

**USDA-ARS Agricultural System Competitiveness &
Sustainability
Customer Workshop
February 22, 2012**

TOPIC QUESTION 1: What knowledge or technology would improve our abilities to produce an agronomic crop in systems that are profitable and will ensure environmental stewardship?

Facilitator: Kent Heikens/Keith Kohler

Recorder: Jay Berkey/Linda Breuer

Please capture what you feel is important to share with the group in post-breakout report & discussion.

-Summary of topics below:

Needs:

- More long-term comparative research trials
- Improved knowledge of sociology/psychology of farmer decision making
- Improved coordination of the objectives of various stakeholders to reach greater societal goals
- Improved performance-based decision tools
 - Provide alternative to fall application of MAP and DAP in corn/soybean rotations. Deal with infrastructure issues related to this
- Better technology transfer, education, and implementation of BMPs
- Improved drainage water management systems that can be retrofit to current systems for BMP

**USDA-ARS Agricultural System Competitiveness &
Sustainability
Customer Workshop
February 22, 2012**

TOPIC QUESTION 2: What knowledge or technology would improve our abilities to produce specialty crops in systems that are profitable and will ensure environmental stewardship?

Facilitator: Kent Heikens/Keith Kohler

Recorder: Jay Berkey/Linda Breuer

Please capture what you feel is important to share with the group in post-breakout report & discussion.

Summary of topics below:

Needs:

- Sweet sorghum for ethanol/butanol
- Perennial crops
- Improved knowledge of best landscape placement of crops
- Improved nutrient recycling
- Inter-regional shared databases
 - “Common and appropriate metrics”
- Improved drainage water management systems retrofit for BMP
- Cover crops to maintain/enhance yields

**USDA-ARS Agricultural System Competitiveness &
Sustainability
Customer Workshop
February 22, 2012**

TOPIC QUESTION 3: What knowledge or technology would improve our abilities to produce crops and livestock from integrated systems that are profitable and will ensure environmental stewardship?

Facilitator:

Kent Heikens/Keith Kohler

Recorder: Jay Berkey/Linda Breuer

Please capture what you feel is important to share with the group in post-breakout report & discussion.

Summary of topics below:

Needs:

- Knowledge of nutrient cycling in livestock systems
 - Scale effects
- Innovation of nutrient extraction from wastes
- Strategically perennializing the landscape
- Grazing

**USDA-ARS Agricultural System Competitiveness &
Sustainability
Customer Workshop
February 22, 2012**

TOPIC QUESTION 4: Wildcard for each Area.

Facilitator: Kent Heikens/Keith Kohler

Recorder: Jay Berkey/Linda Breuer

Please capture what you feel is important to share with the group in post-breakout report & discussion.

Summary of topics below:

Needs:

- Better understanding of sustainability as part of a business model
- Long-term agronomic research incorporating sociology
- Sustainability as a goal for all systems
- Comparison of conventional, GMO, organic systems
- Assess multifunctionality of systems