

Advisory Committee On Agriculture Statistics

SUMMARY AND RECOMMENDATIONS

Annual Meeting, November 4-5, 2015



U.S. Department of Agriculture
National Agricultural Statistics Service

Meeting of the Advisory Committee on Agriculture Statistics (ACAS)

November 4-5, 2015

The Brown Hotel
335 West Broadway
Louisville, KY 40202

Members Present

Shawn Boyd
Kim Brackett
Kellie Bray
Jennifer Dennis
Zachary Ducheneaux
Carole Engle
John Foltz

Doug Goehring
Larry L. Janssen
Carl Mattson, Committee Chair
Juli Obudzinski
Jean Opsomer
Chukou Thao
Louise Waterman

William Bostic, Jr., (Census Bureau *ex-officio*)

Gregory Pompeli, (Economic Research Service *ex-officio*)

Members Absent

Jose Candelaria
Roger Mix
Brian Schilling

Emmett Redd
Lawrence Sanchez
Robert Yonkers

Advisory Committee Officers

Hubert Hamer, Executive Director
Bryan Combs, Designated Federal Officer

**United States Department of Agriculture
National Agricultural Statistics Service**

NASS Senior Executive Service Attendees

Joe Reilly, Administrator
Kevin Barnes, Director, Western Field Offices
Hubert Hamer, Director, Statistics Division
Mark Harris, Director, Methodology Division
Jay Johnson, Director, Eastern Field Offices
Joe Parsons, Director, Information Technology Division
Joseph Prusacki, Director, National Operations Division
Barbara Rater, Director, Census and Survey Division
Linda Young, Director, Research and Development Division

Speakers

Joe Reilly, NASS Administrator
Barbara Rater, Director, Census and Survey Division
Linda Young, Director, Research and Development Division
Bryan Combs, Special Assistant, Statistics Division
Hubert Hamer, Director, Statistics Division
David Hackbarth, Director, National Processing Center
Mark Harris, Director, Methodology Division

Other NASS Staff

David Knopf, Director, Eastern Mountain Region

Scribes

John Stephens
Kate Moore

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MEETING SUMMARY

1. Introduction

The Advisory Committee on Agriculture Statistics (ACAS) annual meeting was called to order by Committee Chair Carl Mattson on Wednesday, November 4, 2015, at 8:02 a.m. Present were 14 of the 20 ACAS members, two Committee *ex-officio* representatives, and nine Senior Executive Service staff members from the National Agricultural Statistics Service (NASS). Committee members, NASS staff, and meeting guests were asked to introduce themselves, after which Mr. Mattson welcomed everyone to the meeting.

Hubert Hamer, who serves as the Advisory Committee Executive Director, welcomed the ACAS members to The Brown Hotel in Louisville, Kentucky, then discussed the Committee's purpose and duties and thanked the members who participated in the previous Advisory Committee meeting in December 2014.

Bryan Combs, Designated Federal Officer, reviewed the contents of attendees' packets, which included a Confidentiality Certification form (ADM-004), a current list of ACAS members, and presentation materials for the meeting.

Mr. Hamer asked Committee members to sign the NASS form ADM-004 since sensitive information would be discussed during the meeting so members could formulate informed recommendations. Each member had already received by email the documents explaining the confidentiality rules and standards members must follow during the meeting. Additional copies of these materials were available for members to review before signing the confidentiality form. All forms were signed and witnessed.

In his presentation on the Committee's function and responsibilities, Mr. Hamer reminded members that the duties are solely advisory. The Committee represents the views and needs of both users and suppliers of agriculture statistics; its charge is to advise the Secretary on the conduct of the periodic census of agriculture, other surveys, and the types of information to obtain from survey respondents. The Committee also makes recommendations regarding the content of agricultural reports. Mr. Hamer discussed the mission of NASS, which is to provide timely, accurate, and useful statistics in service to U.S. agriculture.

NASS is responsible for administering USDA's statistical estimating program and the every-five-year Census of Agriculture, coordinating federal and state agricultural statistics needs, and conducting statistical research, including research for other federal agencies, state agencies, private organizations, and other countries. NASS does not:

- Set policy
- Regulate activities
- Permit influence
- Disclose individual records or
- Favor any group above others.

2. 2014 Recommendations: Review and Update

Using a PowerPoint presentation, Mr. Hamer reviewed the Advisory Committee's recommendations from the December 2014 meeting and NASS's response to each (Appendix B).

3. State of NASS

Joe Reilly, NASS Administrator, welcomed and thanked everyone for taking time out of their busy schedules to help NASS chart its future. He stressed the importance of the Advisory Committee in this endeavor.

Mr. Reilly provided an update on the agency's budget and the outlook for future budget planning. In fiscal years 2011 and 2014, NASS funding for agricultural estimates declined. Mr. Reilly noted that the Advisory Committee can help NASS define what its base programs should be. This would provide guidance for NASS to determine which programs to suspend in the event of funding changes in agricultural estimates programs. Upcoming projects discussed included Census of Organics certifiers and surveys on pollinators, antimicrobial resistance, urban agriculture, farm structure, and local foods. NASS' reimbursable survey projects and international work were also discussed.

Discussion: Mr. Reilly fielded several questions and comments regarding how NASS would conduct the Local Foods Survey. Mr. Reilly noted that NASS is exploring how best to define local foods and is also in discussion with the Office of Management and Budget (OMB) to get approval for the project. With respect to farm structure, Mr. Reilly discussed the difficulties of capturing farm structure as farm operations become more complex.

4. 2017 Census of Agriculture and Census Programs

Barbara Rater, Director, Census and Survey Division, provided an overview of Census programs and products. Mrs. Rater detailed the recent releases of the Typology, Congressional District Rankings, Specialty Crops, and Current Agricultural Industrial Reports (CAIR). She also discussed release dates and timing for the Tenure, Ownership and Transition of Agricultural Land (TOTAL) Survey, the 2014 Organics Survey, and the Census of Horticulture Specialties. Mrs. Rater also covered some additional details related to Local Foods, Census Content Test, Farm Structure, National Agricultural Classification Survey (NACS), and Urban Agriculture.

Discussion: In response to questions from Advisory Committee members, Mrs. Rater noted that the timing of the Local Foods Survey would depend on OMB approval of the project, but that the earliest would be February or March 2016. With respect to NACS, she said that its primary purpose is to remove operations from our mail list that are no longer farming or do not qualify as a farm. NASS uses a variety of ways to add operations to our list of farms including obtaining list of farm operators from commodity associations and other sources.

5. Urban Agriculture and Next Generation Farmers and Ranchers

Linda Young, Director, Research and Development Division, provided an overview of new and beginning farmers and urban agriculture. Dr. Young highlighted the evolving Census of Agriculture questions related to women and new and beginning farmers. Dr. Young also updated the Committee on NASS's request to the National Institute of Statistical Sciences panel of experts on the topic. The panel met on April 2-3, 2015, and provided several recommendations that are being included in various projects to prepare for the 2017 Census of Agriculture. Dr. Young also covered the Urban Agriculture pilot project that was conducted in Baltimore, MD. The basic frame work of the project was covered along with the challenges that were uncovered. Some preliminary results of the project were covered along with steps to moving forward with a second test city.

Discussion: The Committee discussed various decision makers' roles on the farm along with the contribution that other family members provide to the farm. Dr. Young noted that cognitive testing that is still in process and that adjustment may need to be made based on any basis found in the results. Advisory Committee members focused on the cost of collecting urban agriculture data and noted that from a policy prospective it could be a way to cultivate new farmers and help target programs and services to smaller farmers.

6. Agricultural Resource Management Survey and Chemical Use Program Overview

Bryan Combs, Special Assistant, Statistics Division, and Hubert Hamer, Director, Statistics Division, presented the committee with an overview of the Agricultural Resource Management Survey program and the Chemical Use program. Both of these programs recently went through external audits and had specific recommendations that NASS wanted the Advisory Committee's views on. Mr. Hamer and Mr. Combs summarized a white paper prepared for the meeting and shown in this volume as Appendix C.

The white paper details NASS' response to recommendations in a GAO study of the Chemical Use Program that NASS strengthen relationships with state agencies in order to maximize state and federal resources, minimize costs, and make the chemical use data more useful to state officials. It also provides the background and NASS' responses to date on the questions Mr. Combs put to the Committee with respect to ARMS:

- What additional measures should NASS take to incorporate administrative and geospatial data in ARMS?
- Would making ARMS mandatory improve data quality? What other measures should NASS consider with respect to improving data quality?
- Does the ARMS Data User Guide provide sufficient information for new data users? Is the updated training sufficient?

Discussion: Committee members wanted to know what the penalty is for not responding to mandatory surveys. NASS staff explained that current law sets the penalty of \$100 but NASS does not enforce the penalty. NASS prefers to work with various producer groups to explain the importance of the data being collected.

7. National Processing Center

David Hackbarth, Director, National Processing Center, provided the some general comments to the Advisory Committee about the U.S. Census Bureau National Processing Center (NPC) in Jeffersonville, Indiana. Following Mr. Hackbarth's comments, Committee members were provided a tour of the NPC facilities where they witnessed the design, printing, labeling, and mailing processes of the NASS Census Content Test and County Agricultural Production questionnaires.

8. Data Quality

Mark Harris, Director, Methodology Division, discussed the compilation and maintenance of the list sampling frames used in the NASS estimation and Census of Agriculture programs, stressing their impact on data quality. The white paper prepared on this topic for the meeting is shown as Appendix D in this volume.

Mr. Harris noted that the sampling frame must provide a complete and up-to-date list of agricultural operations, without omissions or duplications. Operations missing from the frame would have no chance of selection in the sample, while duplicate operations would have a higher probability of selection than they should have. Either of these circumstances could bias the survey results. The quality of sampling frame, therefore, has significant implications on the quality of survey data and the official estimates. As NASS takes on new areas such as organic farming, local foods, urban agriculture, women and beginning farmers, farm structure and micro and antimicrobial practices, NASS must:

1. Identify and acquire new list sources to improve frame coverage for these type of entities.
2. Evaluate the use of expanding the capture–recapture methodology or other alternative methods for adjusting for list undercoverage.

Discussion: Committee members noted that finding ways to utilize respondents' previously reported data would not only help data quality but also provide encouragement to producers to respond.

9. Public Comment Period

The Chairman Mattson noted and read into the record that three individuals had submitted public comments and were also present to address the Committee: Leigh Maynard representing the Council on Food, Agricultural and Resource Economics; Ryan Stockwell representing the AGrEE Task Force; and Becky Kinder representing the Kentucky Soybean Board and Association. Chauncey Morris representing the Kentucky Thoroughbred Association did not provide written comments but also asked to address the committee. No additional comments were received during the open comment period or the two-week window following the meeting. All written comments are included as Appendix E of this volume.

Mr. Morris said that there are approximately 35,000 horse farms in the Commonwealth of Kentucky and Kentucky has the largest value of horse sales in the US. Mr. Morris noted that this is a non-traditional sector of agriculture and that is very important to Kentucky and the horse industry that USDA measure accurately, as the industry provides important economic contributions and is part of the cultural identity of Kentucky.

10. Discussion and Drafting of Recommendations

The Advisory Committee spent much of Thursday, November 5, developing the committee's recommendations. The ten recommendations passed by the Committee are shown in the following section, along with NASS' responses.

11. Closing Remarks

After the Committee discussed and passed its recommendations, Mr. Hamer and Mr. Reilly thanked the members for volunteering their time to attend the meeting. Mr. Mattson, as Committee Chair, called the meeting officially adjourned at 11:30 a.m. on Thursday, November 5, 2015.

ACAS 2015 RECOMMENDATIONS and NASS RESPONSE

Recommendation No. 1. The Advisory Committee recommends that NASS promote the value of producer response and potential unintended consequences of not reporting by utilizing producer testimonials including the value to producers for reporting. “Be relevant, report!”

Background: The primary goal of the NASS communications plan is to increase the perceived value of NASS and its products. Under this umbrella goal, strategies involve stronger focus on the customer (respondents in this case) and being able to answer the what’s-in-it-for-me question to increase response rates. Historically we’ve been challenged by using producer testimonials due to our commitment to respondent confidentiality. We are primarily working with industry influencers and using anonymous producer testimonials.

NASS Response: We are working to expand this effort by collecting more testimonials, cataloging direct uses of NASS data and benefits to producers by survey and topic area, and incorporating all of these into promotional materials and campaigns. The Public Affairs Office recently launched some new testimonial videos in which representatives of agricultural organizations explain how they use NASS data, why they use NASS data, and why farmers and ranchers should respond to NASS surveys. We launched the videos via a successful social media campaign, made them available to field offices and all NASS staff to use, for example by embedding them in presentations. They will be used in ongoing promotions. These testimonials expand on some we gathered during the 2012 Census promotions in which producers themselves and others in the ag industry shared their stories about using NASS data. Finally, we have begun cataloging specific uses of NASS data and direct benefits to producers to use and make available in similar ways.

Recommendation No. 2. The Advisory Committee encourages NASS to investigate the ability to provide benchmark and historical data to respondents as an incentive to encourage participation.

Background: NASS has recently done several things to provide information back to respondents as an incentive to encourage participation.

1. For the Agricultural Resource Management Survey for Poultry, a highlights document was sent to all sampled records. Respondents were sent a “thank you” version of the accompanying letter and nonrespondents were sent a “results” letter.
2. Presurvey letters have been including impact statements and enhanced infographics.
3. Nearly all surveys provide links to the survey results and ask if they would like to have a summary mailed to them at a later date as shown in box below?

SURVEY RESULTS: To receive the complete results of this survey on the release date, go to <http://www.nass.usda.gov/results>

Would you rather have a brief summary mailed to you at a later date? YES NO

NASS Response: NASS has pursued various methods over time to give our data respondent's survey results. In November 2014, NASS released a new communications plan that promotes, improves, and expands the agency data products that will encourage survey participation.

NASS has been collecting and maintaining emails for some time, but we will evaluate how we can more effectively use email to provide reporters with the results in a more tailored, appealing and timely manner. Email usage does have challenges with privacy and maintenance. Emails to reporters could include the highlights, popular infographics, links to data and to QuickStats. Emailing of results may be especially applicable to respondents who complete questionnaires on the internet.

Infographics have been a useful product for users to distribute through social media and email. Research was recently completed on infographics to assess their usability, usefulness, desirability, value, and credibility. Applying this research will improve the infographics and provide an effective product to give to farmers and ranchers. Additionally, the use of infographics could be expanded to include more survey results that would be provided back to respondents.

Recommendation No. 3. The Advisory Committee recommends that NASS explore the possibility of a task force, including members from NASS, ERS, FSA, RMA, maybe other interested USDA agencies, with the goal to develop a "dashboard" of useful information and data that a producer only has access to when they provide their data to NASS.

Background: Producer participation in both the census and surveys has been declining over the last few years. Giving back to the respondents is one way in which NASS may be able to increase producer participation. This is not a new concept and has been tried over the years with little success. Advancements in technology along with producers' greater use of mobile devices may make this type of endeavor more successful now than in the past.

NASS Response: As a data provider, NASS is always looking for new and innovative ways to share agricultural data with our customers. NASS is organizing a team of representatives from USDA agencies to provide input into a centralized dashboard of data. NASS is currently working with data visualization specialists to implement interactive statistical graphics on our external websites to help improve the interpretability and applicability of the data we produce. NASS may work with these specialists to help create a dashboard of useful information.

Recommendation No. 4. The Advisory Committee recommends that NASS explore adding a question about respondents' primary language and explore ways to communicate available options for reporting in those languages.

Background: NASS has historically not been able to offer reporting in multiple languages due to significant cost and lack of resources to create questionnaires in various languages. NASS has partnered with several community-based organizations (CBOs) many of whom assist with outreach and are available to help non-English-speaking respondents complete NASS census and survey forms.

NASS Response: NASS realizes that response rates may suffer from our inability to allow for self-reporting in languages other than English. We have and will continue to explore and research options for self-reporting in multiple languages. However, we have sufficiently dealt with respondent requests as they come up by utilizing NASS staff and NASDA enumerators that are multilingual.

Recommendation No. 5. The Advisory Committee recommends that NASS work with Census Bureau to ensure that on-farm value added production is captured and linked with NASS data.

Background: Over the last several years value-added products have become more common and increasingly important to many farm households' well-being. There is concern that the value of these items is not being captured either in the farm or other sector accounts.

NASS Response: ERS is using NASS data to the fullest extent possible to produce value-added income data. ARMS III is the main data source, and a complete listing of data sources for value-added components can be found on the ERS website at: <http://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/general-documentation.aspx> and also: <http://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/documentation-for-the-farm-sector-financial-ratios.aspx> Additionally, on March 15, 2016, ERS will participate in a Video Teleconference with NASS Regional Field Offices (RFOs) and will include a discussion of the value-added tables that ERS publishes. This will provide NASS RFOs with more background insight into the ERS value-added published data.

Recommendation No. 6. The Advisory Committee recommends that NASS examine the linkage between farm program participation and census and survey participation rates. The analysis should include a statistical profile of farms that participate in farm programs compared to those that do not.

Background: For the 2007 and the 2012 Census of Agriculture, NASS obtained from the Farm Service Agency (FSA) a list of farm operations that received federal farm program payments during the respective census reference year. This data set included enough information so that the farm program recipients could be linked to the census mail list.

NASS Response: The complete 2012 Census of Agriculture census mail list can be divided into four groups:

1. Linked to FSA programs, responded to the census
2. Linked to FSA programs, did not respond to the census
3. Not linked to FSA programs, responded to the census
4. Not linked to FSA programs, did not respond to the census

A profile of each group's characteristics will be created that would include mean, median, and quartile values for the following continuous variables: total land in farms (K46), rented land in farms (K44), federal farm programs payments received (K684), and total value of agricultural products sold (TVP). The process for examining records and their survey participation rates is more complex, as the FSA records were linked to the census mail list. Consultation with the sampling and list frame group will be necessary to define the process of profiling. However it is possible to examine this information for a few major crop and livestock surveys.

Recommendation No. 7. The Advisory Committee recommends that ARMS remain a voluntary survey at this time.

Background: In 2008, the Committee on National Statistics (CNSTAT) of the National Research Council released the findings and recommendations of an independent review of USDA's Agricultural Resource Management Survey (ARMS). The CNSTAT report contained over 30 recommendations related to various aspects of the ARMS program. NASS has addressed many of the recommendations, is currently addressing others, and for still others is conducting ongoing research, including two on which NASS asked for feedback from stakeholders. CNSTAT stated in Recommendation 6.5 that the research and development program should analyze whether there are differences in ARMS unit and item nonresponse rates between census and non-census years, with an eye toward deciding whether making ARMS mandatory would improve data quality.

NASS Response: At this time NASS has no plans of seeking approval to make ARMS mandatory and it will continue to be a voluntary survey for the foreseeable future.

Recommendation No. 8. The Advisory Committee recommends that NASS continue to work with groups such as C-FARE to create customizable dissemination tools.

Background: NASS has traditionally placed more emphasis on the methodology and process of collecting, analyzing, and publishing sound statistical estimates than on creating innovative data products. When faced with limited resources, creating advanced dissemination products and tools is often seen as being less critical than its mission focus of providing accurate, timely, and unbiased information.

NASS Response: NASS welcomes input from both internal and external user groups. In fact, this is a requirement of the White House's Digital Government Initiative. This

initiative, along with the Open Government Policy, requires NASS to report to the Office of Management and Budget (OMB) on our progress in ensuring customer-centric principles are followed to continually improve service delivery. All our statistical data should be open and freely available through and Application Programming Interface (API) for internal and external developers to utilize. NASS developers are already leveraging our Quick Stats API to build new interfaces to our data, including a new visualization application. Our APIs were also highlighted in a recent USDA/Microsoft Innovation Challenge, where developers competed to develop innovative applications using NASS data.

Recommendation No. 9. The Advisory Committee recommends that NASS work with AGREE to address their recommendations on conservation practices and potential question wording along with including testing where deemed appropriate.

Background: NASS has asked various conservation practice questions on the Census of Agriculture, the Agricultural Resource Management Survey (ARMS), and the Conservation Effects Assessment Project (CEAP). NASS consults with NRCS to assist us with defining specific conservation practices and developing respondent instructional materials.

NASS Response: Following the 2015 Advisory Committee meeting, NASS has held meetings with both AGREE and NRCS to better define conservation practices. Questionnaires include/exclude statements along with respondent instructions and the report form guide will be updated for the 2017 Census of Agriculture. These updates will also be made to ARMS and CEAP questionnaires. NASS will continue to work with AGREE and NRCS to improve the collection of data related to conservation practices.

Recommendation No. 10. The Advisory Committee recommends that NASS be prepared to provide policymakers the full data collection cost for the Urban Agriculture survey. In addition, we recommend that additional resources be provided for this effort and that it not replace current data collection on production agriculture.

Background: Historically NASS's quantification of urban agriculture has been imprecise. Agriculture in urban areas tends to be widely dispersed, transient, and small scale, making it difficult to identify these operations. In an effort to improve its ability to enumerate urban agriculture, NASS collaborated with the Multi-Agency Collaboration Environment (MACE) to conduct a pilot study in Baltimore. MACE used a big data approach to build a list of urban agriculture operations. This was followed with a field survey to verify whether or not the identified areas had agriculture. About 50% of the identified areas had agriculture. The costs of national implementation for the Census of Agriculture were explored.

NASS Response: Although funding for national implementation of the new approach for enumerating urban agriculture is not in the President's FY2017 budget, NASS is conducting another pilot

study to identify small operations (not only urban) in the state of Washington. These would include horticulture, organics, local foods, small livestock, and urban farms, all of which are difficult to enumerate. If successful, efforts will be made to identify partners to help fund the approach for incorporation in the 2017 Census of Agriculture.

APPENDICES

- A. Agenda: 2015 ACAS Meeting
- B. 2014 Recommendations and NASS Response
- C. White Paper: ARMS and Chemical Use Program Recommendations
- D. White Paper: NASS Sampling Frames and Data Quality
- E. Public Comments

Appendix A

Agenda Advisory Committee on Agriculture Statistics Meeting November 4-5, 2015

Wednesday, November 5, 2015

Time	Agenda Item	Presenter
8:00 am	Call to Order and Welcome	Carl Mattson
8:05 am	Introductions	Hubert Hamer
8:15 am	Meeting Overview and ACAS Overview	Hubert Hamer
8:25 am	2014 Recommendations Review and Report, Discussion	Hubert Hamer
8:55 am	'State of NASS' Address	Joe Reilly
9:15 am	BREAK	
9:30 am	2017 Census of Agriculture/Census Programs	Barbara Rater
10:15 am	Discussion	
10:30 am	Urban Agriculture & Next Generation Farmers and Ranchers	Linda Young
11:15 am	Discussion	
11:30 am	Lunch	
12:30 pm	ARMS & Chemical Use Program Overview	Bryan Combs, Hubert Hamer
1:00 pm	Discussion	
1:20 pm	NPC Comments	David Hackbarth
1:30 pm	BREAK	
2:00 pm	National Processing Center Tour - Census Content Test & ARMS III	
4:00 pm	Adjourn and Shuttle Back to Hotel	

Thursday, November 5, 2015

Time	Agenda Item	Presenter
8:00 am	Recap and Review of Previous Day	Hubert Hamer
8:15 am	Data Quality	Mark Harris
9:45 am	Public Comments	Carl Mattson
10:15 am	BREAK	
10:30 am	Committee Requested Topics and Recommendations Discussions	Carl Mattson
10:45 am	Discussion and Preliminary Drafting of Recommendations	Committee
11:45 pm	Presentation of Recommendations	Committee
12:15 pm	Wrap Up	Hubert Hamer
12:30 pm	Adjourn	Carl Mattson

Appendix B

2014 Recommendations and NASS Responses

Recommendation No. 1. The Advisory Committee recommends that NASS examine ways to better capture the on farm contribution and participation of women farmers.

Background: The Census of Agriculture began collecting information on women farm operators in 1978. In 2002 the Census of Agriculture was expanded to cover characteristics for up to three operators. Little has changed in the collection and publication of operator characteristics from when the data series began in 1978 to the present. As farm structure and organization become more complex the role of women operators has also changed requiring additional detail to capture these characteristics and contributions.

NASS Response: NASS is organizing an external panel of experts to provide input and recommendations on additional data needs regarding the on farm contribution of women and beginning farmers and farm ownership structures. Applicable changes to data collection to support these data needs will be developed and tested for implementation in NASS surveys and the Census of Agriculture.

Recommendation No. 2. The Advisory Committee recommends that NASS consider a follow on survey to the 2017 Census of Agriculture that answers questions regarding young, beginning and socially disadvantaged farms. Challenges, success rates, future plans, land tenure, markets, diversity of production, productions practices, farm labor, and USDA program participation are all areas of interest.

Background: The Census of Agriculture began collecting information on race of the farm population in 1900. Over the years additional characteristics were collected and published in the Census of Agriculture. In 2002 the Census of Agriculture was expanded to cover characteristics for more up to three operators. Little has changed in the collection and publication of operator characteristics since 2002. As farm structure and organization become more complex and the age of the farm operator population continues to raise details about the next generation of farm operators is increasingly important.

NASS Response: A special study could be developed and executed in FY2020. It would take the place of the Tenure, Ownership, and Transition of Agricultural Land (TOTAL) survey being conducted in 2015. Funds would need to be secured across two fiscal years – 2019 for planning and 2020 for processing and products.

Recommendation No. 3. The Advisory Committee recommends that NASS add clarity to the surveys, in the farmer entity or partnership name and operator name area. This will accommodate changing farm structures of ownership.

Background: Farm structure and organization is becoming increasingly complex as farm operations grow and diversify production. Many of these complex operations find it difficult to accurately report the structure of their operations on the Census of Agriculture Report Form.

NASS Response: NASS is organizing an external panel of experts to provide input and recommendations on additional data needs regarding the on farm contribution of women and beginning farmers and farm ownership structures. Applicable changes to data collection to support

these data needs will be developed and tested for implementation in NASS surveys and the Census of Agriculture.

Recommendation No. 4. The Advisory Committee recommends that NASS continue work on increasing online Census reporting to increase response rates.

Background: The 2007 Census of Agriculture was the first time electronic data reporting was available and accounted for approximately 4 percent of all receipts. In 2012, the second availability of electronic reporting, approximately 12.5 percent of all receipts were received electronically.

NASS Response: NASS has contracted with a survey researcher at Washington State University (WSU) to test alternative versions of the Census of Agriculture report form. The intent of this work is to test the impact of potential alternatives to the form with respect to data quality and response. WSU will also provide best practices and guidelines for designing the online form.

NASS is currently evaluating the functionality and usability of web survey instruments to increase response rates through online Census reporting. This assessment includes hiring of experts in the field of Mobile Technology to improve the overall effectiveness of web surveys, evaluation of recommendations from the NASS Census Content Team, incorporation of feedback from data user groups, and a NASS public relations campaign to increase respondent awareness of the option to complete surveys online. These efforts will improve online reporting, increase response rates, and improve the experience of respondents that are responding to all NASS surveys that are available online.

Recommendation No. 5. The Advisory Committee recommends that NASS include international certifiers in the survey of organic certifiers.

Background: NASS is planning to begin collecting data from organic certifiers in early 2016 for data related to the 2015 production year.

NASS Response: NASS has reviewed the recommendation to include the certifiers outside the US but after careful consideration will not include the international certifiers.

Recommendation No. 6. The Advisory Committee recommends that aquaponics, vegetable hydroponics integrated with aquaculture be included in a NASS survey as early as appropriate.

Background: Data on aquaponics was collected on the 2013 Census of Aquaculture. Aquaponics were reported by 71 farms with 650 tanks from the Census of Aquaculture.

NASS Response: NASS needs to add this to the List Building Plans submitted by Regional Field Offices and make that a content discussion for the Census of Aquaculture or Census of Horticultural Specialties special studies to see if this is feasible.

Recommendation No. 7. Based on the presentation during the Public Comment period the Advisory Committee recommends that NASS evaluate the inclusion and expansion of direct sales into the Census of Agriculture and partner with AMS and FNS.

Background: The Census of Agriculture began collecting information on agricultural products sold directly to individuals for human consumption in 1978. In 2012 the Census of Agriculture reported that 6.9 percent of farms sold agricultural products directly to individuals for human consumption.

NASS Response: NASS will explore the possibility of increasing the data for direct marketings.

Recommendation No. 8. The Advisory Committee recommends that the marketing and outreach program be expanded and the budget increased. Survey response rates have been declining and high response rates are necessary for the efficacy of NASS results.

Background: The NASS mission is to provide timely, accurate, and useful statistics in service to U.S. agriculture. NASS accomplishes this mission by producing quality data for decision making. Over the last several years farms have become increasingly diverse and complex. At the same time there has been an increasing demand for statistics. Lower response rates have a direct impact on the precision of data products produced by NASS. Marketing and outreach efforts conducted by NASS are essential to improving response rates and strengthening relationships with farm operators.

NASS Response: NASS agrees that its marketing and outreach program should be expanded and budget increased. We are working to hire specialists to broaden and customize local marketing and outreach to respondents and data users. As we implement our communications plan, which includes benchmarking and measuring the impacts of public affairs, additional funding will be needed and will be considered within the overall budget allocations.

Recommendation No. 9. The Advisory Committee recognizes the challenges of collecting producer data and recommends that NASS not allow the expansion of the NORC Data Enclave to include Census of Agriculture information and we recommend NASS explore the feasibility to protect individual data.

Background: The reorganization at NASS has restricted the locations that researchers can access data in a secure NASS Data Lab setting. Previously NASS Data Labs were available in each Field Office, however with the reorganization the NASS Data Labs are now only available in Regional Field Offices. An option to support the sharing of information is to expand the data available in the NORC Data Enclave for approved projects.

NASS Response: NASS is dedicated to protecting individual data and has many safe guards to ensure that individual data is not discernible in publications. Researchers from other government agencies and universities can request to access record level unpublished data for statistical purposes. Projects are reviewed for their statistical methodology and service to the agricultural community, then considered for approval. Researchers are required to sign a certification that the data cannot be shared under any circumstances and violations can result in civil and criminal penalties. Disclosure checks are in place to ensure that record level or individually identifiable data is not released for public use.

The Research and Development Division of NASS can do a literature review for different methods of perturbing the data to enhance confidentiality in the record level data. During this review we will investigate the implications to the resulting data analysis and statistics and the feasibility of performing the perturbation on Census of Agriculture data.

Appendix C

White Paper: ARMS and Chemical Use Program Recommendations

Prepared for November 2015 ACAS Meeting

The Agricultural Resource Management Survey (ARMS) is sponsored jointly by USDA's Economic Research Service (ERS) and the National Agricultural Statistics Service (NASS). ARMS was first conducted in 1996 combining USDA's cropping practices, chemical use, and farm costs and returns surveys, which were conducted separately from 1975 to 1995. ARMS is a multiphase series of interviews with farm operators about their cropping practices, farm businesses, and households.

In Phase I, approximately 75 to 100 thousand farmers and ranchers are selected to verify they qualify as a farm and produce target commodities for the second phase. Phase I is conducted in the summer of the reference year and improves the efficiency by qualifying sampled farms for the additional phases.

In Phase II, approximately three thousand farmers and ranchers are selected to provide field characteristics, nutrient/fertilizer applications, pesticide applications, field operations, and irrigation for the targeted crop(s). Phase II is conducted in the fall and winter of the reference year and provides data at the field level. NASS publishes the Field Crops Agricultural Chemical Usage report annually in May. Fruit and Vegetable Chemical Usage is collected on alternative cycles. Vegetable data are collected on even years, while fruit data are collected on odd years. The data are collected in the fall and winter months and published during July.

In Phase III, approximately 35 thousand farmers and ranchers are selected to provide farm business and farm household information, including commodity marketing and income, farm-related income, operating and capital expenditures, farm assets, farm debt, farm management and use of time, and farm household information. Phase III is conducted in early spring of the year following the reference year. NASS publishes the Farm Production Expenditures report annually in August. ERS prepares several state, regional and national reports using ARMS data, including Commodity Production Costs and Returns, Farm Operation and Financial Characteristics, and the Annual Report to Congress on the Status of Family Farms.

In 2008, the Committee on National Statistics (CNSTAT) of the National Research Council released the findings and recommendations of an independent review of ARMS. The CNSTAT report contained over 30 recommendations related to various aspects of the ARMS program. Many of the recommendation have been addressed and several of the recommendations are in progress or are ongoing activities, including items on which NASS is seeking feedback from stakeholders.

Issues Related to ARMS Recommendations

In an effort to gain feedback from stakeholders, NASS is seeking input from the Advisory Committee on three recommendations. These recommendations cover the use of administrative data sources, data quality, and training for data users.

CNSTAT Recommendation 4.3: NASS and ERS should explore the collection of auxiliary information on a formal basis, as well as feasibility of enriching the ARMS data files with information from administrative data sources, geospatial data, and the like.

NASS/ERS Response: ERS and NASS are participating in an OMB-led initiative to incorporate selected administrative data into surveys, and will evaluate opportunities with regard to current ARMS questions. NASS is a key participant in a USDA effort to synchronize reporting of administrative (program) data for the Farm Service Agency (FSA), the Risk Management Agency (RMA), and the Natural Resources Conservation Service (NRCS). These agencies must agree on common definitions, data reporting, and recordkeeping. The NASS role has been to provide information about the needed data development processes. Ultimately the administrative data will be of more value for developing agricultural production and conservation statistics – several components addressed by ARMS. NASS has also made progress in developing the Cropland Data Layer (CDL) using geospatial data that provide end-of-season crop acreage indications for official estimates. Staff have researched the development of yield estimates for major commodities. These data could feed into the ARMS database.

Questions for CNSTAT Recommendation 4.3

1. Do you see this as a possible benefit to the ARMS program?
2. What other administrative data should be explored?

CNSTAT Recommendation 6.5: The research and development program should analyze whether there are differences in ARMS unit and item nonresponse rates between census and non-census years, with an eye toward deciding whether making ARMS mandatory would improve data quality.

NASS/ERS Response: The Research and Development Division performed a detailed analysis of the item nonresponse rates for the 2006 and 2007 ARMS Phase III. The [report](#) summarizing the analysis, published June 2012, looks at item nonresponse in two different ways to account for the fact that collection procedures at the time did not permit differentiating between valid zeros, zeros that are imputed by an analyst, or zeros that were filled in by data entry staff when no value was available during keying. In addition, a change rate was calculated to examine the total number of changes to an item. The report contains these three calculations for all variables collected in ARMS Phase III and identifies the problematic items.

A relatively small number of items did not meet the OMB threshold. However, the items that fell short were consistent across years. Most of these items dealt with landlord and contractor expenses, values that may not be readily available (or available at all) to the respondent (the operator). Some manually imputed items were imputed one hundred percent of the time, while one machine-imputation-eligible item, landlord's property tax expense, was imputed over half the time. The analysis also discovered several dozen items that always get zero responses and many more that get only a few responses. These variables are being or have been addressed by the NASS/ERS Steering Committee in questionnaire design and editing procedures; they will be evaluated annually as part of post-data-collection and summary evaluation procedures. At this time, the Committee believes ARMS should remain a voluntary survey.

Questions for CNSTAT Recommendation 6.5

1. What are your thoughts on mandatory reporting and data quality?
2. Other ideas to address data quality?

CNSTAT Recommendation 8.3: ERS should provide more training for new data users, including developing a data user manual, which also includes the recommended guide on statistical estimation, and offering training workshops.

NASS/ERS Response: In 2010, ERS had an agency-wide two-day comprehensive training for ARMS users including participation from NASS and the Bureau of Economic Analysis. The workshop covered the uses of the survey, its components, the links between the survey's goals and questionnaire design, and technical features of designing the survey, developing a research database, and analyzing the data. Topics included survey design and sample selection, weighting and calibration, data editing and imputation, inference with complex survey data, and the creation of farm income and wealth accounts from raw data. Another comprehensive training was planned for 2013. The [ARMS User's Guide](#) is published and available on the ERS website. In June of 2015; ERS conducted a formal ARMS training workshop with presentations from NASS and ERS staff. The workshop aligned with material from the ARMS User's Guide. ERS has made the PowerPoint presentations and record sessions available to approved researchers for reference.

Questions for CNSTAT Recommendation 8.3

1. Does the ARMS User's Guide provide enough detail?
2. Are additional training items needed?

Chemical Use Program Recommendations

The Government Accountability Office (GAO) issued a report to congressional requestors (GAO-11-37) on agricultural chemical use data dated November 2010. This was directed to the NASS chemical use program. Since this time, NASS has been working with external constituents, state and federal agencies and with internal program managers to address recommendations.

Recommendation #2:

Strengthen outreach to state agencies regarding NASS's ability to enter into reimbursable cooperative agreements that would maximize state and federal resources, minimize costs and enhance ACU data's usefulness of state officials.

NASS Response:

NASS continues to work with State Departments of Agriculture and other State organizations through our Field Offices to coordinate activities and perform services related to the collection and reporting of chemical use data. In particular, NASS has worked with several states, including California, Iowa, Minnesota, and Washington. The NASS California Office maintains a cooperative agreement with 58 County Agricultural Commissioner's in California to support ongoing state and federal survey programs including chemical use surveys. Access to chemical use data compiled by the Commissioners is a key element of this agreement. The NASS Iowa field office conducts a pesticide applicators survey and produces an Iowa fertilizer report and pesticides sales report for the Iowa Department of Agriculture. The NASS Minnesota field office performs key entry of pesticide data and conducts surveys on pesticide management and fertilizer and manure use for the Minnesota Department of Agriculture. The NASS Washington Field Offices conducts a pesticide applicators survey and collects additional vegetable chemical use data for the Washington Department of Agriculture.

As part of the NASS reorganization proposal, NASS senior leadership met personally with all 50 state departments of agriculture and updated the Memorandum of Understanding (MOU) and Addendum that

NASS has with each respective state. During these face-to-face meetings, NASS senior leaders emphasized the future intent to maintain a close collaborative relationship and minimize duplication of efforts. Both parties affirmed their mutual desire to broaden cooperative research programs and exchanges. This intent applies to any chemical-use program or survey that a state wishes to work cooperatively with NASS.

NASS representatives regularly attend and present information at the State Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) group meetings. FIFRA was established by the Association of American Pesticide Control Officials (AAPCO) with financial support from the U.S. Environmental Protection Agency (EPA). The full committee meets twice a year in June and December. Membership consists of ten state representatives, each representing the states within an EPA region. Meeting topics include pesticide labeling, soil fumigation, endangered species, and working with reduced resources. NASS last presented at the August 2015 meeting.

NASS Senior Management regularly attends annual meetings of the National Association of State Departments of Agriculture (NASDA) and its affiliated organizations which consist of the Southern Association (SASDA), Northeastern Association (NEASDA), Mid-Western Association (MASDA), and Western Association (WASDA). At each of these meetings, NASS management provides organization and program updates to Secretaries, Commissioners, and Directors of State Departments of Agriculture along with their staff and other participating organizations. These groups also provide NASS with feedback on any State concerns or needs with regard to NASS survey programs and services.

Appendix D

White Paper: NASS Sampling Frames and Data Quality

Prepared for November 2015 ACAS Meeting

The National Agricultural Statistics Service (NASS), as the primary fact-collecting and reporting agency of the U.S. Department of Agriculture, is responsible for the national program of timely, accurate, and useful statistics on agriculture. NASS conducts hundreds of surveys each year and the Census of Agriculture every five years, the results of which are published and used by producers, educators, researchers and government leaders. A broad representation of all components of the agricultural sector (small and large farms as well as agribusinesses, demographics and specialty farms) is essential in providing accurate statistics for acreage and production surveys, livestock inventory surveys, economic surveys and to support initiatives such as pesticide surveys for water quality and food safety programs. Coverage of both small and large farms is also needed to ensure reliable indications for county estimates, and to provide a foundation for the Census Mail List. The agency's sampling frames underpinning these surveys and censuses must be of the highest quality possible to ensure that the results reflect an accurate representation of the agricultural sector in the U.S. Extensive efforts are spent in the compilation and maintenance of these frames to assure high quality estimates.

Issue

For each NASS survey, it is necessary to define the sampling population or frame of units to sample. The sampling frame must provide a complete and up-to-date list of agricultural operations, without omissions or duplications. Operations missing from the frame would have no chance of selection in the sample, while duplicate operations would have a higher probability of selection than they should have. In these circumstances, the sample could potentially bias the survey results. Therefore, the quality of sampling frame has significant implications on the quality of survey data and the official estimates. By improving the process by which frames are established and updated, this process improvement will reduce sampling error rates and increase the percent of agriculture operations represented (coverage) in the sampled population of NASS's surveys. Providing sufficient coverage for small farms or sub populations such as organic farms, urban farms, local foods, new and beginning farmers provides new challenges to NASS.

Current Efforts

The Sampling and Frame Development Section (SFDS), the Frames Maintenance Group (FMG), and the Area Frame Section (AFS) are responsible for developing sampling frame policies and providing guidance to the Regional and State Field Offices (RFO/SFO) on creating and maintaining high-quality sampling frames. The structure of farms, the distribution of farms by size, and available list sources vary considerably from state to state, which results in different list building and processing strategies across the RFO/SFO. The re-organization into a regional structure and the creation of the FMG unit was the first step in providing consistent and standardized processes in the development and processing of list sampling frames across all states. These changes thus far, have led to significant improvements in consistency, maintenance, and quality of the list sampling frames, which in turn leads to more efficient samples and higher quality estimates.

Enhanced Efforts

Recently NASS has been tasked with providing additional statistics in areas such as organic farming, local foods, urban agriculture, women and beginning farmers, farm structure and micro and

antimicrobial practices. To meet the needs of our customers in these new areas, NASS must:

- Identify and acquire new list sources to improve frame coverage for these type of entities.
- Evaluate the use of expanding the capture–recapture methodology or other alternative methods for adjusting for list undercoverage.

Public Comments

November 2, 2015

Advisory Committee on Agriculture Statistics
Hubert Hamer, Chair Agricultural Statistics Board
Designated Federal Official, 202-690-8141



Dear Chairman Hamer:

The Council on Food, Agricultural and Resource Economics (C-FARE) is a group of respected economists dedicated to strengthening the national presence of the agricultural economics profession. The Council in coordination with Agricultural & Applied Economics Association (AAEA) Economic Statistics and Information Resources Committee appreciates the opportunity to provide comments at the 2015 meeting of the Advisory Committee on Agricultural Statistics for the National Agricultural Statistics Service (NASS).

C-FARE has had a long history of providing input to NASS processes, for example in 2006-2007, a C-FARE Expert Panel conducted a review of the Census of Agriculture (COA) called, "[Improving Information about America's Farms and Ranches](#)". The report contained 24 recommendations intended to improve all aspects of the COA, including but not limited to: target population and response, development of Census content, sampling, data processing and documentation of methods, and design of, and access to, output products. The NASS was briefed on the meaning and intent of the recommendations. In response, NASS signaled that as many of the recommendations would be implemented for the 2012 COA as possible, with follow-up thereafter. C-FARE acknowledges and appreciates the efforts that NASS has undertaken to improve the COA.

In addition to the report on the COA, C-FARE also has undertaken a more recent report on the NASS Price Program. This report, called the "[USDA NASS Agricultural Prices Program: Challenges and Opportunities for the 21st Century](#)" report was an independent, comprehensive and objective review of the Agricultural Prices Program. The purpose of the review was to identify the strengths and weaknesses of the Agricultural Prices Program and to recommend changes to make the published statistics more accurate and useful. The report addresses objectives, concepts, procedures, data issues and other topics for the three major categories of prices reported by NASS: Prices Received, Prices Paid, and Price Indexes. C-FARE understands that this report has also been of significant use to NASS; we appreciate the opportunity to provide the input.

C-FARE, in coordination with AAEA's Economic Statistics and Information Resources Committee, also submitted comments on the development of the 2017 COA in October, 2014. We appreciate the opportunity to provide input to that process.

As we glance towards the future, there are additional areas where the profession believes it can be of service to NASS as it makes decisions to allocate its scarce resources. C-FARE and AAEA support NASS and seek to see it maintain the high standard of quality and service that the agency has been so widely known for within the agricultural sector.

Areas where C-FARE and AAEA may be able to provide insights include:

- Specifically, as the organizational forms of the agricultural operations become more varied and complex, the profession can be of service. For example, the profession can recommend frameworks central to data collection that consider management and ownership structures of firm organization that reflect alternative organizational structures of large firms.
- The profession could assist with identifying useful ways in coordinating data across agencies to maximize efficiencies, privacy, and use. The profession could identify areas

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that may be useful in building a platform where researchers can have access to both USDA NASS Census of Agriculture (COA) and data from other agencies. In Recommendation 8.3 of C-FARE's Review of the 2007 Census of Agriculture, reviewers emphasized the importance of developing and maintaining unique farm identification numbers across agencies/surveys so that data from different sources can be linked, and information is not repeatedly asked on different surveys. NASS may also consider additional links to administrative data, e.g., USDA Farm Service Agency (FSA) payment data, Natural Resources Conservation Service (NRCS) technical consultation and cost sharing, etc.

- There is no question that NASS is part of the 'big data revolution'. However, the public discourse surrounding the 'revolution' is framing the public understanding of the importance of public statistics and data in a way that could create misunderstanding about the value of these resources. 'Big data', which is unstructured, not validated, and can be very difficult to use, cannot take the place of timely, reliable, and useful public statistics and data. C-FARE can play a role in helping educate decision makers and the general public about the limitations of 'big data' relative to statistically representative data. We'd like to engage NASS in a dialogue about how public and private statistical sources may be used in coordination, as well as a discussion about the future uses of spatial data and information and the anticipated privacy/security needs that accompany such uses.

Some general comments for NASS on its administration and availability of statistical products:

- It is important for NASS to identify and find ways to optimize opportunities for making the COA more available to sworn investigators for research purposes while protecting the confidentiality of individual responders. Currently, all farm-level data are maintained by United States Department of Agriculture (USDA) National Agricultural Statistics Service (NASS), while data for all upstream and downstream industries are maintained by Bureau of the Census. There is a vast amount of data in various household surveys (e.g., American Community Survey (ACS), Current Population Survey (CPS), Decennial Census) that can provide additional information, beyond what's provided in the COA or ARMS, about the context in which farm-level decisions are made. Similarly, there are many industry-level surveys (e.g., Economic Census, Longitudinal Business Database, and Annual Census of Manufacturers) that can provide context about the economic environment in which farms are situated. Housing these data together would provide an opportunity to develop an industry series report on the Food and Agricultural Sector of the economy.
- We find that it continues to be important that NASS develop the detail of meta-data related to survey responses, imputations, etc. for the COA. We recommend that all meta-data be made available to researchers, if requested.

Finally, we applaud NASS' recent accomplishments, including the extremely valuable and timely Tenure, Ownership, and Transition of Agricultural Land (TOTAL) survey. We also appreciate the groundwork completed with the pilot project on representing the growing area of urban agriculture, including your review of area and list frame requirements. Researchers already seek geo-referenced data to examine practices and characteristics for areas other than counties and states—CropScape is very useful in this regard. We acknowledge that while accommodating these demands greatly increases the uses and usefulness of COA data and expands support for COA, there are difficult statistical and disclosure challenges.

Again, we commend NASS for the excellent progress made in improving the quality and usefulness of data collected on the agricultural sector. Our comments are intended as input to build on an excellent record. We, C-FARE and AAEA's Economic Statistics and Information Resources Committee, are prepared to work with you wherever we can be helpful.

Thank you for your consideration of our comments.

900 Second Street, NE | Suite 205 | Washington, DC 20002
T: 202.408.8522 | F: 202.406.5385 | www.cfare.org

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Memorandum to: USDA's Advisory Committee on Agricultural Statistics

From: AGree Conservation and Crop Insurance Task Force

Date: November 5, 2015

Subject: Requested Modifications to Sections 25 (Production Expenses) and 31 (Land Use Practice) of the Census of Agriculture

Background on the AGree Conservation and Crop Insurance Task Force:

Launched in 2011, AGree is a collaborative initiative of several leading foundations seeking to drive positive change in food and agriculture. AGree connects and challenges leaders from diverse communities to build consensus, catalyze action, and elevate food and agriculture as a national priority.

Since 2013, the AGree Conservation and Crop Insurance (CCI) Task Force – comprised of researchers and academics, former USDA leadership, producers, and representatives from environmental NGOs and the crop insurance industry – has explored a range of strategies for driving broader adoption of conservation practices by examining the nexus of conservation and crop insurance. We believe that increased data on conservation practice adoption is critical to inform public policy and private sector decision making.

Background on Request:

The lack of baseline information about the adoption of cover crops at the farm level limits the ability of policy makers to design and implement policies and target resources.

We very much appreciate the inclusion of a question in the 2012 Census of Agriculture about the use of cover crops. This was an important step forward, since the question had not been asked as part of the Census in more than a decade. This question will help expand the available baseline longitudinal data about cover crop adoption. We know this practice is increasingly being used, but we do not know the location or extent of adoption.

We have six requests for modifications of the survey instrument for the Census of Agriculture, including two for Section 25 (Production Expenses) and four for Section 31 (Land Use Practices). We believe these two sets of modifications will increase the usefulness of the information collected and help policy makers better focus resources.

Requested Modifications:**Section 25 – Expenses paid by this operation and its landlord(s)**

Suggested change #1: In order to better delineate expenses associated with utilizing cover crops, we propose to amend category #3 to read: "Seeds (excluding cover crops), plants, vines, trees, etc. purchased – include technology or other fees, seed treatments, and seed cleaning cost. Exclude items purchased for resale without additional growth."

Suggested change #2: In addition, we suggest adding a new category of expenses immediately following category #3 to read: "4. Cover crop seeds. – Include cost of custom application." The remaining categories should be renumbered accordingly.

Reason: The current list of expense categories in section 25 does not clearly provide a means of tracking cover crop expenses. As cover crop use grows, category #3, as it currently reads, may be interpreted multiple ways, leading to potentially ambiguous data collection.

Section 31 – Land Use Practices

Suggested change #3: The existing question Section 31 1.d. currently reads, "On how many cropland acres were no-till practices used?" We suggest amending question 1.d. to better differentiate between a) periodic no-till rotated with tillage, and b) cropping practices in which no-till is used for the entire crop rotation/cropping history. We request question 1.d. be amended to read: "On how many cropland acres were full crop rotation no-till practices used (excluding acres on which no-till is rotated with tillage)?"

Suggested change #4: The existing question Section 31 1.e. currently reads, "On how many cropland acres were conservation tillage, excluding no-till, practices used?" We suggest amending question 1.e. to include periodic or rotational tillage to better reflect conservation outcomes for each acre over a longer history. We request that question 1.e. read: "On how many cropland acres were conservation tillage practices, including periodic no-till but excluding full crop rotation no-till, used?"

Reason: These changes would provide valuable data on more common tillage applications throughout a crop rotation, rather than the tillage applications within a single year.

Suggested change #5: The existing question Section 31 1.f. currently reads, "On how many cropland acres were conventional tillage practices used?" We request replacing the existing question with the following substitute: "How many cropland acres were completely or fully tilled (i.e. zero crop residue retained)?"

Reason: In reviewing the results of the 2012 survey, we believe there was some confusion among farmers about the difference between conventional tillage and conservation tillage. It appears that a significant number of farmers indicated they engaged in conventional tillage, which is defined in the Report Form Guide as 100 percent tillage.

However, based on other recent survey information we believe it is likely that many of these farmers are actually engaging in a reduced level of tillage (such as vertical tillage, reduced tillage, or ridge tillage). The most recent Conservation Effects Assessment Project surveys show a much lower level of conventional tillage than reflected in the Census of Agriculture. This discrepancy is caused by confusion associated with the term "conventional." In most cases reduced tillage is thought of as conventional tillage by farms.

The difference between no-till and conservation tillage is relatively clear, but there seems to be some confusion about where the line between conventional tillage and conservation tillage exists. We hope to address this through a change in the language of the question.

A more accurate assessment of who is engaged in 100 percent tillage vs. some level of conservation tillage or no-till will help assess the effectiveness of programs designed to encourage farmers to transition to practices that reduce soil loss and increase soil health.

Suggested change #6: The existing question Section 31 1.g. currently reads, "How many cropland acres were planted to a cover crop? Exclude CRP Acres. How many years have you planted a cover crop on at least a portion of the land you farm?"

Reason: Including the number of years a farmer has used cover crops as part of this question is important because it often takes several years for the soil health benefits of cover crops to be realized. There is currently a distinct lack of longitudinal data on the use of cover crops. The Census of Agriculture is the most appropriate vehicle we have found for collecting this information.

We understand the need to ensure that the survey is kept as short as possible so as to not overburden farmers, but we hope that at some future date, space can be found in the Census of Agriculture, or another broad-based farmer survey, for the collection of information on the various cover crop practices farmers engage in, i.e. mixes versus single varieties and termination methods.

If you would like to discuss these matters further, please contact Todd Barker, Senior Partner at Meridian Institute (TBarker@merid.org).

Comments to the National Advisory Committee on Agricultural Statistics

Acquiring Data:

Better communication between the USDA NASS and FSA is a must for more accurate census and survey data. Many producers are now farming more and more acres than in the past. Producers today are quite busy and do not have the time or the resources to duplicate all their efforts when the information is readily available by the FSA. NASS should have or be given some type of access to gain the necessary information as needed for much of the surveys & census.

In addition, currently many producers across the state of Kentucky feel that the amount of surveys being conducted on an ongoing basis is excessive. If these processes were streamlined as suggested it would potential open the door for producers to actually fill out the information when needed that is not already being reported elsewhere.

By streamlining this data it would potentially allow NASS to focus on other areas in which it currently doesn't have the ability or the manpower to analyze

Communication of Data:

As a general rule we assume most people are 2-3 generations removed from the farm. This is also the case for some of the employees that conduct surveys / census. From what I've been told they are quite friendly and are trying to do a good job but unfortunately just have little agriculture industry knowledge. This being said the whole story is not always being told and the producers have to defend themselves from the organizations that are supposed to be in place to help them. For example, in 2012 there were numerous stories of high and or record prices for farmers being released but the other part that was left out was there was very little crop to harvest and sell. This press release information led many landlords and other individuals to believe that farmers were making it rich while that was not indeed the case; as many had little to no crop to see that season. So we had producers that then had to deal with rising rent prices and feel that the information included in the surveys is and will be used against them in the future. So they are a bit gun shy as to what information may or may not be released next. If it is coming NASS or any branch under USDA it should tell the complete story so that those not involved in agriculture can at least get a bit of understanding from the information.