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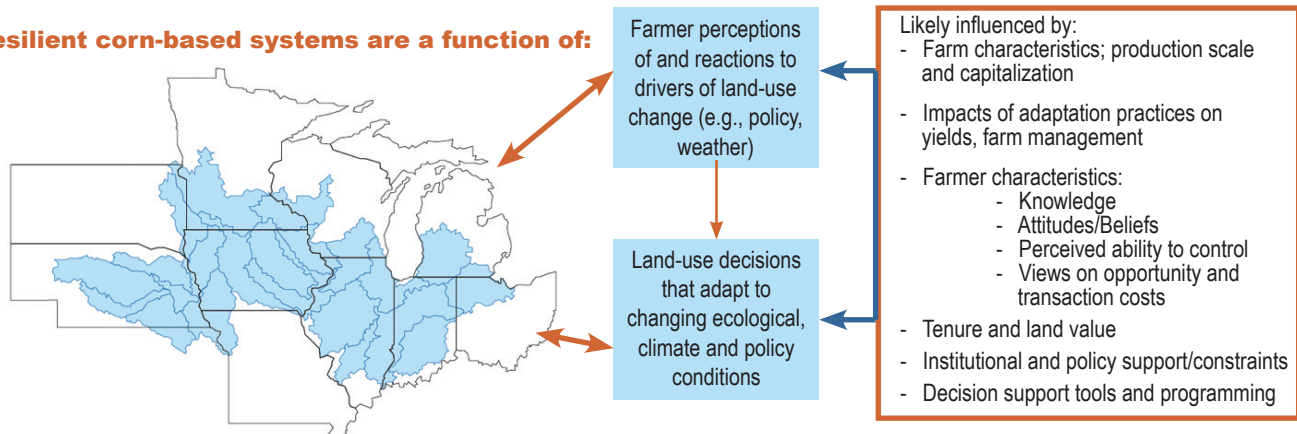
IOWA STATE UNIVERSITY™

Qualitative Farmer Assessment of Adaptive Management

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US Cornbelt agroecosystems are the aggregated result of thousands of individual land-use decisions, which influence and are influenced by economic policy. In light of emerging and dynamic drivers of agroecosystem change (e.g., policy reform, environmental dilemmas, increased uncertainty and extreme weather), the resilience of these systems will be dependent upon how farmers respond to these changing conditions. Thus, it is clear that the sustainable vitality of Cornbelt landscapes is as much a social challenge as agronomic. Starting fall of 2012, a team of 24 Extension Educators in eleven Cornbelt states will be engaging 200 farmers (~20-24 farmers/state) in qualitative in-depth interviews designed to add depth to our understanding of why/how/and when farmers decide to adopt (or not) climate adaptive/mitigative farming practices. This research is the qualitative complement to a quantitative farmer survey, which covered the same eleven states and was segmented among 22 HUC 6 watersheds. These qualitative farmer interviews allow us to explore the nuances of adaptive land-use decisions and farmer beliefs about the socio-ecological resilience of these corn-based landscapes. As part of the research, partial budgeting techniques will be used to assess the potential site-specific financial effects of alternative management or the adoption of various adaptive practices being studied within the larger CSCAP effort (e.g., cover crops, extended rotations, conservation practices, drainage management). Our 200 farmer interviews will be designed to: 1) Discuss the financial assessments to gain a nuanced understanding of farmer perspectives on the relative costs and benefits of adaptive management practices; 2) Gain a deeper understanding of trends discovered in the survey data; and 3) Touch on key issues not covered in the survey– e.g., impact of 2012 drought on attitudes/beliefs about risk, emerging policy (e.g., proposed "shallow loss" insurance). The comprehensive findings of the farmer interviews will be available summer/fall 2013.

Resilient corn-based systems are a function of:

Farmer perceptions of and reactions to drivers of land-use change (e.g., policy, weather)

Land-use decisions that adapt to changing ecological, climate and policy conditions

Likely influenced by:
- Farm characteristics; production scale and capitalization
- Impacts of adaptation practices on yields, farm management
- Farmer characteristics:
    - Knowledge
    - Attitudes/Beliefs
    - Perceived ability to control
    - Views on opportunity and transaction costs
- Tenure and land value
- Institutional and policy support/constraints
- Decision support tools and programming

All of this is being comprehensively analyzed via:
1) Obj 4 A - Cornbelt Farmer Surveys: Sample of 19,193 farmers in 22 HUC 6 watersheds. Data and analysis available fall 2012.
2) Obj 4 B - 200 farmer in-depth interviews across 9 Cornbelt states (~20+ farmers/state). Data and analysis available fall 2013.

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This presentation was given at the Climate and Corn-based Cropping Systems Coordinated Agricultural Project (CSCAP) 2012 Annual Meeting. This handout and supplemental video are approved for use in research, education, and extension outlets.

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