

March 2, 2017 Visioning of United States Agricultural Systems for Sustainable Production Comments Submitted on Behalf of Organic Farming Research Foundation

Organic Farming Research Foundation (OFRF) is pleased to be invited to present at the USDA Visioning session to help inform the possible future of U.S sustainable agricultural systems.

OFRF is a national, public-interest organization founded in 1990 to foster the improvement and widespread adoption of organic farming systems. The organization was founded as a response to rising demand for organic agriculture research, extension and education to meet the information needs of a growing community of organic farmers and to educate the public and policy decision makers about organic farming issues.

Objective for this presentation:

To identify research opportunities and knowledge/data gaps for research priorities for long-term organic U.S. agricultural production systems.

What are the current strengths, weaknesses, and future opportunities of the U.S. agricultural industry?

Strengths

Organic farming has grown tremendously since OFRF was founded in 1990. By April 2015, the United States Department of Agriculture (USDA) announced that there was over 19,000 certified organic producers in the US, a growth of 250% since 2002 (USDA, 2015). This growth brings OFRF closer to our mission of organic agriculture being the leading form of agriculture in the country. It strengthens our commitment to supporting the success of this important and rapidly growing part of our agricultural system. The USDA announced in April 2016 a significant increase in the number of certified organic operations, continuing the trend of double-digit growth in the organic sector. According to new data, there are now 21,781 certified organic operations in the United States and 31,160 around the world. "Organic food is one of the fasting growing segments of American agriculture," said Agriculture Secretary Tom Vilsack. According to data released by the Agricultural Marketing Service's (AMS) National Organic Program (NOP), the number of domestic certified organic operations increased by almost 12 percent between 2014 and 2015, representing the highest growth rate since 2008 and an increase of nearly 300 percent since the count began in 2002. The total retail market for organic products is now valued at more than \$39 billion, nearing a 5% share of the total food market in the United States and over \$75 billion worldwide. (USDA, 2016).



- Organic practices can support both organic and conventional systems.
- These recommendations can provide a choice for producers and consumers for how and what is produced.

Weaknesses

- Aging farmer/rancher demographics.
- Loss of prime agricultural producing lands.
- Reliance on external source of agricultural products.
- Difficulty of transfer of applicable research results for adoption by farmers/ranchers.
- Lack of diversity of production methods.
- Environmental degradation, land use changes, and human health concerns.

Opportunities

- Public acknowledgement of important of farms/ranchers and farmers/ranchers.
- Continued growth of the organic segment of the agricultural industry for both consumers and producers for diversity of products and practices.
- Organic systems and practices can be more sustainable and self-regenerative, especially environmentally and economically, through the enhancement of natural cycles.
- Increase the number of small producers and retain the mid-sized farms/ranches which are most in jeopardy of land and people loss.
- Maintain and support the rural economy.

Based on the current needs of American organic farmers and ranchers as assessed by OFRF surveys and review of the USDA National Institute of Agriculture Organic Programs, USDA NAS producer's surveys, and USDA ERS assessments, OFRF recommends several areas as high research priorities to provide scientific knowledge to farmers and ranchers to meet the challenges of the next 50 years. For a more detailed needs assessment and recommendations, please refer to the OFRF NORA results published in 2016 (Jerkins and Ory, 2016). This report provides the results of a nationwide survey of national organic producers on their research needs.

High Research Priorities

To begin discussion and planning for future research opportunities, OFRF recommends the following high priority research topics:

- Use of **whole systems** research approach for **nutrition**, **weed**, **insect**, **and disease management** for production systems, i.e. vegetable, animal, fruit, etc., and especially for mixed systems.
- Research that will lead to a better understanding of soil processes, for example soil biology (microbiology and food webs), and how to improve soil health and linkage to plant health and relate soil health back to economic returns are leading research needs expressed by organic producers.



- A better understanding of **natural systems** to support and maximize the benefits to agricultural lands.
 - Measure the benefits of **ecosystem services** as multiple services within the production system framework as to how to enhance these services and potential for economic benefits to producers.
- Increase and improve **genetic varieties** for plant and livestock specific to organic systems.
 - **Breeding** specific for organic production to enhance nutritionally dense products and stress reliance.
- Develop practices and products to replace and/or eliminate the use of **antibiotics**.
- Use of **robotics** for all scale of producers.
- Social science research for most efficient way to **transfer research results** and most effective **training** for farmers/ranchers to increase level of adoption of research verified practices and technologies.
- Research to scale-up organic methods.
 - Enhancement of the **medium-scale producer** level from production to economic research needs so that this level of production will not be lost in the US agricultural landscape.
 - Adoption of **large scale organic agriculture** production techniques, technologies, transition methodologies, marketing strategies.
- Provide research and **educational information and training** for new and transitioning farmers/ranchers entering the organic production arena.
 - Retention of current producers and access of **new farmers** how to entice the next generation to be a farmer/ranchers; land access; economic support; training and longterm mentoring.

References:

USDA, 2015. "USDA Announces Record Number of Organic Producers in U.S." Press Release No. 0097.15. USDA Office of Communications, Washington, DC.

USDA, 2016. "USDA Reports Record Growth In U.S. Organic Producers." Press Release No. 0084.16. USDA Office of Communications, Washington, DC.

Jerkins, D. and Ory, J. 2016. 2016 National Organic Research Agenda. OFRF, Santa Cruz, CA.

