</td>
</tr>
<tr>
<td>Natural Resource Development</td>
<td></td>
<td></td>
<td>4.9</td>
</tr>
<tr>
<td>Horticulture, Forestry, Landscape &amp; Parks</td>
<td>2.0</td>
<td>1.2</td>
<td>19.1</td>
</tr>
<tr>
<td>Plant Science</td>
<td>9.4</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>4-H/Youth Development</td>
<td>5.0</td>
<td>4.2</td>
<td>10.0</td>
</tr>
<tr>
<td>Family &amp; Consumer Sciences</td>
<td>3.0</td>
<td>5.0</td>
<td>23.1</td>
</tr>
<tr>
<td>Community Development</td>
<td></td>
<td></td>
<td>5.1</td>
</tr>
<tr>
<td>Ag Communications</td>
<td>5.0</td>
<td>4.3</td>
<td>4.9</td>
</tr>
<tr>
<td>Wildlife &amp; Fisheries</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>8.6</td>
<td>7.3</td>
<td>10.2</td>
</tr>
<tr>
<td>Regional Center + WRAC Secretarial Support</td>
<td></td>
<td></td>
<td>9.5</td>
</tr>
<tr>
<td>Financial Management Support</td>
<td></td>
<td></td>
<td>3.7</td>
</tr>
<tr>
<td><strong>Total CES Staff (FTE)</strong></td>
<td>156.7</td>
<td>160.7</td>
<td>153.0</td>
</tr>
</tbody>
</table>

Staffing for Extension efforts has shifted over the years from being focused at the county level to more of a regional hub. A document from 2011 entitled, "Stewards of Progress" details the fundamental shift which changed the locations and staffing of extension offices throughout the state. Part of the change was the 4-H program would be the primary extension outreach effort delivered from the County Extension Office. Prior to 2011, state funds were utilized to place field staff and some specialists within the County Extension Offices depending on the location.

The state staff at the CES has changed in focus over the years. The change is primarily related to the changing dynamic of agriculture in South Dakota. Overall the reduction in state FTEs is associated with reductions in professors or teaching staff.
Outreach and Delivery Efforts through the Cooperative Extension Service

The CES expanded its outreach and delivery efforts with the implementation of iGrow.org in 2011. iGrow.org is the virtual learning platform used by the CES for educational and informational outreach to the citizens of South Dakota and beyond. iGrow.org features the expertise of faculty, field specialists, and staff. Each week, SDSU Extension staff and partners publish the latest information to the communities within 4-H & Youth, Livestock, Agronomy, Healthy Families, Community Development, and Gardens. iGrow.org has become a repository of information for more than 500 farm publications like Drovers, Dakota Farmer, Farm Forum, and the National Hog Farmer. Since the formation of iGrow.org the number of users and content viewed has grown substantially. Currently, 40% of users access iGrow.org from mobile devices.

<table>
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<tbody>
<tr>
<td>Sum of Page Views</td>
<td>278,439</td>
<td>563,864</td>
<td>926,014</td>
<td>971,786</td>
<td>1,094,936</td>
</tr>
<tr>
<td>Unique Visitors</td>
<td>63,767</td>
<td>228,115</td>
<td>593,559</td>
<td>643,072</td>
<td>758,462</td>
</tr>
</tbody>
</table>

The CES furthers its outreach and delivery efforts from multiple access points across the state, with staff based on the campus of SDSU, the West River Ag Center (WRAC) in Rapid City, the 8 regional extension centers (Aberdeen, Pierre, Lemmon, Rapid City, Winner, Mitchell, Sioux Falls, Watertown) and 4-H delivery at 65 county extension offices.

The development of the regional centers was part of the fundamental shift and restructuring in 2011 driven in part by the need to reduce the budget. The regional centers were established in the areas listed above because they are regional economic hubs. The regional centers provide information and access to educational materials, workshops, classes, and the ability to connect face to face. The regional centers can offer programs through the DDN system, which are accessible and interface with the other regional centers. The regional centers are staffed with field specialists with areas of focus in the table depicting the historical breakout of FTEs.

The WRAC is an additional facility in Rapid City aside from the regional center and has more of a research focus. The WRAC is staffed by faculty tied to the department at SDSU who have an extension assignment as part of their work.

As part of the continual outreach and delivery efforts at Extension, an independent third party was hired in 2013 to create and conduct a benchmark survey. The objective of the study was to gauge current perceptions of SDSU Extension and its position in the current agricultural marketplace. As part of the survey, 400 phone interviews were completed from a list of 10,000 South Dakota crop and cattle producers. Below is a list of several findings from the survey:

- The likelihood of using Extension programs and services tends to increase with the level of education.
- Producers with a gross farm income over $250,000 consistently use Extension services more than other producers.
- Producers who have sought information from Extension are three times as likely to have paid for information from other sources, when compared to those who have never sought information from Extension.

Extension also received high ratings for being a trustworthy source of research and recommendations as the following results from the survey demonstrate.
Do the following statements accurately describe SDSU Extension?

7-point scale; 1=strongly disagree and 7=strongly agree

- Extension is a trustworthy source for research and recommendations: 5.67
- Extension provides the most unbiased information: 5.51
- Extension is a leader in agricultural science: 5.44
- Extension is a relevant source of expertise: 5.40
- Extension provides the most valuable information: 5.14
- Extension provides the most advanced tools and technology: 5.14
- Extension provides the most innovative information: 5.04
- Extension is usually responsive to the market: 4.83
- Extension is usually first to introduce new information: 4.72

How trustworthy are these sources of information?

7-point scale; 1=not at all trustworthy and 7=extremely trustworthy

- Veterinarian: 6.20
- SDSU Extension: 5.50
- Agronomist: 5.46
- Nutritionists: 5.14
- Friends and neighbors: 5.13
- Local cooperative: 5.11
- Seed rep: 4.94
- Commodity associations: 4.40
- Ag news media: 4.37
Cooperative Extension Fiscal Perspective

The CES is funded through a combination of sources. State general funds provide most of the funding, with Federal appropriations as the next largest source of funds. The source of other funds is from fees and charges for services offered through Extension. Examples of fees and charges through extension include – registration fee for a conference, camps, workshop or educational seminar, sponsorships for field days, and technical assistance training fees. The counties also contribute some funding for the 4-H program.

The chart on the next page provides the estimated utilization of general funds in FY2018 by functions and/or programs of the CES. The general fund dollars used in support of the areas in the chart are primarily for salary and benefits of faculty and staff. The general funds account for funding the 122 state FTEs as well as most of the funding for the 31 county FTEs.

The further breakout of the Departments, EHS, WRAC reflects budgeted expenses for faculty who hold an extension appointment with teaching responsibilities by the respective department. The West River Ag Center reflects administrative salaries and benefits tied to Extension for the WRAC Director and 1.5 FTE of administrative support staff.
The following graphs provide an historic budget perspective for the CES. The first graph provides the budgeted funds by source for several historic fiscal years as well as the most recent. Over the years, the amount of federal budgeted dollars has gone up for the most part, however, the percent of budgeted funding from the federal government has gone down. At the same time, the state has increased both dollars and percent of funding, while other funding and dollars have increased as well.

While the percent of general funds budgeted has increased, the increase has been minor since FY1988, however, the percent of federal funds budgeted has dropped from a high of 48.3% in FY1988 to a low of 36% in FY2018. At the same time, the percent of other funds budgeted has made up most of the difference in funding.
The following graphs provide the historic actual expenses of the CES by fiscal year as well as the percent of actual expenses by fund source. General fund expenses by the CES have had sizable increases over the years, with a $2.5M increase from 1988 to 1999 and a $2.7M increase from 1999 to 2010 and after that only a slight increase from 2010 to 2017.

Over the years, the amount of federal funding paying for the CES has declined, while the state and other funding has increased. In fiscal year 1988, federal funding accounted for 50.4% of all expenses, while today it is 33.8%. General funds have grown from 49.6% of the funding to 55.2% today and even reached as high as 60.4% in fiscal year 2010.
Conclusion

The Extension of 30 years ago, is not the Extension of today and the Extension of 30 years from now will not be the same as the Extension of today. The SDSU Extension Office has adapted over time to the changing culture, agricultural practices, and interests among South Dakotans. New core values have been added and adapted, changing priorities among field and state specialist staff, and major fundamental shifts in the operations of Extension have occurred. Outreach practices and delivery have been updated with the changing times and technologies. The continual building of strong links between external groups, both public and private, as well as staying in touch with changing technologies, practices and interests in the agricultural industry, will be essential to the viability and growth of the Cooperative Extension Service in the future.