Kansas State University: Research and Extension Resources and Environment

OVERVIEW:

Kansas State University (K-State) Research and Extension (KSRE) is in all 105 Kansas counties. County Offices link K-State research with these communities, businesses, agriculture, and individuals, allowing KSRE to provide them supportive resources and services. This includes practical knowledge and solutions based on scientific research. A list of representative examples of these resources follows:

1. Agricultural Resources

- -Crop and Livestock Management: Expert advice on crop production, pest management, soil health, livestock care, and sustainable farming practices.
- Extension Field Specialists: Professionals specializing in areas such as agronomy, animal science, horticulture, and natural resources to provide hands-on advice and education.
- Farm Management and Economics: Support on farm financial management, market trends, risk management, and profitability analysis.

2. 4-H Youth Development

- 4-H Clubs: Opportunities for young people to participate in hands-on projects in areas like agriculture, science, technology, and leadership.
- Youth Education and Leadership: Programs designed to develop leadership, citizenship, and life skills among youth in local communities.
- Community Engagement: Facilitation of community service projects and events to help young people build responsibility and work ethic.

3. Family and Consumer Sciences

- Nutrition and Health: Programs to promote healthy eating, active living, and overall well-being, including workshops and resources on managing food systems and budgets.
- Financial Literacy: Education on budgeting, saving, credit management, and financial planning for families and individuals.
- Parenting and Family Life: Resources and counseling to strengthen families, with a focus on building positive relationships and managing stress.

4. Horticulture and Landscaping

- Master Gardener Programs: Training and certification for individuals interested in gardening and landscaping, with volunteer opportunities to support local communities.
- Plant Care and Pest Management: Expert guidance on managing home gardens, landscape plants, trees, and dealing with pests and diseases.
- Urban Agriculture: Resources to support gardening and food production in urban or suburban settings.

5. Natural Resources and Environmental Stewardship

- Water Conservation and Management: Guidance on water use efficiency, irrigation practices, and protecting local water resources.
- Wildlife and Habitat Management: Information on maintaining wildlife habitats and managing land for conservation and sustainable use.
- Energy Efficiency: Resources on renewable energy, energy conservation practices for homes and businesses, and alternative energy systems.

6. Community and Economic Development

- Local Economic Development: Support for community leaders and organizations in fostering economic growth, workforce development, and regional planning.
- Leadership Training: Programs designed to enhance leadership skills within communities and organizations.
- Small Business Support: Resources to help entrepreneurs and small businesses with marketing, finance, and operations.

7. Extension Publications and Online Resources

- Publications: A wide range of fact sheets, bulletins, and guides on various topics related to agriculture, family life, 4-H, and more.
- Workshops and Events: County offices often host educational events, workshops, and classes designed to deliver practical knowledge directly to communities.
- Online Tools and Resources: Access to digital resources, webinars, and online tools for self-guided learning in a variety of subject areas.

8. Research-Based Information

- KSRE County Offices are a direct link to the latest research conducted by K-State faculty and staff, ensuring that the information provided is based on the most current and reliable data available.

9. Emergency Preparedness and Disaster Recovery

- Disaster Relief and Recovery: Support for communities in the aftermath of natural disasters, including flood recovery, drought management, and emergency preparedness education.
- Crisis Management and Resilience: Training on how to prepare for and manage crises that may affect communities or agricultural operations.

10. Collaborative Projects and Partnerships

- Many county offices work in partnership with local organizations, government agencies, and businesses to deliver specialized services and programs.

RESOURCES AND ENVIRONMENT ORGANIZATION:

KSRE is has a multi-tiered organization structure to provide the services listed above. Extension agents on the K-State's main campus in Manhattan, KS (and other campuses) serve as an essential bridge between the cutting-edge research taking place by K-State faculty and Kansas communities. They facilitate sharing this information with local communities via Research Extension Centers and Extension Offices. Extension agents also ensure that information flows from communities to researchers and that K-State research focus on Kansas communities via Agronomy Experiment Fields and Horticulture Centers. Each of these components is described in more detail below:

K-State Campus Extension Agents: KSRE faculty and specialists serve as agents on K-State campus. Each focuses on a targeted area with the goal of being able to provide expertise, educational programs, and outreach to Kansas communities while conducting research and training future extension agents. These areas are chosen to achieve the goals of being able to provide the resources described above. Extension agents are embedded into K-State colleges/departments/units. Units with extension agents and their focus is listed below:

<u>1. College of Agriculture</u>: The College of Agriculture is home to many K-State Extension specialists who focus on agriculture, agronomy, animal sciences, and more.

Department of Agricultural Economics: Specialists in this department provide expertise in farm management, agricultural policy, rural development, and agricultural marketing.

Department of Animal Sciences and Industry: Extension specialists in this field provide knowledge on livestock management, animal health, nutrition, breeding, and sustainable production practices for cattle, poultry, swine, and other livestock.

Department of Agronomy: Specialists in agronomy focus on crop management, soil science, irrigation, pest management, and precision agriculture.

Department of Horticulture and Natural Resources: This department includes experts in plant pathology, turf management, landscape design, fruit and vegetable production, home gardening, and pest management.

Department of Plant Pathology: Extension specialists work on plant disease identification, prevention, and control for crops, trees, and home gardens.

Department of Entomology: Extension entomologists focus on pest management, insect identification, and control strategies for crops, livestock, and home environments.

Department of Agricultural Engineering (Biological and Agricultural Engineering): Specialists in this department provide expertise in agricultural machinery, irrigation systems, renewable energy solutions, and environmental sustainability.

<u>2. College of Health and Human Sciences</u>: The College of Health and Human Sciences includes several areas that host Extension specialists working on family, health, nutrition, and consumer education.

School of Health Sciences: Extension specialists in this unit focus on nutrition education, food safety, healthy living, and chronic disease prevention.

School of Consumer Sciences: Extension specialists in this unit share financial management information with Kansans.

School for Human Sciences: Extension specialists in this unit provide resources on family development, parenting, and child welfare. They also focus on healthy relationships, family well-being, and resources relevant to older Kansans

3. College of Engineering: While the College of Engineering does not have as many traditional Extension specialists as other colleges, there are engineering-focused specialists who work on outreach programs related to technology, renewable energy, and sustainable agricultural practices.

Department of Biological and Agricultural Engineering: Specialists in this department work on agricultural engineering projects related to sustainable farming practices, irrigation, renewable energy, and environmental conservation.

<u>4. College of Education</u>: The College of Education at K-State is involved in Extension through its work with youth development and educational outreach.

Department of Special Education, Counseling, and Student Affairs: While not a direct Extension department, faculty and specialists in this department are involved in community programs and outreach focused on youth development, leadership, and special education.

Department of Curriculum and Instruction: Extension specialists help develop educational materials and curriculum, especially in areas like STEM (science, technology, engineering, and mathematics) for youth development, including 4-H programs.

<u>5. College of Arts and Sciences</u>: Extension programs in the College of Arts and Sciences mainly focus on community development, social sciences, and human resources.

<u>Department of Sociology, Anthropology, and Social Work</u>: Specialists often work on community development programs, helping to foster better social systems and improve the quality of life in local communities.

<u>Department of Geography</u>: Geography specialists help with programs related to land use, urban planning, and environmental sustainability.

<u>6. College of Architecture, Planning, and Design</u>: This college houses specialists who work on community planning and environmental stewardship through Extension programs.

Department of Landscape Architecture and Regional & Community Planning: Extension specialists here focus on urban agriculture, landscape design, community planning, and sustainable design practices that can help improve rural and urban communities.

7. <u>K-State Research and Extension Programs</u>: In addition to the academic departments, many K-State Research and Extension programs run directly from the university and focus on various topics across Kansas. Some of the Extension programs include:

Kansas 4-H Youth Development: Focuses on youth development, leadership, and citizenship through 4-H clubs, STEM education, and community involvement.

Agricultural Research and Extension (ARE) Programs: Specializes in outreach for crop production, soil health, and integrated pest management across different farming systems.

Family and Consumer Sciences: Focuses on topics related to nutrition, family life, financial literacy, and health and wellness. This includes programs like Money Smart Kansas, Healthy Living, and Positive Parenting.

Natural Resources and Environmental Education: Extension specialists in this area work on water conservation, wildlife management, energy efficiency, and natural resource conservation.

Community Vitality and Economic Development: Focuses on helping local communities develop stronger economic and social infrastructure. This program often provides expertise in local business development, leadership, rural entrepreneurship, and workforce development.

Research Extension Centers: The off-campus research extension centers are organized into two departments. The Eastern Kansas Research-Extension Centers and the Western Kansas Research-Extension Centers. These centers are organized by region and listed below:

Eastern Kansas Research-Extension Centers

John C. Pair Center (Haysville)

Northeast Research-Extension Center (Manhattan)

Olathe Research-Extension Center (Olathe)

Southeast Research-Extension Center (Parsons)

Columbus

Mound Valley

Western Kansas Research-Extension Centers

Agricultural Research Center (Hays)

Harold and Olympia Lonsinger Sustainability Research Farm

HB Ranch

Saline Experimental Range

Northwest Research-Extension Center (Colby)

Southwest Research-Extension Center (Garden City)

Southwest Research Center (Tribune)

Agronomy Experiment Fields: Experiment Fields complement the land available for Agronomy research near the K-State campus in Manhattan. Together, these research sites provide opportunities for both practical and basic research.

East Central Experiment Field (Ottawa)

Kansas River Valley Experiment Field (Topeka)

North Central Kansas Irrigation Field (Belleville/Scandia)

South Central Kansas Field (Hutchinson)

Horticulture Centers: Horticulture experiment sites that provide long-term forestry and turfgrass research.

Rocky Ford Turfgrass Research Center (Manhattan)

<u>Tuttle Forestry Research Center</u> (Manhattan)

K-State Research and Extension County Office: Each office strives to provide practical, research-based knowledge to Kansas residents, aiming to improve quality of life, foster community development, and enhance agricultural productivity. Here is a list of all K-State Extension County Offices organized by region:

Northwest Region

- 1. Cheyenne County Extension
- 2. Decatur County Extension
- 3. Gove County Extension
- 4. Sherman County Extension
- 5. Thomas County Extension
- 6. Wallace County Extension
- 7. Wichita County Extension

Northeast Region

- 1. Atchison County Extension
- 2. Bourbon County Extension
- 3. Brown County Extension
- 4. Douglas County Extension
- 5. Jackson County Extension
- 6. Jefferson County Extension
- 7. Johnson County Extension
- 8. Leavenworth County Extension
- 9. Miami County Extension
- 10. Shawnee County Extension

Central Region

- 1. Centrals Kansas Extension (Saline County)
- 2. Ellsworth County Extension
- 3. Geary County Extension
- 4. Lincoln County Extension
- 5. Marion County Extension

- 6. McPherson County Extension
- 7. Ottawa County Extension
- 8. Riley County Extension
- 9. Salina County Extension

Southwest Region

- 1. Haskell County Extension
- 2. Ford County Extension
- 3. Grant County Extension
- 4. Hodgeman County Extension
- 5. Kearny County Extension
- 6. Meade County Extension
- 7. Pawnee County Extension
- 8. Seward County Extension

Southeast Region

- 1. Allen County Extension
- 2. Anderson County Extension
- 3. Chautauqua County Extension
- 4. Crawford County Extension
- 5. Greenwood County Extension
- 6. Linn County Extension
- 7. Montgomery County Extension
- 8. Wilson County Extension

South Central Region

- 1. Butler County Extension
- 2. Harvey County Extension
- 3. Sedgwick County Extension
- 4. Sumner County Extension

Western Region

- 1. Barton County Extension
- 2. Finney County Extension
- 3. Hamilton County Extension
- 4. Kearny County Extension
- 5. Ness County Extension
- 6. Pawnee County Extension
- 7. Rooks County Extension