

ASSESSING DATA NEEDS:
HOW RURAL SOCIAL SCIENCES ARE PROCEEDING

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Collaborators: American Agricultural Economics Association (AAEA)
Rural Sociological Society (RSS)
Community Development Society (CDS)
Association of Environmental and Resource Economists (AERE)
Food Distribution Research Society (FDRS)
American Council on Consumer Interests (ACCI)
Socio-Economics Section, American Fisheries Society (SE-AFS)

Contributors: American Agricultural Economics Association (AAEA)
Rural Sociological Society (RSS)
Community Development Society (CDS)
The Ohio State University
University of Wisconsin
Farm Foundation
Economic Research Service/USDA
National Agricultural Statistics Service/USDA
Agricultural Cooperative Service/USDA
Bureau of the Census
Resources for the Future
American Farm Bureau
Land O'Lakes
Oscar Mayer Company
Pillsbury Company

In late 1987, the Economic Statistics Committee of AAEA undertook to develop a major survey of data needs of rural social scientists and a symposium to address data issues. The survey and symposium were completed during 1989. A proceedings of the symposium is being published. The purpose of the poster is to report these efforts and to update AAEA members on current data initiatives.

PROVISIONAL OUTLINE: DATA CONFERENCE PROCEEDINGS

Title: New Directions in Data and Information Systems for Rural Areas

Co-Editors: Rueben C. Buse and James L. Driscoll

Prologue

Part I: The Current System and New Directions

- Chapter 1: The Institutions of Public Data; An Overview
- Chapter 2: The Changing Dimensions of Rural Area Problems
- Chapter 3: New Methods of Data Generation
- Chapter 4: New Technologies in Social Science Research
- Chapter 5: Priorities for Data on Agriculture and Rural Areas:
A Survey of Agricultural and Rural Social Scientists

- Chapter 6: The USDA Data Dissemination System
- Chapter 7: Managing Data for Use in Industry
- Chapter 8: Integrated Data and Information Systems for
Agricultural Economics Research in the 1990's
- Chapter 9: Issues Affecting Future Data Availability

Part II: Future Needs and Directions

- Chapter 10: Agriculture and the Economy
 - Management and Efficiency of Rural Business
 - Organization and Performance of the Marketing System
 - Food Demand, Consumption and Prices
 - The Rural Financial Structure
- Chapter 11: The Rural Community
 - The Rural Social Structure and Population
 - Community Services, Development and Rural Employment
- Chapter 12: International Agriculture
 - International Trade
 - International Development
- Chapter 13: Natural Resources and the Environment
- Chapter 14: Summary and Conclusions: Toward a Consensus

In process by the Iowa State University Press

GOALS AND OBJECTIVES

SYMPOSIUM: To provide a forum for exchange of ideas, identification of data problems, articulation of data needs, and exploration of new and alternative information sources and techniques.

SURVEY: To assemble comprehensive information about current and future data needs of agricultural and rural social scientists.

Major Survey Objectives:

1. To determine what data on agriculture and rural areas currently are being used by members of rural social science associations.
2. To ascertain expected future data needs of this same group.

Additional Survey Objectives:

3. To search for alternative strategies for collection and dissemination of needed data.
4. To investigate new technologies and/or software being used in data dissemination.

SELECTED RESULTS OF DATA SURVEY

Conducted at The Ohio State University by Leroy J. Hushak, Wen S. Chern and Luther Tweeten

An estimated 5,500 to 5,800 U.S. members of the seven collaborating associations were surveyed, when overlap in membership is eliminated. A total of 2,992 members responded, for a response rate of 52 to 54 percent.

Table 1. Percent of Respondents, Percent Response Rate and U.S. Members, by Association

	Response		
	Respondents	Rate	Members
American Agricultural Economics Association	63.3	51	3,734
Rural Sociological Society	16.4	70	700
Community Development Society	8.3	50	500
Association of Environmental and Resource Economists	6.9	41	500
American Council of Consumer Interest	3.1	13	700
Food Distribution Research Society	2.3	28	250
Socioeconomics Section American Fisheries Society	0.6	8	200

Table 2. Respondents by Current Employment (Percent)

60.7%	- College or University
3.8%	- Industry
13.7%	- Federal Government
3.3%	- State or Local Government
5.3%	- Consultant
4.0%	- Non-Profit Organization
10.3%	- Other

Table 3. Ten Most Important Data Sets: Percent of Respondents Ranking Data Set in Personal Top Ten (15 Highest Ranking)

# ^a	Data Set Name	%	Rank in Top 15 ^b	
			Fields (12)	Assn. (7)
1	Census of Agriculture	36	12	5
6	Census of Population & Housing	26	6	6
121	Consumer Prices & Price Indexes	22	9	6
14	Current Population Survey	18	6	5
23	Farm Costs & Returns Survey	15	8	1
26	Prices Received by Farmers	15	8	1
25	Prices Paid by Farmers	14	6	1
17	County & City Data Book	13	4	4
75	Agricultural Outlook	13	9	1
51	Economic Indicators: Nat. Fin. Sum.	13	5	1
120	Consumer Expenditure Survey	13	4	3
53	Econ. Indicators: Prod. & Eff. Stats	12	3	1
38	Field Crop Acreage & Production	11	5	1
24	Farm Production Expenditures	10	4	1
130	Survey of Current Business	10	2	3

^aThe item number of the data set in Section I, A & B of the questionnaire.

^bNumber of fields of specialization (out of 12) or associations (7) in which the data set ranks in the top 15.

Census prices and costs are crucial to a wide range of social scientists.

Table 4. Ten Highest Ranked Data Sets by AERE Members: Percent Ranked as Used and Very Important and Ten Most Important Data Sets

# ^a	Data Set Name	Percent	
		Used and Very Important	Ten Most Important
121	Consumer Prices & Price Indexes	66	24
122	Producer Prices & Price Indexes	58	11
6	Census of Population & Housing	52	20
130	Survey of Current Business	49	17
14	Current Population Survey	43	11
124	Empl. & Earnings for States & Areas	40	
10	Census of Manufactures	39	13
125	Empl. & Earnings for U.S.	39	
134	Nat. Sur. of Hunt, Fish & Wildlife	38	20
1	Census of Agriculture	35	19
17	County & City Data Book		9
191	Yearbook of Fishery Stats		9

^aThe item number of the data set in Section I, A & B of the questionnaire.

Census and prices are important to environmental & resource economists

The top rated data sets for AERE are the most surprising, with a focus on prices series, business data, and earnings data. Only two of 12 listed data sets (nos. 134, 191) are directly related to natural resources. The overlap with other associations ranges from 42 to 58 percent. Data sets 134 and 191 are also the two top ranked data sets of the socioeconomics section of AFS

Table 5. Percent Ranking Issues as One of the Five Most Important. All Respondents (Top 13)

# ^a	Issue		Rank in Top 10 ^b	
	Description	%	Fields (12)	Assn. (7)
18	Data on cost of prod/per unit of output	21	9	2
22	Data on trade protection & intervention	21	8	3
32	Develop set of RSAs	20	6	3
9	Improve data on off-farm income	18	9	4
31	Better def. & measure of rural pop.	17	4	3
39	Inventory of pesticide & herbicide appl.	17	4	4
38	Enhance ambient quality monitoring	17	1	3
42	Estimate & publish std. errors	16	9	3
23	Real exchange rate series	16	4	1
1	Establish mid-decade census	15	4	4
33	Cost of living, etc., indexes for RSAs	15	4	3
10	Better def. & measure of farm pop.	15	9	3
30	Measures of food safety	14	4	4

^aThe item number of the data set in Section I, A & B of the questionnaire.

^bNumber of fields of specialization (out of 12) or associations (7) in which the issue ranks in the top 10.

Our data needs change with changing conditions.

Table 6. The Ten Highest Ranked Issues by AERE Members: Percent Ranked as Very Important and Five Most Important

# ^a	Issue Description	Percent	
		Very Important	Five Most Important
38	Enhance ambient quality monitoring	61	43
41	Nat. sur. of water-ass. recreation	52	35
37	Inv. of point-source air & water pollution	52	37
42	Estimate & publish std. errors	49	27
39	Inventory of pesticide and herbicide appl.	49	27
40	Systematic fishing & harvest stats.	45	27
43	Estimate nonsampling errors	44	16
30	Measures of food safety	31	10
23	Real exchange rate series	23	
22	Data on trade protection and intervention	21	9
1	Establish mid-decade census		7

^aThe item number of the data set in Section I, A & B of the questionnaire.

Resource economists say increased environmental and resource monitoring are important future data needs

Responses from members of AERE show that nine of ten top issues are ranked in common by the "very important" and "five most important issues" criteria. Eight of 11 issues of AERE are common to the "all respondents" lists; the additions to the AERE list are in the recreation and pollution areas. AERE issues of data quality, herbicide and pesticide applications, and international trade data are common to members of the American Agricultural Economics Association. The five top ranked issues from the "five most important" criteria by SE-AFS respondents (40, 39, 41, 37, and 38) are in the AERE top ten.

SYMPOSIUM OUTCOMES

Nine work groups focused on data needs in their respective subject matter areas. These are published in Chapters 10-13 of the Proceedings.

RESOLUTIONS TO DECISION MAKERS

Two issues on which resolutions were developed by the Economic Statistics Committee and adopted by the AAEA Board of Directors.

RESOLUTION FROM THE ECONOMIC STATISTICS COMMITTEE AND BOARD OF DIRECTORS AMERICAN AGRICULTURAL ECONOMICS ASSOCIATION

WHEREAS there is a large and increasing demand for small area data as revealed by the Survey on Priorities for Data on Agriculture and Rural Areas and other sources, and

WHEREAS this increasing demand for data is brought about by the growing concern about a wide array of issues concerning rural viability, and

WHEREAS many data items available for urban counties cannot be published for rural counties because of disclosure rules, and

WHEREAS there exists a set of defined urban areas called Metropolitan Statistical Areas (MSAs), and

WHEREAS the MSA concept is transferable to rural counties,

BE IT RESOLVED THAT appropriate Federal statistical agencies be given the responsibility and the financial resources to define Rural Statistical Areas (RSAs), which are groups of counties similar in concept to MSAs, covering rural counties of the United States. Each RSA should encompass in so far as possible an economic trading area, be small enough to be of use in local analysis and planning, and yet be of sufficient size that data can be compiled for the RSA without disclosure violations.

RESOLUTION FROM THE
ECONOMIC STATISTICS COMMITTEE AND BOARD OF DIRECTORS
AMERICAN AGRICULTURAL ECONOMICS ASSOCIATION

WHEREAS there is a large and growing concern about the lack of systematic monitoring of key aspects of the natural environment as revealed by the Survey on Priorities for Data on Agriculture and Rural Areas and other sources, and

Whereas this is a result of increasing public awareness of the importance of environmental quality and natural resources as evidenced by regulations of ground and surface water quality from a variety of point and nonpoint sources of pollution,

BE IT RESOLVED THAT appropriate Federal statistical agencies be given the responsibility and the financial resources to establish an ongoing and coordinated system of key indicators of environmental quality and the natural resource base.

GENERALIZATIONS

Papers and Workshops

Workshops conducted with ERS and NASS

Papers presented at RSS, ACCI and AFS

The systems and issues we study are dynamic. More longitudinal data sets are needed to study the dynamics of rural issues.

We study "integrated decision making units". Data collection efforts must establish the principle of multi-purpose data generation so that social scientists can establish behavioral linkages across facets of the unit of inquiry.

Data are versatile. They can be descriptive and relational. Data for monitoring, enforcement, or regulation have been used for a wide range of other purposes. Needed are methods of improving access to such data without destroying confidentiality.

Data have economies of scale opportunities: the more they are used the lower the cost per use. Mechanisms for establishing, maintaining, updating and distributing data need to be improved so that those who need data become aware of it and can gain access to it in an efficient manner.

Microcomputer hardware and software is increasingly powerful and user friendly. At the same time, it can increasingly become a "black box". Educational opportunities are needed to inform social scientists of new technologies and upgrade their technical capabilities in the use of new hardware and software.

Data useful to social sciences are everywhere. User friendly, low cost computing capabilities have enhanced the ability of rural social scientists to operationalize many concepts and incorporate data which were formerly considered beyond the scope of the discipline. Data systems are needed that help scientists find the needed data in documented form.

CURRENT INITIATIVES AFFECTING RURAL SOCIAL SCIENTISTS

COPAFS (Council of Professional Associations on Federal Statistics) has been an active participant, and often the lead organization, on all of these initiatives.

Michael Boskin, chair of the Council of Economic Advisors, chairs working group of Economic Policy Council. Recommendations of Council have been submitted to and approved by the President. COPAFS (Council of Professional Associations on Federal Statistics) has provided input on how to implement recommendations and backing on the Hill on the Administrations budget requests to Congress, and will help address longer term issues as they arise.

COPAFS organized and conducted a seminar on "Quality of Federal Data" in May for the Office of Management and Budget. The seminar was attended by over 325 statistical personnel from Federal agencies and other organizations.

Reauthorization of the "Paperwork Reduction Act" has been an ongoing activity of Congress throughout much of 1989 and 1990.

Legislation is being considered which would establish a Bureau of Environmental Statistics.

Executive Director authored "Losing Count: The Federal Statistical System".

Panel on Confidentiality and Data Access has been formed by the Committee on National Statistics and the Social Science Research Council. The panel is concerned about access problems, suggestions for improving access, and persons or businesses harmed by disclosure. See July/August AAEA Newsletter for details.

