

# **INTERIM JOINT COMMITTEE ON AGRICULTURE**

## **Minutes of the 4th Meeting of the 2024 Interim**

**September 19, 2024**

### **Call to Order and Roll Call**

The fourth meeting of the Interim Joint Committee on Agriculture was held on September 19, 2024, at 9:00 AM in Room 154 of the Capitol Annex. Senator Jason Howell, Chair, called the meeting to order, and the secretary called the roll.

### **Present were:**

Members: Senator Jason Howell Co-Chair; Representative Richard Heath Co-Chair; Senators Gary Boswell, Matthew Deneen, Damon Thayer, Robin L. Webb, Stephen West, and Mike Wilson; Representatives Chad Aull, Josh Calloway, Mike Clines, Daniel Fister, Derrick Graham, David Hale, Mark Hart, Kim King, Matthew Koch, Shawn McPherson, Amy Neighbors, Michael Sarge Pollock, Phillip Pratt, Sarah Stalker, Cherlynn Stevenson, Nancy Tate, Walker Thomas, and James Tipton.

Guests: Dr. Jordan Shockley, Professor in Agriculture Economics, University of Kentucky; Alex McWard, Policy Specialist, National Conference of State Legislatures (NCSL); Garyn Angel, Chief Executive Officer, Farm-Ed; Julie Babbage Laungani, Managing Partner, Babbage Co-Founders; Anne Mikos, Chief Education Officer, Farm-Ed; and Dr. Marcus Bernard, Dean, College of Agriculture, Health, and Natural Resources and Director of Land Grant Programs, Kentucky State University.

LRC Staff: Stefan Kasacavage, Hillary Abbott, Kelly Ludwig, and Susan Spoonamore.

### **Approval of August 22, 2024 minutes**

The August 22, 2024, minutes were approved, upon voice vote, without objection upon motion made by Representative Fister and seconded by Representative Koch.

### **Discussion on Carbon Credits**

Alex McWard, Policy Specialist, National Conference of State Legislatures (NCSL), discussed legislation in other states regarding carbon credits. He said that carbon credits can have different meanings depending on the context. Carbon credits can refer to carbon offsets which compensate for emissions by investing in projects that reduce or prevent emissions in the atmosphere, such as reforestation, carbon storing, agriculture and renewable energy. Mr. McWard said it was important to note that offsets are purchased on a voluntary market. Carbon credits can also refer to carbon markets, cap-and-trade, or cap-and-invest. In some carbon markets, entities receive allowances that permit a certain amount of carbon

emissions. Allowances can be traded between entities, however, the number of allowances declines over time. With only a certain amount of allowances being granted or auctioned off, the overall emissions within the state are capped. California and Washington have statewide carbon markets. In the northeast, the Regional Greenhouse Gas Initiative (RGGI), among 11 states, is the only regional market in the country. Allowances are capped and auctioned off regionally and these allowances can be traded between the states within the region. Several states have introduced carbon market bills while others have enacted carbon offset legislation.

Representative King said her proposed bill requires land owners who enter into carbon credit agreements to include the agreement in their deed and to be filed in the County Clerk's Office. This would protect future buyers, creditors, and potential heirs.

In response to Senator West, Mr. McWard said there is not a lot of information available on how much carbon offset brokers make on transactions.

Dr. Jordon Shockley, Professor in Agriculture Economics, University of Kentucky, explained that agriculture represents about ten percent of greenhouse emissions in the United States. He said a fifth of the world's largest companies are committed to net zero emissions. Questions remain on how companies will meet their goals, especially those in the food supply chain. Both have risks and financial opportunities. Previously, the biggest issue in Kentucky was carbon developers coming into counties, offering payments, and signing contracts to sell carbon credits. Now the issue in carbon inset markets is selling directly to the buyer in the supply chain. The reason for the shift is because of lawsuits against Delta Airlines and Tyson Foods for greenhouse reduction claims. If a company is looking for a place to reduce a carbon foot print, it would be Kentucky.

In response to Senator Howell, Dr. Shockley said there needs to be a platform created to allow credits to be traded. He said the United State Department of Agriculture (USDA) needs to develop carbon credit standards. Dr. Shockley said international markets were placing a demand on Kentucky agricultural product regulations, specifically, the deforestation free soybean program.

In response to Senator West, Dr. Shockley said it is hard to find any information on a middle man being involved in contracts. Senator West said there were numerous intermediaries that take a significant cut of the money.

In response to Representative Tipton, Dr. Shockley said agriculture producers and forest managers need to attend UK's Cooperative Extension meetings or call to obtain information on carbon credits.

In response to Representative Aull, Dr. Shockley said there are opportunities for carbon contracts for agriculture producers by way of payments. Opportunities are available but Kentucky would need to recruit additional companies.

In response to Senator Howell, Dr. Shockley said that he did not know if coal-fired plants or corresponding utilities need carbon credits.

### **Agriculture Education and Plant Growth Innovations**

Garyn Angel, Chief Executive Officer, Farm-Ed; Anne Mikos, Chief Education Officer, Farm-Ed; and Julie Babbage Laungani, Managing Partner, Babbage Co-Founders discussed the future of project-based learning. Farm-Ed is integrating agriculture Artificial Intelligence (AI) in immersive experiences. Students learn from Farm-Ed's Smart Grow Chamber that is a complete ecosystem for plants. The Farm-Ed platform provides classrooms the tools to conduct long-term, data rich, and industry-standard experiments. Anne Mikos said that Farm-Ed's goal is to make agriculture accessible to every K-12 classroom.

In response to Senator Thayer, Mr. Angel said that Farm-Ed could serve every high school in Kentucky for approximately \$4 million. The return on investment would be professional development and interdisciplinary education of the students.

In response to Senator Howell, Ms. Mikos said a largest percentage of Florida classrooms are using Career and Technical Education (CTE) course loads.

In response to Representative Heath, Mr. Angel said the cost is \$10,000 per unit, per classroom, per year. Farm-Ed serves K-12 students.

In response to Senator Webb, Mr. Angel said Farm-Ed has data from Florida, but the data from West Virginia would not be available until the 2024-2025 school year.

In response to Representative Calloway, Mr. Angel said Farm-Ed is a corporation with a non-profit arm.

In response to Representative Aull, Mr. Angel said there are numerous grant opportunities. Farm-Ed works with universities to pursue grants.

In response to Representative Tate, Mr. Angel said Farm-Ed services the Grow Chambers. The life expectancy of a Grow Chamber is about five years, although they are replaced every three years. He said there is no cost for a service agreement or monitoring.

In response to Representative Tipton, Mr. Angel agreed that the Grow Chamber is a lease-service agreement rather than a purchase agreement. He said there is nothing to prevent a

high school from buying the Grow Chamber on its own. Mr. Angel said they were in the early stage of promoting the Grow Chamber and have not reached out to schools.

In response to Representative Pollock, Mr. Angel said they were also working with North Carolina, Georgia, and Ohio.

### **Introduction**

Dr. Marcus Bernard, Dean, College of Agriculture, Health, and Natural Resources and Director of Land Grant Programs, Kentucky State University (KSU) discussed his vision for KSU. The goal is to increase the number of students in the agricultural program by aligning student and industry demands. Dr. Bernard said KSU plans to overhaul the Extension Program by serving all farmers across the state. Research is another area of need based on climate change and the challenge of food insecurity. KSU recently established a Collegiate Farm Bureau Chapter.

In response to Representative Tipton, Dr. Bernard talked about the Benson Research and Demonstration Farm. He said the farm has demonstration plots that contain organic agriculture, warm and cold season grasses as well as sheep and goat research. Two of the most significant research projects involve PawPaws and soybeans. Dr. Bernard said that the aquaculture program is ranked fourth in the nation and first among historical black colleges with aquaculture programs. He said that KSU's aquaculture program works with 31 different countries.

### **Adjournment**

There being no further business, the meeting adjourned at 10:35 AM.