Integrating Economic Surveys in Agriculture: Lessons Learned from the ARMS-CEAP Survey

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Abstract: There is a growing need for information that is integrated across the food chain, from farm production forward to processors, wholesalers, and retailers and backward to resources and input providers. This need stems in part from policy issues that cut across links in the chain, such as tracing products, food safety monitoring or linking policy initiatives to farm practices and environmental outcomes. But the need also stems from the increasingly integrated nature of food production; the expanding use of formal contracts, vertical integration, and multi-unit farms means that one reporting unit may not contain all the relevant information needed to assess policy impacts on production practices, productivity, and financial performance, even at that unit.

Although policy analysis frequently requires development of more integrated, and less fragmented, databases, integrated databases are rarely available. Survey designers and analysts face formidable practical challenges to build integrated databases for policy-oriented research. Specifically, an integrated survey will almost certainly entail a re-examination of sample design, unit definition, questionnaire content, training, and data handling. USDA has worked on a number of survey integration projects, including ARMS-Census, ARMS-AELOS, and ARMS-CEAP.

This paper highlights lessons learned from one such effort to integrate two surveys – ARMS and CEAP—an effort that was prompted by the changed focus of USDA's conservation programs away from traditional land retirement programs and towards conservation on "working farmlands." To measure the success of USDA's working-lands conservation programs, a database was needed to isolate the influence of program incentives from other factors governing farmers' conservation decisions. The ARMS-CEAP pilot survey integration program was conducted for wheat (2004) and corn (2005). The integrated ARMS-CEAP database linked farm production practices, farm economic and producer characteristics, and site-specific environmental characteristics, enabling a comparative assessment of how USDA conservation program incentives affect economic behaviour and environmental outcomes.