Statistical Methodology for the 2012 U.S. Census of Agriculture

Linda J. Young*, Andrea C. Lamas, Denise A. Abreu, Shu Wang, and Daniel Adrian USDA National Agricultural Statistics Service, Fairfax, Virginia, USA and University of Florida, Gainesville, Florida, USA, e-mail: LJYoung@ufl.edu

The U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) conducts the quinquennial U.S. Census of Agriculture, in years ending in 2 and 7. Beginning in 2009, NASS conducted a series of research projects that led to the conclusion that the assumptions underpinning the analysis of the 2007 Census were no longer valid. Consequently, NASS has adopted a unified approach to accounting for non-response, under-coverage, and misclassification using capture-recapture methodology. The two surveys used for capture-recapture are the Census and the June Area Survey (JAS). Challenges, such as resolving farm status when an operation is classified as a farm (non-farm) by the JAS and a non-farm (farm) by the Census, are discussed. Accounting for uncertainty using jackknife methods is presented.