CLIMATE CHANGE

Rationale:
Scientific evidence strongly suggests that climate change is occurring and has the potential to affect global food security. Animal agriculture can contribute to climate change through emissions of greenhouse gases such as methane and nitrous oxide, and animal production is in turn affected by climate change and variability. Mitigation of greenhouse gas emissions can be achieved through various techniques, including dietary manipulation, improved productivity, and manure management. Increasing the efficiency of feed utilization can be especially powerful in reducing life-cycle greenhouse gas emissions per unit of animal product. Similarly, animal system adaptation to climatic change can be achieved through genetic, nutritional, and management strategies. A targeted, well-funded research, extension, and education effort is required to quantify and mitigate greenhouse gas emissions and adapt animal production systems to climatic changes, while balancing other environmental, economic, and societal concerns.

- Climate change and variability can negatively impact agricultural productivity at a time when global food demands are dramatically increasing.
- Building resilience of animal production systems to climate change and variability will require a significant commitment to animal agricultural research, extension, and education through public funding.¹
- Developing and integrating new technologies into animal production systems will serve to both mitigate greenhouse gas emissions and adapt to a changing climate.²

Policy Statement:
FASS supports use of technology to maximize feed efficiency as well as increased public funding for research, extension, and education related to quantification and mitigation of greenhouse gas emissions, and adapting animal production to a changing climate to ensure a safe and abundant food supply.

Policy Objectives:
- FASS supports a multi-faceted approach to climate change solutions that are compatible with other environmental, societal, and economic concerns relating to food systems.
- FASS supports opportunities for the animal production industry to adopt production systems and technologies that reduce life-cycle greenhouse gas emissions by improving the efficiency of feed production and utilization.
- FASS supports increased public funding for:
  - Research to quantify greenhouse gas emissions from animal agriculture to allow improved accuracy of greenhouse gas emission inventories
  - Research to discover greenhouse gas mitigation strategies for animal agriculture
  - Research to find effective solutions to adapt animal production systems to a changing and variable climate
  - Extension programs to support implementation of these strategies and solutions

References: