Methods for Integrating Multiple Data Sources to Improve Crop Estimates

Committee

Mary E. Bock

Chair

Mary Ellen Bock is professor emerita at Purdue University. Her current research interests are in massive data sets and data mining, bioinformatics, image analysis, and wavelets in nonparametric regression. She is a fellow of the American Association for the Advancement of Science, the Institute of Mathematical Statistics, and the American Statistical Association. She is a past president of the American Statistical Association. She is a member of the Committee on National Statistics of the National Academy of Sciences. She has a Ph.D. in mathematics from the University of Illinois.

Julie Gershunskayam

Member

Julie Gershunskaya is a mathematical statistician in the Statistical Methods Division of the Office of Employment and Unemployment Statistics at the U.S. Bureau of Labor Statistics. Her research has involved small area estimation, treatment of influential observations, with special application to the U.S. Current Employment Statistics Program. She has an M.S. in mathematics from Lomonosov Moscow State University and a Ph.D. from the University of Maryland.

Malay Ghosh

Member

Malay Ghosh is distinguished professor of statistics at the University of Florida. He has been a leader in research and applications of small area estimation methods. In addition to small area estimation, he is interested in Bayesian inference, decision theory and likelihoods. His current research includes in particular, Bayesian analysis of case-control data, multiple hypothesis testing, Bayesian variable selection, empirical likelihood and composite likelihood. He is a fellow of the American Statistical Association and the Institute of Mathematical Statistics. He has a Ph.D. in statistics from the University of North Carolina at Chapel Hill.

Michael F. Goodchild

Member

Michael F. Goodchild (NAS) is emeritus professor of geography at the University of California, Santa Barbara. He is a member of the National Academy of Sciences and the American Academy of Arts and Sciences and a foreign fellow of the Royal Society of Canada. He currently chairs an NAS study committee on transformative research in the geographical sciences. Dr. Goodchild's research achievements center on the measurement, description and analysis of phenomena on the surface of the earth. He has explored using digital information gathered by remote-sensing satellites to create spatial and environmental models of the planet, construct maps, and create digital libraries of geographic information that can be widely accessed electronically. He has also developed mathematical models to help quantify the difference between these geographic measurements and the real world. Dr. Goodchild has a Ph.D. in geography from McMaster University.

Chad Hart

Member

Chad Hart is associate professor of economics, crops markets specialist, and extension economist at Iowa State University. Prior to that he was a U.S. policy and insurance analyst with the Food and Agricultural Policy Research Institute (FAPRI) and a scientist with the Center for Agricultural and Rural Development at Iowa State University. For FAPRI, he was responsible for directing econometric and modeling efforts for the crop insurance component of the FAPRI modeling system and he has engaged in research examining the interaction between the agricultural commitments within the World Trade Organization (WTO) and the agricultural policies and programs of WTO members. Dr. Hart received his Ph.D. in economics and statistics from Iowa State University.

Olga Isengildina

Member

Olga Isengildina is currently associate clinical professor in the Economics Department of the College of Business at the University of Texas at Arlington. She will be joining Virginia Tech University in the fall as an associate professor. Previously she worked at Clemson University and the Office for Futures and Options Research at the University of Illinois. Her research focuses on forecast analysis and evaluation, price risk management, value of information, agricultural marketing and agribusiness. She has a Ph.D. in agricultural economics from Mississippi State University.

Susan E. Offutt

Member

Susan E. Offutt is chief economist for the U.S. Government Accountability Office. She will be retiring from this position on May 30, 2015. Before joining GAO, she served as administrator of the Economic Research Service at USDA for ten years and prior to that tour she was the executive director of the National Research Council's Board on Agriculture and Natural Resources, which conducts studies on a range of topics in agricultural science. She was chief of the Agriculture Branch at the Office of Management and Budget (OMB). During her tenure at OMB, she coordinated budget and policy analyses of the farm bill and trade negotiations. She began her career on the faculty at the University of Illinois Urbana-Champaign, where she taught econometrics and public policy in the agricultural economics department. She received an M.S. and a Ph.D. from Cornell.

S. L. Stokes

Member

S. Lynne Stokes is a professor in the Department of Statistical Science at Southern Methodist University. Her current research interests include sampling and nonsampling error modeling, psychometrics, and capture-recapture methodology. She is an elected fellow of the American Statistical Association (ASA), and a recipient of ASA's Founder's Award. She has served on a number of NAS panels, including Panels on the Review of the Study Design of the National Children's Study, Alternative Census Methodologies, Assessment of the National Aviation Operational Monitoring Service, and Recreational Fisheries Survey Methods. For the past 15 years, she has been a member of the Technical Advisory Committee for the U.S. Department of Education's National Assessment of Educational Progress. She received her Ph.D. in mathematical statistics from the University of North Carolina, Chapel Hill.

Jonathan Wakefield

Member

Jonathan Wakefield is a professor in the Department of Statistics and the Department of Biostatistics at the University of Washington. His research interests include spatial epidemiology, ecological inference, genetic epidemiology, genome-wide association studies, the analysis of next generation RNA sequence data, space time models for infectious disease data, small area estimates, hierarchical models for survey data, and the links between Bayes and frequentist procedures. He is a fellow of the American Statistical Association, and a winner of the Guy Medal in Bronze from the Royal Statistical Society. He has a Ph.D. in mathematics from the University of Nottingham.

Robert E. Young

Member

Robert E. Young is chief economist and deputy executive director of public policy at the American Farm Bureau Federation. He directs the organization's Economic Analysis Team, which conducts and coordinates economic research to support Farm Bureau public policy positions on topics such as farm policy, agricultural trade, regulatory costs, labor and taxation. Young previously served as co-director for the Food and Agricultural Policy Research Institute at the University of Missouri, as a research associate professor in agricultural economics at the University of Missouri, and as chief economist for the U.S. Senate Committee on Agriculture, Nutrition and Forestry. He holds a Ph.D. in agricultural economics from the University of Missouri-Columbia.