

## RESEARCH DATA PRIORITIES AS ASSESSED BY USERS: RESULTS FROM A SURVEY

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This paper presents the results from a survey on ranking of current and discontinued data sets and important data issues related to agriculture and rural areas from seven professional associations. The survey results show that the discontinued data set of family budgets is very important to members of ACCI. ACCI members also share many common concerns about the quality of statistics and the needs for new data and measures for analyzing emerging consumer issues such as food safety.

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### INTRODUCTION

A great deal of statistical data and information used by researchers, analysts, and extension professionals like those in the American Council on Consumer Interests (ACCI) are collected by various Federal statistical agencies. The data collected and disseminated by these government agencies are public goods in nature because data users usually pay only marginal costs for duplicating the data base. Therefore, there are simply no market-driven prices for these government statistics to determine the demand for and supply of this information. Yet there are very few who would dispute the tremendous social value of information.

The ever increasing complexities of the problems that most researchers and analysts have to deal with will always demand more and better (more accurate) data. Unfortunately, national statistical agencies are facing increasingly tight budgets for the collection and dissemination of data. Under this situation, statistical agencies have to be more selective in the type of data to collect. In fact, some data sets or parts of data sets were eliminated in the early 1980's as a result of budget cutbacks (Garkey and Chern, 1986).

In 1988, the Economic Statistic Committee of the American Agricultural Economics Association (AAEA) was concerned that additional data sets important to social scientists may be cut back or eliminated. The Committee felt that it was critical to assemble systematic information on how we use current public data and on our priorities, and make this information available to statistical agencies and

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policy makers. Consequently, the committee formed a joint project of seven professional associations including ACCI to conduct a survey of "Priorities for Data on Agriculture and Rural Areas."<sup>2</sup>

The objective of this paper is to present the survey results pertinent to assessing data priorities for consumer economics research and outreach activities. While this paper will provide an overview and selected comparative analysis of the results from the entire sample, the paper of Stafford and Haidacher will focus on a more detailed analysis of the subsample of the ACCI.

### THE SURVEY

The major objectives of the survey are to determine what data on agricultural and rural areas currently are used by members of the seven professional associations and to ascertain expected future data needs of this same group. In order to achieve these objectives, the questionnaire was designed to contain three sections. Section I dealt with use of statistical data sets. There were 225 current data sets included in the survey. Respondents were asked whether or not they have used the data and to rank the data set for future use according to (1) very important, (2) somewhat important, and (3) not important. They were also asked to identify the ten most important data sets. Section II listed a series of 43 statements about potential changes (or new additions) in future data collection and dissemination efforts. Respondents were asked to check whether each statement is very important, somewhat important, not important or "don't know". They were also asked to identify the five most important issues on the list. Section III dealt with characteristics of respondents including primary area of focus and membership in participating associations. The survey allowed overlap among areas of focus as well as associations.

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<sup>2</sup>Initially, the five associations of the American Agricultural Economics Association (AAEA), the Rural Sociological Society (RSS), the Community Development Society (CDS), and the Association of Environmental and Resource Economists (AERE) participated. The ACCI and the Socio-Economics Section of American Fisheries Society (SE-AFS) joined the effort at a later date.

Questionnaires were mailed to 6,200 members of associations during December 1988 - March 1989 (student members were excluded where identification was possible).<sup>3</sup> 2,992 usable responses were received, representing a response rate of 48%. If we exclude the overlap and retired members, the response rate would have been about 52% to 54%. By association, the response rates in percent (U.S. members) were: AAEA 51% (3,734), RSS 70% (700), CDS 50% (500), AERE 41% (500), FDRS 28% (250), ACCI 13% (700) and SE-AFS 8% (200) (see footnote 1 for acronym explanation). The response rates for ACCI and SE-AFS are underestimated because some of their members who are also members of other associations completed their questionnaires before we decided to mail to these two associations. Furthermore, these two associations were not listed explicitly on the questionnaire.

What are the characteristics of respondents? Among 2,992 respondents, the ACCI accounts for 3.1% while AAEA accounts for 63.3% and RSS 16.4%. With respect to the highest degree attained by the respondents, 65% had a Ph.D. and 26.5% had a MS/MA. With respect to current employment, 60.7% of the respondents work for a college or university, 13.7% for the Federal government, 3.8% for industry, 3.3% for state or local government, 4.0% for a non-profit organization, 5.3% for consultant arrangements, and 10.3% for others. There were 12 primary areas of focus specified in the questionnaire. The area of consumption and demand analysis is one of the 12 areas most closely related to what many members of the ACCI do professionally. In the total sample, 10% of the respondents identified consumption and demand as their primary area of focus. The highest percentage is 20.5% for environmental and natural resources as a primary area of focus. In the subsample for ACCI, 24.66% of respondents identified consumption and demand analysis as a primary area of focus, 4.3% identified demography, 1.08% identified agricultural cooperatives, 1.08% identified international trade and development, 1.08% identified community and rural development, and the remainder identified areas not specified in the survey.

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<sup>3</sup>We followed the procedures recommended by Dillman (1978) with three mailings (questionnaire, reminder postcard, follow-up questionnaire). However, the recommended two-week interval was not possible because of the large number of questionnaires involved and the use of bulk mailing procedure. The mailings took four months because we mailed to ACCI and SE-AFS after we had completed mailings to the other five associations.

## SURVEY RESULTS ON CURRENT DATA BASES

One criterion for setting priority of data collection is the relative importance of various data sets to data users. In this paper, only selected sets of survey results most relevant to members of ACCI are presented while more extensive and detailed results were available in Hushak et al. (forthcoming). In the survey, all respondents were asked to check how important the 247 current and discontinued data sets are to them and to identify the ten most important data sets.

Table 1 shows the seventeen data sets ranked as "used and very important" by 30% or more of all respondents. The results show that the data set of consumer prices and price indexes ranks at the top with 54%. The list also includes the census of population and housing, current population survey, and consumer expenditure survey which have been widely utilized by ACCI members. Column four in Table 1 also shows how each data set ranked in the "ten most important" data sets question. Thirteen out of these 17 data sets are also in the top fifteen from this alternative ranking. In addition, Table 1 shows the corresponding ranking by field (12 primary areas of focus) and by association (5 exclusive of ACCI and SE-AFS). Specifically, #121 (consumer price indexes) was ranked in the top 15 by all 12 fields and five associations while, for example, #22 (farm costs and returns survey) was ranked in top 15 by only 5 fields and one association. Table 1 highlights the fact that some data sets have been utilized in more fields and more professional associations than others. More importantly, the data sets such as the consumer expenditure survey can be very important even though it is extensively used only in selected fields and by members in a few professional associations.

Table 2 presents the top fifteen data sets ranked in the "ten most important" data sets. Thirteen of these fifteen data sets are also among the top seventeen data sets shown in Table 1. Thus the two ranking criterion identify a similar set of data sets most important to data users in these seven associations. Note that several data sets on this list were ranked in the top 15 by only one of the seven associations. In fact, many of these fifteen data sets are top ranked only by members of AAEA. The data sets which were ranked in the top 15 by more than 5 associations include census of agriculture (5), census of population and housing (6), consumer prices and price indexes (6), and current population survey (5). This result is not surprising because these data sets provide many commonly used statistics. Somewhat surprising to us is that some more specialized data sets are also widely utilized by several associations. Specifically, county and city data book was ranked in the top 15 by four associations, while consumer expenditure survey was so ranked by three associations.

**Table 1. Seventeen Data Sets with Thirty Percent or More of Respondents Ranking as Used and Very Important.**

#	Data Set, by Rank	%	Top Ten <sup>a</sup>	Field	Assn.
			(Rank)	(12)	(5)
121	Consumer Prices & Price Indexes	54	3	12	5
1	Census of Agriculture	50	1	11	5
6	Census of Population & Housing	46	2	6	3
14	Current Population Survey	45	4	6	3
122	Producer Prices & Price Indexes	42	NR	8	3
26	Prices Received by Farmers	38	6	9	1
75	Agricultural Outlook	38	9	9	2
25	Prices Paid by Farmers	37	7	8	1
27	Number of Farms	35	NR	8	3
38	Field Crop Acreage & Production	32	13	5	1
120	Consumer Expenditure Survey	32	11	2	2
23	Farm Costs & Returns Survey	32	5	5	1
53	Econ. Indicators: Costs of Production	32	12	5	1
20	U.S. Foreign Trade Statistics	31	NR	4	2
47	World Agr. Supply & Demand Estimates	31	NR	4	1
24	Farm Production Expenditures	31	14	5	1
130	Survey of Current Business	30	15	2	2

<sup>a</sup>Rank in ten most important data sets question (Table 2). NR means it was not ranked as one of the top fifteen by this criteria.  
<sup>b</sup>Number of fields (out of 12) or associations (5) in which the data set ranks in the top 15.

**Table 2. Fifteen Data Sets with Ten Percent or More of Respondents Ranking in Ten Most Important Data Sets.**

#	Data Set, by Rank	%	Used & Very Important <sup>a</sup> (Rank)	Rank in Top 15 <sup>b</sup>	
				Field (12)	Assn. (7)
1	Census of Agriculture	36	2	12	5
121	Consumer Prices & Price Indexes	22	1	9	6
14	Current Population Survey	18	4	6	5
23	Farm Costs & Returns Survey	15	12	8	1
26	Prices Received by Farmers	15	6	8	1
25	Prices Paid by Farmers	14	8	6	1
17	County & City Data Book	13	NR	4	4
75	Agricultural Outlook	13	7	9	1
51	Econ. Indicators: National Financial Summary	13	NR	5	1
120	Consumer Expenditure Survey	13	11	4	3
53	Econ. Indicators: Production & Efficiency Stats.	12	13	3	1
38	Field Crop Acreage & Production	11	10	5	1
24	Farm Production Expenditures	10	16	4	1
130	Survey of Current Business	10	17	2	3

<sup>a</sup>Rank in used and very important section (Table 1). NR means it was not ranked as one of the top seventeen by this criteria.  
<sup>b</sup>Number of fields (out of 12) or associations (7) in which the data set ranks in the top 15.

Table 3 shows the ten most important data sets identified by members of the ACCI. It is important to note that family budgets (#246), the third ranked on the list, was a discontinued data set previously published by the Bureau of Labor Statistics (BLS). The finding points out that BLS eliminated a very important data set to users in the ACCI. Somewhat to our surprise, the data sets of food intake by individuals (#133), nutritional status statistics (#161), health interview survey (#164), and survey of income and program participation (#18) were ranked lower than the panel study of income dynamics (#219) and employment and earnings for states and areas (#124) and for U.S. (#125).

## SURVEY RESULTS ON IMPORTANT DATA ISSUES

Respondents were asked to rank the relative importance of the 43 issues related to potential changes in future data collection and dissemination, and to list the five most important issues. Among these are seven issues related to household demand and consumption of food while others are related to production agriculture, community development, trade, environment and resources, and quality of statistics. Tables 4 and 5 present the top 13 or "baker's dozen" issues ranked as "very important" and "five most important", respectively, by all respondents. The related results are organized in the same manner as those presented in Tables 1 and 2. Again, the two criteria yield many similar results even though the actual ranking of the issues differs somewhat. The indicated significance of these issues shows that data users in these seven professional associations are very concerned about (1) interpretation of agricultural statistics in the absence of published standard errors of the estimates, (2) lack of data to address current important public policy such as trade and food safety, and (3) measurement of farm and rural areas.

Table 6 presents the ten highest ranked issues by members of the ACCI. On the top of the list is to reinstate BLS's family budgets data which is consistent with the finding on the importance of data sets discussed earlier. It is interesting to note that ACCI members share many common concerns with members of the other six associations. Specifically, six out of ten issues are common to the all respondents lists presented in Tables 4 and 5. The issues unique to ACCI include establishing a special consumer panel (#27) and disaggregating household expenditures into quantities and prices (#24). These two issues were also on the top 10 issues identified by the FDRS. Measures of food safety (#30) is the issue shared by many data users in the survey.

Since the ACCI did not join the project until after the questionnaire was completed, other data issues unique and important to ACCI members were not included in

the survey. Nevertheless, the survey results are still very useful for assessing the priorities and concerns about the data sets by ACCI members.

## DISCUSSION

Even though the survey provides useful information for assessing the relative importance of current data sets by data users in the seven participating associations, it provides very limited information on whether or not users are completely satisfied with the top ranked data sets. The data issues specified in the questionnaire were not necessarily related to the important data sets identified in the survey. Unfortunately, the large number of data sets (249) made it impossible to include at least some issues related to each data set. The lengthy questionnaire (7 pages) already made it relatively time-consuming for respondents to complete the survey. Few respondents volunteered to offer additional comments on how to improve the current data sets other than the 43 issues listed.

It seems appropriate to use the results presented above for further interpretation. Consider first the consumer prices and price indexes (#121) which was ranked first by "used and very important" among respondents of all participating associations. Yet, none of the 43 data issues listed on the questionnaire is related to this data set. The importance of this particular data set is understandable because almost every researcher, analyst, and extension professional has used the consumer price index (CPI). Does this data set satisfy all the needs for consumer price information? Not completely. In fact, in the area of consumption and demand analysis, to our knowledge, several researchers have requested the BLS to provide consumer price data for more items of goods and services at the regional or state basis. These regional and subregional data of prices are critical for demand analysts to match with consumer expenditure data at the household level for demand estimation. Unfortunately, the BLS has repeatedly declined this request on grounds of confidentiality. This may be the time for the BLS to readdress these needs from data users.

Another example is the issue to "Establish a special consumer panel of at least 1,000 households for data on demand analysis" (#27) which was identified by ACCI members as the second of the ten most important data issues. Both the BLS's consumer expenditure survey and the USDA's nationwide food consumption survey have not been able to provide precisely the needed data for modeling consumer demand and food demand. Specifically, there are no regional data on prices available to match expenditures in the BLS's consumer expenditure survey because the quantity data are not usable. Even

**Table 3. Ten Highest Ranked Data Sets by ACCI<sup>a</sup>.**

#	Data Set	Percent
120	Consumer Expenditure Survey	56
246	Family Budgets	41
6	Census of Population & Housing	29
14	Current Population Survey	29
129	Personal Consumption Expenditures	24
219	Panel Study of Income Dynamics (PSID)	24
124	Empl. & Earnings for States & Areas	19
125	Empl. & Earnings for U.S.	18
132	Household Food Consumption Survey	17

<sup>a</sup>Based on "Ten Most Important."

**Table 4. The Thirteen Top Issues by Ranking of Very Important.**

#	Issues, by Rank	%	Top Five <sup>a</sup> (Rank)	Rank in Top 10 <sup>b</sup>	
				Field (12)	Assn. (5)
42	Estimate & publish standard errors	37	8	10	4
10	Better define & measure of farm population	34	12	10	4
9	Improve data on off-farm income	33	4	11	3
43	Estimate nonsampling errors	33	No	9	4
18	Data on cost of production/unit of output	31	1	7	2
31	Better definition & measure of rural population	31	5	5	2
30	Measures of food safety	29	13	6	2
33	Cost of living, etc., indexes for RSAs	29	11	4	2
39	Inventory of pesticide & herbicide appl.	29	6	4	2
32	Develop set of RSAs	28	3	4	2
22	Data on trade protection & intervention	28	2	6	3
23	Real exchange rate series	27	9	7	2
19	Data on standard units of production	25	No	6	2

<sup>a</sup>Rank in five most important issues question (Table 5).

<sup>b</sup>Number of fields (out of 12) or associations (5) in which the issue ranks in the top 10.

**Table 5. The Thirteen Top Issues from the Five Most Important Issues.**

#	Issues, by Rank	%	Very Important <sup>a</sup> (Rank)	Rank in Top 10 <sup>b</sup>	
				Field (12)	Assn. (7)
18	Data on cost of production/unit of output	21	5	9	2
22	Data on trade protection & intervention	21	11	8	3
32	Develop set of RSAs	20	10	6	3
9	Improve data on off-farm income	18	3	9	4
31	Better definition & measure of rural population	17	6	4	3
39	Inventory of pesticide & herbicide appl.	17	9	4	4
38	Enhance ambient quality monitoring	17	No	1	3
42	Estimate & publish standard errors	16	1	9	3
23	Real exchange rate series	16	12	4	1
1	Establish mid-decade census	15	No	4	4
33	Cost of living, etc., indexes for RSAs	15	8	4	3
10	Better definition & measure of farm population	15	2	9	3
30	Measures of food safety	14	7	4	4

<sup>a</sup>Rank in very important issues section (Table 4).

<sup>b</sup>Number of fields (out of 12) or associations (7) in which the issue ranks in the top 10.

**Table 6. Ten Highest Ranked Issues, ACCI<sup>a</sup>.**

#	Issue	Percent
26	Reinstate BLS family budgets data	55
24	Disagg. Expenditure Survey into quantity & prices	26
33	Cost of living, etc., indexes for RSAs	25
30	Measures of food safety	24
1	Establish mid-decade census	23
31	Better definition & measure of rural population	23
32	Develop set of RSAs	17
9	Improve data on off-farm income	16
7	Series on personal income of farm households	14

<sup>a</sup>Based on responses to the question on "Five Most Important Issues."

though USDA's food consumption survey provides both quantity and expenditure data, it has been conducted only once in ten years. Therefore, it is difficult to use the USDA survey to monitor food consumption/demand on a continuing basis. Due to these imperfections, a special household panel has long been suggested as a means to collect data tailored to the need for demand analysis. In view of the emerging needs to monitor food consumption patterns in response to the increasing public concerns on nutrition, food safety and quality, a special consumer panel would merit serious consideration. The survey results presented earlier confirm the importance of this issue from rankings by members of ACCI.<sup>4</sup> However, it is not clear which Federal agency should be responsible for this data collection activity. It is essential for BLS, USDA and other Federal statistical agencies to examine this and other findings from the survey and to take appropriate measures to respond to the needs of data users.

### CONCLUSIONS

This paper summarizes the findings from a survey on ranking of 249 data sets and 43 data issues related to agriculture and rural areas. Only selected survey results pertinent to consumer and demand/consumption research and extension were presented in the paper.

The ten highest ranked data sets by ACCI members are BLS's consumer expenditure survey (#120), consumer prices and price indexes (#121), family budgets (#246), employment and earnings statistics for states and areas (#124) and for the United States (#125), the Bureau of Census's census of population and housing (#6) and current population survey (#14), Bureau of Economics Analysis's personal consumption expenditures (#129), USDA's household food consumption survey (#132), and the panel study of income dynamics (#219). It was noted that the BLS's family budgets was a discontinued data set. This finding indicates that BLS eliminated a data series which has been very important to members of the ACCI.

The survey results related to data issues show that members of the ACCI share many common concerns about collection and dissemination of data related to agriculture and rural areas. Specifically, six out of ten top issues identified by ACCI members are also on the list of top 13 issues ranked by all respondents. The reinstatement of the family budget data was the top ranked issue by members of the ACCI. In

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<sup>4</sup>The importance of this issue was also highly ranked by members of FDRS. See Hushak et al. (forthcoming).

addition, ACCI members ranked highly the importance of establishing a special consumer panel and of disaggregating the expenditure survey into quantities and prices. The implementation of these improvements would provide the critically needed data for demand and consumption analysis.

In summary, the survey provides useful information for Federal statistical agencies in setting priorities for data collection and dissemination. Of course, members of the seven associations participating in the survey represent only a segment of users of the statistical series listed in the survey. However, this is one important group of data users. It is important for Federal statistical agencies to consider the findings from this survey in setting data priorities.

### REFERENCES

- Dillman, Don A., 1978, Mail and Telephone Surveys: The Total Design Method, New York: John Wiley & Sons.
- Garkey, Janet and Wen S. Chern, 1986, Handbook of Agricultural Statistical Data, Economic Statistics Committee, AAEEA.
- Hushak, Leroy J., Wen S. Chern, and Luther Tweeten, "Priorities for Data on Agriculture and Rural Areas: A Survey of Agricultural and Rural Social Scientists", in New Directions in Data and Information Systems for Rural Areas, ed. Rueben C. Buse and James Driscoll, Ames, Iowa: Iowa State University (forthcoming).
- Stafford, Kay and Richard C. Haidacher, 1990, "New Directions in Data, Information System and Their Uses: Consumer Demand, Consumption, and Prices," paper presented in the 1990 ACCI Annual Meeting, New Orleans, March 29-31.