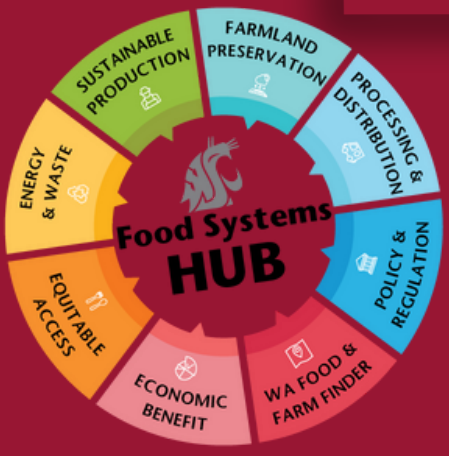
WASHINGTON STATE UNIVERSITY
Food Systems



WHITE PAPER: THE ROLE OF WSU IN SUPPORTING RESILIENT WASHINGTON FOOD SYSTEMS

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Background: what is the need / issue / case statement

Food system resiliency is critical to the economic, physical, and emotional well-being of Washington State residents. Global disruptions including pandemics and climate change present unprecedented challenges to Washington food and farming systems, impacting on-farm food production, wild-harvesting, distribution, and food access. The COVID-19 Pandemic highlighted the vulnerabilities in our Washington food and farm systems and exacerbated the inequities in food access across our state including high rates of food insecurity (50-58%) in lower income households and in households with children (Drewnowski et al., 2020). Climate-driven events such as flooding, water shortages, and heat waves have and will continue to impact the ability of farmers and wild-harvesters to provide a healthy and stable food supply to their communities and remain economically stable. As the most recent 2022 Intergovernmental Panel on Climate Change (IPCC) Report states, "Risks and projected adverse impacts and related losses and damages from climate change escalate with every increment of global warming Climatic and non-climatic risks will increasingly interact, creating compound and cascading risks that are more complex and difficult to manage." While current systems of food production, distribution, and waste management contribute to climate change through the emission of greenhouse gases; redesigning these systems offers significant opportunity to mitigate climate change. To improve resiliency, communities must prepare for mitigation and for adapting to both predicted and unexpected changes. The CAHNRS Resilient Washington vision of "a Washington where every person lives in a thriving community that is well prepared for the unexpected and every person is thriving—physically, emotionally, and financially" begins each day with resilient food systems that focus on ensuring a safe and nutritious food supply for all people who live in Washington and reliable incomes for food providers.

WSU as a Land Grant University is well-positioned to support Washington communities in meeting these challenges. With our traditional expertise in research and education that spans the full cycle of food production, processing, distribution, access, consumption, and waste management; we are well-positioned to support the growth of regional food production and distribution while addressing social inequities and environmental sustainability. With its local presence in county offices, Extension can catalyze community partnerships that build capacity to address climate change and related issues including food security, public health, production expertise, and natural resource conservation in inclusive and equitable ways. Washington State currently counts 35,200 farms, most of them small, that produce 300 different crops (WSDA n.d.). Further, there are 42 tribes that share traditional homelands and waterways in what is now Washington State and rely on healthy ecosystems to supply food needs and food ways.

A resilient food system addresses food supply, access, and waste to combat inequities and mitigate climate change. The Use Food Well Washington Plan baseline data from 2015 tracked 1.2 million tons of food waste across Washington each year including 390,063 tons of edible food waste (Washington Department of Ecology, 2022). The new House Bill 1799 Washington Organics Management Law has outlined an ambitious next seven years for the state to reduce food waste in landfills by 75% by 2030. WSU Extension, backed by CAHNRS research expertise, is poised to support counties throughout the state to move forward in reducing food waste and the resulting methane emissions from landfills, while improving food security in communities.

In addition, equitable access to the resources needed to produce, process, and market food could also improve livelihoods and reduce food insecurity across Washington. Historic trends show a loss of income-generating small and mid-sized farmers, processors, and retail establishments due to economic challenges, retirement, and lack of affordable access to farmland, water, and other inputs. As the Resilient Washington Initiative lines out, "CAHNRS needs to be postured to support agriculture across size and scale, with a focus on increasing sustainability and food security in the context of a challenging future." Extension's continued work with farmers and community food systems stakeholders, including food businesses and consumers, is needed to support the development of robust, long-term, food system linkages.

How is WSU Extension responding?

WSU Food Systems Team members and collaborators, who include county and regional food, community economic development, and agriculture faculty and staff from across CAHNRS, work directly with diverse farmers and gardeners throughout the state to grow sustainable regional food production capacity through educational courses, workshops, technical assistance, and on-farm research. These programs include Cultivating Success, Farm Walks, Growing Groceries, WSU Food Systems Team Hub Calls, Eat Local First Collaborative, the WSU Organic Farm and academic programming in Organic and Sustainable Agriculture at undergraduate and graduate levels. WSU Food Systems members also work to advise policy development at the state level, collaborating with state agencies including WSDA and the Conservation Commission by serving on the Washington Food Policy Forum and driving initiatives like WA Meat Up.

WSU Extension has a long history of working with consumers across the state to improve access to safe healthy food for all people in Washington through Youth and Family Programming. These programs, including the SNAP-Ed Program and the WSU Expanded Food and Nutrition Education Program (EFNEP) provide nutrition education, cooking demos, recipes, and classes for preparing fresh produce.

Additional programs include incentive programs that support local agriculture, support for school gardens and community garden production, Food Waste Prevention Programming and collaboration with local agencies on initiatives like the WSDA/Farm to Food Pantry Initiative that supports local farmers' production of client-requested produce for food banks with attention to culturally appropriate foods. The food preservation outreach program includes the Master Food Preserver volunteer program, which like the Master Gardener program, originated in Washington state.

What difference is WSU Extension making?

In keeping with Extension's historical county presence and mission to support viable food and agricultural production, community development, youth development, and consumer health, County and Reservation/Tribal Offices are playing critical roles in promoting and sustaining Resilient Regional Food Systems for diverse populations. Many County Extension Offices still have agricultural educators who can serve the full range of farmers in their county and many County and Reservation offices are served by SNAP educators. Every county still has 4-H. A few local offices still have consumer food safety expertise, including food preservation expertise. Regional and campus-based Extension faculty offer statewide expertise. Master Gardeners serve the state and have identified Local Food as a program priority stating that they "promote the use of sustainable techniques for growing local food to improve individual and community health and wellness."

In offices that have prioritized this work, Extension is serving diverse audiences across the food system. For example, Clallam County Extension has worked with Tribal communities to identify and support procurement of preferred foods and recycle food waste to enhance local ecosystems. Skagit County Extension provides technical assistance to Spanish speaking farmers and beginning farmers; reaches consumers through nutrition education and cooking classes; and provides support to all scales of agriculture through programs like Farm Stress Prevention. Benton county provides Master Food Preserver training to regional Tribal communities for the safe handling and processing of traditional/cultural foods. Extension serves as a crucial collaborator in food policy efforts to strengthen regional food systems, for example WSU Spokane County Extension participated in the Spokane Food Policy Council efforts to create a Regional Food Action Plan for Spokane County.

The WSU Food Systems Program, originally established by the Washington Safe Food Initiative in 2000 as the Small Farms Program, has a historical mission of serving diverse farmers and food system stakeholders and actively partners with government agencies and community organizations to share knowledge and approaches for building resilient regional food and

farming systems. This program also prioritizes connecting farmers and food system organizers with local Extension offices and other WSU expertise, as well as with non-profit and government agency resources. Their Cultivating Success Program reaches hundreds of diversified farmers across Washington each year with sustainable farming and business management education and has prioritized engaging multilingual and multiracial farming audiences since 2004. These statewide courses, facilitated by County Coordinators and bilingual educators, engage university scientists as well as successful farmers to teach sustainable and regenerative agricultural practices focused on providing healthy foods for local communities and regional markets. In addition to supporting farmers, team members have historically offered community education on the value and importance of supporting local agriculture, processing and marketing infrastructure, and equitable community food access. And, as we saw during COVID, the leadership provided by the Food Systems program for statewide networking and collaborative problem-solving is increasingly critical during times of instability and change.

What could WSU Extension do with additional resources and partnerships?
Extension was designed to share the education and knowledge resources of a land-grant university with residents of every county. To achieve the Resilient Washington Food Systems vision, WSU faculty and staff need to collaborate across disciplines, across campuses, and across research, teaching, and extension functions. Sufficient resources for staffing County and Reservation offices with food and agricultural expertise as well as for linking these offices with campus-based expertise and academic programs would ensure WSU's capacity to serve communities in inclusive ways.

- **Strengthen regional food systems across all of Washington by staffing each County/Reservation office with Food and Farming Systems educators equipped to serve our diverse populations and farms of all sizes.**

As envisioned in CAHNRS Resilient Washington, Extension must "expand the Extension footprint in counties and tribal offices …to enhance co-creation of solutions to local challenges/opportunities". Robust regional food systems are place-based and require knowledge and development of local networks and community-based partnerships. Extension needs to respond to community needs that range from growing food and profitable food and farm businesses to consumption of foods that are both safe and nutritious, all while reducing and managing waste. While almost every county in Washington has diversified, small and midsized commercial growers, some of our most agriculturally diverse and productive counties lack staffing capacity to serve farmers selling into local, regional and value-added markets or beginning farmers of different types and backgrounds. Similarly, while every

community needs educators with expertise in food, nutrition, and food safety; current capacity is often limited to short-term positions and programs funded through federal nutrition programs which limits flexibility. Ideally capacity building could include a DEI lens to ensure our ability to serve diverse and socially disadvantaged audiences, including increasing bilingual Spanish speaking educators and prioritizing knowledge of the crops and foods preferred by different cultures. The current models of grant and contract-based, fee, or donor funded programs can make it difficult to build long-term relationships and consistently serve a wide range of audiences, including historically underserved constituents.

- **Elevate Extension in the land grant mission across the university campuses and institutional structures.**

Rather than seeing Extension as an add-on service to research and teaching, building community resiliency requires that centering Extension as a vital mission across all WSU functions. It will take an integration of research, extension and teaching to truly support the development of professionals, students, and academics who prioritize healthy and equitable food and agricultural systems as critical to ensuring the long-term health, environment, and economy of Washington residents. An integrated and community-engaged approach to research, teaching, and extension will be foundational to developing and sharing the interdisciplinary resources and knowledge needed to strengthen and adapt regional food and farming systems to climate and societal crises.

- **Equip Extension Faculty and Staff with resources, skills and knowledge on Resilient WA Food Systems in a Changing Climate.**

To grow production and consumption of regionally produced sustainable food and address food access and waste across the state, Extension could support staff and faculty to expand community-engaged research and education focused on climate resilient, regenerative production methods, food waste prevention through food preservation and fresh food use with an emphasis on nutrient rich diets (shopping and cooking), home and on-farm composting, and much more. For example:

  - The Food Systems Program could offer HUB Calls focused on Resilient Food Systems in a Changing Climate.
  - WSU Cultivating Success could launch a CS Climate Stewards Course to connect farmers with practices and resources for climate mitigation and resiliency with case studies highlighting changes farms have made to make their operations more resilient to climate change.

- The Growing Groceries Program could be continued and expanded across the state for different communities.
- ·Extension could work with WSU Health Sciences faculty to establish programs that support farmworkers, farmers, and gleaners working under conditions of heat-stress and wildfire smoke.

Expand partnerships within communities to improve food production, distribution and waste prevention.

With increased capacity across the state, Extension could build partnerships with organizations, agencies, and farms in every community to respond to local challenges and needs. Some examples include:

- Develop relationships with Use Food Well Washington for food waste reduction strategies in each county. Some examples include training WSU Extension staff to conduct Food Waste Audits in schools and businesses to support compliance with the new Organics Management Law and promoting Food Waste Prevention Week events across the state.
- Expand relationships with statewide USDA Offices, Conservation Districts, and the Conservation Commission to expand participation in programs supporting Climate Smart Agriculture Practices.
- Partner with regulatory agencies including Health Departments and the WSDA for education around what processed foods can go into public consumption.
- Share effective strategies for food systems climate resiliency in different communities, for example: Whatcom County has a non-profit that is distributing extra restaurant food funded by a program similar to the Master Composter Program.

Connect and engage those working on Regional Food Systems Sustainability throughout the state.

Invest resources in systematically assessing existing resources, challenges, and needs and identifying the most strategic and effective roles for the Food Systems Program and for CAHNRS teaching, research, and extension on regional food systems sustainability. This would be done with the goal of identifying future areas of emphasis, engaging the widest possible audience, and strategically investing and planning for the most significant outcomes. The Food Systems program will work to continue connecting campus-based expertise and programs in food systems with our local County and Reservation Extension Offices.

Extension then becomes best poised to address the aspects of the food system with the most potential to increase resilience in the face of climate change and other disruptions. Effectively responding to informational requests from people who want grow, distribute, and eat healthy food can contribute to the greenhouse gas emission reductions and drawdown critical to resilient food systems. At the same time, strengthening local and regional food production and distribution systems in partnership with community food advocates can help improve food access to vulnerable communities. Creating access to education and information at the county/Tribal level for all community members, especially those who are not currently able to access institutional resources and knowledge is critical. These investments would make WSU known as an institution that serves all scales of agriculture and distribution on a regional scale, position CAHNRS as a change leader, and support Extension to fulfill its mission of sharing knowledge resources with all residents (farmers, producers, consumers, youth, laborers) who are working to strengthen community food systems in the face of unprecedented challenges.

What resources are needed to accomplish this:

To ensure Extension can fulfill its potential to contribute to Resilient Food Systems across Washington, the following resources are needed:

- Funding for a needs assessment across Extension County and Tribal offices to ascertain which counties are currently being adequately served by agriculture and family and consumer science educators and where needs exist for additional staffing. In some cases, counties have agricultural educators, but they are limited to serving specific crops or types of production systems rather than the full spectrum of farmers.
- Funding for adequate staff and faculty to ensure that there is an agricultural educator and a family consumer sciences educator with expertise in food production, nutrition, and food safety covering every county/reservation.
- Funding for the Food Systems Program to conduct needs assessments and develop and compile resources to meet needs. Examples could include Resilient Food Systems factsheets could be developed with county/tribal staff and faculty, Food Systems HUB Call seminars focused on Resilient Food System, or developing additional courses through Cultivating Success such as a Climate Stewards course.

Who is not here that should be part of this (Extension, CAHNRS, WSU, External):
WSU Food Systems Team members and collaborators have contributed to the development of this white paper that was initiated by a working group at the 2022 All Extension Conference. Participants span programs across the food system from small farm support to consumer education. Programs not currently engaged fully through the Food Systems Program include 4-H, Master Gardeners and Livestock advisor program. Further needs assessments and strategic planning efforts should seek to engage interested colleagues from across CAHNRS research and teaching programs and across other WSU Campuses such as Health Sciences. Critical partners external to WSU include the Tribal governments, Washington State Department of Agriculture (WSDA), conservation districts, non-profit food and agriculture organizations, farmers, BIPOC communities, community gardens, housing sites and school districts that grow food, and Food Banks/Pantries. Many of these groups are already engaged by Extension staff and faculty in their communities.

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