Idaho (University of Idaho)

Plan of Work for 2023-2027

Status: Final (Approved 9/22/2022)

Executive Summary Overview

In 2020, the University of Idaho Extension began to implement the 2020-24 plan of work (POW) through seven program teams called 'Priority Extension Themes' (PETs). In the POW, PETs are listed as Critical Issues. The PETs emerged as a result of 2017 statewide needs-assessment. Each PET corresponds with one (or more) of the nine Science Emphasis areas identified by NIFA as national priorities. The goals of PETs are to better align programs with stakeholder needs, deliver educational activities to meet customer preferences, and maximize statewide operational efficiency. The PET structure facilitates the opportunity to demonstrate Extension's public value to our stakeholders serving them with need-based educational programs as well as return on investment (ROI) to the communities. The terms Critical Issue and PETs are used interchangeably throughout the document.

The names of the seven PETs listed under the Critical Issue section of this POW are 1) Food Production Systems, 2) Horticulture and Small Farms, 3) Community Development, 4) Forest, Range, and other Natural Resources, 5) Health and Wellness, 6) Water, and 7) 4-H Community Youth Development.

The PET plan of work was faculty-driven and included a) Extension specialists with joint extension and research appointments, b) research scientists with full research appointments, c) faculty with joint research and extension or teaching appointments, and d) county Extension educators with extension appointments. Each year, the PETs co-leaders meet to review the previous year's progress and provide updates to their plans to address the changing community needs.

Idaho is the 4th largest agricultural economy in the U.S., with 25,000 farms and ranches, producing 185 commodities. Agricultural cash receipts are close to \$7.1 billion and agribusiness contributed \$20.6 billion in sales; 128,200 Idaho jobs; and \$3.7 billion in wages. Agribusiness is the largest industry in Idaho. It contributes to the state's economy and, more importantly, affects rural communities through job creation, increasing the value-added of products, and indirect effects on local economies. Most agricultural challenges faced by ranchers and farmers are production, market, policy, and environmental driven. The food production PET will address these challenges by conducting relevant research in conjunction with Extension to achieve Idaho's farm productivity, economic profitability, and sustainability. Research-generated information and technology will be transferred to farmers and ranchers using various educational activities and partnerships with allied agencies.

In 2018, the U.S. Census Bureau announced that Idaho was the fastest-growing state in the nation. In communities across Idaho, rapid urbanization and demographics changes have created a critical need for landscaping, gardening, and home food-production information. The green industry, including nurseries, turf marketing and care, landscapers, and the commercial-fruit industry, continues to rise with associated growth in educational needs. The purpose of the Horticulture and Small Farms PET is to focus on best practices that engage individuals and groups to improve social, environmental, and economic sustainability on intensively managed private and public lands. Focus areas include soil health,

water conservation, selection and maintenance of appropriate plant materials, invasive species management, garden and on-farm food safety, sustainable small-scale crop and livestock systems, small farm entrepreneurship, and related subjects.

Communities need social and political capital to update and reinvent themselves. These capitals are essential to constructive community dialogue that keeps residents working together toward common interests. The community development PET is committed to improving the economic well-being of Idaho rural residents. It focuses on matters that support the process of wealth creation in rural communities and in disseminating economic knowledge to community leaders to broaden their perspectives and sense of the possibilities.

Idaho residents' unfamiliarity with the natural resource-based enterprises upon which the regions' economies are built often leads to misunderstandings and friction regarding best management practices and natural resources. Some of the emerging issues in this area include climate change, wildfire, biodiversity conservation, and forest and rangeland health. The forests, rangelands, and other natural resources PET will teach youth and adults to develop awareness and make connections between food and fiber production, health, and quality of life and help them to participate in public discussions of natural resource management.

Two-thirds of Idaho adults and 30% of youth are overweight or obese, increasing risk for chronic disease. One in ten children and 10% of Idahoans experience hunger or food insecurity due to a lack of money. They consume fruit less than once per day and vegetables less than once per day. An estimated one-sixth of Idahoans, especially the elderly, pregnant women, and young children, contract a foodborne illness caused by improper holding temperature, inadequate cooking, contaminated equipment, unsafe food source, and poor personal hygiene. A recent report showed that 49% of Americans feel, concerned, anxious, or fearful about their current financial well-being. Consumers are bombarded daily by an array of credit, investing, retirement, and purchasing options that did not exist in previous decades. In Idaho, 198,000 Idahoans owe an average of \$29,000 student debt. The health and wellness PET provides Healthy Living, Food Safety, and Resource Management programs, with projects and educational activities, developed and implemented to Inspire Wellness in Idaho.

To help manage uncertainty and adapt to increasing variability, the water PET will improve socialecological resilience and water system robustness. An essential element is development of watershedand systems thinking/modeling for reducing uncertainty and increasing resilience/robustness. To increase Idahoans understanding of applying effective water management, it will develop programming in the areas of climate change mitigation and adaptation related to water resources, balancing increasing demand for water-related to food supply with no increase in water availability, increasing food produced per unit of water and wise water-use outreach and Extension education.

Leadership and citizenship are an integral part of 4-H Youth Development. By providing educational opportunities for youth to learn leadership skills and participate in community service learning, they can practice what they have learned to become more involved in their communities. There is a great concern by educators and decision-makers regarding the number of youths interested in sciences. Low standardized test scores for youth indicate they are not learning the skills they will need in the workplace. The 4-H Youth Development PET will take leadership to facilitate the faculty, staff, and volunteers to deliver educational programs in building the capacity of youth who become resilient, productive, and responsible individuals

Merit and Scientific Peer Review Processes

The UI Extension has adopted a program team – PETs approach to program planning and delivery. Faculty with research appointments are assigned to PETs based upon their area of expertise and signature programs established by CALS. Faculty teams from each PETs meet to discuss priorities and agree upon projects for advancement. The PETs priorities are monitored by college administration. The PETs prepare and submit competitive grant applications for the funding needed to address critical issues in the state. Successful applications are those which demonstrate that the project meets a PETs identified, peer-reviewed priority, and will result in measurable outcomes for stakeholders. An increasing number of programs are supported through grants and awards made by federal, state, or local agencies, foundations, and businesses. It is particularly true for agencies, and increasingly true for private organizations, that the projects meet high standards for quality, relevance, and impact.

All faculty in CALS or other colleges within the UI holding a research appointment in the IAES are required to have an active, approved research project that reflects their major research emphasis. The Hatch projects are expected to address problems relevant to Idaho's agriculture and its citizens. Projects should also include a national or regional scope of importance. Hatch project proposals must be reviewed internally by a minimum of two colleagues with expertise in the area of research, the investigator's department head and a minimum of two external experts in the area not affiliated with UI.

The IAES research contributing to multi-state projects/programs and approved by NIFA are categorized as research activities of various types as defined by the State Agricultural Experiment Station System. In the western region, these multi-state projects must be reviewed by a maximum of four outside peer reviewers in addition to the overall regional multi-function committee appointed by the Western Association of Agricultural Experiment Station Directors (WAAESD). The Multi-state Review Committee (MRC - formerly RCIC) reviews the initial proposal, makes recommendations to the WAAESD and, if approved, transmits the project to CSREES. The MRC also monitors progress annually.

All Extension and research faculty develop annual position descriptions that outline major programs for the year. These position descriptions are subject to annual merit review at a number of levels, beginning with division leaders and department heads and ending with associate deans and deans. Merit and program success of each faculty member is also thoroughly reviewed throughout the tenure and promotion process by a panel of faculty, at years 3, 5, 10, 15, 20, etc. Review panels charged with specific program responsibilities conduct further merit review. These review panels may include commodity interests, other academics, agency personnel and stakeholders.

Stakeholder input: Action Taken to Seek Stakeholder Input

The most effective approach is to involve stakeholders in the planning and delivery of research and Extension programs. To encourage participation by larger numbers of collaborators, we solicit assistance from stakeholder representatives and advocates to help us advertise and promote participation opportunities. While CALS has long included statements of inclusiveness on program announcements, recent mass media campaigns have helped expose large numbers of non-traditional stakeholders to this commitment.

In securing inputs from research and Extension stakeholders, we will encourage participation by both traditional and non-traditional stakeholders by providing venues that are convenient, economical, and efficient. This will be accomplished by making CALS off-campus video conferencing facilities available, as well as increased use other forms of electronic communications. Selection and eventual invitation of targeted individuals to serve on key stakeholder groups will be accomplished in context of securing representation of Idaho's diverse population and stakeholder interests. The examples of such stakeholder groups include the Dean's Advisory Board, unit advisory boards, and UI Extension citizens' advisory groups.

Stakeholder input: Methods to Identify Individuals and Groups

The Dean's Advisory Board, comprised of stakeholder representatives from government, industry, and educational institutions in Idaho. Members are recruited by an invitation and selection process that encourages broad participation representative of Idaho's population diversity, including both traditional and non-traditional stakeholders.

The seven CALS academic departments have stakeholder advisory boards. Members are recruited by an invitation and selection process that encourages broad participation representative of Idaho's population diversity, including both traditional and nontraditional stakeholders.

UI Extension has citizen advisory groups in 42 of Idaho's 44 counties which represent a broad mix of public interests from the county perspective.

Idaho's 17 agricultural commodity commissions and organizations are selected by industry representatives with approval by state government officials.

Extension newsletters and other communication materials are sent to every household in some counties, and everyone is invited to provide input and to participate in programs.

When stakeholder groups can be narrowly defined, UI Extension often collaborates with state and local agencies and organizations whose missions overlap. For example, to reach more seniors, UI Extension has collaborated with AARP and the Agencies on Aging.

IAES researcher and extension faculty conduct several major commodity schools and "field days" annually in the state. These events are highly advertised through numerous media outlets and attended by stakeholders from Idaho and the region.

Stakeholder input: Methods for Collecting Stakeholder Input

Input from stakeholders is collected in person through advisory committee meetings, through surveys conducted at many Extension events and activities, and through direct conversations with interest groups and other organizations. Periodic surveys are conducted for specific topic areas using random sampling techniques as well as listening sessions are conducted around the states to identify broader needs (e.g., 2016 statewide listening session). Data area also collected through random sampling for statewide issues periodically, and individual programs are frequently concluded with an evaluation that includes an opportunity for stakeholders to provide recommendations for future programs.

Stakeholder input: A Statement of How the Input Will Be Considered

Stakeholder inputs are used to formulate overall CALS research and extension strategic goals, as well as the goals and directions of individual PETs programs. After receiving input from stakeholders as described in sections b(i) and b(ii), the appropriate administrative group or PETs will plan for short-term and long-term objectives and provide resources accordingly. Acquiring input is documented and formally considered by PETs as a part of the priority setting and planning processes for programs and must be included as a part of applications for critical issues extension grants and other awards available through the state office. The UI Extension has worked to increase the Spanish-language skills of staff, through both training and hiring to build capacity to reach underserved stakeholders.

A 2009 task force made five specific recommendations for Extension to consider, including to conduct a process to re-prioritize our efforts. During 2010, Extension gathered input from two distinct groups of stakeholders to consider during the re- prioritization process. Those activities resulted in the elimination of two programs and in the integration of seven previously independent programs into three programs. The 2020-24 plan of work reflects the reorganization of 15 topic teams down to seven PETs based on the statewide listening sessions held in 2016.

Critical Issues

4-H Community Youth Development

Initiated on: Nov 26, 2019 State: Idaho

Term Length: Long-term (>5 years)

4-H Youth Development is focused on strengthening youth and families across Idaho. 4-H will continue to create positive learning environments based on the 4-H Essential Elements of belonging, independence, generosity and mastery. The 4-H Youth development team, composed of educators, staff, and volunteers will work on the following topics: 4-H Science, Healthy Living, Volunteer and Adult Leadership Development, Youth Leadership and Citizenship, Reaching Underserved Audiences.

Science Emphasis Area

Youth Development

Community Development

Initiated on: Nov 26, 2019 State: Idaho

Term Length: Long-term (>5 years)

UI Extension community development programs create sustainable social and economic systems in Idaho through human, social, cultural, and physical capital development. Our programs provide learning opportunities that transform the lives of people and their communities. Our goal is to promote high quality of life and community well-being.

Science Emphasis Area

Education and Multicultural Alliances

Food Production Systems

Initiated on: Nov 26, 2019 State: Idaho

Term Length: Long-term (>5 years)

Idaho is the 4th largest agricultural economy in the U.S. with 25,000 farms and ranches, producing 185 commodities. Agricultural cash receipts are close to \$7.1 billion and agribusiness contributed \$20.6 billion in sales; 128,200 Idaho jobs; and \$3.7 billion in wages. Current and emerging challenges affect the broad agricultural system. Extension efforts will focus on scientific research and objective empirical evidence and will be made available for implementation by all pertinent Idaho agriculture stakeholders, including producers and affiliated agribusinesses, government support agencies, and allied industries.

Science Emphasis Area

Sustainable Agricultural Production Systems

Forest, Range, and other Natural Resources

Initiated on: Nov 26, 2019 State: Idaho

Term Length: Long-term (>5 years)

This PET will provide innovative, research-based, educational opportunities which engage diverse stakeholders and citizens to help them better steward Idaho's forests, rangelands, and other natural resources in the context of changing Idaho demographics and environment. We will improve participants' knowledge and actions, help landowners and managers apply sustainable management practices, and increase economic opportunity. We will also help Idaho adults and youth participate more effectively in natural-resource policy discussions.

Science Emphasis Area

Bioeconomy, Bioenergy, and Bioproducts, Environmental Systems

Health and Wellness

Initiated on: Nov 26, 2019 State: Idaho

Term Length: Long-term (>5 years)

This critical issue offers healthy living, food safety, and resource management programs targeting various dimensions of wellness including physical, social, emotional, financial, intellectual, and occupational wellness. High rates of overweight and obesity, low physical activity, and low intake of fruits and vegetables put Idahoans at ever increasing risk for chronic disease. These risks are higher among vulnerable populations such as minorities and low-income adults/youth. Consumer food-safety programming provides science-based educational contents to help Idahoans with food preservation, temperature control, proper cooking, and personal hygiene, and promotes human health and physical wellness by improving the quality and safety of food.

Science Emphasis Area

Family & Consumer Sciences, Food Safety, Human Nutrition

Horticulture and Small Farms

Initiated on: Nov 26, 2019 State: Idaho

Term Length: Long-term (>5 years)

This critical issue addresses sustainable food and ornamental plant production and scale-appropriate residential land use practices appropriate for both commercial and general public audiences, including youth. These diverse yet interconnected programs and activities are targeted to meet the needs of home and community gardeners, residential and small acreage landowners, urban, peri-urban and rural small-scale specialty crop and livestock producers, landscape and nursery industry professionals, and supporting industries and organizations. Audience needs will be met by the development and delivery of adaptive, wide-ranging, creative research, education and outreach solutions.

Science Emphasis Area

Sustainable Agricultural Production Systems

Water

Initiated on: Nov 26, 2019 State: Idaho

Term Length: Long-term (>5 years)

Water security refers to the reliable availability of sufficient quality and quantity of water to sustain human health, livelihoods, and the environment. The water PET will focus on teaching and researching about managing uncertainty and about systems management for multiple benefits. An essential element is development of watershed and systems thinking/modeling for reducing uncertainty and increasing resilience/robustness.

Science Emphasis Area

Education and Multicultural Alliances, Environmental Systems, Sustainable Agricultural Production Systems