



The Center for
Behavioral and Experimental
Agri-Environmental Research

CALL FOR RESEARCH COLLABORATIONS

The Center for Behavioral & Experimental Agri-Environmental Research (CBEAR) is a consortium of researchers from major research and land grant universities that applies the science of behavioral economics to understand the values and decision-making processes of farmers, ranchers, and landowners (USDA's customers). Drawing on insights from behavioral economics, CBEAR helps USDA program administrators adapt their program designs. The adapted program designs are then rigorously tested through randomized controlled trials in the field. The end result is evidence-based program designs that achieve greater levels of participation, satisfaction with the programs, and improved environmental outcomes... all while reducing program costs.

CBEAR welcomes the opportunity to collaborate with administrators of agri-environmental programs. We have found that the following conditions are generally favorable with regards to application of randomized controlled trials:

1. The proposed program change is popular, or increasingly popular, or the required behavioral change among participants is common to many programs (e.g., adopting a new practice or technology). Thus, the evidence about program impacts would have broad applications to other USDA programs and beyond.
2. Program managers can control access to the program change and there are few similar interventions in the study area. Thus, program managers can clearly separate eligible land units or land users into treatment (the new program features) and control (status quo program features) groups.
3. A sufficient number of land units or users (typically more than thirty) can be exposed to the program change. Larger samples permit sufficient statistical power to detect a policy-relevant impact should one exist. Smaller-scale units, like individuals, households, farms, or areas, will be easier to incorporate into an experimental program design than large units, like counties, states, or large regions.
4. Factors that affect access to the program are well understood (for instance, how farmers receive information about program enrollment). Thus CBEAR can help program administrators inject experimental variation into the implementation of the new program designs.
5. Final outcomes, or important intermediate outcomes, can be observed. These outcomes should be relatively independent across units (or the way in which changes in one unit, like a landowner, affect changes in other units are understood).
6. Opportunities exist to go beyond answering the question, "Does it work?" The best project designs can answer, "In which circumstances do changes work best?" and "Which policy levers maximize effects?"

BACKGROUND

CBEAR's mission is to apply behavioral insights and experimental designs to improve programs related to agriculture and the environment. CBEAR was established in October 2014, funded by a competitive grant from the USDA Economic Research Service. For more information go to: www.centerbear.org.



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EXAMPLES OF RESEARCH PROJECTS

CBEAR can apply randomized controlled trials in a variety of situations. For instance, consider a NRCS project that seeks to increase landowner enrollment in a new conservation program. In order to be able to design the ‘optimal’ program, the project administrators do not just want to know if financial incentives lead to increased initial enrollment, but they also want to know the incentive amount that is most cost-effective. In a pilot initiative, they could collaborate with CBEAR to randomize the size of the incentives offered to landowners and measure how much additional participation they can induce per dollar spent. Furthermore, by looking at how responses vary with landowner characteristics, the project administrators will also understand better how to target “smart incentives” at particular kinds of landowners, or how to avoid the trouble of marketing incentives to landowner types that, on average, will be unresponsive to the incentive.

Note that experimental design in a project can be quite modest. Instead of experimenting with the main project intervention, one can experiment with features of the intervention. For example, a program may not be able to randomize the incentives being offered to landowners, but the program could randomize the recruitment messages that landowners receive. Some recruitment messages could emphasize the financial incentives, while other messages could augment this emphasis by highlighting the positive environmental outcomes or the adoption of practices of neighboring landowners. Other examples include having a program vary its monitoring regimes to test whether regulatory compliance is better with random government audits compared to third-party audits, or a program could test different ways of helping landowners complete the enrollment and reporting forms, to determine whether there are some types of low-cost technical assistance that could aid enrollment and compliance.