

Vision 2030 – Animal Systems Challenges

1. Disease / Animal Health

- Use of macro- and micro-scale sensors and robotics to monitor animal health, productivity and environmental impact in real time
- Mindful use of antibiotics to support animal health while being aware of resistance and overuse of antibiotics is important.
- Encouraging producers to partner with veterinarians to optimize animal health and biosecurity

2. Farm Gate Value that leaves the state

- Focus on innovative ways to add value to animal products here in MS. Food insecurity is a real problem for many in Mississippi, but there is a lot of “food” produced in this state. We produce a lot of food, but not a lot of food in a form that Mississippians go to the grocery store to purchase.

3. Capitalize on the interconnectedness of animal systems and increase production efficiency

- How can production processes support each other? How can diversification benefit producers?
- Production of vitamins, synthetic AA, and some other feed additives important to animal (and human) health are primarily (or almost exclusively) produced in Asia. This creates potential for supply and demand challenges
- Input use reduction and soil preservation to support animal systems

4. Recycling/Repurposing waste from animal sectors

- get value added products from waste. Nutrient cycling to support forage systems
- Utilize by-products as co-products to reduce food waste
- Research is needed to support the use of by-products from other industries to be utilized as feed sources in animal production systems. Variability is a concern with by-product feeds

5. Sharing our Story

- Build on programs like Farm Families of Mississippi to encourage producers to share the facts about how food is produced in Mississippi. Many producers are comfortable on the farm, but not in front of a camera.
- connecting animal ag production with food consumers are eating. Educate consumers on how to prepare foods from products we produce.

6. Labor and workforce development

- building emotional intelligence of workforce through MSU teaching programs

- Early outreach programs to highlight careers in animal agriculture, internship and mentorship programs for high school and college students

7. Barriers to entry

- increase opportunity and training for smaller scale producers (e.g. cattle, sheep, and goats)
- Insurance and loan concerns
- Connect aging producers with new and beginning producers for mentoring and opportunities to keep land in animal agriculture
- Address challenges surrounding big producers getting bigger and it being harder for beginning/smaller producers to be competitive

8. Consumer transparency

- Informing producers/consumers with best research-backed information and helping them avoid misinformation. Make Mississippi State University the trusted source of information for both consumers and producers.
- Responsible antimicrobial use – consumer trust that you are following withdrawal guidelines.

9. Product Development for U.S. Catfish

- need R&D that private industry won't undertake. Also – what to do with large fish and what to do with offal products?
- Promote engineering solutions for seining and processing in catfish harvesting

10. Value of international trade

- Education for producers and consumers on the importance of international markets for Mississippi agriculture
- Build support and brand awareness for Mississippi branded value-added products