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Factors Affecting Farmer Acceptability of Agricultural Best Management Practices

Denise Weinkauf and Linda Prokopy

Abstract Text:

Land management can have a significant effect on water quality, and conservation practices can mitigate this impact. However they are only effective if land managers are willing to adopt and maintain them. There is a large literature exploring factors that lead to farmer's voluntary adoption of BMPs however generalization is difficult. In addition many studies have focused on statistical models to explain adoption with widely varying results. Napier (2001) suggests researchers approach land owner-operators and inquire why they have or have not adopted conservation production systems. This is the methodological approach taken by this research. The research question we asked is which BMPs are most acceptable and what factors either facilitate or impede implementation or proper maintenance of those BMPs. Sixteen farmers were interviewed in Clinton County, Indiana as a pretest for a CEAP project in the Eagle Creek Watershed, Indiana. The pretest has provided initial results and informed method changes for final interviews. For example land tenure and responsibility for adoption decisions will be important to address. Farmers were asked specifically about themselves, their farm operation, and attitudes and beliefs about water quality; factors shown to influence adoption of BMPs. The farmers were then asked about acceptability of common conservation practices. Farmers identified whether they were currently using these practices and for what reasons along with answering questions related to characteristics of specific practices. Preliminary analysis indicates practices that have high relative advantage (e.g. reduce expenses, time savings, and biophysical and environmental benefits), low complexity, low perceived risk, and high compatibility with the farming system are more acceptable. In farmers' opinions, suitability of land, economics, and lack of awareness are common barriers to adoption. Obtaining a greater understanding of farmer BMP adoption has important implications for conservation, and can help target cost-share money, policy, and education and outreach strategies.

Napier, T.L. (2001). Soil and water conservation behaviors within the upper Mississippi River Basin. Journal of Soil and Water Conservation. 56(4): 279-285.

Impact Statement:

If we are better able to understand what makes certain conservation practice acceptable or unacceptable to a farmer, then this can be taken into consideration when attempting to market that conservation practice to the farmer. Also discovering what characteristics of the farm and farmer make conservation more likely will aid in targeting cost-share money and outreach strategies. These issues combined have the potential to increase BMP adoption therefore protecting water quality.