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AGRICULTURAL CENSUS

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KANSAS STATE UNIVERSITY

HEARINGS

BEFORE THE

SENATE COMMITTEE ON CENSUS AND POPULATION

OF THE

COMMITTEE ON

POST OFFICE AND CIVIL SERVICE

HOUSE OF REPRESENTATIVES

NINETY-FOURTH CONGRESS

SECOND SESSION

ON

H.R. 11048 and H.R. 12397

BILLS RELATING TO THE METHOD OF CONDUCTING THE
CENSUS OF AGRICULTURE

JUNE 22 AND 23, 1976

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AGRICULTURAL CENSUS

TUESDAY, JUNE 22, 1976

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON POST OFFICE AND CIVIL SERVICE,
SUBCOMMITTEE ON CENSUS AND POPULATION,
Washington, D.C.

The subcommittee met at 10 a.m. in room 304, Cannon House Office Building, Hon. Paul Simon (acting chairman) presiding.

Mr. SIMON. The subcommittee meeting will come to order. Let me read just a very brief statement of our situation.

The subcommittee today begins a series of hearings into the issue of the agricultural census. A number of bills have been introduced in the Congress to reform the census. The two principal bills introduced by Congressman Nolan of Minnesota and Congressman Smith of Iowa would require sampling to be used in taking the agricultural census.

In addition, Mr. Smith's bill would transfer the function of taking the agricultural census from the Bureau of the Census to the Department of Agriculture.

In addition to considering these bills, the subcommittee also wants to inquire into the content and use of agricultural census. Why are certain questions asked, who uses the data, and do the data users need all the data down to the county levels.

This subcommittee hopes to come out of these hearings with a basis for legislation mandating reform of the agricultural census which would at the very least greatly reduce the burden on respondents who are already being crushed with paper work from other Government agencies.

Our first witness is my colleague, Congressman Charles Rose, who has shown a great deal of leadership and interest in this area, and I welcome him as a witness at this point.

STATEMENT OF HON. CHARLES ROSE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA

Mr. ROSE. Mr. Chairman, I thank you very much for the invitation and opportunity to come and speak to your subcommittee this morning. As chairman of the Agriculture Subcommittee on Family Farms and Rural Development, we have held two separate hearings now on the general proposition of the redefinition of what is a farm.

It is with this background in mind that I come before you today, sir, and say that I have some very mixed emotions about transferring the job of taking the agricultural census from the Census Bureau in the Department of Commerce to some section of the Department of Agriculture.

Not a year ago, the General Accounting Office produced a report on what it felt the Department of Agriculture was not doing and what it should be doing to help the small family farmer in America. We have lost literally hundreds of thousands of small family farmers in this country over the last several years. They have gone into other lines of work; they have quit the farm and moved to the city, and in some few instances they have been absorbed by larger conglomerate farming operations.

It is my very firm belief, Mr. Chairman, that the family farm is the backbone of this country as we know it today. As we founded this Nation some 200 years ago, the family farm was then a basic building block in the structure of this Nation and, in my opinion, it continues, sir, to be so today.

But the Department of Agriculture, in my opinion, and from what I have seen and heard in these two sets of hearings and in my 4 years now on the House Agriculture Committee, has decided to rate its priorities a little differently. Based on the priorities that the Department of Agriculture has established for agriculture in this country, the family farm is now ranking somewhere down at the bottom of the pile, especially the less efficient, in terms of food production-sized family farm units.

In other words, the main thrust of the Department of Agriculture is to support and give aid and assistance to the large units of agriculture with total food productivity being their sole and main consideration.

We heard witnesses at our last hearing in the Family Farm and Rural Development Subcommittee who said that in pilot projects that they have conducted in agriculture over the last decade, they have proven that with a modest expenditure of resources, the small agricultural units can be greatly enhanced in productivity and output to the betterment of the people who live in that environment and for the betterment of agriculture generally.

But because the numbers of the increases in efficiency are not as great as the Department of Agriculture has determined they should be, none of those pilot projects have ever been brought forward to the Congress through the President's budget or through existing programs and encouraged to be expanded to apply to all small farmers similarly situated in this country.

What does that have to do with the census? In my opinion, one of the easiest ways to push the small family farmer under the rug once and for all is to stop counting him and her, is to forget them statistically, and with the Department of Agriculture of a mind, as it is today, to put its emphasis on the more productive large-scale units of agriculture. I am afraid that if they are given the job in agriculture of handling the agricultural census, it will be much easier for them to statistically completely forget about the small family farmer.

I like the idea of the Census Bureau continuing to gather information about what is happening in this country in rural America, in giving us in the Congress the facts and the figures that we need to make judgments that we are going to have to make in the years ahead as to what is happening in rural America and what our response should be.

The present consternation we have been through has revolved around whether or not the definition of what is a farm should be changed from its present configuration to requiring that only places that produce \$1,000 a year be counted as farms.

The problem with that change in definition, Mr. Chairman, is that it will eliminate, as farms, close to 600,000 farms that are now existing in this country, and theoretically they would become places or gardens, but not farms. The rural development moneys, the agricultural research and extension moneys that are presently given to the States of this Nation based on the number of farms that they have would take a drastic change.

In my own State of North Carolina a change in the definition of what is a farm would result in a reduction of 25 percent of all the farms in North Carolina.

Mr. Paarlberg, at the Department of Agriculture, in testimony before my subcommittee several weeks ago, stated that for purposes of stating farm income that they in the future were going to begin to break down farmers into four categories: part-time farmers, full-time farmers, corporate-related farmers or farms, and special farms is the fourth category, farms at prisons, hospitals, or experiment station, and the like.

My argument to them and to you, sir, is that if you are going to break down farm income into those four categories, you do no injustice to the definition to continue to gather all the information that you can about part-time farmers. If the definition has to be changed to create four new categories, why does the part-time farmer have to be limited to just those part-time farmers who make above \$1,000 a year.

I think that testimony from the Census Department and questions that you might direct at them would show that with statistical sampling methods they can continue to gather data about the small part-time farmer that makes up such a large percentage of rural America, and that it will do no great harm to them to continue to gather this information, but, on the other hand, I feel it would do great injustice to us in the Congress from an information standpoint if we lose this source of facts and figures about what is happening to the poor and the small farmers who live on the small farms of rural America. They are not as glamorous as the large corporate farming operation, but they are just as important to the framework of this country.

So for that reason, because of the rather cynical priorities that the Department of Agriculture has arranged, in my opinion, neglecting these smaller units of agriculture, I am afraid that giving them the job of handling the agricultural census is tantamount to putting the fox in charge of the chicken coop, and for that reason I would urge this subcommittee to be very cautious about any change in taking the agricultural census away from the Census Department and giving it to someone in Agriculture.

I thank you for letting me come here.

Mr. SIMON. I thank you for your testimony.

First of all, my personal feeling is in agreement with you on the matter of including that small farm in the definition of "farm" in future censuses.

Do you have any feeling on the suggestion of the Nolan bill and the Smith bill for sampling rather than a more thorough census as we do now?

Mr. ROSE. I am not an expert in that field, and Mr. Barabba and his people who are here today can better comment on that than I, but I feel from what I have read and seen and heard, they certainly should be able to engage in sampling techniques to gather most of the information that we should need to know what is happening to these smaller units of agriculture.

Mr. SIMON. And the other question: Have you seen the actual forms that the farmers get? I am curious whether you think they are too long for the average small farmer, or whether they can be abbreviated and still make sense?

Mr. ROSE. Here again, I would say that I am sure there are ways it could be made simpler, and I would certainly rather us opt for a simpler form if it meant more participation from the smaller farmers even if it meant less information of some kind.

I realize that larger farm units of agriculture, those that have accountants and CPA's working for them, probably have a much easier time of filling out the agriculture census, whereas the smaller unit would not have the resources for filling out a complicated questionnaire, and I believe adequate sampling techniques could be devised to take care of those people.

Mr. SIMON. We thank you very much, and if I may again say for the record, I appreciate the leadership you have provided in this whole field. There are many of us who share that feeling.

We are pleased to welcome a colleague, Congressman Gillis Long, as a witness at this point. We will ask you to proceed, Mr. Long.

STATEMENT OF HON. GILLIS W. LONG, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

Mr. LONG. Thank you, Mr. Chairman. I am pleased to have this opportunity to appear before you today. I will be brief because, as you know, and certainly Mrs. Schroeder knows, I have testified at length before this committee and others with respect to this problem over past months, because I have been greatly concerned about this proposed redefinition of "farm." Also, of course, I know you have a number of other witnesses to hear.

This issue is of deep personal interest to me and I have, as I said, testified to make my views known on it a number of times. But it is also an issue of deep personal interest to the many farmers in the congressional districts that I represent. I wanted to commend you and the other members of your committee for the work you have done and continue to do in this regard.

To recap for a moment: The Department of Agriculture, the Census Bureau, and OMB jointly made a decision last year to change the existing definition and require the ceiling of \$1,000 or more yearly in order to qualify as a farm. That decision has been temporarily delayed in legislation passed by this Congress which restored the former definition of \$250 in sales or 10 acres and \$50 in sales until June 30.

I believe we are at a point today where we have to seriously consider taking the legislative route to resolve some differences of opinion on this question. Of course, ideally, any Federal statutes developed would insure the continued counting of a substantial number of our smaller farmers without permanently locking census into a dollar value which would remain unchanged over the years.

As I have said in other appearances on this issue, I am not opposed to an honest effort to redefine the term "farm" in order to make the data collected of greater value to many people who rely on it for the various reasons people do rely on it. But I question whether this particular redefinition accomplishes those goals.

When I first testified on the issue before this same subcommittee in September of last year, I raised the concern that the redefinition had been carried out administratively by these three Federal agencies without what I would consider to be a proper investigation of all of the implications which would result from such a change. No one was asking the kind of questions that needed to be asked before approval was given administratively.

The congressional hearings which followed, both in your committee and in the Family Farms and Rural Development Committee, did a great deal to pinpoint some of the problem areas and open them up to public discussion. I would like to highlight, for the purpose of the record, a few of the positive things I believe we learned from these explorations and point up a few questions which I feel remain unanswered to any degree of satisfaction.

First, we learned from the testimony presented by the Census Bureau that the 1975 redefinition of farm is a significant departure from the historical progression of the agricultural census. In a chart documenting the history of farm definition over the past 125 years, we saw that the 1975 dollar cutoff jumped to a figure four times beyond its previous level.

More importantly, we saw that this quantum jump occurred for the first time with no distinction between agriculture produced for home consumption and agriculture produced for sale.

Second, we learned that several Federal programs which distribute funds from a formula including farm population would undergo a change in the manner of distribution. In short, those States with the greatest number of small, limited resource farms and farmers—of course, this automatically in my part of the country means minority farmers—would be eligible for proportionately fewer funds for agriculture and rural development research and extension unless Congress acted affirmatively to freeze programs at the current levels.

Third, we learned that the Department of Agriculture did not advise other Federal agencies who use a "farm definition" in their calculations that the change was being made. As a result, small low-income farmers would be dropped from the census definition by the \$1,000 limit, but they would continue to be counted as farmers—with stricter eligibility requirements—under the Federal poverty definition by the previous \$250 limit.

Fourth, we learned that assurances by Census and the Department of Agriculture of more accurate and meaningful information on these very small farmers from the decennial census—or population census—were about as hollow as the little strawmen who stand in the farmers' fields all over the country.

At joint hearings held in the House in April, Census officials would make no commitment that a farm/nonfarm breakdown would continue to be used in the 1980 census. These, of course, are all aspects of the issue which need to be publicly aired so we know what we are dealing with.

At the same time, as I mentioned earlier, there are a number of questions which remain to be resolved. For example, I don't believe anybody in the Federal bureaucracy has been able to demonstrate any urgent need for a change of this magnitude at this time. There has been testimony to the effect that by counting all the farms in the country we would distort the overall picture of agriculture in this country. That makes no sense to me at all. It just doesn't make any sense to me how by counting all the farmers, we are distorting the picture of agriculture in this country.

The only way I can accept this logic is to believe the purpose of the agricultural census is to reflect somebody's perception of what American agriculture should be rather than to reflect what American agriculture really is.

Furthermore, I don't believe we have had fully explained why a farm must contribute a significant part of the national agricultural production to count. There are many users of the agricultural census. They include not only farmers themselves, but statisticians, demographers, legislators, rural planners, policymakers. Nobody has sufficiently delineated for the public the many uses to which this information gathered from the census is put or the many different ways it can be used to the benefit of farmers. I would hope that this is the kind of record you would be able to develop further in the context of the hearing you are holding at the present time.

Finally, I don't believe anybody has pinned down the Department of Agriculture's purpose in insisting upon the definitional change. It is not that the Department is indifferent to the prospects of counting all our current farms in the census, and it is not that the Department is indifferent to meeting the needs of small farms as studies would indicate. The Department is openly and adamantly opposed to counting these small farms under any circumstances, and this is the root that I think we have not yet uncovered in the course of our study and of the public hearings that have been held on this subject.

Mr. Chairman, in closing, I would like to make one brief comment, if I may, on the future of the agricultural census. I know there have been a number of bills introduced that would change this census from the Department of Commerce to the Department of Agriculture.

I can understand and appreciate the pressures which have generated these bills, but in my view this would be a tragic mistake.

The Bureau of the Census is primarily a nonpolitical agency. The professional staff at Census, the staff which develops the questions and gathers and analyzes the results of the answers to those questions, has no vested interest in the end result or the end-use of their statistics. And while this could be construed by some as a great weakness in the system, I submit it can also be its greatest strength. It is credible information. It is information in which people can put great faith.

In fact, it is a little bit like the independent auditing firms that exist in the United States today. When they go in and do an audit of a major company—and I have represented some of these companies and been on the board of some of them—we might fight as to what type of figure they come up with, but at least we are getting the benefit of a third person looking into the situation who is not presenting the figures in the light of what we would like to see.

Mr. Chairman, we need to see agriculture in the United States as it really is, because to make the kind of enlightened policy decisions we have to make as legislators, it's important that we know agriculture as it currently exists. I would certainly caution the committee to weigh the advantages against the disadvantages of such a move most seriously.

I thank you for listening to my views.

Mr. SIMON. Thank you very much, Mr. Long.

I might add, I think you were the first person to come before our subcommittee and point out this problem. I personally appreciate it, and I think the other members of the subcommittee do, too.

One of the other questions presented to us in the bills before us is the question of whether it should be a sampling or across-the-board census of the farm population. Do you have any feeling on that?

Mr. LONG. I would be willing to go with what Census felt would be a good enough sample in order to feel that they were competent in letting the results be used.

I well recognize the cost of it and the tendency to build a big system, an organization, to use an overworked term, of bureaucracy in order to do it and the complexities of it. Just keeping up in my district, which has a lot of these small farms in it, with all of them, and where they move and who they are, gets to be very complicated, but I think the methods they have developed are sufficient that they can get a pretty clear indication of it for most needs without doing it on a head-to-head count.

Mr. SIMON. Have you received any complaints in your district about the size of the form?

Mr. LONG. No, I don't believe I have. I haven't seen them if we have.

Mr. SIMON. Thank you very much.

Mr. LONG. Thank you, Mr. Chairman.

Mr. SIMON. Our next witness will be Mr. Vincent Barabba, the Director of the Bureau of the Census.

STATEMENT OF VINCENT P. BARABBA, DIRECTOR, BUREAU OF THE CENSUS, ACCOMPANIED BY SHIRLEY KALLEK, ASSOCIATE DIRECTOR FOR ECONOMIC FIELDS, AND ORVIN L. WILHITE, CHIEF, AGRICULTURE DIVISION, BUREAU OF THE CENSUS

Mr. BARABBA. Mr. Chairman, I have with me Miss Shirley Kallek, whom you have met before, the Associate Director for Economic Fields in the Census Bureau, and Orvin Wilhite, the Chief of our Agriculture Division, which has the most immediate responsibility for the conduct of the census of agriculture.

We appreciate the opportunity to appear before this subcommittee to testify on the proposed legislation, H.R. 12397 and H.R. 11048, dealing with the agriculture census; the definition of places to be classified as farms in the census of agriculture, as well as the Census Bureau's plans to reduce the respondent burden in the area.

I would like to point out that we certainly appreciate the delay that you allowed us in the conduct of these hearings so that we would have an opportunity to meet with our advisory committees in this

area as well as to talk to other people. I think the amount of time we had allowed us to get a better understanding of the intensity of the problem and to make what I hope are appropriate modifications to our plans.

Mr. SIMON. The credit for that goes to the chairwoman of this subcommittee, not to the present presiding officer. We will pass your comment along to her.

Mr. BARABBA. Though reference is made to amending title 13, United States Code, to prevent a change in the definition of a farm prior to June 30, 1976, I should like to point out that Public Law 94-229, recently enacted, accomplishes this objective.

We most vigorously oppose the proposal to relieve the Secretary of Commerce of the responsibility for conducting the census of agriculture and delegate such authority to the Secretary of Agriculture. There are sound and sufficient reasons for this strong opposition.

Before discussing these reasons, I should like to present the fundamental premises on which my testimony is based, and which I believe to be noncontroversial: (1) An agricultural information system which provides data on agricultural operations periodically on a county level is necessary and desirable; (2) data basic to such an information system need to be updated at least every 5 years; (3) such an information system should provide statistics which enable farming to be linked to related industrial activity; and (4) the least amount of burden should be placed on the respondent consistent with producing relevant statistics of an acceptable level of quality. I believe these objectives to be universal and clearly independent of any debate with regard to delegating responsibility for the agriculture census.

I should like to address first the issue of reducing respondent burden while producing timely statistics with acceptable accuracy through the use of sampling techniques in the collection of agriculture statistics.

The Bureau of the Census has long been a strong advocate of the use of sampling to obtain information with a minimum cost and a reduced respondent burden. Existing legislation allows the Secretary of Commerce to authorize the use of sampling to collect information where appropriate, with the exception of determining population for apportionment purposes. Sampling has been used to increase efficiency of collecting information and to reduce respondent burden in a number of previous agricultural censuses.

The first use of area probability sampling in connection with a census of agriculture was in the 1945 census. In that census, there was a basic questionnaire covering information asked of all farms. Data needed only at the State and national level were asked of a sample of these farms. This sample was based on the area sample frame for the master sample of agriculture, which was developed jointly by the Bureau of the Census and the Bureau of Agricultural Economics (USDA) in cooperation with the Statistical Laboratory of Iowa State College, now Iowa State University, for use in connection with the 1945 Census of Agriculture, and for general use in sample surveys in the field of agriculture. The work of the Statistical Reporting Service (SRS) of the U.S. Department of Agriculture on the use of area sampling, starting in 1954, was based on this area sampling frame.

Uses of sampling continued in subsequent censuses and in the 1964 census, information on selected items was collected from a 20-percent sample of the farmers who had less than 1,000 acres or less than \$100,000 in sales. Estimates for these selected items were prepared and published at the county level, using the sample data in combination with selected information on all farms from the census.

In the 1969 Census of Agriculture, data for farms under \$2,500 total value of products sold were collected on a 50-percent sample basis. Sampling errors of total estimates at the county level were calculated and published. Data on farm finance and farm enterprises which were needed only at the State and National level were obtained in sample surveys following the census. The sampling frame for these surveys was the farms included in the basic census. As can be seen, sampling has been a part of the Bureau of the Census operational program for conducting censuses of agriculture for over 30 years.

We are investigating a number of sample options for the 1978 Census of Agriculture. As in censuses prior to 1974, we plan to conduct several sample surveys subsequent to the census proper which will cover selected areas such as farm finances. Since the information will be obtained on a sample basis instead of 100 percent, the respondent burden is obviously reduced. In addition, we plan to employ sampling with respect to specific data items. The size of the sample would, of course, have to be consistent with user requirements, both with respect to accuracy and geographic detail. This approach would decrease significantly the size of the report form and thus further reduce respondent burden. A third option may involve a sample of farms, themselves. One reason for considering this option is that the list frame for small farms will be less complete than it is for large farms. It is obvious that an area sample taken to supplement the list frame of small farms would be appropriate in order to provide a better estimate of the number and contribution of small farms.

It is recognized in H.R. 12397 that sampling may not be efficient for providing needed county data except when used in combination with a census, as was done in the 1964 Census of Agriculture. Thus, section 2(b) (2) provides that—

If the Secretary determines that the statistical method known as "sampling" is not appropriate for the collection of information relating to the classification of farms, he may use another method to collect such information * * *

The Bureau adopted a mail-out, mail-back procedure in 1969 in order to provide greater convenience to the respondent in reporting, to allow for more precise answers from respondents, and to improve the coverage of agricultural activities by improving the coverage of agricultural services and other operations which are difficult to identify by observation. Census forms are mailed to operators of agricultural enterprises to be filled out and returned to the Bureau. Directly related to this point, Mrs. Chester Smith, representing the American Farm Bureau Woman's Committee—normally the people who fill these forms out—at our June 16 advisory committee meeting, stated that she felt the persons filling out report forms are more comfortable doing it themselves rather than answering questions put to them by an enumerator whose qualifications and dependability are unknown to the respondent. Furthermore, she said she thought that dropping the

mandatory response provisions of the census would mean the information would be more difficult to obtain. Mrs. Smith emphasized the need to educate farmers in the uses made of census data so that they would have a better idea of the value of these data to their own operations.

To conduct a mail-out, mail-back census, a comprehensive list must be developed so that the report forms can be sent to farmers. By experience we have learned that some part-time and small farmers do not appear on administrative lists and will have to be contacted on a sample basis in order to estimate this component of the universe.

An important, perhaps the most important, component of such a list is Internal Revenue Service records. Extracts of these records are made available to the Bureau under stringent confidentiality restrictions. They provide a unique administrative source of names, addresses, and size characteristics for Census Bureau mailing lists. To obtain addresses for farmers who cannot be identified in IRS records, we also obtain addresses from other sources, including Social Security Administration, trade associations, and the U.S. Department of Agriculture's Statistical Reporting Service and the Agricultural Stabilization and Conservation Service.

Title 13, United States Code, prohibits the Census Bureau from releasing any information including the name and address of individual enterprises regardless of source. This restriction severely limits the ability of any other agency to develop as complete and comprehensive a list as the Census Bureau can construct. In 1982, when the census of agriculture will be taken in conjunction with the economic censuses, benefits will also accrue from the identification in the economic census of nonagricultural firms which also had agricultural activities.

Next I would like to point out that the increase of multiactivity corporate enterprises in the agricultural sector requires a comprehensive and integrated approach to the development of an analytical base. The American Agricultural Economic Association Committee on Economic Statistics, chaired by Dr. James Bonnen, in its report, "Our Obsolete Data Systems: New Directions and Opportunities," found that—

However well the Census of Agriculture may deal with the farming part of the agricultural industry, it has never been adequately coordinated with the census of business, census of manufactures, and other fields of periodic data. Each data system tends to have its own basic unit of measurement, industry classification system and industry sector definitions. Thus, we do not have a complete and coordinated body of data that permits description or analyses of the food and fiber industry as a whole. No one understands all of this better, or is more concerned, than those responsible for the Census of Agriculture and various USDA data systems. It is time agricultural economists pitched in to help solve this problem.

The Bureau of the Census is the only agency in the Government with the source material required for the development of such a micro-data base. For the 1974 census, we will provide limited statistics on the activities of corporations in agriculture. For the 1978 Census of Agriculture, we plan to expand the program and to develop a program to link the economic censuses and current surveys to the agriculture census.

We believe that this interrelationship should include data on agriculture inputs, outputs and distribution. The obvious advantages of this symbiotic relationship will be greatly diminished if the agriculture census is transferred. Moreover, the transfer is in apparent conflict with Public Law 94-229 and would obviously make more difficult the task of achieving the objectives of that law.

With respect to the wording of the bill to prevent the change in the definition of a farm prior to June 30, 1976, in compliance with Public Law 94-229, the Bureau is currently tabulating and publishing the preliminary 1974 individual county reports according to the farm definition which was in effect as of January 1, 1975, that is, the definition which had been used since the 1959 Census of Agriculture.

Exhibit A is an example of a county preliminary report. The Bureau is considering how best to show data for all farms in final 1974 census reports on this basis even though the provision of the law is scheduled to expire on June 30, 1976.

In my testimony before a joint meeting of the Subcommittee on Family Farms and Rural Development of the Committee on Agriculture and Subcommittee on Census and Population of the Committee on Post Office and Civil Service on April 26, 1976, I indicated that the Bureau has attempted to be responsive to the needs of data users concerning the most appropriate definition of a farm.

After conferring with users and discussing the matter on a number of occasions with the Bureau's Census Advisory Committee on Agriculture Statistics and after clearance by the Office of Management and Budget last year, the Secretaries of Agriculture and Commerce simultaneously announced that agricultural operations having less than \$1,000 of sales would not be included as farms in the 1974 Census of Agriculture.

Based on 1969 census counts, the new definition would have reduced the total value of products sold by only 0.5 percent. With the rapid increase in the price of agricultural products over the past several years, the census results available to date indicate that about two out of three of these small farms had sales of more than \$1,000 in 1974.

The Bureau is considering ways to collect information for 1978 which could continue to provide data for small farms, but which would require much less information of those farms than in the past. In addition to the agriculture census, we are considering obtaining supplemental information for 1978 from the current population sample. The decennial census program will also continue to provide related data.

We have established a task force to plan for the 1978 Census of Agriculture. In keeping with our previous practice we expect to work closely with the Department of Agriculture in developing plans for the 1978 Census of Agriculture. The task force has as its highest priority the substantial reduction in respondent burden.

We plan to test the use of shortened report forms which are specifically designed for the primary types of operations conducted by the respondent. The use of sampling will be continued and expanded consistent with data requirements.

As always, the Bureau will seek the involvement of our advisory committees, farmers and other data users, Government agencies and Members of Congress to determine the content of the census.

Our publication plans call for a much more stringent time schedule. These changes being considered by the Census Bureau for the 1978 Census of Agriculture should result in reduced respondent burden, improved quality, and timeliness.

We will be pleased to answer any questions the committee members may have.

[The attachment follows:]



U. S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1974 CENSUS OF AGRICULTURE

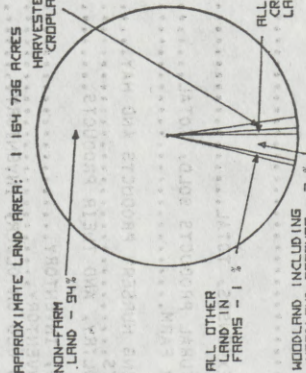
PRELIMINARY REPORT

Coos County, N.H.

Issued May 1976

AG74-P-33-007

USE OF THE COUNTY'S LAND IN 1974



APPROXIMATE LAND AREA: 1,164,736 ACRES

HARVESTED CROPLAND - 1 %

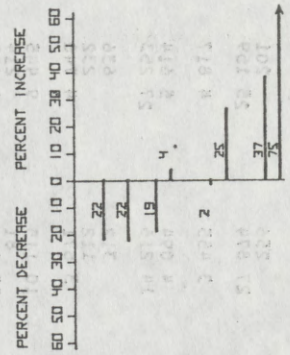
NON-FARM LAND - 94 %

ALL OTHER LAND IN FARMS - 1 %

WOODLAND INCLUDING WOODLAND PASTURE - 3 %

ALL OTHER CROPLAND - 1 %

CHANGES IN THE COUNTY'S AGRICULTURE: 1974 FROM 1969
AS MEASURED BY THE CENSUS OF AGRICULTURE



NUMBER OF FARMS WITH
SALES OF \$2,500 AND OVER...

ACRES IN FARMS...

ACRES OF CROPLAND HARVESTED...

VALUE OF AGRICULTURAL PRODUCTS SOLD...

PER FARM...

TOTAL...

PER FARM...

TOTAL...

THE PRELIMINARY REPORTS ARE BEING PUBLISHED FOR ALL COUNTIES IN THE UNITED STATES WITH 10 FARMS OR MORE. THIS SERIES IS INTENDED TO PROVIDE, AT THE EARLIEST POSSIBLE DATE, USABLE INFORMATION ON A LIMITED NUMBER OF MAJOR ITEMS. THE 1974 FIGURES ARE SUBJECT TO REVISION.

THE COUNTY REPORTS ARE ISSUED ON A FLOW BASIS, WITH STATE SUMMARIES FOLLOWING THE RELEASE OF THE LAST COUNTY REPORT. THE STATE AND NATIONAL TOTALS ARE A PART OF THE SERIES FINAL, AND COMPLETE DATA FOR ALL COUNTIES WILL APPEAR AS A PART OF THE STATE REPORTS (VOLUME 1).

THE APPENDIX OF VOLUME I WILL PROVIDE A COMPLETE DISCUSSION OF HOW THE CENSUS WAS TAKEN ALONG WITH PERTINENT DEFINITIONS AND EXPLANATIONS.

DEFINITION OF FARM--IN THESE PRELIMINARY REPORTS THE 1974 DEFINITION OF FARM IS THE SAME ONE USED IN THE 1969 AND TWO PRECEDING CENSUSES.

A FARM IS ANY PLACE FROM WHICH \$250 OR MORE OF AGRICULTURAL PRODUCTS WERE SOLD, OR NORMALLY WOULD HAVE BEEN SOLD, DURING THE CENSUS YEAR, OR ANY PLACE OF 10 ACRES OR MORE FROM WHICH \$50 OR MORE OF AGRICULTURAL PRODUCTS WERE SOLD, OR NORMALLY WOULD HAVE BEEN SOLD, DURING THE CENSUS YEAR.

FOR SEVERAL CENSUSES, THERE HAS BEEN A LARGE, BUT DECREASING, NUMBER OF FARMS WHICH DO NOT PRODUCE A SIGNIFICANT QUANTITY OF AGRICULTURAL PRODUCTS FOR SALE. FOR THE UNITED STATES, IN 1969, ABOUT 571,000 FARMS REPORTED SALES OF LESS THAN \$1,000. THESE FARMS COMPRISED 20.9 PERCENT OF THE TOTAL FARMS BUT ONLY 1/2 OF ONE PERCENT OF THE TOTAL SALES. BY 1974 MANY OF THESE FARMS HAD EITHER INCREASED TO ABOVE \$1,000 IN SALES OR DROPPED OUT OF EXISTENCE.

TABLE 1, BELOW, SHOWS SUMMARY ITEMS FOR ALL FARMS AND FOR THOSE FARMS WHICH HAD, OR NORMALLY WOULD HAVE HAD, SALES OF \$1,000 AND OVER.

TABLE 1. SELECTED SUMMARY ITEMS: 1974 AND 1969

	ALL FARMS		FARMS WITH SALES OF \$1,000 AND OVER	
	1974	1969	1974	1969
ALL FARMS.....	226	288	206	212
LAND IN FARMS.....	71 527	87 979	69 352	77 882
AVERAGE SIZE OF FARM.....	316	305	337	367
FARMS WITH SALES UNDER \$2,500.....	74	93	54	17
TOTAL CROPLAND.....	218	256	201	203
	25 473	27 874	25 159	25 955
FARM PRODUCTION EXPENSES, TOTAL.....	4 832	3 455	4 817	3 361
VALUE OF AGRICULTURAL PRODUCTS SOLD, TOTAL.....	5 618	4 094	5 614	4 071
AVERAGE PER FARM.....	24 858	14 216	27 253	19 202
CROPS, INCLUDING NURSERY PRODUCTS AND HAY.....	638	312	636	297
FOREST PRODUCTS.....	233	112	232	111
LIVESTOCK, POULTRY, AND THEIR PRODUCTS.....	4 747	3 671	4 746	3 663
CATTLE AND CALVES, INVENTORY.....	9 462	10 115	9 445	9 955
HOGS AND PIGS, INVENTORY.....	214	81	214	70
CHICKENS 3 MONTHS OLD OR OLDER, INVENTORY.....	6 910	25 961	6 875	25 786

X - NOT APPLICABLE. NA - NOT AVAILABLE. Z - LESS THAN HALF OF THE UNIT REPORTED. D - DATA WITHHELD TO AVOID DISCLOSURE OF INFORMATION FOR INDIVIDUAL FARMS. XC - EXCLUDES CORPORATIONS AND OTHER ORGANIZATIONS.

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TABLE 4. PRODUCTION EXPENSES, PRODUCTS SOLD, AND MACHINERY AND EQUIPMENT: 1974 AND 1969

	ALL FARMS		FARMS WITH SALES OF \$2,500 AND OVER	
	1974	1969	1974	1969
FARM PRODUCTION EXPENSES:				
TOTAL.....	4 832	3 455	4 623	3 264
LIVESTOCK AND POULTRY PURCHASED.....	183	215	174	210
FEED PURCHASED FOR LIVESTOCK AND POULTRY.....	1 697	1 116	1 633	1 076
COMMERCIALLY MIXED FORMULA FEEDS.....	1 531	994	1 473	960
SEEDS, BULBS, PLANTS, AND TREES PURCHASED.....	71	23	69	20
HIRED FARM LABOR.....	393	396	357	373
CONTRACT LABOR, MACHINE HIRE, AND CUSTOMWORK.....				
COMMERCIAL FERTILIZER PURCHASED.....	71	37	68	31
GASOLINE AND OTHER PETROLEUM FUEL AND OIL.....	233	154	220	142
AGRICULTURAL CHEMICALS, INCLUDING LIME.....	257	175	227	160
OTHER PRODUCTION EXPENSES.....	61	35	58	32
TOTAL.....	1 866	1 304	1 817	1 220
VALUE OF AGRICULTURAL PRODUCTS SOLD:				
TOTAL.....	5 618	4 094	5 420	3 999
AVERAGE PER FARM.....	24 858	14 216	35 658	20 505
CROPS, INCLUDING NURSERY PRODUCTS AND HAY.....	638	312	599	284
FOREST PRODUCTS.....	233	112	230	108
POULTRY AND POULTRY PRODUCTS.....	77		74	191
LIVESTOCK AND LIVESTOCK PRODUCTS.....	4 670	3 671	4 517	3 415
MACHINERY AND EQUIPMENT:				
ESTIMATED MARKET VALUE, TOTAL.....	4 608	2 477	4 057	2 157
MOTORTRUCKS, INCLUDING PICKUPS.....	181	240	139	174
WHEEL TRACTORS.....	313	389	260	319
.....FARMS.....	193	252	144	174
.....NUMBER.....	476	560	403	418

TABLE 5. LIVESTOCK AND POULTRY: 1974 AND 1969

	ALL FARMS		FARMS WITH SALES OF \$2,500 AND OVER	
	1974	1969	1974	1969
CATTLE AND CALVES, INVENTORY.....	162	198	128	167
NUMBER.....	9 462	10 115	9 019	9 680
SOLD.....	152	197	129	169
FARMS.....	4 023	4 349	3 535	4 163
COWS, INVENTORY.....	153	187	124	163
FARMS.....	5 614	5 915	5 407	5 739
NUMBER.....	45	(NA)	25	33
BEEF COWS, INVENTORY.....	462	344	369	280
FARMS.....	134	165	117	152
NUMBER.....	5 152	5 571	5 038	5 459
MILK COWS, INVENTORY.....				
FARMS.....	33	20	23	12
NUMBER.....	214	81	115	52
SOLD.....	12	8	8	5
FARMS.....	555	197	274	151
NUMBER.....	8	1	6	0
FEEDER PIGS SOLD.....	302	42	260	0
FARMS.....				
NUMBER.....				
HOGS AND PIGS, INVENTORY.....				
FARMS.....	11	5	7	4
NUMBER.....	72	29	31	15
DECEMBER 1 OF PREVIOUS YEAR AND NOVEMBER 30.....	7	4	6	3
FARMS.....	43	20	23	8
NUMBER.....	8	5	4	4
JUNE 1 AND NOVEMBER 30.....	29	9	8	7
FARMS.....				
NUMBER.....				
SHEEP AND LAMBS, INVENTORY.....	11	19	3	7
FARMS.....	166	251	87	179
NUMBER.....	5	6	2	5
SOLD.....	59	161	33	77
FARMS.....				
NUMBER.....				
HORSES AND PONIES, INVENTORY.....	37	77	21	(NA)
FARMS.....	141	186	62	(NA)
NUMBER.....				
CHICKENS 3 MONTHS OLD OR OLDER, INVENTORY.....	21	27	13	19
FARMS.....	6 910	25 961	6 572	25 686
NUMBER.....	11	19	11	19
HENS AND PULLETS OF LAYING AGE, INVENTORY.....	6 068	21 660	5 738	21 385
FARMS.....	0	1	0	1
NUMBER.....	0	4 000	0	4 000
BROILERS SOLD.....				
FARMS.....				
NUMBER.....				

TABLE 6. CROPS HARVESTED: 1974 AND 1969

	ALL FARMS		FARMS WITH SALES OF \$2,500 AND OVER	
	1974	1969	1974	1969
CORN FOR ALL PURPOSES.....FARMS..	40	30	39	29
FOR GRAIN OR SEED.....FARMS..	5	0	5	0
.....ACRES..	193	0	193	0
.....BUSHELS..	15 038	0	15 038	0
FOR SILAGE, GREEN CHOP, DRY FORAGE, HOGGED OR GRAZED.....FARMS..	38	30	37	(NA)
.....ACRES..	1 485	647	1 440	618
SORGHUMS (MILO) FOR ALL PURPOSES.....FARMS..	2	0	2	0
FOR GRAIN OR SEED.....FARMS..	0	0	0	0
.....ACRES..	0	0	0	0
.....BUSHELS..	0	0	0	0
WHEAT FOR GRAIN.....FARMS..	0	0	0	0
.....ACRES..	0	0	0	0
.....BUSHELS..	0	0	0	0
SOYBEANS FOR BEANS.....FARMS..	0	0	0	0
.....ACRES..	0	0	0	0
.....BUSHELS..	0	0	0	0
HAY (EXCLUDING SORGHUM HAY) AND GRASS SILAGE.....FARMS..	176	218	128	168
.....ACRES..	13 628	14 990	12 483	13 781
.....TONS..	24 332	26 031	22 857	24 359
TOBACCO.....FARMS..	0	0	0	0
.....ACRES..	0	0	0	0
.....POUNDS..	0	0	0	0
COTTON.....FARMS..	0	0	0	0
.....ACRES..	0	0	0	0
IRISH POTATOES.....BALES..	0	0	0	0
.....FARMS..	21	(NA)	15	14
.....ACRES..	276	(NA)	268	270
.....HUNDREDWEIGHT..	53 755	(NA)	51 315	55 918
VEGETABLES, SWEET CORN, OR MELONS FOR SALE.....FARMS..	11	13	7	6
.....ACRES..	31	48	25	44
LAND IN ORCHARDS.....FARMS..	6	2	2	0
.....ACRES..	8	3	6	0

TABLE 7. SUMMARY OF SELECTED ITEMS FOR FARMS WITH SALES OF \$2,500 AND OVER: 1974 AND 1969

	1974	1969
FARMS BY VALUE OF SALES:		
\$100,000 AND OVER.....	7 }	24
\$40,000 TO \$99,999.....	47 }	
\$20,000 TO \$39,999.....	47	60
\$10,000 TO \$19,999.....	19	50
\$5,000 TO \$9,999.....	17	33
\$2,500 TO \$4,999.....	15	28
FARMS BY TYPE OF ORGANIZATION:		
INDIVIDUAL OR FAMILY.....	131	169
PARTNERSHIP.....	16	27
CORPORATION, INCLUDING FAMILY OWNED.....	3	5
OTHER.....	2	0
SELECTED ITEMS:		
FARM-RELATED INCOME, TOTAL.....	65	(NA)
\$1,000.....	77	(NA)
RELATED EXPENSES.....	9	(NA)
\$1,000.....	8	(NA)
OFF-FARM INCOME, TOTAL (XC).....	90	(NA)
\$1,000.....	516	(NA)
GRAIN STORAGE FACILITIES OF 1,000 BUSHELS AND OVER.....	1	(NA)
SELECTED LIVESTOCK AND POULTRY:		
HEIFERS AND HEIFER CALVES, INVENTORY.....	110	152
NUMBER.....	3 092	3 547
FOR BEEF PURPOSES AND BEEF COW REPLACEMENT.....	16	(NA)
NUMBER.....	198	(NA)
FOR MILK COW REPLACEMENT.....	105	(NA)
NUMBER.....	2 894	(NA)
STEERS AND BULLS, INCLUDING CALVES, INVENTORY.....	87	122
NUMBER.....	520	394
FATTENED CATTLE SOLD.....	10	1
NUMBER.....	163	6
DAIRY PRODUCTS SOLD.....	111	153
\$1,000.....	4 028	3 076
LAMBS UNDER 1 YEAR OLD, INVENTORY.....	2	(NA)
NUMBER.....	10	(NA)
EWES 1 YEAR OLD OR OLDER, INVENTORY.....	3	(NA)
NUMBER.....	65	(NA)
SHEEP AND LAMBS SHORN.....	3	(NA)
NUMBER.....	92	(NA)
POUNDS OF WOOL.....	610	(NA)
TURKEYS SOLD.....	1	2
NUMBER.....	300	800
SELECTED CROPS:		
OATS.....	0	2
ACRES.....	0	60
BUSHELS.....	0	1 800
BARLEY.....	0	0
ACRES.....	0	0
BUSHELS.....	0	0
ALFALFA HAY.....	24	21
ACRES.....	1 264	728
TONS.....	2 832	1 434
CLOVER HAY.....	107	154
ACRES.....	9 065	11 646
TONS.....	16 494	20 603
SWEET CORN.....	7	5
ACRES.....	15	12
UNIT.....	(X)	(X)
APPLES.....	2	0
ACRES.....	6	0
POUNDS.....	0	0

Mr. SIMON. On page 3 of your testimony you refer to a 50-percent sample basis. I assume you are talking about 50 percent of the farms in that particular category?

Mr. BARABBA. Farms under a certain size category.

Mr. SIMON. Fifty percent?

Mr. BARABBA. Fifty percent of them; yes, sir.

Mr. SIMON. If you had taken 10 percent instead of 50 percent would the sampling have been almost as accurate?

Mr. BARABBA. No, sir, it would not have been as accurate. I think the relevant part of your question is "would it have been accurate enough for the purposes to which it was put," and I think this is part of the responsibility that the Bureau has, to insure that not only do we respond to people's requests for what they need but to be more forceful in determining the quality of the statistic and related to the decision which it is being used for.

Mr. SIMON. Then the next question is, is the 50 percent almost as accurate as the 100 percent?

Mr. BARABBA. No, it is not.

Mr. SIMON. What kind of variation are we talking about statistically?

Mr. BARABBA. A lot would depend on the size of the county with which you are dealing and the number of farms. It is not the percentage of the farms that you sample but it is the number that result from that percentage that you cut off, so in a county which had a tremendous number of farms, 50 percent would be a adequate sample.

In a county that had very few farms it would perhaps not be satisfactory.

Mr. SIMON. Is there a possibility that you would determine the counties where there are a large number of farms and in those counties do a 50-percent sampling while in a county in Wyoming, for instance, where there are very few farms, you would sample 100 percent?

Mr. BARABBA. I think that is an option which is open to the Bureau and I think it is one which we are more than willing to look at; and then I think on the basis of an assessment of the extent to which the information is going to be used, the purposes for which it is going to be used, and the reliability needed, we can make the appropriate judgment whether or not to use such a technique.

Mr. SIMON. Who are the users?

Mr. BARABBA. I don't think I can answer that question completely for you, but let me give you some examples of the uses to which the census has been put. This is not to be a comprehensive list but just to give you a flavor of the many uses to which it is put.

As an example, the Rhode Island State Planning Commission requested data by county on all agricultural land use for planning purposes for that State.

Specific agricultural data on the number of farms, the average size, cropland use, et cetera, for Florence County, S.C., was requested for a HUD project.

Recently Mr. Richard Pommrehn of the Agricultural Publishers Association made this statement during hearings:

Private industry must know, not on a state level, but on a small area or county level, about the status of agriculture. Some chemicals, for example, because of soil characteristics of crops grown may be appropriate in a single

county or a small group of counties within a particular state. Chemical companies must know about the needs of farmers, within the county or area so that they can properly serve their needs.

The need for different varieties of seed corn varies according to climate. Seed corn companies must know about the needs of farmers within the various climate zones so they can properly serve farmers.

Mr. Ivan Moore, the director of the Indiana Farm Bureau Cooperative Association, says:

We invest tens of thousands of dollars in collecting farm market information which is used to make better market decisions. Data from the Statistical Reporting Service, U.S.D.A. is also extensively used. However, county data is essential to successful market planning. The Census of Agriculture is the only reliable source of county data.

The Maryland State Planning Commission requested agricultural land use data by county, again for planning purposes.

So, I think it is a wide variety of users, some directly related to agricultural activity, others who need the agricultural component as part of a total planning program for other activity.

Mr. SIMON. If I may take Florence County, S.C., as an example, would a sampling not work in that county?

Mr. WILHITE. The request came in. They wanted county data to compare directly with the last two prior censuses. I do not know the specific use to which it was to be put excepting that they said it was for a HUD report. I don't know the details of their use and I didn't question them since we expect to have that data available for them.

Mr. BARABBA. The other problem you run into on the sampling is not only do you have the number of farms to contend with, but then the number of items you want to measure. You may have a sufficient number of farms to talk about a sample of farms and their basic characteristics, but with the kind of crops on each of those farms if there is a wide variety of crops, then you run into the same problem of size as to having a sample of a particular crop that would be satisfactory, sufficiently reliable as well.

Mr. SIMON. This is a question I should know the answer to but I just don't recall it. I know the House amended a bill and took off the mandatory provisions. You refer to this, the mandatory provisions, on page 5. What has happened in the Senate on this? What is the status of that bill?

Mr. BARABBA. No hearings have been held to date. I think they are in the process of scheduling hearings on that bill.

Mr. SIMON. I gather that you feel that the mandatory provision is essential to accurate collection of data.

Mr. BARABBA. We do, Mr. Simon, and, additionally, we have sought counsel of our advisory committee and I think it would be fair to say that they would concur unanimously with the position we take.

Mr. SIMON. You mention your Advisory Committee on Agricultural Statistics. Obviously one of the things that Congressman Neal Smith wants is more actual farm input. To what extent is this advisory committee made up of farmers and to what extent do they have a real input on this or to what extent do you hand them an accomplished fact?

Mr. BARABBA. Well, I would say that the major farm organizations, the American Farm Bureau, the National Farmers Organization,

Farmers Union, the cooperatives, the Grange, are all represented by their associations on that committee.

In addition to that agribusiness is represented through various large companies and then the academic community within agriculture is also represented, as is the American Rural Sociological Society. We think it is a very broad-based group. Certainly there is no one committee that is going to represent fully all aspects of any activity, but I would say it is fairly broad based.

Mr. SIMON. Do you have any dirt farmers on it, not just the executive directors but the people who get their hands dirty out in the soil?

Mr. BARABBA. In talking to them we find that they may not be actually faring now but most of them at one point in their life were—I am not sure dirt farmer would be the appropriate classification, but were farming.

We have submitted to this committee the names of those members and if you would like we can certainly further review that. I am satisfied in my own mind from my conversations with the members that they certainly understand agriculture. In fact, two things have happened recently relative to the representation on that committee.

We have had a member named to represent the farmwomen who, we have come to the conclusion, spend an awful lot of time filling out the report forms, particularly on the smaller farms. In addition to that, at Secretary Richardson's direction we have placed a representative from the consumer organizations also on that committee.

Mr. SIMON. The assumption is that you need the data down to the county level. Has that fundamental assumption been examined at all?

Mr. BARABBA. I think it has been examined, Mr. Simon, and at least I personally feel that there are sufficient uses for the data to warrant its continued collection at the county level.

I think it is an open question whether or not all of the questions have to be asked of a full count, and I think there is some evidence that perhaps a complete county enumeration with an associated sample of certain questions would be a reliable option. We haven't discounted the possibility of limiting data collection to a sample of farms at the county level.

Mr. SIMON. One of the complaints obviously is the size of the form. You went through the history of the various dates and so forth. You have not gone through any history of the size of the form. I assume that that form has grown through the years.

Mr. BARABBA. It has both grown and shrunk. I think you will find in 1969 it was a bigger form. It had fewer pages, but it was actually physically larger. This time it was physically smaller but had more pages.

I think it is clear to us that a better presentation must be made to the American farmer, and one of the very serious considerations that we have is to develop our mailing list to the point that we understand more about the farmer prior to sending out the form and to, in a sense, custom design a form for either that particular area or that particular type of farmer because though there are many hundreds of questions on that form, I don't think in any instance would any one farm organization have to fill them all out.

There are a lot of questions you fill out simply by checking the "No" box. So, what we would like to do, and are planning to do, is to design the questionnaire to meet more specifically the ability of the

respondent to fill out the form and not be faced with all of the questions that are not relevant to that person.

We can't make a perfect match obviously but we think we can do a much better job than we have in the past. I would say as it relates to the 1974 Census, as you perhaps will recall, the Bureau really found itself in a very difficult situation because of the initial decision to postpone the 1974 census to 1977. We lost some very, very valuable planning months, so that when the Congress mandated the conduct of the census related to the year 1974 we then found ourselves having to move rather quickly. Because of that we weren't able to incorporate some of the innovations we are now talking about.

Mr. SIMON. In the census, as I understand it, you continued to use the old definition—

Mr. BARABBA. We collected the data on the basis of the old definition.

Mr. SIMON. Was there resistance from the Department of Agriculture on that change?

Mr. BARABBA. No, there was no resistance on the need to collect the information of all farmers this time because we knew we needed a carryover period where we could compare the actual changes based on both definitions, so there was no pressure on anyone's part.

In fact, everyone was quite enthusiastic that we would collect all the information this time.

Mr. SIMON. On the publishing of the census data there has been some complaint about the timeliness, the time gap between the time you collect the information and its availability. What is the present time span and is there a way of reducing that?

Mr. BARABBA. There is a way and one of the ways is obviously to get people to fill out the form quicker. I found myself in situations, not necessarily in the agricultural sector but in other economic censuses, where I have had companies complaining to me that they couldn't get their hands on the data.

When you review the situation you will find out they were one of the last companies to fill out the form, so there is some additional work that needs to be done in encouraging people to fill out the form quickly.

In addition to that, our goal would be to have all data to be published about a particular census completed in a 2-year period. I think it is important to remember when we say the 1974 Census of Agriculture we are talking about the activity of the year 1974.

We really start collecting it in January 1975, so what we are saying is that in the year ending in 6 we would have all of the publications completed.

Now, we will not do it this time. One of the reasons is because we had a 4-month hiatus in publication because we found an error in the manner in which we developed our list and we felt it important to stop publication until we had that error cleared up.

Mr. SIMON. But you say this time period can be condensed, so that ordinarily 1974 data will not be available until the end of 1976; is that correct?

Mr. BARABBA. That is correct, the activity for the full year 1974. The other thing to remember is that the end of 1976 refers to the last publication. The preliminary reports at the county level could be coming out as early as October of the year in which you start collecting

the information, and in fact until we found this error in our listing procedure we had already started publishing the preliminary results.

Mr. SIMON. This is a question I perhaps should direct to our counsel, but is there any legal constraint on you right now if you were to determine that in counties above, let us say, 5,000 population you would sample only 50 percent of the farms because that would bring you good results?

Mr. BARABBA. There is no legal restriction on the Bureau doing that right now. The Secretary has the authority to allow the use of sampling. The only place where he cannot use sampling is in the apportionment process.

Mr. SIMON. Does either of you have questions? Mr. Terry.

Mr. TERRY. If I understand you correctly, the Bureau's position is that the need for county data requires you to do the full census in some areas. If the need were only for State or national figures, then you could estimate that with a sample survey with a great degree of reliability; but you cannot get down to the degree of reliability that the data users need without getting into a census in some areas?

Mr. BARABBA. Mr. Terry, I don't want to answer that yes or no because I don't think we have done a satisfactory job of pinning down the users as to the use to which that county level is being put and making the determination whether it would be satisfactory to use sample data.

Our judgment is that, at this point, based on what we have heard it would be quite difficult to do it on a sample basis, but I have not precluded the option of moving in that direction.

Mr. TERRY. When do you think you will be in a position to make that type of decision?

Mr. BARABBA. I don't think we have much more time because one of the things that is involved in this is a budget consideration, particularly when one considers the number of small farms about which Mr. Rose and Mr. Long have expressed a concern.

Not only are there large numbers of those small farms but also they are the most difficult ones to enumerate because they don't necessarily show up on any lists. As we move forward with our budget request, these decisions are going to have to be made.

Mr. TERRY. We are going to be trying to move forward with some legislation this year. You don't anticipate you would be in a position to make any final decision this Congress?

Mr. BARABBA. I think we could probably identify some different scenarios and the relative impact of those scenarios, if that would be helpful to your process.

Mr. TERRY. When do you think those might be available?

Mr. BARABBA. I think in the next 2 or 3 months we ought to be able to have something for you.

Mr. TERRY. By the same token, if you were to determine that sampling was sufficient and that the data users could live with whatever margin of error you might have in estimating county level data, would you still need a mandatory census?

Mr. BARABBA. My answer to that question is yes, and there is a premise upon which I am basing it, that is, that even if we sampled, the size of that sample would be so large that our ability to approach the respondent as we do, say, in our voluntary surveys with the current

population survey where we are dealing with maybe 60,000 households and even to the extent to which we contact individuals, make appointments to meet with them, express to them the importance of the whole item, we still get a 2 and 3 percent refusal rate, which may not be tolerable when we start dealing with some of these very very large farms. That is quite different than the 2 or 3 percent refusal rate of a household which is relatively equal among all households.

If we start missing 2 or 3 percent of some of these very large concerns who choose not to participate I think we would have a difficult time just to find the reliability of the data we are producing.

Mr. TERRY. What is your missed rate now? What do you anticipate it is going to be with the 1974 census?

Mr. BARABBA. Again you have to distinguish between the number of farms that we would miss versus the total value of the product that is found in the farms that we did enumerate. I think 92 percent of the total farms have responded, but that would relate to about 98 percent of the total value of the products, and we would have an estimating procedure to factor in those that we would miss in the enumeration.

Mr. TERRY. Is there any indication in the 1974 census that you have run up against much more resistance in answering the forms and in fact are people resenting the aspect of the mandatory nature of the questionnaire.

Mr. BARABBA. I am not sure exactly what the cause is and I wasn't here in some of the earlier times, but the information I have received in conversation with our senior people in the Bureau is that the resentment is much greater today, but it is not necessarily because of the census of agriculture, since there is a great concern about any Government activity among our citizens.

In addition to that, it was not a good year for agriculture and many people blame their discomforts on the Federal Government, so any Government form that came out was not necessarily greeted with any great degree of pleasantness.

Mr. SIMON. One further question.

If you go to, say, 50 percent in some of the counties, presumably then, since you only have half as many forms to deal with, you could speed the process of the returns so that while you reduce something, with slightly more inaccuracy, you increase the utility of the end result by getting it and making it available more promptly.

Is that true?

Mr. BARABBA. There are these benefits but then there are tradeoffs on the other side, which is insuring that the farm is sent to a representative 50 percent of the farm and there are costs, time, and other things involved, as well as in the presentation of the information. At least as it relates to what the Bureau would want to do, we want to spend considerable time identifying the reliability of each of those statistics.

Mr. SIMON. Do you have anything further?

Mr. TERRY. No.

Mr. BARABBA. I think it is also important to note when we talked about that 50 percent, it was really 50 percent of the very small farms. It was not 50 percent of all agricultural activity.

Mr. SIMON. I understand.

I don't think we have any more questions. We thank you very much for your testimony.

Mr. BARABBA. Thank you.

Mr. SIMON. Next we have Mr. William Kibler, and will you identify the gentleman with you also.

STATEMENT OF WILLIAM KIBLER, ADMINISTRATOR, STATISTICAL REPORTING SERVICE, USDA, ACCOMPANIED BY GAYLORD WORDEN, RESEARCH DATA COORDINATOR, ECONOMIC RESEARCH SERVICE, USDA

Mr. KIBLER. Mr. Chairman, I have Dr. Gaylord Worden, who is the Research Data Coordinator for the Economic Research Service in the Department of Agriculture.

I appreciate the opportunity to appear before this committee to testify on H.R. 12397, which would shift the responsibility for the quinquennial census of agriculture to the Department of Agriculture from the Department of Commerce.

The Department of Agriculture has a substantial interest in the census of agriculture. The census provides very important information on agriculture that is not obtained by the Department of Agriculture in its own program of developing current statistics. The census is the only source of periodic comprehensive data, at the county level, covering the entire Nation. It has generally provided a good historical picture of the changing structure of American agriculture at 5-year intervals.

Data from the census of agriculture are used in many ways by the Department of Agriculture. One major use of these data by the Economic Research Service [ERS] is for information on the structure of the farming industry.

The census data provide information on the whole farm which can then be classified by size variables, by major types of activity, by legal form of organization, and by age and race of the operator. Other USDA data series are primarily geared to providing data on individual commodities rather than the farm as an economic unit.

A second major use of agriculture census data by ERS is for information at the county level. Although most of the research done by ERS is national and international in scope, it is also engaged in rural development research and river basin planning which often cover small sub-State areas. Having data available from census that can be aggregated to multi-county areas is very useful in planning and conducting this research work.

In the Statistical Reporting Service [SRS], we find the census material useful in establishing estimates for counties and similar geographic areas which our current survey program is not designed to cover in sufficient detail. Historically, census data served as benchmarks for State and national estimates for SRS's current agricultural statistics program, but census data are no longer needed or useful for this purpose.

The Department of Agriculture opposes the enactment of H.R. 12397. The census of agriculture could be improved in timeliness and reduction of burden without going to the trouble and expense of

merely shifting this function to USDA. Careful planning, sufficient resources in terms of staff and finances, and especially adequate time, are all essential ingredients for a smooth transfer of functions and improvements of the final product, namely, everything we are interested in, which are accurate and timely agricultural data. There is simply not enough time left before the 1978 Census of Agriculture to transfer the function to USDA with any confidence that the 1978 census results would be superior to those of the 1974 census.

The Department of Agriculture was encouraged by recent legislation changing the date of the census of agriculture to better coordinate economic and agricultural censuses. We also understand that the Department of Commerce is considering ways to separate economic and demographic surveys and to make greater use of sampling to reduce respondent burden.

We do endorse these efforts and those proposals in the bill under consideration that would help improve the census survey and reduce its reporting requirements.

For example, we have long advocated the use of sampling methods for collecting data, as outlined in the bill. Department of Agriculture experience with effectively designed sample surveys has shown they efficiently provide data for making very precise estimates for commodities of interest.

We believe implementation by census of the use of sample surveys for taking the census of agriculture would permit greater control in data collecting and processing, which would improve the quality and timeliness of the statistics.

Tabulations for the 1969 census were not as timely as previous censuses, and currently the 1974 census results are available for only a very few counties. In today's dynamically changing agriculture, the usefulness of data diminishes rapidly with the passage of time.

By the time the 1974 census is published, 2 production years will have passed. The use of sampling could materially shorten the time required to acquire and process the data, and at the same time enhance the quality of both survey data and the estimates prepared for publication.

Data acquired through sufficiently large samples would permit the estimation of county totals and provide data for computing sampling errors to measure the statistical precision of estimates. A properly designed sample survey, efficiently conducted, can provide more reliable data than those produced in a census.

Another important feature of sampling is that it would greatly reduce the census reporting burden on the Nation's farmers. Sampling would greatly decrease the number of farmers needed in the survey.

Likewise, subsampling could reduce the length of the questionnaire. Three SRS State-funded programs using sampling methods have replaced full canvasses previously employed for annual farm censuses in those States. Experience with these programs indicates precise county estimates can be made for most agricultural commodities, with some saving of funds and a substantial easing of respondent burden.

In the Departments of Agriculture and Commerce, we make special efforts to get inputs on data requirements from all segments of the data-using community. These requirements are then translated into survey designs and questionnaires.

During the last several years, the respondent burden placed on farms by statistical, regulatory, and service programs has increased enormously. The flow of criticism from respondents during this period is a clear signal that effort and control must be exerted to reduce this burden.

The agencies of the Department of Agriculture are significant users of census data, and we recognize that requests for these data have increased. We are committed to a careful review of information requested from the public to insure that needs for this information are fully justified.

The Department of Agriculture feels strongly that there is a need to shorten the time between data collection and publication. We are also interested in working closely with the Census Bureau to avoid publishing different levels of estimates that can lead to public confusion.

The Statistical Reporting Service and the Bureau of the Census have many parallel survey capabilities, techniques, and staff requirements for serving respective programs which are often cited incorrectly as duplication of effort. The SRS program centers around sample surveys for reporting of the potential supply of agricultural products with rigid reference dates that typically precede the release data by about 2 weeks.

The census of agriculture is one large survey undertaken at 5-year intervals. There are some requirements that are identical. The principal identical requirement is a general purpose list of farmers' names and addresses that is current and reasonably complete.

Both agencies are currently expending resources to build such a list from separate administrative records available to each. It would be beneficial to both agencies, and certainly to the public, if a single list could be developed for both agencies to use.

We have long recognized this benefit, but existing title 13 legislation prevents this type of collaboration. We understand the need for protecting the confidentiality of data; however, some way must be found for the two agencies to cooperate within legal bounds, and at the same time protect the confidentiality of the data and the integrity of the agencies.

Both agencies must give careful consideration to joint steps that can be taken to make the Federal program of agricultural statistics more useful, accurate, timely, and responsive to the food and fiber sector of the Nation.

The Department of Agriculture feels the Bureau of the Census has the capability to conduct a high quality census that will reflect well on both agencies. We hope the change in date for conducting the census and discussions that are now taking place will result in a better quality census of agriculture in 1978. The Department already has named a representative to work with the Bureau's planning group when it begins operation.

One other provision of H.R. 12397 is to prohibit the use of a new farm definition before June 30, 1976. This has already been prohibited by Public Law 94-229 and neither the Department nor the Census Bureau has published any statistics using the new definition.

The Department feels it is very important that the statistical definition of a farm be changed. The statistical description of today's farm-

ing industry should be updated to avoid misleading data users and the general public.

The Department and the Census Bureau need to work closely in finalizing statistical reports to be published for 1974 to insure that as much data as possible are published for both farms with less than and more than \$1,000 of sales.

Thank you for the opportunity to discuss the Department's views on H.R. 12397. I will be happy to respond to questions the committee wishes to ask.

Mr. SIMON. Thank you, Mr. Kibler.

On page 3 of your testimony you talk about sampling which would permit greater control in data collecting and processing.

On page 4 you talk about properly designed sample survey, efficiently conducted, can provide more reliable data than those produced in a census. How can a sample provide more accurate data than the more massive questionnaire?

Mr. KIBLER. In a sample survey you ask relatively fewer respondents to provide data. That means you can concentrate on obtaining better data from those few respondents. You can prepare better survey materials, instructions, use fewer staff members.

With sampling it is more feasible to use personal interviews. Interviewers can be schooled in what the questions mean and how they should be reported. They actually talk to the farmer to make sure he understands what each question means. At the same time, having fewer of the respondents to contact, you can telescope the period within which you collect the data. This allows the information to be published faster.

So, in essence, you just have a smaller amount of data but the quality of the data tends to be better than that acquired when you have an extremely large universe to canvass such as the agricultural census.

Mr. SIMON. What percentage is needed for an accurate sampling?

Mr. KIBLER. I cited three States in which we are using sampling methods where we once used the full canvass. In general, the sample design requires us to survey about a fourth of the farmers. That doesn't mean that exactly one-fourth of all farmers are included in the survey. The smaller farms would be sampled at a lower rate and the larger ones would be sampled at a higher rate.

We feel a sample of this size gives us information that is roughly comparable to what we obtain from the census of agriculture, each method has errors of about 10 percent per county.

Mr. SIMON. What you say makes a great deal of sense to me. Are you consulted at all by the Census Bureau now in this process?

Mr. KIBLER. Yes, sir.

We are represented on their Advisory Committee and have monthly contact with them regarding survey procedures and the many items that are included on the census.

Mr. SIMON. Do you have a feeling that your input is listened to?

Mr. KIBLER. I feel it will be listened to somewhat more now that more people around the country are saying "cut down on the respondent burden."

I believe also that you are aware that the President has a campaign to cut down the number of public use documents and the reporting burden for farmers, and that is going to help us.

Mr. SIMON. I have no further questions.

Mr. TERRY. Do some of the sample surveys which you are conducting give you estimates of county level data?

Mr. KIBLER. Yes, they give us estimates for county level data and that county level data would be for such items as acreages of crops, production of soybeans, corn, inventories of pigs, or sales of eggs.

Mr. TERRY. And these sample surveys are done on a voluntary basis?

Mr. KIBLER. Yes, sir, they are done on a voluntary basis.

Mr. TERRY. What is the range of your sampling error associated with the estimates that you come up with on a county level?

Mr. KIBLER. The range of those sampling errors would probably be less than 10 percent for counties in Iowa where farms are very homogenous and somewhat over 10 percent for some of the western counties in States like Wyoming where farms are not homogenous.

Mr. TERRY. And data users can live with this?

Mr. KIBLER. Yes; we find they are very satisfied with the data.

Mr. TERRY. I didn't ask the question of the Bureau of the Census, but how does that compare, do you know, with their range of error at county level?

Mr. KIBLER. At the national level some of their incompleteness or their misses would be 6, 7, or 8 percent. We have to assume in some counties they miss by more than that, in others they miss by less than that. Census coverage checks tend to show, for instance, that they may miss 5 or 6 percent of the cattle. You have to assume that in some counties they do a better job than that, in other counties they don't do that well. These checks only measure incompleteness. They don't measure other nonsampling errors which would include variations due to information the respondent provided that may be incorrect. The Census only publishes data that indicate the degree of incompleteness, not total error.

Mr. TERRY. You sit on the Advisory Committee?

Mr. KIBLER. Yes.

Mr. TERRY. Do you think that the census of agriculture need be mandatory?

Mr. KIBLER. No. It would be our position, particularly if you do it by sampling, that you would not need a mandatory reporting requirement. Here again it gets back to the question raised earlier, that is, the fact that if you have fewer people to contact, you can give them a little bit more personal attention and, therefore, cut down on the number of refusals.

Mr. TERRY. What about the very large size farms, the agribusiness corporations? They have all sorts of forms to fill out. I have heard people say that if they have a choice they just won't fill it out.

Mr. KIBLER. I would assume that their refusal rate might be a little bit higher on the average. On the other hand, these are the type people who make most use of the data provided. In dealing with them we try to counsel with them that they are in essence helping themselves and us by reporting. Their reporting improves the data that they really use in their day-to-day operations.

Mr. TERRY. If you did run up against a relatively high nonresponse rate, that they simply chose not to do it, what would be the effect?

Mr. KIBLER. There are statistically sound ways that you can impute totals for the people who refuse. We have not had any experience that would imply that voluntary reporting for a sample survey would not be satisfactory. Our voluntary system has surely been satisfactory.

Mr. SIMON. What percentage would turn you down?

Mr. KIBLER. In a nationwide survey we did just 2 or 3 weeks ago our refusal rate, that is, the proportion of farms that refused, was under 3 percent. This low rate reflects the use of face-to-face interviews by an enumerator who is located in the county or neighborhood where the respondents live.

This is a much better procedure than a mail-type survey.

Mr. TERRY. How much more does that cost you to go around and talk to people?

Mr. KIBLER. It costs roughly 5 to 6 times maybe as much to do a telephone interview as it does to do a mail-out survey. It may cost 3 times as much to do a face-to-face interview survey as it does to do a telephone survey.

We use all these methods for collecting the data.

Mr. TERRY. What would be the total size of a sample survey, do you think, the census of agriculture could get away with to get the—

Mr. KIBLER. Our experience has shown that roughly we need about a 25-percent sample, and that would be 700,000 or 800,000 farms if we are talking about the current definition.

Mr. TERRY. Just one final question.

USDA is probably, I guess, the biggest user of the census data. How would you characterize the Bureau's efforts over the past two censuses in terms of your use of them?

Mr. KIBLER. I guess our main criticism and concern, has been the timing, that is, when the data became available for USDA to use in the dynamic, changing agriculture that we have today. The other concern is that it appears to us, on the basis of what we have seen for 1974 and 1969 that the quality of the data that we are getting from recent censuses is not as good as it had been in earlier censuses.

Mr. TERRY. Why is that, do you think?

Mr. KIBLER. Basically part of the problem is associated with the respondents. A major part of the problem is associated with the difficulty of the questionnaire, its length and complexity. Another part of it is the need to provide resources and staff to handle the problems that may come up in data collection and tabulation.

Mr. TERRY. That is all, Mr. Chairman.

Mr. SIMON. Thank you very, very much.

This concludes our meeting today. We meet again at 10 tomorrow morning.

[Whereupon, at 11:55 a.m. the subcommittee adjourned, to meet at 10 a.m. Wednesday, June 23, 1976.]

Mr. Leland: There are statistically sound ways that you can improve totals for the people who refuse. We have not had any experience that would suggest that someone reporting for a sample survey would be statistically more likely to refuse than someone who is not in the sample. I have no way of knowing how many people would refuse.

Mr. Leland: In a survey of 100,000 people, if you had just 2 or 3 weeks and our refusal rate was 10 percent, that would be a very high refusal rate. I think that the refusal rate is probably 10 percent. The refusal rate is probably 10 percent. The refusal rate is probably 10 percent. The refusal rate is probably 10 percent.

Mr. Leland: I think that the refusal rate is probably 10 percent. The refusal rate is probably 10 percent. The refusal rate is probably 10 percent. The refusal rate is probably 10 percent.

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AGRICULTURAL CENSUS

WEDNESDAY, JUNE 23, 1976

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON POST OFFICE AND CIVIL SERVICE,
SUBCOMMITTEE ON CENSUS AND POPULATION,
Washington, D.C.

The subcommittee met at 10 a.m., in room 304 of the Cannon House Office Building, Hon. Patricia Schroeder (chairwoman of the subcommittee) presiding.

Mrs. SCHROEDER. This is the continuation of a hearing which began yesterday on the agricultural census. We are happy to have with us a gentleman who was my first Congressman, Neal Smith from Iowa. I am delighted to have you here with us. We will be happy to hear what you have to say.

STATEMENT OF HON. NEAL SMITH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF IOWA

Mr. SMITH. Thank you very much.

Madam Chairwoman, I do think this is a very important bill. We are talking here about 3 million farms that were enumerated in the last census, together with threat of jail and those kinds of things that American people don't like. If the same system or a similar system is used this time, it will cost \$40 million, and opposed to all this we could have a different system which is more accurate, more timely, and which would cost only \$9 million.

It is, therefore, a very important bill, and I don't want to belittle the importance of it at all. However, I do know the time schedule under which you are operating, and I could insert my statement into the record as though read in full at this point.

Mrs. SCHROEDER. That would be fine.

Mr. SMITH. Madam Chairwoman, members of the subcommittee: I appreciate the opportunity to appear here today to testify on behalf of H.R. 12397, a bill which I have introduced to improve the way in which the census of agriculture is conducted.

In recent months, there has been a great deal of talk about getting the Government off the back of the people. Most of the talk has been just talk, serving mainly to arouse emotions for no useful purpose. This bill, however, addresses itself to a legitimate grievance. It is an effort to take constructive action.

In one stroke, this bill would abolish literally millions of Government forms. It would make life easier and more secure and save time for the farmers and ranchers of this country who otherwise will be told to fill out these forms and be threatened with jail if they refuse.

At the same time, it would place the operation of the agricultural census in the hands of those best qualified to conduct it to achieve these purposes and so provide more accurate statistics sooner and with the least duplication in governmental activities.

Nevertheless, the Bureau of the Census has mounted an intense and continuing lobbying campaign against this bill, even to the point of seeking to influence the Commission on Federal Paperwork not to recommend support of it.

In considering the present legislation, the subcommittee should keep clearly in mind the fact that on May 23, 1973, the Census Bureau testified, in hearings before the Senate Post Office and Civil Service Committee, against enactment of a bill, Senate Joint Resolution 95, designed to require the Bureau to carry out its duties and conduct the 1974 agricultural census in accordance with law, and instead argued for a delay until 1977. That same day, the Director of Economics for the Department of Agriculture, Dr. Paarlberg, also testified. He did not speak against the bill but, on the contrary, frankly told the Senate committee that the data from the 1974 census was needed.

Why the Census Bureau was so casual about the agricultural census in 1973, and why it is so concerned about that same census today, are questions which deserve close consideration.

PURPOSE OF THE BILL

As it now comes before this subcommittee, H.R. 12397 would make four changes to existing law.

First, it would shift the responsibility for conducting the agricultural census from the Bureau of the Census in the Department of Commerce to the Department of Agriculture. The bill contemplates that the Statistical Reporting Service, within USDA, would actually conduct the census.

Second, it would provide that whenever possible the census be taken on a sample basis. This provision contemplates that information for the census, with some limited exceptions, will be gathered on a person-to-person basis by enumerators trained in gathering farm data. Thus people would replace the mailed Government forms and, because it would be conducted on a sample basis, fewer farmers would be affected.

Third, it would ban the use of Federal income tax returns for collecting information relating to the agricultural census. This would provide further assurance to the public that their tax returns are kept confidential but it would not hamper the census operation.

Fourth, it would eliminate the current requirement that the agricultural census be conducted on a one-shot basis once every 5 years and provide instead for a year-by-year operation offering more flexibility.

Also, I should point out that the provision in the bill to retain the current Census Bureau definition of a farm through June 30 is no longer needed. A requirement to that effect already is contained in Public Law 94-229, which originated with this subcommittee. The SRS policy is to measure all farm production, without reference to any artificial definition, and so passage of this bill would resolve the dispute over the Census Bureau's proposed change in their farm definition.

This bill would result in cost savings. The cost of the 1974 Census of Agriculture was nearly \$25 million. The estimated cost of the next agricultural census is nearly \$40 million. If the agricultural census were conducted as proposed in my bill, according to one estimate the cost would only be a little more than \$9 million.

PRESENT AND POTENTIAL PROBLEMS

Irritation and even outrage has been aroused among the country's farmers and ranchers as a result of the way in which the last census of agriculture was conducted. There have been many complaints about the complexity of the agricultural census forms sent out in the mail, and probably even stronger reactions from those threatened with criminal prosecution for being unable or failing to fill out and return the forms.

The 1974 agricultural census began on December 28, 1974, when the Census Bureau mailed out 4.1 million forms. The so-called "long form" consisted of 26 pages crammed full of questions and instructions, many of which required consulting financial or other records, if the records were available. At the top of the second page, it carried the message: "It's easier than it looks." The fact is, however, that the form was every bit as difficult as it looked.

The second step in the census process came 18 days later when, on January 14, 1975, for reasons which are not entirely clear, the Census Bureau mailed out 4.1 million "thank you" cards.

Then, according to the Bureau's work schedule, 1,640,000 first followup letters went into the mails on February 28. On March 24, out went 1,150,000 second followup forms. On April 22, the Bureau sent 835,000 third followup letters into the mails. On May 16, out went 645,000 fourth followup forms. And, on June 14, the Bureau sent out 550,000 fifth followup letters. And so, between December and June, the Bureau had flooded the mails with more than 13 million pieces of mail.

In fact, the total number of farmers and ranchers is less than 3 million. The Census Bureau's original mailing list was faulty, and millions of the forms and letters which went into the mails served no purpose.

And yet, at the least, 1 out of every 10 farmers and ranchers failed to respond. Many of those who did not return the forms received telephone calls, sometimes on a party line, from Census Bureau officials demanding information the farmer or rancher considered personal. Many were threatened with criminal prosecution if they did not provide information by telephone or return the form mailed to them.

For example, in November the Census Bureau sent by certified mail a letter, with the Bicentennial symbol in the lower right-hand corner, informing one of my constituents that, and I quote from the letter, "your refusal to file in response to this final request will make you subject to penalties provided by law. * * *" The letter goes on to warn that, unless the Census Bureau's demands are met, and again I quote from the letter, "your case may be referred to the General Counsel of the Department of Commerce for appropriate legal action."

The letter plainly threatened my constituent with criminal prosecution, perhaps even jail, unless he provided the information demanded. While, as of today, not a single case of noncompliance with the agricultural census has been referred to the General Counsel by the Census Bureau, hard-working, law-abiding citizens take these threats seriously and I do not think the Federal Criminal Code should be used in this manner.

Shortly after I introduced H.R. 12397, and in reaction to newspaper publicity about it, a rural Iowa woman wrote a letter to the editor of the Des Moines Register. She said:

One farmer I know was frustrated to tears at the prospect of jail as a result of not recalling, for instance, how many pounds of protein he fed out to feeder pigs 2 years ago.

For the next agricultural census, the Census Bureau plans to use even more Government forms. First of all, as I understand it, there will be a prec canvass mass mailing of millions of forms to prepare for the census itself. Then there will be another, larger mass mailing of perhaps 4 million forms, including a mailing to those who received the prec canvass forms. Then, I assume, there will be more cards, forms, letters, telephone calls, and warnings of criminal prosecution.

I believe this subcommittee should take fully into account the irritation and anger caused by the most recent agricultural census and the prospect that the same thing would happen during the next, if the Census Bureau proceeds with the system they plan to use.

LATE AND INACCURATE DATA

Even if the data were timely, accurate, and valuable, the method of collection would be objectionable; however, the information collected by this method is both much later and more inaccurate than it would be by using the less costly sample method proposed by H.R. 12397.

The Census Bureau shifted from the person-to-person approach for the 1969 agricultural census and replaced field enumerators with Government forms. Some volumes containing figures collected during that census were not published until 1974, when the data was 5 years old. Also, according to an analysis made for the Office of Technology Assessment by Harry C. Trelogan, former head of the Statistical Reporting Service in USDA, the 1969 census failed to count about 8.5 million head of cattle located on 298,000 farms. This error, according to the Trelogan analysis, resulted in the impression that the cattle production cycle had turned downward. Livestock farmers, therefore, were advised that higher prices could be expected and began producing additional cattle. The result was a subsequent glut on the market and financial disaster for some livestock farmers. It was like a map that gave one the wrong road directions.

The final results of the most recent agricultural census have yet to be published. One reason for the delay is that, as the computer was at work on what the Census Bureau calls the unduplication process, more than 300,000 names were inadvertently dropped from the mailing list. The data will of course be outdated when available, as with the 1969 census.

To its credit, the Census Bureau has acknowledged problems with the agricultural census and has pledged to do better next time. But it still plans to collect information by mailing out Government forms and there is no assurance that its end product will be much improved.

Clearly, a change is needed to assure greater accuracy.

HISTORICAL BACKGROUND

The agricultural census is the oldest source of national farm data in the United States. The first such census was made in 1840 by the Department of State. Originally, the agricultural census was our only source of farm commodity and economic data. It is still the only national source of this data on a county-by-county basis.

Over the years, as the need for timely statistics increased, the Department of Agriculture began to collect data annually on crops and livestock using sample techniques. This provided timely information for use by farmers and industry in making management decisions, and by the Government in reaching farmer program and policy decisions. The agricultural census, which is taken once every 5 years, was in the recent past used to true up the USDA figures collected annually.

But now, since the quality of the agricultural census has deteriorated, there has been a complete reverse. The Department of Agriculture no longer uses the Census Bureau data to refine the annual USDA figures. Instead, the Census Bureau utilizes the USDA statistics to measure the completeness of the agricultural census data.

Thus, the Department of Agriculture now depends for assistance in making program and policy decisions on its own data, gathered by the Statistical Reporting Service on a sample basis. The probability sampling method used by SRS provides national estimates annually with a standard error of 2 percent or less for major items. Plans are underway to reduce this still further. Since at least 10 percent do not answer the questionnaires, the net effect of the method used by the Census Bureau is an uncontrolled sample. The accuracy of a very large uncontrolled sample is less than for a smaller controlled sample.

The agricultural census data is still needed, however, to determine and analyze long-term trends in agriculture and rural society. In the last census, data was collected for seven agencies within the Department of Agriculture, as well as for the Bureau of Economic Analysis in the Department of Commerce, the Bureau of Labor Statistics, the Farm Credit Administration and the Water Resources Council. Others who use the statistical results of the agricultural census include land-grant colleges, rural sociologists, plus a large number of agriculture-related business firms.

SRS RESOURCES

As mentioned previously, H.R. 12397 contemplates that the agricultural census be conducted by the Statistical Reporting Service. This is the chief agency in USDA for the collection of domestic agricultural data. The analysis then is done by other USDA agencies. SRS has 44 offices around the Nation, serving all the States, and issues data on 150 crop and livestock products each year in some 550 reports. For some time, SRS has been supplying agricultural data to other Federal agencies outside USDA. In the last 5 years, seven such agencies have called upon SRS for statistical help.

Of particular importance with respect to this legislation is the fact that, unlike the Census Bureau, SRS has a full field organization of trained enumerators operating on a cooperative basis with State agricultural departments. This organization can provide the basis for putting the agricultural census on a person-to-person basis and abolishing the millions of Government forms. The field enumerators, for the most part, would conduct the census so those farmers included in the sample will no longer have to struggle through the forms themselves.

In addition to doing away with the annoying forms, conducting a census on a person-to-person basis has other advantages. Information would be gathered by friendly persuasion, not threats. If a farmer has trouble recalling information dating back 1 or 2 years, a trained enumerator would be on hand to help him make an accurate estimate. This would largely eliminate what is technically called "memory bias" from the data collected. The average farmer and rancher, of course, does not employ a bookkeeper. Like anyone else, they tend to forget.

Another very important point is that SRS has already started compiling, from sources other than Federal income tax returns, a general-purpose farm list which could be used for conducting the agricultural census on a sampling basis. Congress already has appropriated more than \$1.2 million for development of this list. Additional funds for that purpose were included in the agricultural appropriations bill passed by the House last week. I am assured by SRS officials that, if the Agency receives the funds in that bill, it will be able to complete the list in time to conduct the agricultural census in 1979. If the responsibility for conducting the agricultural census is shifted to SRS, the Census Bureau will no longer need to maintain its national mailing list of farmers. That list, incidentally, is drawn from Federal income tax returns.

It is expensive to compile and maintain an accurate and up-to-date mailing list of farms. The list now being put together by SRS is needed by that agency for its work. It is both wasteful and foolish for the Census Bureau to keep and compile another farm mailing list.

Again, it is especially important to note that SRS has an organization of trained field enumerators while the Census Bureau does not. Only an agency with a field organization will be able to utilize sampling procedures and avoid reliance on mass mailings of Government forms.

The Census Bureau has more work than it can do anyhow. If it were to conduct the agricultural census efficiently and accurately, it would have to set up a field organization of enumerators. Since SRS already has such a field organization, there is no need for the Census Bureau to duplicate this work when it can be done better and at less cost by the Department of Agriculture.

SAMPLING

After careful research, I feel confident that the agricultural census can be accurately conducted, including county data, by using the probability sampling method.

Here, the discussion can lead into an overly technical debate, with the use of such arcane terms as "the universe of a census." What it comes down to, however, is that those now conducting the agricultural

census are not using probability sampling and say it should not be used for census purposes, while those wishing to improve the census say probability sampling would provide better results. It is an argument, in short, between the status quo and change. Change is not always progress, but it would be in this case.

I mentioned earlier the analysis prepared by Harry C. Trelogan, formerly head of SRS. This was prepared and presented in January of this year, after Dr. Trelogan retired, to the Office of Technology Assessment. It is a scholarly, well-reasoned and fully-documented paper, the chief conclusion of which is that probability sampling can and should be used in conducting the agricultural census. I commend it to the subcommittee.

I am aware that the Census Bureau disagrees with Dr. Trelogan. One of the Bureau's main arguments is that sampling methods cannot produce accurate data on a county-by-county basis. The answer to that argument is simply that SRS, using probability sampling, already is collecting accurate data in some States on the county level.

In addition to abolishing mass mailings of Government forms and providing more accurate data sooner, use of sampling would be beneficial from two other standpoints.

First, it would remove overreliance on a single computer in Washington. The Census Bureau now depends upon this computer to detect errors on the agricultural census forms. Also, I am informed that some 15 to 20 percent of the published agricultural census data is based on estimates imputed by this computer. Computers are useful but by no means infallible. And computer statistics are no better than their source. The best check against error is having data collected by trained enumerators, who go out to a farm, talk to real people, look at real cattle or hogs, observe real corn, wheat, and soybeans.

Second, it would do away with the worrisome problem of criminal sanctions as regards the agricultural census. The Department of Agriculture officials have assured me that if they are charged by the Congress with this responsibility they do not need laws which make answering the questions mandatory. If sampling were used, only a cross-section of farm operators would of course be enumerated and SRS could concentrate on encouraging those in the survey to cooperate. In the past, SRS has received overwhelming cooperation. Thus the census would be on a voluntary basis, with no need for threats of criminal prosecution.

OBJECTIVITY

In material circulated by the Census Bureau, the statement is made that the agricultural census should continue to be conducted by the Bureau because, among other reasons, it is an independent agency. The statement is also made that, should the farm census be transferred to the Department of Agriculture, USDA "would be subject to great pressures to publish statistics that would reflect favorably on its handling of program responsibilities, or at least would be perceived to be so subject." Informally, concerns have been expressed to the effect that USDA cannot be trusted to honestly conduct the agricultural census.

I think these arguments are false and unfair. They are false because the Census Bureau is no more independent than the Statistical Reporting Service in the Department of Agriculture. The Census Bureau is part of the Department of Commerce, which has programs and poli-

cies which quite often involve agriculture-related industries and corporations. The argument is unfair in that it casts doubt on the integrity of the Statistical Reporting Service, which is a separate agency within USDA and which dates back to 1863, when it was known as the Division of Statistics. The ethical standards of those serving in SRS are as high as in the Census Bureau or any Federal agency. And, since it works in cooperation with State agencies, SRS enjoys a degree of independence the more centralized Census Bureau does not.

Anyway, the data collected in the agricultural census is not used as the basis for the program or policy decisions. So there would be little, if any, motive for the Secretary of Agriculture to try to induce the SRS to produce phony census statistics.

I am certain SRS can be trusted with the agricultural census and am confident the subcommittee will consider my bill on its merits.

CONTINUITY AND FLEXIBILITY

My bill provides, in section 2, that the Department of Agriculture shall collect data comparable to the information previously collected every 5 years in the census of agriculture.

The intent of this provision is to provide continuity. The same data collected and published by the Census Bureau would be collected and published by SRS, and collected and published on a county-by-county basis. It is contemplated that the Census Advisory Committee on Agricultural Statistics, which advises as to the data needed for business, academic and other purposes, would remain in existence and provide recommendations to SRS, as it does now to the Census Bureau.

Also, this provision is intended to abolish the requirement that the agricultural census be conducted once every 5 years. This would result in more flexibility and the ability to respond to unexpected, perhaps very important, needs for data on a special subject.

The agricultural census, as contemplated by H.R. 12397, could be conducted on a continuing, year-by-year basis, and the data would be published promptly after being collected and refined. Under this system, priority could be given to the most important data. The workload could be scheduled to avoid peaking, and the errors and confusion resulting from the rush to meet a deadline under stress would be avoided. The prospect of steady work would doubtless attract more experienced enumerator employees who could be trained well in advance for their duties.

RELATED LEGISLATION

Acting at the recommendation of this subcommittee, the House of Representatives on April 7 passed H.R. 11337, a bill requiring a mid-decade of population census starting in 1985. That bill is needed and I supported it.

In its report on H.R. 11337, the committee stated that many special-purpose surveys now conducted to fill in the statistical gaps between censuses would not be necessary if there were a mid-decade census. The committee report does not refer specifically to the agricultural census, but it would make no sense at all for the Census Bureau to conduct both a mid-decade census and a census of agriculture within the same general time period to get agricultural demographic data.

The changes proposed by H.R. 12397, therefore, would dovetail neatly into the overall plan envisioned by the mid-decade census bill.

Also, if the mid-decade census bill and H.R. 12397 become law, consideration could then be given to a further adjustment under which SRS would collect commodity and income data for farms, on the basis proposed in my bill, while the Census Bureau would gather general demographic and socially oriented information for all rural areas, farm and nonfarm, in conducting the regular and mid-decade population censuses. Such an arrangement would further avoid unnecessary governmental duplication and, at the same time, ease the data-collection burden on the public.

CONCLUSION

I think there is a general feeling today among the American people that their Government is harassing them. Some complaints, of course, are unreasonable and overlook the problems of the complex society in which we live. The complaints about the agricultural census, however, are entirely reasonable and represent a grievance which should be redressed as soon as possible.

Passage of my bill would respond to the complaints and, at the same time, provide more accurate data on a more timely basis. It would help the people, and it would help the Government.

It is the nature of a bureaucracy to resist change. Not surprisingly, the administrators of the Census Bureau do not want to give up the agricultural census. But this is a large and diverse Nation, containing a wealth of things for the Census Bureau to count and categorize. It will have much more work to do after the mid-decade census bill becomes law. It can survive and even flourish without the census of agriculture.

This bill affords Congress the opportunity to demonstrate that it means to keep the bureaucracy under control, reduce waste and duplication in governmental operations, cut unnecessary expenditures, and make Government more efficient and effective.

If the responsibility for the next agricultural census is to be transferred to the Department of Agriculture in an orderly manner, this legislation should become law this year, before the Census Bureau gets well down the road toward obligating the \$40 million it intends to spend on the 1979 census of agriculture. I hope this subcommittee will move to overcome bureaucratic inertia and act favorably on this bill as soon as possible.

The Census Bureau people have got plenty to do without doing the agricultural census, and yet apparently some of them don't want somebody else to do it instead of them, and I just think that in this particular case it can be done cheaper and better by the Agriculture Department with their Statistical Reporting Service (SRS) over there; that it would be more timely, that it will be done in a way that people understand better and with less irritation.

The SRS already has the field men out there who can do some of this and understand this kind of sampling. SRS has been using this kind of sampling technique for several years, and whereas the Department of Agriculture a few years ago used to true up their estimates with the Census Bureau estimates, it's gotten so bad that at the Census Bureau now they are trueing up their estimates with Agriculture

estimates, and there is no need of farming this out over the Census.

It ought to be done in the Agriculture Department where it can be done cheaper and better and on a particular basis. From year to year they can have certain items enumerated and other years they can have other items, and it will be done more timely and more efficiently.

We have a spectacle right now of the 1974 census having been taken with these long forms that I am sure you have got copies of with a total mailing out of some 13 million forms. Here we are, 2 years later, and haven't even published any of the statistics. They are outdated before they get them in.

Their idea of improving the situation is to use income tax returns to get some of the information for a new list. We have already appropriated the money for Agriculture to develop a national list of farmers. They are already underway with that list. There is no need for Census to go ahead and spend the money to develop a whole new list of the same kind of people.

They have an intention of still using millions of forms which they will mail, and there is no reason to think you won't end up in the same circumstances with about 10 percent to 20 percent of the people not responding.

Therefore, it will be an uncontrolled sample instead of a controlled sample. It doesn't make any difference if you get 80 percent back, as long as you don't know who the other 20 percent are. You had better have tested a sound sample of 20 percent and gotten them all back with interviews. So I say this is a very important piece of legislation.

Mrs. SCHROEDER. We really appreciate your long-term interest in this.

I think one of the concerns is, as you know, that yesterday we heard the Department of Agriculture say they couldn't do this.

Mr. SMITH. They said they couldn't do it by 1978, as I understand it. The Census can't either. As a matter of fact, although they are calling it a 1978 census, they have an intention of mailing some material in late 1978, and it is, in effect, a 1979 census, that is, fiscal year 1978.

But the fact of the matter is that Agriculture can do it as fast as Census, and they can get results out faster than Census can, because Census is still proposing to use an outmoded method. There is no insurance whatever that it will be either accurate or timely.

Mrs. SCHROEDER. So you think of it as very limited, as they couldn't do it by 1978, but the Department of Agriculture could do it in the future?

Mr. SMITH. No, I am sure that they are willing to do it as soon as they can get to it and do it accurately, and if it does squeeze them a little bit to do it in 1978, then I would say it would be better for them to delay a year and have a good, accurate sampling than to proceed as they are. I am saying also that Census is not going to be able to do it in 1978, either.

Mrs. SCHROEDER. Again, I appreciate your time. Do you have questions, Counsel?

Mr. TERRY. No.

Mrs. SCHROEDER. Thank you very much, Mr. Smith. We are delighted to have John Stencel, president, Rocky Mountain Farmers Union as our next witness.

STATEMENT OF JOHN STENCEL, PRESIDENT, ROCKY MOUNTAIN FARMERS UNION

Mr. STENCEL. Thank you, Madam Chairwoman. What I would like to do is read my statement, and then I would like to make a few additions, if I may, and if there are any questions, then I will try to answer them.

I am John Stencel, president of the Rocky Mountain Farmers Union and I am here today on behalf of the Rocky Mountain Farmers Union and the National Farmers Union. We appreciate the subcommittee's invitation to present our views on this important matter.

At our most recent annual convention, the delegates adopted a policy with regard to the agricultural census. They said:

We urge that the present method for conducting the agricultural census be declared obsolete, inefficient, and non-beneficial to agricultural interests. The present procedure should be revised as to the collection, interpretation, and distribution of relevant data.

That statement accurately reflects the mood of many of our members. In short, they are dissatisfied with the manner in which the census of agriculture has been conducted. However, while revision is necessary and overdue, we do not believe that the census should be eliminated or that the operational responsibility for it should be removed from the Bureau of Census, Department of Commerce.

Appearing before this subcommittee 3 years ago on the question of conducting the 1974 census, Reuben Johnson, Legislative Director of National Farmers Union said:

The National Farmers Union, since it began in 1902, has supported those programs that support a family-farm system of agriculture in the United States. We believe that complete agriculture censuses, such as those that have been taken in recent years, should be continued in the interest of providing full and complete information on what is happening in agriculture.

Full and complete census data is essential to the formation of policies and programs that will help the family farm survive.

The encroachment of corporate-type farms in recent years into agricultural production phases of agriculture is a threat to the family farmer, and full and detailed information concerning corporate farms must be available in order to develop those policies and programs that can strengthen and protect family-farm agriculture.

The census of agriculture is the only uniform source of county agriculture data that is available. This data is not only of importance to policymakers in Government but it is important to others, including main street businessmen and to farmers themselves in understanding such things as shifts in production, size of farms, commodities produced, and so forth.

The political history of the 1974 census of agriculture along with growing complaints by farmers about the size of the questionnaire and the complexity of the information being sought has created a negative atmosphere in rural America concerning the census.

The census is needed. Much of the information obtained is useful and necessary for the Congress, the administration, and the farming sector. We use that information. Government programs are often based on it. It assists policymakers in discerning trends and family farmers in making decisions.

However, at the same time, we have a growing dissatisfaction over the manner in which the Bureau of Census has handled the agricultural census and we are here today to urge the Congress, during this oversight hearing, to continue reexamining some of the issues that are the source of controversy.

It is only fair to note that the Bureau of the Census is aware of many of these complaints and is presently in the process of making changes. I represent the National Farmers Union on the Census Advisory Committee on Agricultural Statistics at the Bureau of Census. Through that committee we have made suggestions for internal reforms and have evaluated the suggestions of others. And we are pleased with the response by the Bureau's staff to our suggestions. Improvements are being made.

We believe that greater care should be taken in preparing for the census. We have urged the Bureau to streamline and simplify their forms. Confusing the respondent serves no purpose. Improving the method of data collection will greatly enhance its acceptance by farmers.

Additionally, we have suggested that the Bureau continually re-evaluate the questions and the type of information being sought. On one hand, certain types of questions that are particularly sensitive can be obtained by survey rather than through each and every respondent's questionnaire. The Census Bureau already has statutory authority for utilizing this method of obtaining information and they advise us that this is being done to a limited extent at the present time.

Other types of information, such as the nature and scope of corporate farming, should be obtained. And recently we have witnessed an increase in syndication farming. Providing adequate information for policymakers about the trends in agriculture with respect to corporate and syndicate development would be a useful expansion of the Bureau's work.

We don't believe that passage of H.R. 12397 at this time is in the best interest of agriculture. Maintaining the census of agriculture within the jurisdiction of the Bureau of Census is justified for several reasons. First, the continuity of benchmark data would be maintained. Second, the process of data collection and political decisionmaking would be separate from each other. Maintaining an independent source of information is very important to the credibility and value of the data collected. Third, the Bureau of the Census has recognized that problems do exist and they are endeavoring to correct them. Their cooperation with various segments of our industry is to be commended. Last, agriculture is a major segment of the national economy and should not be considered separately for statistical purposes.

Vigorous oversight by the Congress is often a cure to poor or lax administration of a program. We congratulate this committee's interest and willingness to review this program.

If I may, Madam Chairwoman, I would just like to add a few comments. I would like to see, personally, after sitting at some of the meetings at the Bureau of the Census, better utilization of existing structures than we presently have. The Census Bureau. I think, can shorten the forms or shorten the questionnaires, providing a way of obtaining more relevant data, but at the same time obtaining relevant data that is needed at that present time.

I would like to see sampling, as it is done by the SRS, expanded, because that data can be obtained quickly, but perhaps not by the SRS. We have a great system in rural America, the committee system of the Agricultural Stabilization and Conservation Service and most—I should say, probably all—ASCS offices have most of the data at all times that is needed and sought by various Government agencies and for farmers and whomever else might need it.

Perhaps if there were a way of moving materials between the Census Bureau, the SRS, and the USDA and ASCS, we could obtain relevant data when we need it, and maybe it would be more effective.

The system wouldn't have to bother farmers as often as they are being bothered now, in terms of receiving not only census questionnaires once every 5 years, but SRS questionnaires that they receive more frequently. I think a better system can be revised.

As is the case in Colorado, one agency vies for political interest with another Government agency. It seems strange to me that information cannot be moved back and forth between governmental agencies for the use of everyone and for efficiency and economical reasons.

I would also like to mention that funding of such a program is going to be necessary. The Bureau of Census should continue to do the census of agriculture, because agriculture is an important segment of our economy. Perhaps a new system is needed to collect that data that is needed almost immediately or at times when we have problems in agriculture and need to know what crop estimates are or what livestock numbers might be. That data can be collected in a rather short period of time, by using better methods all the way through the entire system. If we take a good look at the system and revamp it, I think we can come up with something that would be better.

Mrs. SCHROEDER. Thank you very much. I appreciate that. Do you, sitting on the Census Committee, have any idea whether it appears to be much more of a problem in the agricultural census than in other parts of the census that are taken by the Census Bureau?

Mr. STENCEL. I don't know whether I can answer that adequately. On the producer end, I think that the atmosphere in the country is one of negativism, and it has been more difficult for the Bureau of Census to collect the data than, perhaps, in previous years.

Several things have happened in the Government over the last number of years, such as talk about using IRS forms, questions on the census questionnaires that seem to be probing into personal affairs, make farmers upset, and they just don't want to fill them out.

Therefore, a lot of them did not fill them out as soon as they received them. That slowed the whole process. I think perhaps the questionnaire itself, the length of it, had a great effect.

Mrs. SCHROEDER. Would you say the questionnaire was more or less cumbersome than other ones that you have seen? Is there any way you can analyze it?

Mr. STENCEL. I haven't sat on the committee long enough to know exactly what all the questionnaires have looked like previously and also to know what kind of data was being sought during those censuses.

But from what I know of this last one—and I would like to make it clear that I was not on the committee, the Advisory Committee, when that questionnaire was put together, I did not have any input into those types of questions. I think that the length of it, calling for

detailed information that a lot of farmers thought they had to go to their bookkeeper or to their CPA, certified public accountant, or to those people which could adequately answer them, farmers just didn't feel they could take out of their desks or out of their files that information very readily and quickly; and, therefore, some prolonged it.

For the same reasons, therefore, others didn't fill out the questionnaire, because they felt it would take too much time. Perhaps the details of certain questions in the area of costs and economics as they pertained to their particular farm were upsetting, and farmers refused to fill out the questionnaires. They felt that some of that information was not needed by anyone, that it was of a personal nature and not necessary.

Mrs. SCHROEDER. Thank you very much. Have you any questions, Mr. Terry?

Mr. TERRY. Just one question: On page 3 you seem to imply that there is some concern that if the Department of Agriculture were to conduct the census that this might in some way politicize the process to a great extent. Is there a general feeling amongst the farmers or farm organizations that the Department of Agriculture in the past, in collecting or publishing its data, has allowed political considerations to become involved?

Mr. STENCEL. I will only tell you what farmers are saying right now, and it is very rampant, because I hear it very often. News releases that are coming out of the USDA at the moment are ones which farmers think affect prices of their product. Farmers are saying that the USDA is editorializing on the facts or statistics that are gathered, and they feel that the USDA has no right to editorialize on those statistics.

They feel it would be fine if these statistics were provided, and then let everyone make their own judgment. But farmers are saying—and I am quoting some of the things that I hear—that the USDA will take a crop estimate report, and as it is an estimate, the news release will state that they feel the crop estimate will be larger than they anticipated or it will be smaller than anticipated, and consumers should not worry about shortages because we have more than enough on hand.

The next day, the market is either up or down, just because of that pronouncement from the USDA, and farmers are very upset with that kind of editorializing.

So, whether it is the Bureau of the Census taking the data or the USDA taking that data, they look at it all as government. They see no distinction, and they are upset with everyone, because they feel that everyone—and it is not always justified—is using this data against them and not for them and politicizing it in that effect.

I would say, yes, that farmers feel that it is being politicized and used against them. Whether it is or not, that is questionable, but that is how they feel about it.

Mr. TERRY. If the data is bad, the Government doesn't say that this indicates that there are terrible problems in rural America and things are going bad, but when the data indicates possibly some good trends then there is editorialization. Is that generally the process?

Mr. STENCEL. Sometimes, but not always. For instance, we have a drought in our area. The drought, along with late freeze and along

with wet fields in Texas and Oklahoma, and I am talking specifically about the wheat harvest, crop estimates on the wheat harvest were coming out monthly. Instead of saying, what USDA feels the harvest will produce, they always say, "Well we are still going to have more than enough," or, "Maybe we are going to be short," or whatever the situation might be at that moment. "And it seems as if it is always compared unfavorably with a previous month or year to the disadvantage of the farmers market. Farmers wish that everybody would just leave their hands off it.

I would also like to comment that I think that the USDA, if they were to take the census and they were the only agency taking that census, it would set agriculture out and away and separate from all the other segments of the economy, and I don't think that is quite right. We are a major segment of the economy, and basically that data should be collected along with all the other economic censuses and used properly.

But that information which we need daily, that is the part that I think can be collected by sampling by the USDA, whether it is by the SRS or the ASCS, that is something to be determined.

Mrs. SCHROEDER. Again, thank you very much.

Mr. STENCEL. I appreciate being able to testify.

Mrs. SCHROEDER. We appreciate having you, Mr. Stencil.

Dr. Richard Rodefelf, assistant professor, Department of Sociology, Michigan State University, is the next witness. You may proceed.

STATEMENT OF DR. RICHARD RODEFELD, MICHIGAN STATE UNIVERSITY

Dr. RODEFELD. Thank you very much, Madam Chairwoman. I don't like to begin on a negative note, but I would like to apologize to you and to the members of the audience for not being able to get my statement typed in time, so that I could get copies made and distributed. I would just like to mention that anyone who would like to receive a copy of my comments in this paper might leave his name and address with me, and I will faithfully send him a copy as soon as I get back to Michigan State.

Mrs. SCHROEDER. Doctor, are you telling us that Michigan State professors don't have people that can type either?

[Laughter.]

Dr. RODEFELD. They have really great people that can type. They just have professors that can't get their papers written in time.

Mrs. SCHROEDER. I was worried that the epidemic had spread.

[Laughter.]

Dr. RODEFELD. The title of my presentation is, "Recommended Content Changes Which Will Alleviate a Number of Shortcomings in the Census of Agriculture." I would like to point out that even though I am presently an assistant professor in the department of sociology at Michigan State, that beginning in December of this year I will occupy a similar position in the department of agricultural economics and rural sociology at Pennsylvania State University.

A good deal of my academic work, both at the University of Wisconsin, where I did my graduate work, and at Michigan State, has been concerned with various structural characteristics of U.S. and Wisconsin farms and changes occurring in these characteristics.

The structural characteristics I have dealt with most are those of landownership; nonland resource ownership; management; labor; the interrelationships of the preceding; changes in structural farm types, such as family, nonfamily, corporate-industrial, and so forth; legal organization; acres operated; sales; and production.

Because it is the most comprehensive and definitive source of information on State, regional, and national farm characteristics, I have relied heavily on the census of agriculture in my work. As a result, I have become quite familiar with the data it obtains and reports. In this work, I have encountered what I consider to be a number of major shortcomings or deficiencies in the census of agriculture. My major objective today is to suggest a number of changes in the content of the census which will either eliminate or greatly reduce these shortcomings. These changes in content and the problems they address are as follows:

I should also preface this by saying that most of my comments today are concerned specifically with the long form as opposed to the short form. A distinction should be made between family-owned and non-family-owned farming corporations and those which have farm-based as opposed to non-farm-based owners. I was just made aware before this presentation that at least a portion of this information is being obtained by the census of agriculture in a special survey of corporations with farming operations. As I recall, at least it will be possible, on the basis of that data, to identify family-owned as opposed to non-family-owned farming corporations.

Continuing with my statement, in recent years there has been a good deal of concern about the movement into farming of both non-family and nonfarmed based corporations. Beginning in 1969 the census classified farms as to type of organization—sole proprietorship, partnership, corporation, and other. It does not identify those corporations, however, that are either nonfamily owned or nonfarm based. This problem can be remedied by determining the maximum percentage of stock owned by any one individual or family and whether majority stockholders are farm or nonfarm residents.

I would also like to add to this that it would be extremely useful indeed to also know if the majority shareholders, either individual or family, are actually involved or to what extent they are involved, in the actual operations of the farming operation.

Classification of farms by the tenure status of the individuals or family managing the farm on a daily basis should be reinstituted or increased in specificity.

Prior to 1969, the census was sent only to those individuals who actually managed farms on a daily basis. A determination was then made of how much land in the operation was owned by the manager, all, some or none, and if none was owned, whether the manager was a renter, operated the farm on shares, or was salaried, in other words, hired.

In 1969, the definition of a farm operator was changed from that individual managing the farm on a daily basis to that individual in charge of the farm operation. This minor change in wording has had a major impact of the tenure classification of farms.

First, the hired manager tenure category was eliminated as a result of this change. Forms are now sent, supposedly, to the employer of

the hired manager who, of course, is the person in charge, rather than to the manager himself. Thus, the farm operator category is no longer restricted to those individuals actually managing farms on a daily basis.

The absentee and/or nonfarm owners and renters of farms managed by hired workers are now classified as full or part owner operators or renters, depending on the amount of land owned.

The result in 1969 was a large increase in the percentage of farms which were classified as owner operated and the percentage of total acres in owner operated farms from that reported in 1964.

Second, farms owned by large nonfarm corporations operated by hired managers and hired workers are now classified as full- or part-owner operated or as renter operated farms depending on the amount of owned and rented land.

Third, no longer can we definitively determine who is managing farms on a daily basis.

Fourth, we can no longer determine the number of farms and amount of acreage with absentee and/or nonresident owners, because of this change.

Next, this change has destroyed the longitudinal integrity of the land tenure classification of farms. The owner and renter operated farm categories, full- or part-owner operated and renter operated farm categories before 1969 are no longer equivalent to those in 1969 and 1974.

Next, it has been argued and evidence exists showing that major increases have occurred in large farms with absentee or nonresident owners operated by hired managers and hired workers, which some people have referred to as a corporate or hired manager type. All such farms prior to 1969 were identified in the hired manager category, which was eliminated in 1969.

Next, we have lost a key indicator of the status and trends or changes in family type farms. Some people have defined family type farms at least in minimal terms as owner operated farms. Since we no longer can identify the owner operated farms, we have lost one key indicator of changes which may be occurring in family type farms if defined in this manner.

The solution that I proposed to this problem is either to return to the enumeration of individuals who manage farms on a daily basis, actually managing farms on a daily basis, or include a specific question in the census which determines who, in fact, manages farms on a daily basis. I would suggest that at a minimum it would be very useful to determine this in terms of whether the individuals managing farms on a daily basis are full owners, part owners, and I would specify that part ownership in terms of more than half or less than half of the land operated and the type of nonland owning manager, either renter or hired manager.

My next main point, No. 3, is that the proportion of total physical work provided on each farm by the farm manager and family members should be determined. Perhaps the greatest consensus about what a family farm is, or how to define it, is that the individual or family managing the farm on a daily basis does the majority of the actual physical work which is performed on that farm.

Empirical evidence shows that this type of farm has been declining at a rapid rate, while those employing large numbers of workers have been growing. If the percentage of total work provided by the farm manager and family members was obtained by the census, farms could then be classified on this basis, and these changes could be assessed in a much more definitive manner.

The number of farm manager and unpaid family workers should be obtained. The number of hired and contract workers are presently obtained and reported, along with the expenditure for custom work. If the number of farm managers and nonpaid family workers were obtained, perhaps also the type of manager, as suggested previously, we would then have complete information on the size and composition of work forces on farms.

In other words, we presently do not have complete information on the composition of farmwork forces.

If the suggested information on the land tenure status of individuals managing farms on a daily basis and the percentage of total labor provided by the farm manager is obtained, then farms can be classified on the basis of these joint characteristics simultaneously.

In minimal terms, four unique structural types of farms could be identified: Two types of landowner-managed farms, those that are family size; those that are larger than family size in terms of the percentage of work performed by the manager or manager's family; two types of non-landowner-managed farms could be identified, again family sized and larger than family sized.

You see, we have four unique structural types where these major basic structural characteristics of landownership, management and labor, and their interrelationships are assessed simultaneously.

It has been argued that the most incisive, useful, and definitive information about the present and changing status of family, non-family, and/or corporate industrial-type farms can be achieved by classifying farms in this manner. Actually, I am the one who argued that, just to make things clear.

As an example, in an earlier study that I did, classifying farms on this basis nationally for 1959 and 1964, I found that both types of family-sized farms, both owner managed and nonowner managed, were experiencing the greatest rate of decline over this time period. The two larger than family-sized farms, both owner managed and nonowner managed, were experiencing the greatest rate of growth over the same time period. Specifically, the nonowner managed, larger than family-sized farm was experiencing the greatest growth rate over this time period and was the only farm type increasing in terms of absolute numbers.

Now, this is quite significant, because I think this latter type of farm, with absentee or nonresident landowners, hired or renting managers, where the majority of work is done by hired nonowning workers, is probably, or it could be argued, is the closest equivalent in structural terms to what many farmers and farm organizations and others have been talking about and referring to as a corporate or industrial type farm.

These farms may or may not be legally incorporated, but they tend to be extremely large farms. They have absentee or nonresident owners, nonowning managers, either hired or renters, and most of the work,

the majority of it is done by hired workers. This is the farm type that experienced the most rapid rate of growth from 1959 to 1964.

This analysis, it seemed to me, anyway, has indicated that major changes had, in fact, occurred from 1959 to 1964 in the relative status of these four farm types. Generally, it could be argued that the family types were experiencing the greatest rates of decline; the nonfamily types, the greatest rate of growth. No analysis comparable to the one just reported has been made in the last 12 years.

However, the growing status of extremely large-scale farms, those with sales exceeding \$100,000 a year or operating 1,000 or more acres of land a year, suggests that this earlier trend from 1959 to 1954 has been maintained.

It seems to me the results of this classification suggest the utility of the census classifying and assessing farms on this basis.

Additional information should be obtained on the characteristics of landowners who do not, themselves, manage their land on a daily basis, that is, landowners who rent their land out to others who hire managers to operate the land for them. Evidence exists showing the increased ownership by individuals and corporations who do not, themselves farm. Additional information is needed on the characteristics of these absentee and/or nonresident landowners.

Particularly useful would be information on their location in proximity to that of the farm; in other words, we could determine if they resided in the same county that the farm was located in or in a different county in the same State or a different State.

It would also be useful to obtain the place of residence as is presently being obtained in the census of agriculture and the occupations of these absentee or nonresident landowners. At a minimum, at least farm or nonfarm primary occupations should be reported.

Now, if hired manager farms are identified, as suggested earlier, this information can be obtained rather easily, since part owners and renters presently report the names and addresses of the individuals or corporations they rent each parcel from. The same could be obtained for the owners or renters of farms with hired managers on them.

We should aggregate the multiple-operation units of the same firms, at least at the national level, and, ideally, at the State and county levels as well. The problem here is that the census enumerators separate operating units.

Some farm firms, however—and I don't have the number of such firms, although perhaps the census has this—have more than one operating unit. For instance, large canning companies may have multiple-operating units within a particular county, within a particular State, or in more than one State.

Now, each of these operating units is reported separately, as a separate farm firm, in the census of agriculture. Thus, the amount of concentration which exists in terms of farm landownership, acres rented, acres operated, sales, production, et cetera, are all presently underestimated, because, obviously, if all of the separate operating units for each firm were aggregated, it would reduce the total number of farms that are reported on, but that smaller number of firms would be producing or accounting for the same amount of production. So there are a smaller number of firms actually producing these goods,

operating these farms, land, and what not, than what is presently indicated by the census of agriculture.

The census presently collects a good deal of information on the operators, defined presently as the person in charge of farms. For instance, they collect information on the place of residence, age, race, occupation, nonfarm income, family income, et cetera. It does not collect this information for all operators contacted, however.

Specifically, it excludes the operators associated with farming corporations. Now, it seems to me it should obtain complete data for the entire universe of operators contacted. If each farm does, in fact, have an operator, then we should be able to get this kind of information for each of those operators. There is no necessary a priori reason I can see why corporations are excluded from presenting this information.

At a minimum, it could determine, as suggested earlier, these characteristics for those individuals or families who are majority shareholders of farm corporations. If there was no majority shareholder in the corporation, then perhaps the board chairman should reply for that corporation.

Those are the major changes in content that at least I would personally like to propose or see adopted. I do think that adopting or collecting this additional information will expand and increase the meaningfulness and the utility, the use value, of census of agriculture information considerably above what it is presently.

In my opinion, we cannot get or obtain an adequate understanding of the structural characteristics of U.S. farms or changes that are occurring in these characteristics with the type of information that is presently being obtained and reported by the census of agriculture.

I would like to go on and just make a few additional comments on some other issues or topics.

In reading through the long form, it seemed to me that there were a number of types of information which might be eliminated or reduced. I am sure there is some rationale for including these things but it seemed to me there were certain types of information that could easily be eliminated without any loss of significant information.

For instance, total acres irrigated and total quantities and types of fertilizer used are reported in the census, in most cases for each individual crop that is produced.

Now, I wonder if this information is absolutely necessary on a crop-by-crop basis?

The totals for all of these things are reported, but I just wonder about the utility of reporting it for each individual separate crop down to a tenth of a ton, in terms of fertilizer. I kind of thought that that was adding insult to injury.

You first ask the farmers for each crop, how much dry fertilizer and how much liquid fertilizer they apply to each acre of cropland or to the acres grown and then in addition to that, not only ask them how many tons are applied, you also ask them how many tenths of a ton.

I know information on the acres devoted to various types of crops and the amounts of production by crop are probably necessary. But I found it quite ironic that, in terms of artichokes, we know how many total acres are harvested to the tenth of an acre for the fresh market

and acres for processing and how many of these acres were irrigated to the one-tenth of an acre, but at the same time that we have this level of specificity in data about artichoke production, we don't know definitely who owns our farms, we don't know who is managing our farms, we don't know the extent to which farm managers are involved in farm work.

I would also like to comment that we should continue, I think, to carry out the census of agriculture every 5 years. I know quite a few months ago there was a proposal that perhaps it be carried out on a less frequent basis. I do think it should continue to be carried out every 5 years, primarily because of the rapidity of the documented changes that appear to be occurring at the present time. I think we need frequent assessments of those changes.

Next, I do not think the definition of a farm should be changed. I do not find the limited economic significance of these smaller farms a persuasive or logical argument for eliminating the number of farms proposed.

If cost is the major concern, other ways should be found to reduce the cost without eliminating a major portion of the universe of total farms. I don't see how we can gain a better understanding of what changes are occurring in agriculture and the structural characteristics of farms by eliminating a major portion of farms in that universe.

I would also prefer that the census of agriculture remain in the Census Bureau, if for no other reason than that I think that the census of agriculture under the administration of the Bureau of Census is less likely to be influenced by or become a part of partisan politics than it would be if administered by the USDA.

It is true that questions can be designed and included in the census to produce the results desired. It is also true that data can be, at times, classified and analyzed to produce the results desired. Obviously, I am not saying that this would happen if the census was administered by the USDA, only that I think it is more likely to happen.

At a minimum, I would not support this type of a change until convinced or guaranteed that it would not be influenced by partisan politics.

Thank you.

Mrs. SCHROEDER. Thank you very much, Dr. Rodefeld. That was an excellent presentation. We are always hearing in the city that one day we are going to wake up and find out that all of our farms are going to have to be operated like offshore oil rigs, and I think I hear you saying we really won't know that happens until it happens because the census is not giving up the right information. I take it one of your main points was that because of definitional change in 1969 the census would show that it appears there are more owners of farms than there really are?

Dr. RODEFELD. Yes, because the entire hired manager tenure category was eliminated, and it appears to me that the bulk of those farms was reclassified in either the full-owner operated or part-owner operated categories. You know, if these hired manager farms had 1 acre of land owned, and, say 1,000 rented, that farm would be classified in the part-owner operated category.

That is another problem with the statistics that we presently have, but it appears the bulk of them, of the hired manager farms, went into the full- and part-owner operated categories and, as I pointed out before, the increase in the percentage of total farms which were owner operated and the percentage of total acres operated by those farms, experienced a substantial increase in that 5-year period.

I think the census has been very careful about pointing out the fact that this change did take place, and that the characteristics prior to 1969, in terms of land tenure, are not, in fact, comparable with those reported for 1969 and 1974.

But the sad thing about that is that most journalists and non-academicians, private citizens, whatnot, do not read footnotes in the census, and because of this they go right ahead and compare how many owner-operated farms there were in 1964 with how many there were in 1969, never realizing that that is a totally inappropriate comparison. It just simply should not be made, because the categories are no longer analogous.

Mrs. SCHROEDER. Let me ask you another question as a nonfarmer. You are interested in the ownership structure and how the interest should focus more on that, rather than how much water and fertilizer and artichokes there are. That makes sense to me, because I suppose it is the impact of Arab oil, and certainly everybody is concerned who owns what and where it is going.

But have you any idea why we ended up with the fertilizer and water for an artichoke, and those kinds of questions being in there, rather than the ownership structure?

Is there another academic school of thought that would feel really put upon if we took out those questions versus the ownership structure? In other words, what I am saying to you is, I compliment you for giving us some very positive suggestions as to what could be culled out of the census because it is very easy to say, "It is too long or cumbersome," but you decide you are going to take out the guy's middle initial, and 15 people say, "We have to have it."

Dr. RODEFELD. Quite frankly, it appears to me what is happening in this instance is the taxpayer and the Federal Government are carrying out essentially market research, perhaps for fertilizer companies. I have no way of knowing. I don't know how these items with that level of specificity ever ended up in the census of agriculture.

If I know where the suggestion to get that kind of information had come from initially, perhaps we would have a better idea. But I simply don't. Nevertheless, it just seemed to me in terms of what I know, that that level of specificity is not needed for the major purposes for which the census historically has been used and has been intended.

Mrs. SCHROEDER. Well, it is for political purposes, too. I think, politically, we are more interested in the ownership structure than the fertilizer.

Dr. RODEFELD. Right. There is also information in there on the age, number of years old, that the equipment, major pieces of equipment, on the farms is.

Again, I don't know, but perhaps that is serving some altruistic purpose that I don't know about. Maybe it has some kind of significance that is not immediately detectable, but I would suspect that

that is beneficial information for farm equipment manufacturers to have, particularly if it is reported at the county level.

Mrs. SCHROEDER. Thank you very much.

Mr. SIMON. Dr. Rodefelf, I am sorry I missed the first part of your presentation. Do you think that the changes you have outlined were purposefully made in order to not make that information available, and, if so, do you have any idea why?

Dr. RODEFELD. No; I have no knowledge that that was the situation.

Mr. SIMON. Have you tried to convey your ideas to the Census Bureau?

Dr. RODEFELD. No, I haven't. I have written earlier papers on this, some of them going back to 4 years, 5 years, pointing out the major shortcomings which existed in terms of many of the same types of things and characteristics that I have talked about today, and those have been provided, at least, to the USDA.

Mr. SIMON. When you are talking about the deficiencies you referred to in 1969, I assume you are also talking about the 1974 census?

Dr. RODEFELD. Yes. The definition of a farm operator is the same in 1974 as it was in 1969.

Mr. SIMON. Now, in the 1974 census, for example, it says, "Type of organization, individual or family operation, sole proprietorship."

Dr. RODEFELD. Right.

Mr. SIMON. And then "partnership, corporation, and other."

Now, is that the section you would change?

Dr. RODEFELD. No, it is in terms of who the census form goes to, who is defined as an operator and hence who receives the census form.

In the case of farms that have absentee or nonresident landowners and renters who have hired managers, at least in terms of the definition of what a farm operator now is, the person in charge, the forms would go to the absentee or nonresident landowner or renter, not to the person actually on the farm and the classification by type of legal organization really does not have anything to do with that.

Mr. SIMON. And you say there was a change in 1969 or a shift at that point?

Dr. RODEFELD. It was first implemented in 1969; yes.

Mr. SIMON. You mentioned some cutback. You also mentioned some additional information you want.

Do you think, having looked at the form, that there is a way of appreciably reducing the size of that form?

Dr. RODEFELD. Well, I think really what is necessary is a full scale reanalysis of the census, the purpose that it is intended for, the information, the most important information, crucial information that should be obtained and reported, but a full scale review, I think.

The problem with piecemeal changes is that you can eliminate some deadwood perhaps, or some information that is not as important or useful as others, and possibly replace it with additional questions and information equally as bad.

Mr. SIMON. Do you have any feeling or is there some question whether the census should be universal, or whether it should be a sampling technique?

A gentleman testified yesterday from the U.S. Department of Agriculture that if a sampling technique or person-to-person interview

were to be used with, say, 25 percent sampling, that it would be much more accurate than the present universal census sent out by mail. Do you have any feeling on that?

Dr. RODEFELD. That is possibly true, in terms of the total figures that are reported.

I think that might be possible. But I still think that there would have to be a complete enumeration of the largest farms.

Now, what that cutoff point would be, 50,000, or 100,000, or what, I don't know. But the number of farms in those categories are so small that your sampling error, it seems to me, is going to be extremely high.

In other words, if you take a one-fourth sample, even a 50-percent sample, you may, in fact, be leaving out or missing a number of the largest firms or farms which presently exist. It could throw your estimates off considerably.

Mr. SIMON. When you used the terms 50,000 or 100,000, what do you mean by that?

Dr. RODEFELD. Total sales.

Mr. SIMON. Gross sales?

Dr. RODEFELD. Gross sales, yes.

Mr. SIMON. I have no further questions.

Mrs. SCHROEDER. Let me just quickly summarize one thing to make sure we got it on the record.

Would you say a summary of your position is that the farm census today is giving us less information about the ownership structure of farms that it was before 1969?

Dr. RODEFELD. Yes, it is.

Mrs. SCHROEDER. Thank you very much, Dr. Rodefeld.

Mr. Steve Rawlings, a volunteer staffer with Rural America, Inc., is our next witness. You may proceed.

STATEMENT OF STEVE RAWLINGS

Mr. RAWLINGS. I am sure that I, as did others, find Dr. Rodefeld's remarks very instructive, and I think he would be an excellent addition to the Census Bureau's Advisory Committee on Agricultural Statistics.

Mrs. SCHROEDER. I think he would, too.

Mr. RAWLINGS. Let me begin by saying that my name is Steve Rawlings. I serve as a volunteer staff person with Rural America, Inc. We are a nonprofit organization devoted to seeking equity for rural and small town people.

We appreciate the invitation to appear this morning and present our views on the topic of data on rural people as it relates to the census of agriculture.

We have noted with some alarm, over the years, a tendency among the Federal statistical establishment to always view the world in terms of "statistical purposes" rather than impacts on people.

We are not here today to deliver any sort of political diatribe against numerical accuracy and scientific technique, but we would like to try and assure that those responsible for data collection in this country don't forget that in today's world, the absence of a particular group of people from the statistics is synonymous with the denial of the existence of those people and their problems.

America's rural people already have a difficult time in terms of the availability of reliable data.

Nothing should be done to change the nature of the census of agriculture which would further diminish the base of information which we presently have available on rural people.

The governing body of a county of only 2,000 residents has needs for information on the characteristics of the people, just as does the mayor of New York. Yet, whereas the census produces elaborate tables of detailed data for our major cities; rural areas and smaller communities face considerable obstacles in their efforts to find data generally required to qualify for Federal programs.

For instance, in some of the work I do with the Rural Housing Alliance, we find frequently that the sort of data required to meet HUD's preapplication requirements for the community development program are simply not available for small towns.

Now, not all of this is necessarily the fault of the census of agriculture. Rather, it is the sort of thing we should be finding in the census of population, but it is not there, either.

We have heard a lot in the last 2 days about the chorus of complaints concerning the manner the 1974 agriculture census was handled.

Some of those grievances are probably legitimate and have led to suggestions that the next agricultural census be taken by the Department of Agriculture.

We would consider such a move to be contrary to the interests of rural people, and we were glad to hear USDA representatives indicate yesterday that they apparently agree with this view.

We seriously doubt that having the USDA conduct the census would do anything to reduce the clamor which many Members have heard from the farm definition was apparently hatched at USDA. Their two of those responding to agricultural census thought the USDA was the agency responsible for conducting it, in any case.

People generally don't bother to differentiate between what agency is making a demand of them. All they know is that it is a burden. They figure it has been cooked up in Washington, and they expect it will ultimately cause them problems, rather than produce benefits.

Our primary concern, however, relates to USDA's longstanding campaign to favor the needs of agribusiness conglomerates and large established farms over the interests of small and subsistence family farmers.

The scheme to obliterate all those making less than \$5,000 a year from the farm definition was apparently hatched at USDA. Their two representatives attending last week's meeting of the Census Advisory Committee on Agricultural Statistics demonstrated an arrogant persistence in their efforts to see that the new farm definition is utilized in all publications relating to 1974 agriculture census, and they forced the passage of a resolution to that effect.

Although USDA has reconciled itself for the moment to increasing the cutoff to only \$1,000 in yearly sales, there is little doubt that they would jump at the opportunity to increase it to \$5,000 or \$10,000 or even higher, should they ever get a free hand to do so.

We would agree with Congressman Rose's statements in yesterday's hearing that putting USDA in charge of the agricultural census would be comparable to putting the fox in charge of the chicken coop.

Although we want to see the Census Bureau continue to conduct the census of agriculture, we would still hope to see some changes. For one thing, as I alluded to earlier, it strikes us that the current membership of their advisory committee is dominated by such interests as Ralston Purina Co., the American Meat Institute, the American Petroleum Institute, the International Harvester Co., AgWay Inc., Northrop, King & Co., National Canners Association, American Cyanamid Co., and the U.S. Department of Agriculture.

Although the group has recently been required to add a "consumer" representative, and does have executives from various farm organizations, such as Mr. Stencel, Charles Fraser, and others, we still feel that there is a preponderance of very vocal spokespeople for agribusiness.

We feel that a more broadly representative advisory group, including both those actually engaged in farming and allowing for more congressional input and oversight would ultimately result in more balanced deliberations, and a policy incorporating sensitivity to the uses of data that affect people rather than stressing those which are just of interest to the agriculture industry.

In recent years, the Census Bureau in all its programs has sought to eliminate the need for personal enumerators to actually go out and take the census. We are aware that there are constraints that have made the "mail-out mail-back" type of form a simpler, less costly mechanism for the Bureau. Yet, we are concerned that a personal touch has been lost.

We can hardly blame many farmers who received a 20-page questionnaire through the mail from their postman for feeling that it was anything more than a piece of burdensome, junk mail. The reaction is understandable, even though there was a form letter from the Census Director to break the ice which started off, "Dear Friend: It's time for the 1974 census of agriculture and we need your help. Please fill out the report and return."

Perhaps enumerators are a relic of the past, but we feel the current impersonal approach is one of the things that has contributed to the level of complaints, and frequent refusals to respond to the 1974 agricultural census.

In House floor debates last January, the chairperson of this subcommittee raised several concerns regarding the proposal to change the definition of what constitutes a farm.

In addition to pointing out that the eventual effects of this change in the definition are unknown, you called for the Congress to assert itself in this area, become involved in proposed definitional changes, and make its will felt in terms of policy.

The Congress acted by passing H.R. 7824, which required the Census Bureau to continue to use the current definition of farm in any reports issued prior to June 30, 1976. That was prudent, but its impact expires 1 week from today.

So far, the six or so reports which have come out, preliminary reports, have held to the law embodied in Public Law 94-229 (H.R. 7824), but there continues to be a clear reluctance on the part of the USDA in particular to accept the will of Congress. There were sarcastic references during advisory meetings last week to small farmers

as being synonymous with congressional farmers, and that they really should not be included and were simply a whim of Congressman Rose and others.

In hearings held jointly in April by this committee and Congressman Rose's subcommittee on family farms and rural development, it was clearly demonstrated that the change in farm definition was to have been imposed by administrative fiat. Mrs. Schroeder asked a question during those hearings regarding whether or not the proposed change had been announced in the Federal Register.

One of the Census Bureau's Associate Directors assured her it had been, but when she asked them to give a citation, they were unable to do so, and finally had to admit that the only notice of the change was an August 12, 1975, press release.

This hardly seems calculated to inform data users and allow for possible objections.

For these reasons, we would urge that the legislative embargo on the new definition be continued and strengthened, similar to a proposal made by Congressman Gillis Long in yesterday's hearing.

If the Department of Agriculture is to pull in its horns on this matter, there can be no room left for any doubt regarding the will of this committee and the intent of Congress.

As to alternative data sources, Census Bureau officials and others have suggested that any information eliminated from the census of agriculture will still be available in the census of population or the current population survey.

We do not believe that this will be the case.

As mentioned previously, there are already considerable gaps and deficiencies in data for rural America. Clearly, if the definition of a farm is changed in the agricultural census, those responsible for the census of population will follow suit and alter their definition, in order to be consistent.

Consequently, what disappears from one source, will just as quickly vanish from the other.

Although the current population survey, known as the CPS, provides more timely data in some instances than the decennial census, information from it is generally reliable at the national or State only, due to the sampling techniques used.

The CPS does not provide the sort of detailed county data presently available from the agriculture census.

It would hardly prove a very fruitful alternative source of data for the rural and farm population where small area information is not often even available from sources based on complete enumerations of the population.

Again, we ask how rural people can be expected to relinquish the already all too meager sources of information?

In reality, the alternative sources suggested are not alternatives at all.

Now, as to facts which influence policy, public policy is and will be affected by how we define a farm and the information we collect about farmers, that is, who is a farmer, how many there are, where they are, what their actual production is, and what it might become.

If, by definition, we exclude hundreds of thousands from agriculture,

consideration of agricultural policy will tend to be circumscribed by the statistics. The U.S. Department of Agriculture has done little enough for the smaller farmers in recent years, but their exclusion from the numbers will freeze that bias into fixed policy.

Presently, nongovernmental agencies and individuals find it difficult, expensive or impossible to carry on research concerning those excluded, due to the sheer inability or difficulty of securing the data on which to base research and raise policy questions.

We ask this committee to act to see that currently available data continues to be provided, and that it work toward insuring that more comprehensive information on farmers and other rural people be available in the future.

Thank you very much, Madam Chairwoman.

Mrs. SCHROEDER. Thank you.

There is a quorum call underway on the House floor. The subcommittee will adjourn at this time.

[Whereupon, at 2 p.m., the subcommittee adjourned.]

STATEMENT OF HON. JOHN B. BRECKINRIDGE OF KENTUCKY

Madame Chairman, I appreciate the opportunity to express my support for H.R. 12397, Congressman Neal Smith's bill to transfer the agricultural census from the Census Bureau in the U.S. Department of Commerce to the Statistical Reporting Service in the U.S. Department of Agriculture.

Kentucky is one of the six leading states in horse population. We have 20,000 thoroughbreds on more than 400 thoroughbred farms valued at half a billion dollars. I am proud to say that a good share of these outstanding horses are raised in my Congressional District.

Having this orientation, I wish to focus on the importance of including in the agricultural census an accurate inventory of the horse population in the nation. The entire American horse industry and its related industries vitally need up-to-date information on the size and distribution of the horse population.

The present way of conducting the agricultural census by the Census Bureau is cumbersome, incomplete and inaccurate. In 1969, the Census Bureau mailed out 13 million forms to elicit information from 4.1 million persons. By the time the information was assembled, it was obsolete and of little value. Moreover, such procedures antagonized farmers who were requested to answer up to 750 questions and threatened with criminal penalties for failure to respond.

The inadequacy of the existing method of conducting the agricultural census was especially evident in the livestock count. It has been estimated by statistical experts that the Census Bureau in 1969 missed about 8.5 million cattle and about 15 per cent of American farms.

The Statistical Reporting Service in the Department of Agriculture, which now conducts crop and livestock surveys, has a superior capability for obtaining the necessary agricultural information in a way that would yield more accurate results and cause less wear and tear on our farmers. The Reporting Service has well-trained people, accustomed to working cooperatively with the states, who would use sampling methods involving interviews with a relatively small number of farmers.

In 1973, the Statistical Reporting Service designed a pilot project to collect national statistics to provide estimates of equine population by breed and primary use. National estimates for total equines were expected to have sampling errors of 5 percent or less. State estimates were expected to have sampling errors of about 10 per cent. Unfortunately, no funds were made available for even a pilot project.

Accurate data about horses are of national importance, because of the dimensions of the horse industry in the United States. Spindletop Research of Lexington, Kentucky, conducted a study, "Impact of the Horse Industry on the Economy of the United States in 1968," for the American Horse Council that illustrated this point.

Currently, the American Horse Council estimates that:

(1) Combined investment and annual expenditures of the horse industry amount to more than \$13 billion.

(2) Horse owners spend nearly \$7 billion annually on feed, equipment, drugs, services and related items.

(3) Total federal, state and local revenues from racing and related industries approach \$1 billion annually.

(4) There are approximately 3.2 million horse owners in the United States; a majority represent middle- and low-income families who own horses for recreational purposes in much the same manner as other families own bicycles. There are 200,000 breeders of registered horses.

(5) More than 320,000 boys and girls are engaged in 4-H horse projects.

An industry as large as the horse industry requires reliable basic and current raw data in order to function properly, the linchpin to which must be an accurate inventory of the horse population and related matters. Responsible financial planning in the industries that supply goods and services to horse owners is greatly complicated by the lack of information; it goes without saying that legislation at both the state and national levels should not be undertaken in the dark.

A dependable horse census is also important to the successful combating of disease. An epidemic like Venezuelan Equine Encephalomyelitis could reduce the horse population overnight. A more precise knowledge of the number and location of horses is essential to the conduct of adequate health research, vaccination and control planning. The availability of such data will significantly undergird The Agricultural Research Act of 1976, which I co-sponsored, in the conduct of equine research as therein contemplated.

Madame Chairman, I strongly endorse H.R. 12397, to assist agriculture in general and, in doing so, I wish to increase awareness and understanding of the need for and importance of including an accurate inventory of the nation's horse population and related matters in the agricultural census.

STATEMENT OF HON. FLOYD J. FITHIAN, A MEMBER OF CONGRESS FROM THE STATE OF INDIANA

We have an opportunity, Madam Chairman, to save the taxpayers millions of dollars, to reduce unnecessary government paperwork, to eliminate a needless intrusion into the privacy of millions of Americans and to improve the statistical information we have about American agriculture. All of this can be accomplished through passage of H.R. 12397, a bill I am co-sponsoring, which would eliminate the Census of Agriculture as presently styled and conducted and substitute for it a statistical sample survey conducted by the U.S. Department of Agriculture. I am pleased to have this opportunity to present to you my views in support of the bill.

With the exception of the drive in support of estate tax reform, no single issue arouses the interests of farmers in my district as much as does the Census of Agriculture. And with good reason. I can understand why a farmer wouldn't want to spend countless hours pouring over a 700-question government form. I can understand why a farmer would resent the government prying into what his income is and how many tons of fertilizer he applies to his crops. I can understand why a farmer would be unhappy when the Census Bureau threatens him with legal action for failing to complete these forms.

To many of my constituents, nothing more clearly represents the heavy-handed federal bureaucracy than does the Census of Agriculture. Nor do they see any benefits to them resulting from this exercise.

I do not doubt the importance of having an accurate measure of agricultural activity in our nation. Good business practices simply dictate that in food production, as in the production of any article, every step in the production chain be visible and understood. I argue, however, that the present Census of Agriculture fails in that regard. It simply doesn't fulfill its task.

First, by the time information collected in the Census of Agriculture is available for use, it already is two years old and is therefore obsolete. Especially is this problematical in the area of agriculture, where sudden droughts or arti-

fically-engendered market changes may quite suddenly drastically alter the supply of a commodity, and thus market conditions for many months to come. Researchers, farmers, public agencies—in short, anyone whose livelihood depends upon agriculture—thus cannot trust statistics in the Census of Agriculture, simply because of the time lag between reporting and publication of the data.

That problem is compounded when inaccuracy of the data is considered. Currently millions of pieces of paper are mailed to some 4 million households which are required by law to fill out the lengthy forms and return them to the government. Unfortunately, however, there are only about 3 million farm and ranch families in this country. There's a 25 per cent error rate in mailing out the census forms alone.

Getting the forms returned presents a similar problem. Almost 20 per cent of the farmers contacted in 1969 refused to respond, and the number of non-respondents in the 1974 census is likely to be at least that high, when the statistics finally are compiled.

We would have more accuracy with a sample survey, such as proposed by the bill before you now. Experts have informed me that a 20 per cent sample will give fully accurate data down to the county level. That means that we'd be keeping four out of five farmers from having to put up with this system.

Moving the data collection for this census to the Statistical Reporting Service of U.S.D.A. makes sense. I have great confidence in the integrity and reliability of SRS, and I believe that most farmers share that feeling. Working in co-operation with the states, SRS already has trained field personnel in place who can conduct the agricultural census on a sample basis.

Millions of dollars can be saved by instituting this program. It also can eliminate millions of needless government forms. It can reduce the prying of government into personal affairs of farmers across our land.

I urge you to act swiftly to approve this bill.

STATEMENT OF PAUL WELLER, VICE PRESIDENT, PUBLIC AFFAIRS, NATIONAL COUNCIL OF FARMER COOPERATIVES

The National Council of Farmer Cooperatives, on behalf of the nation's farmer-owned and controlled businesses, is pleased to comment on the census definition of a farm.

American farmers currently own and control approximately 7,800 local marketing and supply cooperatives doing a gross annual volume of nearly \$30 billion. Farmers sell 28 percent of their production through these cooperatives and purchase 19 percent of their total farm supplies from them. Through its membership, the National Council represents approximately 80 percent of this cooperative agricultural industry.

Farm marketing and supply cooperatives are regular users of agricultural data collected by the quinquennial Census of Agriculture. Such data, collected and compiled both by county and by enterprise and farming operation, is critically needed in the daily operations of these vital businesses. It would be difficult, if not impossible, to maintain increasing standards of efficiency and effectiveness without factual and relevant data. As a result, the National Council has been a long-time supporter of the Census of Agriculture, and currently serves as a member of its agricultural advisory committee.

As an active member of this advisory committee for many years, the National Council has been a party to the lengthy deliberations on the Census of Agriculture. Such a nationwide Census is critical to the efficient and effective operation of farmer cooperatives, through collection and compilation of local agricultural data. There is no other source of county agricultural data available for Rural America's use.

So important is this data to farmer cooperatives and their members, that the Delegate Body of the National Council went on public record at its 1959 annual meeting with a policy resolution in support of a continuing Census of Agriculture. The policy resolution was reaffirmed in 1976 as follows:

"Five-Year Agricultural Census Enumeration.—The five-year agricultural census has provided a valuable and continuing source of data on American agriculture. We recommend that this census be continued on a five-year basis.

"The National Council specifically opposes any change to a longer interval for

the Census of Agriculture and recommends that data on farmer purchases and usage of feed, petroleum products, fertilizer, insecticides, and other farm supply items be collected on a county basis."

Now the major issues relevant to the Census of Agriculture dwell upon whether this nationwide census, traditionally conducted by the federal government's major census-taking agency, shall be switched to another executive agency—and whether government efforts to conduct a complete enumeration of data shall be replaced by a periodic sampling of the farm population. The National Council of Farmer Cooperatives opposes both proposals. We were party to a detailed letter to Chairwoman Schroeder on June 22, which reads as follows:

JUNE 22, 1976.

HON. PATRICIA SCHROEDER,

Chairwoman, Subcommittee on Census and Population, Committee on Post Office and Civil Service, U.S. House of Representatives

H.R. 12397, S. 3215 AND RELATED BILLS

Farmers, as well as people in business who service agriculture, and those in government who deal with farm-related matters, have become increasingly dissatisfied with the statistical information available to them. Traditional sources and methods of collecting agricultural data have become increasingly obsolete while the needs for more reliable and timely data have become very important. Agriculture, including the entire food and fiber sectors of our economy, have become a highly complex and sophisticated industry. Many actions of Government, both within USDA and in other agencies, affect this industry. The need in Government and in the industry itself for better availability and reliability cannot be overemphasized. Producers have a great deal at stake in the operation of their own organizations.

The Census of Agriculture has long been recognized as a reliable source of data about the industry, concentrated especially upon the farming sector. Early in this Administration the Commerce Department, under pressure from the Office of Management and Budget, decided not to take the 1974 Census of Agriculture. The decision was reversed but the delay and controversy got the 1974 Census off to a bad start.

Many farmers complained that 1974 Census questionnaires were an unwarranted intrusion of their time and privacy. This, in part, caused further delays in collection of the data and necessitated expensive follow-up services and other devices to improve coverage. For a number of reasons, the 1974 Census of Agriculture has faltered, causing an unacceptable delay in making data available and damaging public confidence in both the procedure and the methods of collection. Certainly, improvement are needed in their data collection systems and especially in the Census of Agriculture. Incidentally, these problems have been acknowledged in the Census Bureau and substantial improvements are now under way.

H.R. 12397 and S. 3215 have been introduced in an effort to effect improvements. These identical bills, and others of similar nature, would relieve the Secretary of Commerce of taking the Census of Agriculture every five years and would make the Secretary of Agriculture responsible for assembling all agricultural data. They would further permit him to use sampling techniques in collecting this data. While the intent of these bills is laudable, we do not believe they are the way to achieve the objectives desired.

One motive seems to be to change the apparent low priority given to the Census of Agriculture by the Bureau of the Census. We believe this situation is already corrected both by previous actions of Congress and by the increasing realization by the leadership in the Congress Department of the role of agriculture in our economic system. Consequently, the role of the Census of Agriculture in the family of economic censuses takes on new significance. The Congress has acted to change the dates of the Census of Agriculture to correspond with the dates of other economic censuses and the Bureau of the Census is initiating plans for an improved Census of Agriculture for 1978 and 1982. We are impressed with their plans.

The need to coordinate the Census of Agriculture with other economic census activity has become increasingly evident. Traditionally the Census of Agriculture has dealt with farms and farmers. But farming is only part of the agri-

cultural industry. Some of the farm supply, farm service and product marketing activities that are so important to the total agricultural sector of the economy have been missed in the past, both by the Census of Agriculture and by other economic censuses. Plans are now afoot to correct this important gap in our economic intelligence. The opportunity to make this important improvement could be greatly inhibited by shifting the responsibility for all agricultural data to USDA. It should be noted that the results of this work are probably more important to producers in the final analysis than to any other part of the farm economy. Other segments have alternatives available—we do not.

One motive behind the bills seems to be to reduce respondents' complaints by permitting sampling rather than presumably full coverage of a census. Respondents' complaints can be reduced in other ways—better preparatory work by the Bureau of the Census, simpler questionnaires and better education of respondents would help. Moreover, many items of information usually requested may not be necessary on a complete enumeration.

For example, since Congress authorized the USDA is conducting annual estimates of costs of production, we may not need enumeration of expenses on the census schedule. Many other actions can be taken within present authorizations to reduce respondents' complaints. There will always be some complaints, whether information is requested by Census or the USDA. It should also be noted that the Census Bureau already has authority to use the sampling technique.

We do not believe that passage of H.R. 12397 would, of itself, affect needed improvements in agricultural data. We do believe that substantial improvements can and will be made by the Bureau of the Census under present authority. We believe, further, that substantial opportunity exists for interagency cooperation by the Bureau of the Census and the Department of Agriculture to provide the necessary economic information for a modern agricultural industry. It is urged that the influence of the Congress be used to encourage cooperation, rather than becoming involved in an action that will delay and hamper the 1978 Census of Agriculture.

In summary, we must at this time hold to the view that the public will be better served if the Census of Agriculture is maintained in the Census Bureau as an independent measure of trends, benchmarks and long-time indicators of change in the basic statistics of agriculture. It is equally important to acknowledge the responsibility of, and improve the work of, the Agencies in the USDA whose missions are appropriately keyed to reporting and analysis of current data. Such timely reporting may be handled on a sample basis in most instances.

These views are submitted by the undersigned as representatives of our organizations. It may be worth noting also that we have the benefit of knowledge gained through our participation in the Census Advisory Committee on Agricultural Statistics.

We are willing to discuss these issues in greater detail if that would be of value to you.

PAUL WELLER,
Vice President, Public Affairs,
National Council of Farmer Cooperatives.
ROBERT M. FREDERICK,
Legislative Director, National Grange.
CHARLES L. FRAZIER,
Director, Washington Staff,
National Farmers Organization.

CONCLUSION

In closing, let me say that it is the opinion of the National Council of Farmer Cooperatives that the Agricultural Census Division, Bureau of the Census, U.S. Department of Commerce, is the best qualified agency of government to gather and compile data for a Census of Agriculture. It is also the opinion of the National Council that the census definition of a farm for data purposes be maintained at a reasonable economic level. This would be in the range of \$1,000 to \$2,500 per annum in sales of agricultural products, as currently proposed by Administration officials. The Census of Agriculture is a valuable and necessary tool for all facets of American agriculture. We urge this committee to help it reach the level of accuracy and timeliness that agriculture so critically needs by close supervision and assistance whenever possible.

NATIONAL COTTON COUNCIL OF AMERICA,
Memphis, Tenn., June 21, 1976.

HON. PATRICIA SCHROEDER,
*Subcommittee on Census and Population, House Committee on Post Office and
 Civil Service, Washington, D.C.*

DEAR MS. SCHROEDER: The purpose of this letter is to present our views concerning the census of agriculture, which we understand is the subject of hearings this week. It will be greatly appreciated if this letter can be made a part of the hearing record.

The National Cotton Council is the central organization of the U.S. cotton industry, representing cotton growers, ginner, warehousemen, merchants, cooperatives, manufacturers, and cottonseed crushers.

The five-year censuses of the agricultural sector are extremely valuable to our industry. Nowhere else can we obtain data on a county basis on many important aspects of cotton production.

It is our belief that a full enumeration every five years of the basic data of agriculture, i.e., number of farms, production, acreage, etc., is essential for our industry, its suppliers, and government for planning purposes. It makes possible the truing-up of sampling procedures that are needed for additional information and for between-census data.

The Bureau of Census can and does use sampling procedures for some types of information it collects. We will be working with the Bureau in the area of cotton statistics to make recommendations on which items should be fully enumerated and which should be sampled, as well as on what kinds of data should be collected.

We respectfully suggest that the census remain in the Department of Commerce; that it be funded at a level adequate to get the information published on a timely basis; and that the Bureau of Census be instructed to seek the guidance of all interested farm and commodity organizations on the structure and publication.

Sincerely,

ALBERT R. RUSSELL,
Executive Vice President.

AMERICAN FARM BUREAU FEDERATION,
Washington, D.C., June 23, 1976.

HON. PATRICIA SCHROEDER,
*Chairperson, Subcommittee on Census and Population, Committee on Post Office
 and Civil Service, U.S. House of Representatives, Washington, D.C.*

DEAR MS. SCHROEDER: We appreciate the opportunity to express our views on certain aspects of the Census of Agriculture.

We understand that your current hearings are primarily concerned with proposed legislation, H.R. 12397, which would transfer the agricultural census from the Secretary of Commerce to the Secretary of Agriculture; and H.R. 11270, which would require more extensive use of sampling techniques in taking the agricultural census.

Good statistics are a valuable aid to people who need to know what is going on in the world, including Members of Congress and almost everyone else who is involved in making public or private decisions on economic matters. Most of the agricultural statistics we use—for example, current crop reports—are produced by the United States Department of Agriculture.

The Census of Agriculture makes an important contribution to the USDA's statistical program by providing benchmarks which are used in the development of national estimates from the results of relatively small sample surveys. In addition, the Census of Agriculture is practically our only source of certain types of agricultural data, including statistics for individual countries. The efficient collection of reliable agricultural census data is therefore important to Farm Bureau members.

At the present time we doubt that it would be either desirable or feasible to shift the responsibility for the agricultural census from the Secretary of Commerce to the Secretary of Agriculture. Such an integration of the staff and activities of the Census of Agriculture into the USDA's Statistical Reporting

Service appears logical at first glance; however, serious questions need to be considered. For example, what effect would the separation of the Census of Agriculture from the Census Bureau have on the coordination of agricultural data with national statistical series such as the national income accounts? Is there merit in having periodic benchmark surveys made by an agency other than SRS, since SRS is a part of a department that has operating responsibilities for farm programs? Would the burden of producing detailed county statistics impair the ability of SRS to produce high quality national estimates on a timely basis?

The second proposal on which we wish to comment is the use of sampling techniques in taking agricultural census. There have always been some complaints about the length and complexity of the Census of Agriculture questionnaires, but the number and intensity of the complaints have increased since the Census Bureau discontinued the use of enumerators. Complaints were especially numerous immediately after the 1974 census was taken early last year. This may reflect adverse reactions to big government, inflation, federal taxes, and the burdensome regulations imposed by such agencies as EPA and OSHA, as well as irritation over census questionnaires. In any case the voting delegates at the 1976 annual meeting of the American Farm Bureau Federation adopted a policy statement which says:

"We oppose wasting federal money on complicated farm census forms as presently used."

In fairness to the Census Bureau, it should be noted that:

- (1) the length of the census questionnaire is, at least in part, due to the insistence of the Department of Agriculture that certain questions be included;
- (2) individual farmers are required to answer only the questions that are applicable to their operations; and
- (3) many farmers also object to SRS questionnaires.

In view of the apparent reluctance of many farmers to fill out long, complicated questionnaires, we believe the Census Bureau should subject its procedures to a thorough review before taking another Census of Agriculture. We are confident that the burden on respondents can be reduced materially by shortening and simplifying the questionnaire and by making greater use of sampling techniques.

We are not convinced that the increased use of sampling techniques can best be achieved through a rigid Congressional mandate. Rather, it would appear better to express the sense of the Congress that the Census Bureau should implement the maximum use of sampling techniques in a manner which will not reduce the usefulness of the resulting data.

We urge your Committee to continue to study ways to obtain reliable agricultural census data in the most efficient manner.

Sincerely,

JOHN C. DATT,
Director, Washington Office.

UNIVERSITY OF MISSOURI-COLUMBIA,
Columbia, Mo., June 22, 1976.

HON. NEAL SMITH,
*U.S. House of Representatives,
Washington, D.C.*

DEAR MR. SMITH: This relates to H.R. 12397, and I ask that it be presented for the hearing record. My comments relate to the second part providing for transfer of the agricultural census to the Statistical Reporting Service.

Such a transfer would be desirable, for two important reasons. One is that the census of agriculture has been low caste within the Census Bureau and is not handled with the dispatch and efficiency that are necessary. The second reason is the unnecessary duplication of staff and expertise when two agencies engage in compiling basic statistics of agriculture. Moreover, the periodicity of the agricultural census interferes with best management within the Census Bureau. If equivalent responsibilities were shifted to SRS the entire reporting procedure would be a continuously ongoing operation.

I nevertheless must add a major caveat. The legal provision for transfer should, in my judgment, retain some of the mandatory authority that has long been a part of the law establishing a census. In particular, it should be applied to reporting by all large producing or distributing units.

The principle is old and established that certain basic reporting about the body politic including economic matters should be obligatory. It should not be abandoned. Trends in the make-up of agriculture and its markets make that principle even more important now than formerly. Some enterprises are dominated by a relatively few firms. For them must complete rather than sample enumeration be practiced, as any substantial non-reporting would invalidate the entire reporting. For small units, on the other hand, voluntary sample surveys will be adequate.

It is essential for today's trade and commerce that reliable statistical data be collected and published. We cannot afford to let the compilation of those data be jeopardized by the non-cooperativeness of a few large firms.

Respectfully yours,

HAROLD F. BREITMYER,

Perry Foundation Professor of Agricultural Economics.

STATEMENT OF L. C. "CLELL" CARPENTER, MIDCONTINENT FARMERS ASSOCIATION, COLUMBIA, MISSOURI

Madame Chairman and Members of the Committee, I am L. C. "Clell" Carpenter, Vice President of Midcontinent Farmers Association, headquartered in Columbia, Missouri. MFA is a farm organization representing over 162,000 farmers in the midcentral United States.

We appreciate your holding these hearings on a subject of vital concern to farmers and the Nation—the agricultural census. With assets of \$600 billion, agriculture is the Nation's largest industry. One of every four persons in private employment works in a job related to agriculture. Therefore, the welfare of the farm sector is of prime concern to a much broader segment of our society than only farmers.

Because change is continually occurring in agriculture, it is important to measure these changes and provide updated information to farmers, to their suppliers, to local, state, and national governments, and to the general public.

The information most needed by farmers in making their short-run production plans is provided by those monthly, quarterly and annual reports now made available on a state and national basis by the Statistical Reporting Service of USDA. In contrast, the information needed by farmers, and even more so by business and governments, for long-range planning related to agriculture is the historical information provided on a local, state and national basis through the agricultural census.

Especially important is that specialized information is provided only by the agricultural census.

To illustrate—In the fall of 1973 when the OPEC imposed an oil embargo, agriculture was vitally affected. Farmers were faced with a fuel shortage, primarily because the major oil companies withdrew from the rural markets. Farmer cooperatives had to supply both their own member-patrons during a time of fuel shortage and those farmers deserted by the major oil companies.

To meet the immediate and long-range fuel needs of farmers, it was essential to know the amount of fuel they used by geographic areas. The major oil companies, naturally, did not make information available. The state agency administering the gasoline tax could not supply the information needed. The only source was the agricultural census. Our planners used the 1964 and 1969 census data to project the fuel needs of farmers during the mid-1970's.

We are anxiously waiting for the release of the 1974 farm census data to update our information on current total amounts of fuels used by farmers.

Madame Chairman, it is important to measure the increased capital intensive-ness of farming in order that adequate capital is to be available to farmers for both production and ownership loans. It is necessary to know the amount of machinery, fertilizer, pesticides, and other farm production inputs used by farmers if new plants are to be planned and built when and where needed to meet expanded needs of farmers.

For example, during the past decade many thousands of acres of our forest lands have been converted to pasture. If we are to meet the long-range needs of the farmers involved, we must know the number of acres converted and the amount of fertilizer and seeds used on these new pastures.

The 1974 farm census, when finally released, will be the best source of information available for our assessing the ever-changing situations within agriculture.

It is also important to have an update on social and economic data of the farm sector such as the age of farmers, sources of income of farmers, and the amount of land in production. Only then can proper economic and social planning be accomplished.

It must be remembered that the agricultural census information needed by private industry and government is provided by farmers. If farmers are to provide the information needed primarily by others it is essential that they have an input in how and when the information is to be collected.

We see several problems with the collection and dissemination of the census data as now done by the Commerce Department.

Foremost among these is that the questionnaire is too complex and burdensome to be handled by mail. Until the 1969 agricultural census, the information was gathered through personal interviews.

The questionnaire is far more complex than the Internal Revenue Service forms. It requires searching past records on production, expenses, inputs and income in order to complete the 38 sections, with over 250 questions plus sub-questions, and over 1500 spaces for answers. Of course, most farmers did not have to fill in a majority of the spaces, but considerable time had to be spent in deciding which ones to answer and which ones to pass. The Office of Management and Budget has estimated that the 1974 agricultural census form was five times more burdensome for farmers to complete than all USDA forms completed during the year.

A second major problem is the incompleteness of the farm census returns. Due to the difficulty of responding to the questionnaire, many farmers failed to complete them, in spite of their being required by law to do so. It has been estimated that the 1974 agricultural census had a much poorer rating of completeness than the 1969 census.

Prior to 1969, the agricultural census was used to measure the accuracy of the figures arrived at by SRS through probability sampling. Now SRS figures are used to measure the incompleteness of the census figures.

A third problem farmers, agribusinesses and government agencies have with the agricultural census is the long delay between collection of data and publication of findings. We have not received even preliminary figures, yet we know there has been a change in the cattle cycle since the data was gathered.

Because of the importance of the agricultural census to farmers, agribusinesses, and governmental agencies, and because of the deficiencies in the present census collection system, we propose several improvements. H.R. 12397 provides for several improvements which we support. But it does not go far enough. We propose the following:

The present definition of farms and the same statistical classification of farms in effect on January 1, 1975, should be continued

A primary function of the census is to provide facts useful for comparison. Changing the farm definition or classification would weaken the usefulness of the information for determining agricultural trends.

The farm census information should be collected by probability sampling

A major complaint by farmers against the census is its complexity and the time involved in completing the census form. By using a probability sampling, many farmers would be relieved of providing the information. Yet the reliability of the data would not be less than under the present system where 20% of the farmers do not complete the questionnaire.

Having a smaller number of respondents would enhance reducing the time required to analyze and publish the farm census data.

Because of the importance of having data on a county basis, it is necessary to have a large enough sample within each county to assure the reliability of county data. Therefore, we believe that at least 200 samples per county should be taken. Overall the sample would comprise 25% of the total. In a state such as Missouri, which has a large number of small family farms, the 200 per county would be considerably below 25% of the total. An individual farmer's chances of being included in the farm census would be reduced from the present once every five years to about once every twenty years.

The collection of sampling should be by personal interview rather than by mail

As stated above, the census form is difficult and time-consuming for farmers to complete. Computing the answers to some questions is an almost impossible task. Computing the number of acre feet of water used in irrigation serves as an example of the difficulties involved.

Yet, for the census to be of value, it must be comprehensive. Having enumerators to personally interview each respondent would make the task much easier for the farmers involved. It should increase the accuracy of the replies.

The mandatory requirement for completing the farm census reports should be deleted for individual and family farmers, but should be continued for corporate farms

Such a change would be in keeping with recent farm corporation reporting requirements enacted by the legislatures of Missouri and many other states.

Also the importance of a few large feedlots to the total beef produced is such that without their cooperation, a true picture would not be obtained. The same is true of other large producers. We have one large hog producer in Southwest Missouri whose output is such that if he is missed, reliable hog figures could not be given for either the county where located or for the State.

The responsibility for collecting the farm census should be transferred from the Department of Commerce to the U.S. Department of Agriculture

USDA already collects much of the data included in the agricultural census. It has enumerators who understand farmers and farm problems now securing data through personal interview. In fact, many of our farm members requested the assistance of SRS enumerators in completing their 1974 farm census form. This indicates the rapport such enumerators have with farmers. SRS also has a complete and current list of farmers by state. Such lists would prevent the kind of mistakes made by the Census Bureau when it missed thousands of farmers for the 1974 farm census who had completed the 1969 census and who were still farming in 1974.

Although we believe USDA is best suited and equipped to make the farm census, farmers are not concerned over which administrative agency secures the needed information. If the provisions called for above are enacted into law, farmers are willing for Congress to decide which agency is best suited to make the farm census.

USDA should not have authority to secure access to or examine Federal income tax returns in order to make their farm census records more complete

We would go beyond this provision called for by H.R. 12397 and extend it to eliminate the present authority of the Census Bureau to have access to IRS records.

Madame Chairman, we believe that most complaints of farmers concerning the farm census will be eliminated if provisions of H.R. 12397, plus others set out in this testimony are incorporated into law.

Thank you for the opportunity of making the views of farmers known to your committee.

STATEMENT BY F. H. SCARBOROUGH, JR., PRESIDENT, NATIONAL ASSOCIATION OF AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE COUNTY EMPLOYEES—(NASCOE)

I am F. H. Scarborough, Jr., Lowndes-Echols County ASCS Executive Director, Valdosta, Georgia, and President of the National Association of ASCS County Employees.

The National Association of Agricultural Stabilization and Conservation Service Employees, commonly called NASCOE, is a voluntary organization of County Agricultural Stabilization and Conservation Service Employees—hereafter referred to as ASCS employees. Approximately 98% of the 8,618 ASCS employees are members of NASCOE from nearly every county in the United States.

County ASCS Employees are employed by County ASCS committees established pursuant to Section 8(b) of the Soil and Domestic Allotment Act (as amended).

ASC Committees and their staffs administer Federal programs assigned to them by the Congress, Secretary of Agriculture, Executive Order, et cetera.

Programs administered include but are not limited to: Marketing Quotas (tobacco and peanuts); Price Support; Cropland Adjustment; Wool Incentives; Agricultural Conservation; Forestry Incentives; Bee and Dairy Indemnity Feed Grain, Wheat and Cotton, including disaster provisions, et cetera as well as assisting other agencies upon specific request such as the Bureau of Census and Federal Crop Insurance Corporation.

NASCOE supports legislation to transfer census functions from the Department of Commerce to the Department of Agriculture and respectively request these functions be assigned to the County Agricultural Stabilization and Conservation Service (ASC) Committees. County ASC Committees and their staffs have direct contact with farmers of the nation in administering Federal farm programs; therefore, it appears assignment to ASC Committees would be logical and definitely more economical than assignment to some other agency.

In explaining the above statement we also would like to bring to your attention some other aspects of the capabilities of County ASC Committees in regard to related items.

County ASC Committees have competent staffed offices in practically every county of the U.S. Practically all farmers visit county ASCS offices several times a year in relationship to various farm programs administered by ASC Committees.

County committee offices presently have available numerous farm records including size of farms, cropland, farm allotments, etc. These farm records basically include all farms. These offices under provisions of other programs obtain acreage reports and production for some crops. Exhibit 1 reveals a copy of farm record cards presently maintained.¹ Offices could easily obtain additional data needed for farm census in their normal routine contact with farmers. Farmers have trust in ASC Committees based on previous experience and would make necessary reports for farm census without objection.

Additional administrative cost for County ASC Committees to obtain census or related information would be nominal as offices are already staffed with adequate office space, equipment, maintaining various farm records and have automatic mailing equipment when the necessity arises to write farmers.

ASCS offices presently are assisting the Department of Commerce with census problem cases. Generally, every problem arising in which the Department of Commerce seeks assistance from ASCS can be solved from records already available in County ASCS Offices.

May we again suggest census functions be assigned to County ASC Committees and these functions be on a continuing basis and not at five year intervals. In our opinion maintaining records on a continuing basis would be more feasible and the cost negligible. Information could be stored in computers and desired factual information could be obtained at any time. If ASCS was designated to maintain necessary farm data for the census other benefits could be derived from these records. These benefits would be factual reports of plantings and production of crops. This information could be obtained instantly if it was stored in computers. ASCS has computer capabilities and experience therefore this would create no problem.

In conclusion, NASCOE respectively requests serious consideration be given to assigning to County ASC Committees and their staffs the responsibility of maintaining information on a current basis for a farm census as well as maintaining on a current basis other information needed for acreage of crops planted, production, etc.

County Committees as well as Community Committees elected by the farmers of each county along with experienced and competent office staffs would welcome this challenge and would provide current and factual information on a timely basis with very little additional cost to the Government.

In the event the transfer of the farm census function from the Department of Commerce to the Department of Agriculture is not consummated, NASCOE would support a position whereby the assignment, of the farm census function to the County ASC Committees and staff, by the Department of Commerce, would be made.

Exactly how this would be accomplished is not known, but the same facilities, capabilities and network are available to obtain and dispense the desired information.

We appreciate the opportunity to present our ideas on this subject. We would be pleased to attempt to answer any questions.

¹ Retained in files of the subcommittee.

94TH CONGRESS
1ST SESSION

H. R. 11048

IN THE HOUSE OF REPRESENTATIVES

DECEMBER 8, 1975

Mr. NOLAN introduced the following bill; which was referred to the Committee on Post Office and Civil Service

A BILL

To amend title 13, United States Code, to require the Secretary of Commerce to use sampling methods in taking agricultural censuses.

- 1 *Be it enacted by the Senate and House of Representa-*
- 2 *tives of the United States of America in Congress assembled,*
- 3 That (a) section 142 (a) of title 13, United States Code, is
- 4 amended by inserting "(1)" immediately after "(a)" and
- 5 by adding at the end thereof the following new sentence:
- 6 "Except as provided in paragraph (2), the Secretary shall
- 7 use the statistical method known as 'sampling' in taking any
- 8 census of agriculture under this subsection."

1 (b) Section 142 (a) of title 12, United States Code, as
2 amended by subsection (a), is amended by adding at the end
3 thereof the following new paragraph:

4 “(2) The Secretary may use any method he considers
5 appropriate to collect information relating to the classifica-
6 tion of farms if he determines that the statistical method
7 known as ‘sampling’ is not appropriate for the collection of
8 such information, except that the Secretary, in collecting such
9 information (A) shall seek to reduce the time necessary to
10 respond to the census questions involved; and (B) shall not
11 use any method which imposes unnecessary requirements
12 upon persons responding to such questions.”.

13 SEC. 2. The amendments made by the first section of
14 this Act shall apply to any census of agriculture taken by
15 the Secretary of Commerce under section 142 (a) of title 13,
16 United States Code, after the date of the enactment of this
17 Act.

94TH CONGRESS
2D SESSION

H. R. 12397

IN THE HOUSE OF REPRESENTATIVES

MARCH 9, 1976

Mr. SMITH of Iowa introduced the following bill; which was referred jointly to the Committees on Post Office and Civil Service and Agriculture

A BILL

To amend section 142 of title 13 and section 411 (a) of title 7, United States Code, to prevent a change in the definition of a farm prior to June 30, 1976, to relieve the Secretary of Commerce of the responsibility for taking censuses of agriculture every fifth year, and require the Secretary of Agriculture to collect comparable information using sampling methods.

- 1 *Be it enacted by the Senate and House of Representa-*
- 2 *tives of the United States of America in Congress assembled,*
- 3 That section 142 of title 13, United States Code, is repealed
- 4 and replaced by the following paragraph, "The Secretary
- 5 shall continue the statistical classification of farms in effect
- 6 on January 1, 1975, with respect to censuses taken under
- 7 section 142 of title 13, United States Code, effective through

I

1 June 30, 1976, and any statistical report issued on or before
 2 June 30, 1976, with respect to any such census shall reflect
 3 such classification, but may also include additional classifica-
 4 tions as deemed appropriate by the Secretary”.

5 SEC. 2. That section 411 (a) of title 7 is amended by
 6 inserting “(a)” immediately before “The” and insert the
 7 following new paragraphs:

8 “(b) (1) The Secretary of Agriculture also shall collect
 9 information on agriculture, irrigation, and drainage, on a
 10 sample basis, comparable to the information previously col-
 11 lected every five years in the census of agriculture.

12 “(2) If the Secretary determines that the statistical
 13 method known as ‘sampling’ is not appropriate for the col-
 14 lection of information relating to the classification of farms,
 15 he may use another method to collect such information:

16 *Provided*, That in collecting such information, the Secretary
 17 (A) shall seek to reduce the time necessary to respond to
 18 the questions involved; and (B) shall not use any method
 19 which imposes unnecessary requirements upon persons re-
 20 sponding to such questions: *Provided further*, That the
 21 authority contained herein shall not constitute authority to
 22 secure access to or examine Federal income tax returns.”.

Frank Horton, Chairman
 Thomas J. McIntyre, Co-Chairman
 Mark Littler, Vice Chairman
 Donald C. Alexander
 Gil Barrett
 Robert D. Benton
 Otis R. Bowen

COMMISSION ON FEDERAL PAPERWORK
 1111 TWENTIETH STREET, N.W.
 WASHINGTON, D. C. 20532

Bill Brock
 Bruce G. Fielding
 Louis B. Knecht
 James T. Lynn
 Esther Peterson
 Elmer B. Staats
 Tom Steed

The Honorable Patricia Schroeder
 Chairwoman
 Subcommittee on Census and Population
 House of Representatives
 Washington, DC 20515

Dear Ms. Schroeder:

I appreciate very much this opportunity to comment on behalf of the Commission on Federal Paperwork on some of the issues which have been raised regarding the conduct of the Census of Agriculture during your Subcommittee's consideration of H.R. 12397.

As you know, the primary purpose of the Commission on Federal Paperwork is to find ways to minimize the burden imposed by Federal reporting requirements on private citizens while at the same time assuring that necessary information is made available to Federal officials in order to set policy and operate Federal programs. Our comments, therefore, are directed to these aspects of the questions before your Committee.

This Commission, during the course of its hearings around the country, has received a number of serious complaints about the burden imposed upon farmers by requests for information from Federal agencies, and specifically, about the Census of Agriculture. Farmers are genuinely disturbed. Vigorous measures need to be taken now, as planning for the 1978 Census is beginning, to reduce the burden of paperwork and make this Census more timely and effective. Specifically, witnesses testifying before the Commission on Federal Paperwork stated that the forms used in the 1974 Census of Agriculture were too long--some 20 pages--and too complicated; that the coverage was incomplete, missing substantial number of farms, especially small farms; that there appeared to be duplication and lack of coordination between the data collection by the Census of Agriculture and the Department of Agriculture; and that the results of the Census were so long delayed in publication as to be of limited use for some purposes. The first publications from the 1974 Census were issued only in May 1976. We understand that some inquiries were still being sent to farmers this spring to obtain or verify data for that Census.

The Commission on Federal Paperwork proposes to work actively with the Bureau of the Census and the Department of Agriculture in helping to develop plans which will avoid some of the difficulties of earlier Censuses of Agriculture.

As the Director of the Census has testified, many of these problems arose because of the long delay in the decision to take the Census of Agriculture for 1974, leaving inadequate time for planning and organization. Now there is time to plan. The Bureau of the Census is well aware of these problems. As is its usual practice, it has organized a Task Force on the Census which is already at work. With this lead-time, it should be possible to perfect detailed plans which will materially reduce the burden of reporting by farmers and insure higher quality and more timely results. The Commission suggests that there be an overall target for reduction of paperwork, which will serve as a guide for a serious effort to reexamine plans and procedures.

The Census of Agriculture represents a major effort by the Government and by the farmers who provide the basic information. It deserves a high priority, which it has not always enjoyed. In 1978, it will be especially important to provide sufficient staff and resources to assure adequate pre-tests, well-designed forms and more rapid tabulation and publication of the summary results than in the Censuses of 1969 and 1974. It is essential that this next Census be demonstrably useful to those for whose benefit the information is collected, and that its results be made widely available. "Paperwork" is never justified unless it is really used.

To turn to more specific matters: There are a number of obvious suggestions for reducing respondent burden which emerge from the criticisms of recent Censuses of Agriculture received by this Commission. No doubt some are already under consideration.

The first is the redesign and simplification of the report forms. Questions which are not absolutely essential should be eliminated; wording of the questions and instructions should be clarified and made more realistic. (It would help to try them out on some "dirt farmers".)

Only the most basic information should be on the "short form". Small farmers, in particular, should be asked to

supply only a minimum of essential information. The long, formidable form used in 1974 should be broken into sections, if possible, and organized so that farmers would not have to leaf through many pages in search of the few questions which may concern them. Special subjects for which considerable detail is needed might be handled on supplementary forms to be used on a sub-sample basis.

Simple, clear forms are of the utmost importance to any inquiry made by the mail-out/mail-back method which has been used in the last two Censuses of Agriculture. The forms can be more elaborate when they are to be filled out during a personal interview by trained enumerators, who can interpret questions; but this procedure is very expensive for large scale inquiries, and cost alone limits the extent to which it can be used.

Sampling

One of the principal features of H.R. 12397 is its recommendation for the greater use of sampling techniques by the Census of Agriculture in order to reduce the reporting burden on agricultural enterprises. The Commission on Federal Paperwork strongly supports this concept. The use of sample surveys, properly designed and applied, is clearly one of the most effective means of limiting the reporting demands upon the public, as well as the cost, while at the same time obtaining excellent data. Both the Census of Agriculture and the Statistical Reporting Service of the Department of Agriculture in its current surveys, make extensive use of these techniques.

The Bureau of the Census has employed probability sampling in some phases of its Censuses for over 30 years. The Census of Agriculture is among them. There is specific legislation allowing the Secretary of Commerce to authorize the use of sampling, except, of course, in determining population for purposes of apportionment when a full count is required. Thus, no special legislation is needed to refine or extend this method, which is already in use.

The Director of the Census has outlined for your Committee some of the possibilities which are now being explored for the use of sampling in the Agricultural Census of 1978. They include the use of sampling in surveying the small farms which produce only a very limited fraction of all agricultural products, thus reducing the number of respondents; and obtaining certain specialized, detailed reports on supplemental schedules from a sub-sample of

farmers, thus reducing the length of the standard report form. While such a program might involve sacrificing county data for some items and obtaining only state-wide information, it would limit the burden on many farmers. There are other possibilities which should also be explored, and we will encourage Census to do so.

The question of the extent of basic data to be provided at the county level should be studied carefully. The Census of Agriculture, taken only every five years, has supplied the only comparable county-wide information generally available on certain aspects of agriculture. It must be recognized that valid summaries for such small areas require substantially larger samples than state-wide information. At present, the Statistical Reporting Service of the Department of Agriculture does not collect data routinely at the county level, although it has indicated that this would be possible at five year intervals with a much larger sample than it now uses. County information is used by farm service organizations, especially those which deal in farm supplies, services, and commodity marketing. It is also used extensively by state and local agencies for planning a variety of programs i.e. economic development, land use, water districts, etc.

Joint Use of Mailing Lists

There is one important possibility for reducing duplication and saving paperwork which is implicit in this discussion of the Census of Agriculture and which, in our opinion, has not been sufficiently emphasized. It is the sharing of mailing lists by the two agencies most concerned with agricultural statistics. Both the Bureau of the Census and the Statistical Reporting Service of the Department of Agriculture require very comprehensive general-purpose lists of farmers' names and addresses. They must be as complete and up-to-date as possible. The Bureau of the Census is especially dependent on lists for mailing its report forms to farmers every five years. Completeness is crucial for a mail survey, to avoid the undercount of farms, as in the past two Censuses of Agriculture.

The Department of Agriculture must also have a correct current list for conducting its sample surveys of agricultural products. These surveys are made on a continuing basis on tight timetables. With the rapid changes taking place in agriculture, the lists used by SRS must be continuously updated. Funds are now being provided especially for this purpose. Thus, both agencies are

actively building up separate mailing lists from a variety of private and public sources, as indicated in testimony before this Committee. This represents a duplication of effort. The value of a combined mailing list is obvious, and it is recognized by both agencies. There has been collaboration in developing lists in the past, but it has been a one-way street.

The Bureau of the Census, under present legislation, can not share its mailing list with the Department of Agriculture. The Bureau of the Census obtains names and addresses from IRS records under a special agreement with "stringent confidentiality restrictions." The Bureau states that Title 13 of the U.S. Code prohibits it from releasing any information, including names and addresses of any individual enterprise. The Department of Agriculture has suggested to this Committee that "some way must be found for the two agencies to cooperate within legal bounds, and at the same time protect the confidentiality of the data and the integrity of the agencies."

The Commission on Federal Paperwork's concern is to find ways to avoid this needless duplication and to build up one effective combined list which will provide a base for both the Census and the SRS.

We recognize this recommendation poses issues much broader than those relating to the Census of Agriculture. However, since work on the Census for 1978 is now beginning, it seems desirable to consider special action which will make possible a joint mailing list. Why wait another five years?

The Commission strongly recommends that a thorough examination be made of the legislative requirements for multi-agency development and joint use of these mailing lists under adequate protection of confidentiality and privacy.

Looking to the future, however, it seems clear that the rapidly changing nature of agriculture requires a broader, better integrated set of information on rural America than is now being collected on a piecemeal basis.

A proposal for a mid-decennial Census of Population in 1985 is now being considered. This appears to be an opportune time to review the entire Federal system for collection of data on agriculture and the rural population. There is time before the Decennial Census to consider a

more effective tie-in between the Censuses and the collection of current statistics on agriculture by the Statistical Reporting Service of the Department of Agriculture. It should be possible to avoid duplication and provide more meaningful data.

Mandatory Powers

Another issue before the Committee is whether the Census of Agriculture should be taken on a voluntary basis, as is proposed, or on a mandatory basis, as is now provided by law for all Censuses. The Bureau of the Census strongly supports the continuation of its present mandatory authority. It holds that its legal powers to require reports are essential to secure adequate coverage, especially when a Census is being conducted by mail, as is the Census of Agriculture. In general, the response rate for mail surveys is lower than for personal enumeration. Authority to require reports is sometimes needed to obtain information from key enterprises without which the Census count would be incomplete and misleading.

The Census' powers have rarely, if ever (to our knowledge), been used to impose penalties in the Census of Agriculture. However, references to the law in difficult cases of non-response are said to be quite persuasive. These pressures should be judiciously used and applied only as a last resort. There have been complaints from citizens about peremptory demands in follow-up communications. This should be studiously avoided.

The issues involved in the use of mandatory powers to compel replies to Censuses extend far beyond any single Census. All Censuses have this authority. The Commission on Federal Paperwork believes that the approach to these issues should be a broad one: to deal with this question on a fragmentary basis could have an adverse effect on all Census operations. It is suggested, therefore, that this particular authority remain unchanged at this time.

Definition of a "Farm"

The possible redefinition of a "farm" for statistical purposes is also under consideration by your Committee. The issue is whether a "farm" should continue to be defined as an enterprise with a minimum of \$250 in annual sales of agricultural products, as at present, or with a minimum of \$1,000, as proposed. The Census Bureau is now

tabulating and issuing the results of the Census of 1974 on the old basis (\$250) which has been in effect since 1959. P.L. 94-229 required that this definition not be changed prior to June 30, 1976, and the Bureau of the Census is continuing its tabulations on that limit.

This subject merits further study in depth for 1978. Policy issues which go beyond the volume of paperwork are involved. There is no question that the use of the higher value of sales (\$1,000) would reduce the number of farmers who would be asked to fill out detailed Census questionnaires. Based on the 1969 Census of Agriculture, the proposed minimum of \$1,000 would reduce the number of farms by 20.9 percent and the total value of products by 0.5 percent, according to the Census Bureau. In 1974, at the higher prices prevailing than in 1969, the number of farms would no doubt be even smaller.

However, a comprehensive overall mailing list of farmers who would have to be polled on a basic Census schedule in order to be sure to find the "farms" which fall above the set minimum. The list eligible to be counted will vary from year to year, depending on weather, crops and prices.

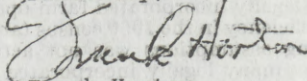
The Commission urges that a realistic, but workable, definition be adopted after all the various uses of data on size of farms have been explored.

We recognize that there are many difficult issues involved in securing adequate and timely data through the Census of Agriculture, but these issues must be addressed. The Commission on Federal Paperwork has received full cooperation from both the Bureau of the Census and the Department of Agriculture in its consideration of these questions.

We believe that the solutions toward which they are working should lead to a substantial reduction in the burden of the Census of Agriculture.

We congratulate you and the members of your Subcommittee for your concern and your sustained interest in these issues.

Sincerely,



Frank Horton
Chairman

PREPARED STATEMENT OF DR. RICHARD D. RODEFELD, ASSISTANT PROFESSOR
DEPARTMENT OF SOCIOLOGY, MICHIGAN STATE UNIVERSITY; EAST LANSING,
MICH.

THE ASSESSMENT OF FARM (OPERATING UNIT) AND FARM OPERATOR CHARACTERISTICS BY THE U.S. CENSUS OF AGRICULTURE: SHORTCOMINGS AND PROCEDURES FOR THEIR ALLEVIATION

The Census of Agriculture clearly is the most comprehensive and definitive source of information on the past, present and changing characteristics of U.S. farms. This is true for the country as a whole, multi-state regions, individual states and counties within states. Because of its widespread use by societal members, those with interests in the farm sector (academicians, policy-makers, journalists, farmers, farm organizations, the business sector, etc.) it is important any major shortcomings in the data are identified and, if possible, eliminated.

In this paper, ten major shortcomings in the assessment of U.S. farm structural characteristics will be discussed. Alterations in Census content and procedure which would eliminate or diminish these shortcomings will be suggested. If these alterations are adopted, the meaningfulness, accuracy, definitiveness and utility of Census information should be increased considerably. The farm structural characteristics which will be discussed are: land ownership, nonland resource ownership, management, labor, the interrelationships of the preceding factors, legal organization, changes in the numbers and relative status of farm structural types (family, nonfamily, corporate-industrial, etc.) and concentration levels. Neither the identification of shortcomings nor the suggested alterations are viewed as definitive by the author, rather, the view is that of an initial foray into a very complicated area.

(1) *Information collected and reported on the legal organization of farm operating units is inadequate*

In recent years there has been a good deal of concern about the movement into farming of non-family and/or non-farm based corporations. Some have equated the "corporate farm" problem with these types of corporations. Prior to 1969 little information was available to determine the extent of change in the numbers and relative significance of such corporations. In 1969 the Census of Agriculture began collecting information on the legal organization of farm operating units. Farm operators were asked if their operation was organized as a: sole proprietorship, partnership, corporation or "other" (none of the preceding). If the farm was legally incorporated the respondent was asked to indicate whether there were 10 or fewer shareholders or more than 10 shareholders in the corporation.

The dominant assumptions in interpreting the replies to these questions were that all or most of the corporations with 10 or fewer shareholders were family-owned, farm-based operations which had incorporated for tax advantages and/or to facilitate inter-generational transfer of the farm operation. Farming corporations with more than 10 shareholders, on the other hand, were viewed entirely or largely as nonfamily-owned and nonfarm-based. If a "corporate farm" problem existed it was thought to be restricted to these latter farm types. In 1974, the Census of Agriculture once again obtained information on the legal organization of farm operating units. No information was obtained, however, on the number of shareholders in farming corporations. This information was obtained in a later survey of legally incorporated farm operations.

The major deficiency in the 1969 census (and possibly 1974) was that the validity of the preceding assumptions was not actually determined. We do not know definitively how many legally incorporated farm operations were either family-owned or farm-based. The fact that a farming corporation has 10 or fewer shareholders does not necessarily indicate that one individual or family holds all (or a majority) of the stock in the corporation. Ten or fewer unrelated individuals, none of whom holds a majority of the stock, may hold the stock in the corporation. Furthermore, the existence of more than 10 shareholders does not preclude a majority of the stock being held by an individual or family. Also, the holding of all or a majority of the corporation's stock by an individual or family (or ownership by a sole proprietor or partnership) does not guarantee the operation has farm-based owners. The individual or family holding the stock (or owning the sole proprietorship or partnership) may reside in a distant urban center and have a full-time nonfarm occupation. The farm may be operated on a daily basis by hired non-owning managers and workers.

Whether farming corporations are family- or nonfamily-owned and whether they have farm- or nonfarm-based owners, have sufficient importance to merit direct assessment. Two questions which would provide this information for farms organized as corporations are:

(a) Does any one individual or family (group of individuals related by blood or marriage) own (hold title) more than half of the stock in this corporation? — No. (Nonfamily-owned.) — Yes. (Individual- or family-owned.)

If yes (b) Does this individual or family manage the operation of this farm on a daily basis? — No. (Major shareholder is nonfarm-based.) — Yes. (Major shareholder is farm-based.)

(2) *The present definition of a "farm operator" and the classification of farms by the tenure of their operator are not consistent with those prior to 1969, and are misleading and logically inconsistent*

Prior to 1969 a farm operator was defined by the Census as that individual "managing (directing) farm production activities on a daily basis".¹ Census forms were sent to all such individuals who then provided information on themselves and the units they managed. Among the information obtained was the number of acres owned, rented, or worked on shares. Operators who received a salary for managing the daily production activities were identified.

The present enumeration and classification of farm operators is misleading because a change in the definition of farm operator for the 1969 Census has had major consequences for classification of operators by tenure. Some individuals are now classified as farm operators who would not have been classified as such before 1969; and, some individuals who were previously classified as farm operators no longer are. Valid comparisons can no longer be made in the characteristics of pre-1969 and post-1968 operators.

Prior to 1969, a farm operator was defined as "a person * * * either doing the (farm) work himself or directly supervising the (farm) work." Thus, the basic unit of enumeration was the farm operational manager, i.e., the person deciding on a daily basis who did what, when, where and how. Census forms were sent to these individuals who then provided requested information about themselves and the farm units they managed.

In 1969, the definition of a farm operator was changed to "the person in charge of the farm or ranch operation." If being "in charge" had been defined as "directing farm production activities on a daily basis," there would have been no contradiction or difference between the two definitions of a farm operator. This was not the case, however. Beginning in 1969, hired farm managers were no longer enumerated or classified as "farm operators." Instead, it appears that the employers of these managers were enumerated and classified as farm operators, i.e., the persons in charge. This suggests the Census changed its definition of being in charge from "managing the farm on a daily basis" to "possessing the authority to control and direct both the organization and operation of farm production units by virtue of either business (sole proprietorship, partnership, corporation, other) ownership or delegation of authority from the owners." Thus, in 1969, the basic unit in the enumeration of farm operators was changed from the farm operational manager to the farm business owner (proprietor, partner, shareholder) or the person making all or most of the farm organizational² decisions [the business-owner or employee who manages with authority delegated from the owner(s)].

In either case, the universe of farm operators prior to 1969 is different from those in 1969 and 1974. The major difference is that some farm business owners or their agents are now classified as farm operators even though they do not reside on the farm (absentee and/or nonfarm resident) nor manage it on a daily basis. On the other hand, hired farm managers who were classified as farm operators prior to 1969, no longer are.

It also appears business owners (or their agents) may now be classified as farm operators even though they make few or none of the farm organizational decisions. This type of decision-making, can, of course, be delegated (as with operational decision-making) to other employees of the business. Business owners (or their agents) with low levels of involvement in organizational decision-making may presently be classified as "operators" since there is no indication the Census is asking

¹ Unless otherwise specified, all quotes and data requiring reference notations have been taken from either Rodefeld, R. D., 1973; or Rodefeld, R. D., 1975.

² Organizational decisions consists of those concerned with the specification (magnitude, quality, types) and acquisition (where, what price, when) of production inputs (land, nonland resources, management, labor) and the disposition of farm output (where to sell, at what price, when, how much).

questions which allow a distinction between these owners and/or agents and those who have high levels of involvement. The question could be raised of whether it is meaningful to classify individuals as farm operators, i.e., in charge, if they made few or none of either the operational or organizational decisions.

The classification of farm operators by their tenure status (full owner, part owner, hired manager, tenant) has also been altered. First, the hired manager category was eliminated in 1969 (since hired managers no longer qualified as farm operators). Secondly, the meaning of the remaining categories has been changed. For instance, prior to 1969, individuals classified as "full owner operators" not only owned all the land in the operation—they also managed the farm on a daily basis. While those individuals presently classified as "full owner operators" still own all the land in the operation, they do not necessarily manage the farm on a daily basis. The same is true for individuals presently classified as part owner and tenant operators.

Another, possibly major, inadequacy is excessive variability in the characteristics of individuals presently enumerated and classified as farm operators. The Census has not explicitly stated its criteria for determining who is "in charge" of the farm operation. While the farm operator category contains individuals who are operational managers, clearly, it is not restricted to this group (since hired managers have been excluded). Nor is it restricted to the owners (proprietors, partners, shareholders) of farm businesses (sole proprietorships, partnerships, corporations). The business owner is not necessarily the person "in charge" since this authority can be delegated to others.

Also, not all farm businesses are owned in their entirety or in the majority by a single individual (or family). Many corporations, for instance, have no individual or family who owns a majority of the shares. This being the case, there would be no one owner who would qualify as the person "in charge" or as the "farm operator." The latter situation suggests that nonowners (or minority owners) to whom the authority has been delegated to make operational and organizational decisions are also classified as "farm operators" (in addition to business owners who are actually making organizational decisions). This could be the same individual that manages the farm on a daily basis (hired manager) or it could be someone in the higher echelons of the farm business. Considerable variability is likely to exist among individuals presently (proprietor, partner, shareholder, corporate officer, hired employee) but also in their involvement in the making of farm operational and organizational decisions (all—none). This is likely because the Census has not explicitly defined the meaning of being "in charge" nor has it systematically screened those individuals contacted to insure minimal criteria were met.

Information presently reported on farm operators is also incomplete. Specifically, individuals who indicated they were operators of farming corporations were directed to skip fourteen questions on farm operator characteristics. Operators of sole proprietorships and partnerships, on the other hand, were required to answer these questions. This is a curious situation since if the Census definition of an operator is applicable across all types of farms then there is no clear reason why this information was not obtained.³ If for some reason it didn't make sense to collect this information from the operators of farm corporations, either the conceptual or operational definition of a farm operator, or both, are in need of modification.

Perhaps the easiest solution to the preceding problems would be to define a farm operator once again as the individual managing all or most of the farm production activities on a daily basis. While this approach undoubtedly has shortcomings, it seems to present many fewer problems than the present approach. If the Census is interested in obtaining information on the farm business owners, organizational decision-makers or both, it is likely operational managers can provide this information. They are also likely to provide more accurate and complete information on the characteristics of the farm operating unit than either owners and/or organizational managers who do not reside on the farm. Also, it should be easier to identify individuals managing farms on a daily basis than those individuals who are "in charge" of the farm operation.

If the present approach is retained, the following is suggested. Firstly, explicit conceptual and operational definitions of being "in charge" should be provided. Secondly, screening procedures should be adopted which would insure the enumeration of qualified individuals. Thirdly, it should be made more clear to the users of Census data that the definition of a farm operator is markedly dif-

³ Comparable farm operator information was not obtained in the later survey of farming corporations referred to earlier.

ferent from that employed prior to 1969. The major differences and their implications should be pointed out. Fourthly, farm businesses operated on a daily basis by hired, non-owning managers should be identified. If this alone was done, farms and farm operators could be classified in tenure categories consistent with those prior to 1969. Fifthly, personal characteristics should be obtained for the operator of each farm. If this information was also obtained for hired, nonowning managers, longitudinal integrity could be restored to the characteristics of farm operators.

(3) *The present classification of farms into tenure categories is misleading and provides much less information on the interrelationships of ownership and daily farm management by individuals*

Prior to 1969 one of the most useful and insightful classifications of farms by the Census was that based on the land tenure status of their operator (person managing on a daily basis). This classification was based on the number of acres in the operation owned and rented by the operator; the type of rental agreement (cash, livestock-share, crop-share or various combinations); or, if the operator received a salary for managing the farm on a daily basis. On the basis of this information it was possible to classify all farms in terms of both the tenure status of their operator and the percentage of land owned by the operator: full owner operated (100 percent of land owned); part owner operated (1-99 percent owned, remainder rented); hired manager operated (zero percent of land owned, salaried); and, tenant (zero percent of land owned, all rented). This latter category was further subdivided according to the type of rent paid—cash, livestock-share, crop-share or various combinations. Farms have been consistently classified on this basis since the early 1900's. As a result, the classification has provided valuable information and insights into changes occurring in the land ownership and management structure of U.S. farms.

While farms are still classified by the census as full owner-, part owner- and tenant-operated (by type of rental agreement) this classification system and its constituent categories are no longer equivalent to those reported prior to 1969. Since 1969 farms have been classified on the basis of acres owned and rented by the farm business unit (sole proprietorship, partnership, corporation, other) rather than the acres owned and rented by the farm operator (person managing the farm on a daily basis) and/or the type of farm operator. The nature of the change is illustrated by the fact that since 1969 corporations have been classified in tenure categories on the basis of acres owned and rented by the corporation (full owner-operated—all land owned by corporation; part owner operated—some land owned, some rented by corporation; tenant operated—all land rented by corporation) not by the acres owned and rented by the farm operator (either the individual managing on a daily basis or the person in charge). The major consequence of this change in the definitional base of farms classified by tenure have been as follows:

First, the hired manager operated category was eliminated from the classification system. In 1969 farms which previously would have been classified as "hired manager" operated were classified in the three remaining categories according to the number of acres owned and rented by the businesses employing the managers. Thus, beginning in 1969, large absentee-owned farms (both corporate and non-corporate) with hired, nonowning managers and workers were classified as full owner-, part owner- and tenant-operated depending on the acreage owned and rented by the farm business.

One immediate result of these reclassifications was a dramatic increase in the percentage of total farm numbers and acreage associated with farms classified as owner operated (full and part) from 1964 to 1969. In 1964, owner-operated farms accounted for 82.4% of all farms and 76.7% of all land in farms. In 1969, these percentages rose to 88.1% and 86.9%, respectively. Since family farms have commonly been defined, wholly or in part, as owner-operated farms, these percentage changes would appear to indicate an increase in the relative status of family farms from 1964 to 1969. Such an interpretation may be the reverse of what actually occurred. Farms actually owned (fully or partly) by the individuals managing them on a daily basis may have declined over this period. The appearance of growth may have occurred for no other reason than the inclusion of hired manager farms with absentee and/or nonresident farm owners in these categories in 1969.

Secondly, it is no longer possible to determine solely from the land tenure classification of farms the number and characteristics of those farms actually managed on a daily basis by their landowners and/or renters and those which are not. Prior to 1969, the latter type of farm consisted of hired manager operated

farms. The former types consisted of those classified as full owner-, part owner- and tenant-operated. These distinctions can no longer be made since farms which are not managed by their owners or renters are not classified with those that are.

Thirdly, it is no longer possible to determine definitively from the land tenure classification who is managing farms on a daily basis. Farms presently classified in the full owner operated category, for instance, now contain the following types of farm businesses and operators:

(a) all the land is owned by a sole proprietorship and the proprietor manages the farm on a daily basis;

(b) all the land is owned by a sole proprietorship but the farm is managed on a daily basis by a hired employee;

(c) all the land is owned by a partnership but is managed on a daily basis by a hired employee; and

(d) all the land is owned by a corporation (family or nonfamily) but is managed by a hired employee.

The point is that the classification of a farm as full-owner-, part-owner-, or tenant-operated, no longer means the farm is being managed on a daily basis by a full owner, part owner or tenant, respectively. Farms presently managed on a daily basis by hired, nonowning business employees are now included in these categories as well.

Fourthly, it is no longer possible to determine the number and characteristics of farm operating units with absentee and/or nonfarm (resident) land owners solely from the tenure classification of farms. Prior to 1969, this could be determined quite easily by summing the numbers and characteristics of hired manager- and tenant-operated farms. Since farms with absentee and/or nonresident land owners are now classified in the full- and part-owner operated categories, however, the previous aggregations are no longer possible.

Fifthly, the tenure classification of farms was one of the major means of assessing changes in the number and relative status of "nonfamily" and "family" farms. The classification is no longer adequate for this purpose. It has been argued and evidence exists showing major increases have occurred in the number and acreages of large farms, with absentee and/or nonresident owners, and hired non-owning managers and workers. This is one way of defining a "corporate" or "industrial-type" farm in structural terms. Prior to 1969, all such farms were classified in the "hired manager" tenure category. As a result, it was possible to measure changes in the number and relative status of these farms. By eliminating hired manager operated farms from the tenure classification in 1969 the best single means of assessing change in "corporate or industrial type" farms was also eliminated.

The ability to assess changes in the characteristics and relative status of "family type" farms has also been diminished. A structural requirement in some definitions of a "family" farm is that the person managing the farm on a daily basis owns all or some of the land operated. Prior to 1969, the number, characteristics, relative status, and change in the status of such farms were obtained by summing the full and part owner operated tenure categories of farms. This procedure is no longer valid, however, since an unknown number of full and part owner operated farms in 1969 and 1974 had daily managers (hired) who owned none of the land in the farm operation.

Two approaches can be followed in alleviating the previously enumerated problems. First, the Census could re-institute the pre-1969 definition of a farm operator, i.e., the person managing farm production activities on a daily basis (as suggested in No. 2). This would entail screening recipients of the Census forms to insure operational managers received the forms; determining the number of acres in the farm operation owned and rented by these managers; determining the type of rental agreement (if renting) or if the manager was a hired employee (salaried);⁴ and classifying the farms on the basis of the pre-1969 tenure status of the farm operator. The classification of farms on the basis of acres owned and rented by the farm business need not necessarily be eliminated. Second, if a compelling rationale can be developed for the continued definition of a farm operator as the person "in charge" and the enumeration of farm business owners

⁴ If the farm or business is organized as a corporation, a determination should be made of on the extent (percent of total) of stock ownership by the individual manager [along with other family members, perhaps]. On the basis of this information and the number of acres owned and rented by the corporation, a determination could be made of the total acres owned (indirectly) by the manager allowing classification of these farms in existent tenure categories.

or their agents as operators, then, these operators should be asked the following questions:

If farm is organized as a sole proprietorship or partnership

Is this farm managed on a daily basis by: the proprietor —, one or both or partners — or by a hired, nonowning manager —?

If the farm is organized as a corporation, ask either

Is the farm managed on a daily basis by a hired, nonowning manager? — Yes.
 — No. If no, What percentage of the total stock in this corporation is held by the individual (or family) managing this farm on a daily basis? 0% —. 1-50% —. 51-99% —. 100% —.

Who manages this farm on a daily basis?

- An individual or family holding all of the stock?
- An individual or family holding a majority of the stock?
- An individual or family holding a minority of the stock?
- An individual or family holding no stock—salaried?

The major function of the preceding questions is to determine which sole proprietorships, partnerships, and corporations are managed on a daily basis by their owners and which employ hired managers. Assuming the number of owned and rented acres in the operation (by type of rental agreement) continues to be obtained, once the preceding information and the percentage of stock in corporations held by the manager is known, then farms can be classified according to the tenure status of their operator (pre-1969 definitions).

(4) Farms classified as "part-owner operated" should be subdivided into two or more separate categories according to the percentage of operated acres which are owned

"Part-owner operated" farms are those operated by an individual (or business) who owns some—but not all of the land in the operation. One of the major structural changes which has occurred in the twentieth century has been the growth of this farm type relative to those farms classified in the other tenure categories (full owner-, tenant-, and hired manager-operated). In 1935 there were approximately 690,000 part-owner operated farms. They operated 266 million acres of land (132 million owned, 134 million rented). By 1964, there were approximately 790,000 such farms operating 533 million acres of land (284 million owned, 249 million rented). While accounting for 10.1 percent of all farms and 25.2 percent of all land in farms in 1935, they accounted for 24.8 percent of the farms and 48 percent of the land in 1964. Over this time period this was the only tenure category which increased in absolute numbers.

While the Census of Agriculture has provided adequate information on the changes which have occurred in the aggregate numbers and acres owned and rented by the operators of these farms, it has not provided adequate information on the nature of these changes at the individual farm level. The problem is that great variability exists between part-owner farms in the acres and percentages of owned and rented land. Theoretically, these percentages may vary from .01 percent to 99.99 percent of the total acres operated (zero percent owned or 100 percent rented—tenant or hired manager operated; 100 percent owned or zero percent rented—full-owner operated). At the present time, two farms—one with 1 percent of the acreage owned by the operator and another with 99 percent owned are both classified in the same category of part-owner operated.

Since no distinctions have been made in the past between part-owner operated farms with different percentages of owned land, we cannot answer the following questions: Is the trend toward part-owner operated farms with high or low percentages of owned land? Is the percentage of land owned by the operator related to other farm characteristics, such as type or production, value of sales, acres operated, state and region of location, farm operator characteristics, etc.? What are the major casual forces and conditions determining the percentage of land owned (or rented) by the operator? Do farms with high and low percentages of rented acreage rent from the same sources and types of land owners? A necessary step in the direction of providing answers to these questions and a solution to the problem of excessive variability in the present part-owner operated category is to classify these farms into a larger number of more narrow categories. This can be done without collecting any additional information. The proportion or percentages of acres operated which are owned by the operator can be obtained by dividing the number of acres owned by the number of acres operated. This can be done easily for the entire U.S. with the use of a computer. After a decision has been

made on the cutting points for the possible range of scores (0.01 percent-99.99 percent) all part-owner operated farms can be classified into their appropriate categories. At a minimum, these farms should be classified into the following categories: (1) More than 50 percent-99.9 percent of the land is owned (majority landowner-operated). (2) 0.01 percent-05 percent or less of the land is owned (minority landowner-operated).

A larger number of categories may be used depending on space limitations in published reports and research objectives.

In addition to the preceding, it would be extremely useful if the tenant-operated category was subdivided more frequently in the reporting of farm characteristics according to the farm's tenure classification. At a minimum those farms rented in their entirety for cash should be distinguished from those operated on a share-livestock and share-crop basis.

If the preceding classification, tabulation and reporting changes are made, the revised tenure classification of farms would contain the following categories:

If recommended changes (Points 2 and 3) are made

- Full-owner operated (100 percent owned)
- Part-owner operated
 - Majority owner (99.9 percent-50.1 percent owned)
 - Minority owner (50 percent-0.01 percent owned)
- Non-owner operated (zero percent owned)
 - Hired manager
 - Cash rented
 - Share (or tenant) rented

If present definition of a farm operator is retained

- Full-owner operated (100 percent owned by business)
- Part-owner operated
 - Majority owner (99.9 percent-50.1 percent owned by business)
 - Minority owner (50 percent-0.01 percent owned by business)
- Non-owner operated (zero percent owned by business)
 - Cash rented
 - Share (or tenant) rented

(5) *Additional information should be obtained and reported on the characteristics of land owners who do not themselves farm the land.*

A high and increasing percentage of U.S. farm land has owners who do not manage the daily production activities carried out on the land. These nonmanaging landowners consist of those who rent their land to others and those who employ other individuals to manage and carry out production activities (hired manager farms). In 1950, 492 million acres of U.S. farm land (42.3 percent of the total) was either rented out by the owner or operated by a hired manager. These numbers increased to 507 million acres and 45.7 percent of the total in 1964. While no comparable figures are available for 1969 and 1974, the trend has likely continued.

Given the magnitude and possible significance of the preceding change, little is known about the characteristics of land owners who rent their land out or who employ hired managers. The only information presently obtained about the owners of land rented by others is their name, address, number of acres rented (to the farm operator) and the type of rental arrangement with the farm operator. Few uses have been made of either the names or addresses of the owners from whom land is rented. In addition, the total number of acres not managed on a daily basis by their owners has not been computable for either 1969 or 1974 since hired manager farms are no longer identified or classified as such by the Census.

At least four types of additional information on nonmanaging land owners should be obtained and reported from Census respondents. The following are recommended:

- (1) Type of landowner: (a) Individual or family, (b) Partnership, (c) Individual or family-owned corporation, (d) Non-family corporation.
- (2) Location of landowner: (a) On the land, (b) Not on the land, (1) In the county of land, (2) Other county in state, (3) Other state, (4) Other country.
(For all land owned by nonmanaging: individuals or families, partnerships or family owned corporations.)
- (3) Major occupation of landowner: (a) Farmer, (b) Non-farmer, (c) Retired farmer, (d) Retired non-farmer.
- (4) Relationship of farm operator (daily manager) to landowner: (a) Related by blood or marriage, (b) Not related.

In addition, as recommended earlier, farms operated on a daily basis by hired managers should be identified. In addition to obtaining the preceding information on the owners of rented land, this preceding information should also be obtained on those employers of hired managers who own some or all of the land in the operation. This could be obtained from either the hired manager or the employer (depending on who the Census forms are sent to).

If the recommended information was obtained, the following could be determined. First, since comparable types of information are presently obtained on landowners who manage farms on a daily basis, basic information on the universe of U.S. farm land owners would be available. This would include the: type of landowner, location of landowner (extent and type of absentee landownership); the major occupation of the landowner (farm-nonfarm) and the extent to which land owned by an individual or family unit is managed on a daily basis by that individual or family.

Second, if the trend toward landownership by nonmanagers continues, the acquisition of the recommended information will allow a specification of the sectors within society accounting for the increased ownership (individuals or corporations, farm or nonfarm residence, local or nonlocal, within or outside the family, farm or nonfarm occupations and businesses).

(6) *Additional information should be obtained on the size and composition of each farm's work force*

A major structural characteristic of farms is the size and composition (types of managers and workers) of its work force. These characteristics and their change have major implications for the structure and functioning of both farms and the communities within which farms are located. Evidence exists showing major changes have occurred in both the size and composition of farm work forces in recent decades.

The information which has been collected by the Census (both past and present) in this area has had major shortcomings, however. First, neither the type (relationship to landownership) or number of individuals managing farms on a daily basis has been determined. The type of manager can not be determined because individuals who do not manage farms on a daily basis are included with those that do and farms operated by hired managers are not identifiable. The number of individuals managing farms on a daily basis is not determined. Second, the number of unpaid family workers (relatives of managers and workers) is not determined. Third, the number of custom workers employed on the farm is not determined. Expenditures for custom work are included with those for machine hire. As a result, there is no way to determine if reported expenditures were for custom-work, machine hire or both.

If the type of farm manager was determined (point #2) and the preceding information was obtained, then, in conjunction with information presently obtained, the size and composition of each farm's work force could be specified. The Census presently determines the numbers of hired workers (by number of days employed) and contract workers and the total paid to these workers.

It should be pointed out that while both the Census of Population and the USDA presently determine the number of farm operators and workers, these figures are only available at the county level every 10 years and it is not possible to aggregate numbers and types of managers and workers on a farm by farm basis. Because of the latter, it is not possible to relate the size and composition of the work force to other farm characteristics at the farm level.

(7) *The relative contributions of farm managers and hired workers to the provision of farm labor should be determined*

At a minimum, farms should be classified as to whether the individual(s) managing the farm on a daily basis (along with other family members) provide more (manager-worked or family-sized) or less (nonmanager-worked or larger-than-family-sized) than half of the total farm labor.

In addition to determining the size and composition of each farm's work force a determination should also be made of the relative contributions of each occupational group to the farm's total expended labor. This determination is important for a number of reasons. Firstly, as pointed out previously, the size and composition of farm work forces and their change have been found to be highly related to the structure and functioning of both farms and rural communities. The size and composition of the farm work force and its change can be assessed empirically, of course, in either absolute (actual numbers) or relative (% of total) terms. Secondly, the greatest consensus (among academicians) about what a "family farm" is, or how

to define it, is that at a minimum, the individual managing the farm on a daily basis (along with other family members) also provides for a majority of the total physical work (labor) expended on the farm. Thus, a classification of farms on this basis provides one empirical method of assessing the past, present, and changing status of "family (sized)" and "nonfamily (larger-than-family-sized)" farms.

While the Census has never classified farms on this basis in its major publications rather conclusive empirical data exists which shows that family-sized farms are declining at a rapid rate while the reverse holds for larger-than-family-sized farms. For instance, while family-sized farms accounted for 95.5 percent of all farms and 70 percent of total farm sales in 1959 they accounted for only 94.4 percent of the farms and 62 percent of the sales in 1969. In 1930 farms with 1000 or more acres (most of which were larger-than-family-sized) accounted for 1.3 percent of all farms and 27.9 percent of the acreage in farms. By 1969, they accounted for 5.5 percent of all farms and 54.5 percent of all land in farms. Likewise, farms with sales of \$100,000 or more (most of which are larger-than-family-sized) while accounting for only 0.5 percent of all farms and 16.3 percent of the sales in 1959, accounted for 3.8 percent of all farms and 45.7 percent of farm sales in 1973. From 1959 to 1969 these farms increased 160 percent in number, while those with sales less than \$100,000 declined by 27 percent.

Information presently collected by the Census is not adequate to determine the relative contributions of managers and workers to farm labor. While farms have been classified (in special tabulations) according to the number of hired workers and expenditures for hired labor, this is not an entirely satisfactory measure of the relative contributions of managers and hired workers to the provision of farm labor. As pointed out previously, neither the number of amount of labor expended (hours) by farm managers (and other family members) or by custom workers is presently obtained by the Census. Furthermore, the information provided on hired and contract workers does not allow a definitive determination of their contributions to total farm labor. The number of hired workers is obtained but the specific number of days worked, and the number of hours worked per day is not obtained (number of workers are reported for those working: 150 days or more, 25-149 days and less than 25 days). Without this information the total number of hours worked by hired workers can not be determined. The total wages paid to these workers is reported. If the hourly wage rates are known the total number of hours worked could be determined. Given the widespread variability in hourly wages, within and between states, however, this approach may be problematic. While the Census obtains the number of contract workers employed and the total wages paid to these workers it does not obtain the number of days worked or number of hours worked per day.

Ideally, the following information would be obtained for all major classes of managers and workers: the number of individuals doing physical work; the number of days or weeks worked and the average number of hours worked per day or per week. With this information, the total number and percentage of hours worked in the year by each group could be determined. Farms could then be classified according to the percentage of total farm labor provided by either the farm manager or hired workers.

As attractive, useful and definitive as this information would be, because of its complexity and space requirements, it may be not possible to obtain in it the Census. A less definitive but adequate measure would consist of asking the respondent: What portion of the total physical work in this farm is provided by the individual managing the farm on a daily basis (including other family members)?— All.— Not all but more than $\frac{3}{4}$.— $\frac{1}{2}$ to $\frac{3}{4}$.— $\frac{1}{4}$ to $\frac{1}{2}$.— less than $\frac{1}{4}$ but some.— None.

If this was felt to be too complicated, the respondent could simply be asked if the daily manager (along with other family members) provided more or less than half the total labor. The latter would be the minimally acceptable amount of information.

(8) *More information is needed on who owns farm nonland resources (machinery, livestock, crops, etc.)*

Major changes have taken place in recent years in both the importance of farm nonland resources and in their ownership. Generally, the importance of nonland resources in farm operations has increased and the ownership of these resources by farm (operational) managers has declined.

While a wide variety of items are classified as "nonland", machinery and livestock are the most important. In 1972, machinery accounted for 48 percent of the value of total nonland resources, while livestock accounted for 42 percent.

Increases in the absolute and relative importance of nonland resources in farm operation are indicated by the following: Firstly, the value of nonland resources on the average U.S. farm increased from \$1600 in 1940 to \$24,200 in 1972. Secondly, while nonland resources accounted for 25 percent of the value of both land and nonland resources (on the average) in 1940, they accounted for 29 percent in 1972.

The decreased ownership of farm machinery and equipment by farm operational managers is indicated by the following: increased absolute and relative expenditures for machine rental, leasing and custom hiring (work); the increased rental and leasing of buildings and related equipment; the increased amount and value of farm production carried out under production and/or vertical coordination contracts where the integrator or contractor retains ownership and/or control of machinery and equipment; and, the growing importance of farms managed on a daily basis by hired, nonowning (neither land or nonland resources) managers.

Decreased ownership of livestock, poultry and crops by farm operational managers (increased ownership by nonfarmers) is indicated by: increases in the number, value and relative status of livestock fed on a custom basis (especially beef); the growing importance of crops grown on a custom basis; the increasing amount of production carried out under production and/or vertical coordination contracts where the integrator or contractor retains ownership or control of the crops and livestock on the farm; the increased leasing of livestock (milk cows—sows); and, the increased importance of farms with hired, nonowning managers.

While neither the major causes or consequences of these changes are clear, it is imperative that the information collected to assess the nature and magnitude of these changes is adequate. Ideally, information should be collected and reported on who owns the nonland resources associated with farm production (at a minimum whether they are owned by the farm operational manager or someone else) and what changes are occurring in the relative status of farms with varying degrees (high/low) of nonland resource ownership by farm managers. While the Census is presently collecting information necessary to make these determinations it is incomplete in a number of areas.

The major inadequacies in the assessment of machinery ownership are as follows: Firstly, information on machinery rental, leasing and custom work is inadequate. The Census presently obtains expenditures for "machine hire and custom work". These expenditures rose from \$865 million in 1959 (2.6 percent of total farm sales) to \$1.4 billion in 1969 (3.1 percent of total crop sales). Unfortunately, there is no way to determine the relative importance or changes in machinery rental-leasing as opposed to custom work (since both are reported in the same category). In addition, there is no good way to determine the relative importance of either machinery rental or custom work for farms reporting these expenditures. Two possibilities would be to determine the total value of all machinery used on the farm and the percentage of this value accounted for by rented or custom hired machines or determine what percentage of the total farm work was done with rented machines or those hired on a custom basis.

Secondly, in 1974, the Census identified those farms involved in contractual production and determined if the contractor was providing any machinery, equipment or buildings, harvesting, transportation or processing used in the production process. Unfortunately neither the magnitude nor value of these resources was obtained. Without this information no determination can be made of the importance of these resources to the total production activities of the farm.

Thirdly, an identification of farms managed on a daily basis by hired, nonowning managers is necessary to accurately determine the extent of machinery ownership by farm operational managers. On farms employing hired managers, it is unlikely these individuals will own any of the farm machinery. Rather, they will be owned or rented by the employer of the hired manager. Farms employing hired managers increased their operated acreage from 100 to 113.4 million acres in the 1954 to 1964 time period. The trend has likely continued to the present time. This change indicates the growing importance of farms where the operational manager owns little or none of the machinery used on the farm.

A fourth gap is that no determination is made of who owns the machinery on farms operated on a crop-, livestock- or combination-share basis. The machinery may be owned by the farm share-renter, landlord, or both. If the extent of machinery ownership by farm operational managers is to be determined then the amounts owned by share-tenants and landlords will have to be determined.

Similar (those less severe) problems exist in determining the extent of livestock and crop ownership by farm operational managers and the relative importance of those owned and nonowned to the farm operation. Ownership of farm livestock,

poultry and crops by contractors or integrators and the percentage of total (farm) production with this ownership can be determined from the 1974 Census of Agriculture. A complete determination cannot be made in this area, however, because: no information is obtained on the extent of livestock rental and/or leasing; farms with hired, nonowning managers are not identified; and, no determination has been made of who owns crops and livestock on crop-, livestock- and combination-share operations, i.e., the extent of ownership by share-tenants and landlords. Without the preceding types of information, it is not possible to classify all farms on the basis of extent of crop and livestock ownership by the farm operational manager (all owned, majority owned, minority owned, none owned). As a result, it is not possible to assess either the present or changing status of farms differing in this regard.

The ideal solution to the preceding problems, of course, would be to determine who owns each piece of machinery, head of livestock and acreage of crops found (or used) on each U.S. farm. This is not likely to occur because of the length and complexity of such an approach. The quality of the data could be improved considerably, however, without going to this extreme. Firstly, expenditures for machine rental-leasing and custom work should be reported separately. Secondly, the value of these machines should be determined. Thirdly, farms operated by hired managers should be identified and classified as such. Fourthly, three additional questions should be included in the Census to determine the relative levels of machinery, crop and livestock ownership by farm operational managers. These might consist of the following:

(1) What portion of all the machinery (numbers or value) used on this farm last year was owned (title held) by the individual managing the farm on a daily basis? or of all the field work done on this farm last year (plowing, planting, harvesting, etc.), what portion of it was done with machinery owned by the individual managing the farm on a daily basis?

(2) Of all the livestock on this farm last year, what portion (of the head or their value) was owned (title held) by the individual managing the farm on a daily basis?

(3) Of all the crops produced on this farm last year, what portion (of the acres or total value) was owned (title held) by the individual managing the farm on a daily basis?

The response categories for questions 1-3 could be: — All. — Majority (more than half). — Minority (none, but less than half). — None.

Acquisition of this data would allow all farms to be classified (at a minimum) according to the percentage of farm machinery, livestock and crops owned by the individuals managing farms on a daily basis. If major changes were detected in the relative status of farms with high and low levels of ownership by farm managers, additional questions could be added to the Census later or special surveys could be carried out to obtain more detailed information on the nature of the change (types of nonfarm owners, etc.).

(9) *The present enumeration of farm unit is less consistent than previously and does not provide an accurate assessment of concentration levels in agricultural production*

In order to fully understand the data reported in the Census of Agriculture, it is necessary to understand in relatively specific terms the type of unit enumerated. This will be done by comparing and contrasting three different ways in which a farm or farm unit might be defined and enumerated. These three ways are as: operating units, business units or ownership units.

The Census presently, as in the past, enumerates farm operating units. In 1964 this unit was defined as "all land on which agricultural operations were conducted at any time in 1964 under the control or supervision of one person or partnership. Control may have been exercised through ownership or management, or through a lease, rental or cropping arrangement." (1964, U.S. Census of Agriculture, Volume I, Part 13, p. 2). The least common denominator for operating units is that each contains an operational manager, i.e., an individual or small number of individuals who decide what is going to be done on the farm on a day to day basis. At a minimum, these managers supervise and direct production activities carried out on the farm. They may or may not be involved in the actual physical work. In addition, they may own or rent all, some or none of the land in the unit. If they are hired to manage the farm on a daily basis they are not likely to either own or rent any of the land in the operation.

A farm business unit, on the other hand, is defined in terms of its legal organization, i.e., sole proprietorship, partnership, corporation, other. Each of these units has identifiable owners (individuals, families, other legal entities) and consists

of all farm resources (land, nonland, management, labor) owned, rented or employed (hired) by the business firm. While there is a considerable amount of overlap between farm operating- and business-units they are not the same.

Most sole proprietorships, partnerships and family owned corporations have only one operating unit. In these cases, the operating- and business-units are one in the same. Some farm business units, however, contain more than one operating unit. In these cases the two units are not the same since the number of farm business units is less than the number of operating units. As an example, a sole proprietorship, owned in its entirety by an individual or family, might own and/or rent a considerable amount of acreage. This acreage (which constitutes the business unit) might be subdivided into a larger number of smaller units, each of which is operated (managed) on a daily basis by an employee of the business owner. The distinction is perhaps clearer for farms organized as corporations, especially nonclosely held corporations. In the case of large canning corporations which grow their own crops, land may be owned and/or rented in numerous states and at numerous locations within each state. The totality of the farm resources controlled and used by each corporation constitutes its farm business unit. Each of these business units, however, is divided into a much larger number of separate operating units. It is each of these latter units which is enumerated by the Census—not the singular corporation or business unit of which the smaller operating units are a part.

The enumeration of farm operating units, rather than farm business units, has a number of important consequences. Firstly, if farm business units rather than operating units were enumerated, an immediate reduction would occur in the number of farm units. While reductions would be observed in all categories, it would likely be greatest (perhaps substantial) for farms presently classified as corporations. At the present time all of the separate operating units which are parts of a corporate business firm are enumerated separately. Each operating unit is classified and counted as a separate "corporation." If "business units" were enumerated, multiple operating units would be aggregated for each corporation.

Secondly, the enumeration of operating units results in smaller average size characteristics and lower reported levels of concentration in the ownership and/or control of farm resources (land, nonland, management and labor) than would be the case if business units were enumerated. This would occur because smaller numbers of units would control these resources than presently reported with the greatest reduction in numbers among those farms presently classified in the largest size categories (acres operated, sales, nonclosely held corporations, etc.).

Farm could also be enumerated and classified on an ownership unit basis, either in terms of landownership, nonland resource ownership or both. If farms were classified on a land ownership basis, the starting point would be to identify all owners of land used for agricultural production purposes in the U.S. These owners (individuals, families, corporations, cooperatives, other) would then be contracted and all land with a common owner would be aggregated. Such an approach would be necessary to provide a definitive answer to the question "Who owns U.S. farm land?"⁵

Once identified, these ownership units could be further classified and subdivided in terms of the land owner's involvement in production activities carried out on the land. If the owner was not involved, a determination could be made of who was managing agricultural activities on this land and under what type of arrangement the management (cash rent, livestock-share, crop-share, hired manager, etc.) was being performed. Major differences in the characteristics of farm units are likely, depending on whether operating or ownership units are enumerated. Unfortunately, neither the direction nor magnitude of these differences can be specified since it has been thirty years since the last nationwide assessments of farm land ownership.

In addition to the major differences which exist between farms classified as operating-, business- and ownership-units, there are a number of additional problems or shortcomings in the present enumeration and classification of farms on an operating-unit basis. Firstly, there is a lack of consistency between the present definition of a "farm operator" and the farm unit enumerated. Prior to 1969, farms were defined as operating units and all such units and the operational managers of each were enumerated. Each farm unit has one operator (or a small number). These units and operators were mutually exclusive and exhausted the entire universe of units and operators.

⁵ A similar approach would be necessary if farms were to be classified as units on the basis of nonland resource ownership.

In 1969, the farm operator was defined as the person "in charge" of the farm operation. This has been operationalized as either the owner of the farm business unit or a representative (agent) of the business owner. In other words, the farm operator was defined as the operator (person in charge) of the farm business unit, not the farm operating unit. To maintain internal consistency, when the Census changed the definition of a farm operator from the manager of the operating unit to that of the business unit, it should have also changed the definition of a farm from the operational unit to the business unit. This way, each enumerated farm (business-unit) would still have had one and only one operator (the operator of the farm business unit). This was not the case, however. Instead, it changed the definition from the manager of the operational unit to the manager of the business unit while continuing to enumerate farm operating (rather than business) units.

One result of this lack of consistency was to introduce a major source of error into the determination of farm operator characteristics. This occurs in two ways: Firstly, some individual operators (and their characteristics) are included in the Census more than once. This occurs when the farm business unit contains more than one operating unit. In this situation, one operator (that of the farm business unit) is identified. This individual, however, is asked to complete a Census form for each of the multiple operating units comprising the farm business unit. On the forms for each operating unit, information is requested on the characteristics of the farm operator. Thus, the operator of the farm business unit (who is filling out the forms) reports his or her personal characteristics for each operating unit. As an extreme example, if a farm business unit contained within it thirty separate operating units, each of the thirty units would be enumerated separately and the characteristics of the same individual (the operator) would appear in the Census thirty different times. Quite clearly, the larger the number of such individuals who are included in the Census more than once, the greater the amount of error in the determination of farm operator characteristics.

Perhaps, it is for the preceding reason that the Census does not obtain information for the operators of farm businesses organized as corporations. This procedure results in additional error, however. Since the operators of these farms are not included, they make no contributions to the determination of reported farm operator characteristics. This procedure is also inappropriate because not all farm corporations have multiple operating units (hence, the unit would have only one operator). Also, an unknown number of sole proprietorships and partnerships have multiple operating units, hence, the operators of these business units continue to be included in the Census more than once.

A number of approaches may be followed in alleviating or eliminating the preceding problems. Firstly, for both applied and basic reasons, there is merit in continuing the enumeration of farm "operating units." However, an accurate assessment of trends and concentration levels in agriculture cannot be obtained until farms are enumerated and classified on a "business unit" basis. Ideally, the Census should enumerate both types of units. It presently identifies operating units and has information necessary for the classification of farm business units, i.e., it knows which business units have multiple operating units and what the characteristics of these units are. With the information at hand, it can identify those business units with either one or with multiple operating units. It could aggregate the multiple operating units for each business unit at the county, state and national levels. It would then be possible to report basic information on the characteristics of farm business units (number, acres owned, acres rented, acres operated, amount and value of production by type, quantities and types of purchased in-puts, etc.).

While there is also a good deal of merit in enumerating farm (land) ownership units, this deficiency can not be remedied easily. While the Census presently obtains the names of all farm land owners, a separate survey (or computer scan) would be required to determine the total amount of land owned by each owner. This could be done, of course, if the resources were made available.

The enumeration of farm nonland resource ownership units is even more problematic since the Census does not even determine, at the present time, which of these resources are owned by farm operational managers. Considerably more resources and time would be necessary to make this determination. A good starting point might be to simply adopt the recommendations made in point #8 and obtain more information on the extent to which farm operational managers own the major farm nonland resources.

Three procedures can be followed to eliminate the present inconsistency between farm operators (managers of farm business units) and farm units (operating units). Firstly, farm business units (in their entirety) rather than farm operating

units could be enumerated. Secondly, the Census could continue to enumerate farm operating units even while contacting the managers of farm business units. However, instead of obtaining information on the characteristics of these managers, operators, it could obtain this information for the manager of the farm operating unit. Thirdly, the Census could simply enumerate the individuals managing operating units on a daily basis (as was done prior to 1969) and obtain farm operating unit and farm operator characteristics from these individuals.

(10) *The Census of Agriculture neither collects nor reports adequate information on the status of family- non-family-, or corporate/industrial-type farms*

As pointed out previously, a major debate in recent years has revolved around the present and changing status of family- and nonfamily- or corporate/industrial-type farms. Some individuals and organizations have asserted that family farms are declining rapidly in both absolute and relative terms and are being replaced by nonfamily or corporate/industrial farms. Others have responded that while family farms may have declined numerically they still account for a high percentage of all farm numbers and sales and these percentages have not declined. Nonfamily- or corporate/industrial farms are viewed as small in number accounting for a small percentage of total production and sales (though high in certain traditional states and types of production), with little change occurring in either their absolute or relative positions.

Given the divergency between the two positions and their differential implications for public policy, it is surprising the Census has been unable to provide definitive information. The general objectives in this section will be to determine why Census information on the status of family and nonfamily farms lacks definitiveness and suggest a number of alterations, which if adopted, would generate less equivocal data.

A necessary first step in this process is to define what is meant by family, nonfamily and/or corporate/industrial farms. This is problematic since a variety of definitions have been advanced over the years and little consensus exists on which definitions are most appropriate. One approach with the possibility of overcoming the lack of consensus is to review the definitions of both family and non-family farms and determine the major common denominators, i.e., those farm characteristics most frequently included.

This has been done previously (Rodefeld, R.D., 1974) with the following results: Firstly, one or more of the economic factors of production (land, nonland resources, management, labor) were invariably included in the definitions. Secondly, they were concerned with the extent of ownership, management and labor by individuals or families. Thirdly, they were concerned with the extent of separation or differentiation between the four factors of production, i.e., the extent to which the same or different individuals or families owned the land and nonland resources, managed and did physical work. Usually this was specified in terms of the extent of ownership and labor by the individual or family managing the farm on a daily basis. Family farms generally had high levels of ownership, management and labor by relatively small numbers of individuals or families and low levels of separation between these factors, i.e., one individual or family had major levels of involvement in ownership, management and labor. Nonfamily farms, on the other hand, frequently had large number of owners (land and nonland), managers and laborers with high levels of separation between these factors, i.e., different individuals or families owned, managed and labored.

While it may never be possible to define the various farm types in terms acceptable to everyone, it may be possible to gain consensus on definitions of the most extreme family and nonfamily type farms in terms of the preceding criteria. It may also be possible to classify all farms in terms of the extent to which they approach or approximate these extremes.

In terms of the enumerated criteria, the most "family" of all family-type farms can be defined as those farms where a single individual or family owns (holds title) all of the farm land and nonland resources, makes all management decisions (both organizational and operational) and does all the required physical labor. Historically, farms approximating ⁶ this extreme type have dominated U.S. farm numbers in all states, regions and types of production. They have also dominated farm production and sales in states outside the West and South and types of production other than those concentrated in these regions. The nonfamily- or corporate/industrial-type farm extreme can be defined as those farms with large numbers of

⁶ Farm which were managed on a daily basis by an individual or family who owned all or most of the farmland and nonland resources, who also did all or most of the physical labor.

individual or family landowners, nonland resource owners, managers and laborers; where no one individual or family accounts for a high portion of the ownership, management or labor; and, where no one individual or family occupies more than one of the major farm positions (landowner, resource owner, manager, laborer). Most of these farms would likely be organized as corporations. Farms approximating⁷ this extreme type, while never large in number, have been extremely large in size and major economic forces in both the South and West and in the areas of fruit, vegetable and cotton production.

Given the specification of the farms located at the two extremes of the farm type continuum, four questions will be addressed in the remainder of this section:

(1) What types of information are necessary to determine the extent to which farms approximate either of the extreme types?

(2) To what extent is this information presently obtained by the Census?

(3) How adequate is Census information on legal organization and size as measures of the extent to which farms approximate either the family or non-family extreme type?

(4) How can a more definitive assessment of family-type and nonfamily-type farms be made by the Census?

TYPES OF NECESSARY INFORMATION

Generally, two types of information are necessary to determine a farm's degree of approximation to the extreme types. Firstly, a determination of the extent to which a single individual or family accounts (owned-provided) for the factors of production or farm positions is necessary. All other things equal, as the percentage of each factor owned or provided by an individual or family increases, the approximation of the farm to the family farm extreme increases. Conversely, as these percentages decline, approximation to the family farm extreme declines and approximation to the nonfamily extreme increases.

Secondly, a determination is necessary of the extent to which the individuals or families who own, manage, and work farms are the same or different. All other things equal, the greater the number of total factors or positions occupied or provided by the same individual or family the greater the approximation to the family farm extreme and the lower the approximation to the nonfamily extreme. This latter information is required because while a farm may have only one individual or family: land owner, nonland resource owner, manager and laborer (thus approximating the family farm extreme) these individuals or families need not be the same—they could be different (thus approximating the nonfamily extreme). Both types of information are necessary for an accurate determination of a farm's approximation to the extreme types.

Thus, high levels of farm ownership, management and labor by individuals or families are necessary—but not sufficient—conditions for high levels of approximation to the family farm extreme. The other necessary condition is that these individuals or families be the same. The greater the extent to which all of these conditions are met the closer the approximation to the family farm extreme.

THE PROVISION OF NECESSARY INFORMATION BY THE CENSUS

To what extent does the Census obtain and report the types of information necessary for an accurate determination of the extent to which farms approximate the family and nonfamily extremes? This question will be addressed for each of the farm factors of production or positions.

At the present time, the Census reports the number of acres owned, and rented by farm businesses and the type of rental arrangement. No direct information is reported on the percentage of total acres owned by any one individual or family. However, if one assumes farms organized as sole proprietorships and partnerships are owned by an individual or family, then, the percentage of land operated which is owned by the business, i.e., the individual or family, can be determined. To date, however, farms have not been classified on this basis. The major shortcoming with the present (land tenure) classification is that no distinctions are made between part owner operated farms with high and low percentages of owned land. Another problem which is more difficult to overcome is that some farm businesses are organized as corporations. In these cases, the land is owned and/or rented by the corporation. The only way to obtain comparable information on the maximum percentage of land owned by any one individual or family is to:

⁷ Farms with land and nonland resource owners who have little or no involvement in daily farm operations (absentee and/or nonfarm residents), hired nonowning managers and hired nonowning laborers (either seasonal or full-time).

determine the maximum percentage of corporation shares held by any one individual or family; multiply this by the number of acres owned by the corporation to determine the number of acres owned (indirectly by the individual or family); and, divide these acres owned by the total acres operated.

A more severe problem is that no information is obtained on the extent to which the farm landowners or renters: own the farm's nonland resources; are involved in farm management (either organizational or operational decision-making); or, are involved in farm physical labor. All or most of the nonland resources might be rented, leased or provided by a contractor. In addition, the landowner-renters may hire others to manage and work the farm on a daily basis. In summary, farms cannot be classified at the present time on the basis of either the maximum percentage of landownership by anyone individual or family or in terms of the involvement of farm landowners (or renters) in the other factors of production.

Information on the ownership of farm nonland resources is even less adequate than that on landownership. If the farm is organized as a sole proprietorship or partnership and the farm reports: no involvement in contract production where nonland resources are provided by the contractor; no expenditures for custom work or machine hire; no expenditures for hired labor of any kind; and no involvement in either crop- or livestock-share rental arrangement; it is likely that all of the farm nonland resources are owned by the farm business proprietor or partners. If any of the preceding conditions are not met, however, there is no way of determining the maximum percentage of nonland resources owned by any one individual or family: No information is obtained on the involvement of farm nonland resource owners in the other farm factors of production or positions (other than that already indicated).

As pointed out previously, no information is obtained on the number of individuals involved in either organizational or operational farm decision-making. A dominant assumption in this area appears to be that the owners of farm businesses (proprietors, partners, shareholders) make all or most of the farm organizational decisions. If this is true then knowledge of the farm's legal organization provides a rough estimate on the number of farm organizational decision-makers. This may not be true, however. The authority to make all or most of the decisions may be delegated to nonbusiness owners (hired employees). This is a possibility whenever expenditures for hired labor are reported. Furthermore, if such expenditures are reported, there is no way to determine the involvement of the business owners (or organizational decision-makers) in either operational decision-making or labor. All or most of these factors may be provided by hired, nonowning employees.

Another dominant assumption appears to be that farm operating units either have only one operational manager or at a minimum a dominant operational manager. If this is true, then, the extent to which this factor is provided by an individual or family is a constant across farm units. Limited information exists on the extent to which the individuals who manage farms on a daily basis own farm land and nonland resources or engage in physical labor, however. If no expenditures are reported for hired labor of any kind, it may be safe to assume the operational manager and business owner are one in the same (hence, the extent of landownership by the operational manager can be determined) and that the operational manager (along with other family members) is performing all or most of the physical labor. If these conditions are not met, the operational manager may be hired by the business owners and or a high percentage of the labor may be provided by hired employees. If no labor is hired and there are no indications of nonland resource ownership by anyone else, it may be safe to assume the operational manager also owns the farm nonland resources and makes all of the organizational decisions. Since a high percentage of all farms fail to meet the preceding conditions—it is not possible to determine the extent to which the operational managers of most farms account for the remaining factors of production.

While the information on the extent of hired labor is not entirely complete, it is possible to determine, approximately, the number of individuals occupying laborer positions on each farm. Since the number of operational managers (and unpaid family workers) is not determined, however, nor the total number of hours worked by each individual doing physical labor, it is not possible to determine the maximum percentage of total work provided by any one individual or family nor the percentage of total work provided by either operational managers or non managing laborers. No information is obtained on the extent of land ownership, nonland resource ownership or management by hired laborers. Since hired managers and laborers are not differentiated in the expenditures for hired labor, individuals classified in the hired labor category may also make all or most of the farm organizational and/or operational decisions. In addition, if the farm is incorporated, individuals receiving wages may also be business owners-shareholders (hence, indirect land and nonland resource owners).

In summary, the Census can not determine the extent to which farms approximate either the family or nonfamily extreme types because it does not collect information for each farm: (a) On the extent of individual or family land ownership, nonland resource ownership, management (organizational or operational) or labor, or (b) on the extent to which individual or family owners, managers and laborers are the same or are different.

If the two postulated extreme farm types are viewed as reasonable, it is clear why the Census has not been able to provide definitive information on either the present or changing status of family- and nonfamily- or corporate/industrial-type farms. Hardly none of the information necessary to classify farms on this basis has been obtained.

THE ADEQUACY OF FARM LEGAL ORGANIZATION AND SIZE AS MEASURES OF FAMILY- AND NONFAMILY-TYPE FARMS

In lieu of more definitive measures, there has been a tendency to use the type of farm legal organization and farm size as indicators of family and nonfamily type farms. More specifically, the tendency has been to equate small (acreage, production, sales, etc.) sized farms and farm businesses owned by an individual or family (sole proprietorships, partnerships and family corporations) with "family-type" farms and those businesses not owned by an individual or family, have been equated with "nonfamily- and/or corporate/industrial-type" farms. To what extent are these assumptions justified?

In 1969, family owned farm businesses (as defined) accounted for 99.3% of all farm numbers and 97.5% of all farm acres. Does this mean that ninety-eight percent of all farm numbers and acres were accounted for by farms closely approximating the family-type farm extreme defined earlier? The answer is definitely not. The reason is that while individual or family ownership of the farm is a necessary condition for a high degree of approximation to the family farm extreme, it is not a sufficient condition, i.e., it does not insure a high level of approximation. It is not sufficient because even though the farm is organized as a family business, the family owners might own little or none of the land and nonland-resources in the farm business (they might rent or lease all or most of both); they might reside away from the farm and/or have little or no involvement in the making of either organizational or operational decisions (the authority might be delegated to hired, nonowning employees); and, they might do little or none of the farm physical work (this might be done by a hired manager, hired laborers or both). In other words, such farms may approximate the family-type farm extreme only in the sense that the farm business is owned by an individual or family.

Conversely, even though the farm business is organized as a corporation with a large number of shareholders, one individual or family might own almost all the shares, indirectly own almost all the farm land and nonland resources, make all of the farm organizational and operational decisions and do all of the physical work. Such farms closely approximate the family farm extreme. Since type of legal organization does not by itself measure any of the factors or production or their provision by individuals and families, it is not a good measure of the extent to which farms approximate the extreme farm types.

Farm size is a poor measure of family and nonfamily farms for largely the same reasons. None of the size measures provide direct assessments of individual or family involvement in the farm enterprise or the extent to which the same or different individuals own, manage and work the farm. While it is true that size is highly correlated (positively) with the amount of separation or differentiation between the factors of production, these relationships are far from perfect. There is no necessary relationship between size and the extent of separation. Farms equally large (or small) in size can have considerable variability in the extent to which the factors of production are provided by individuals or families and in the extent to which these individuals or families are the same. Because the various measures and categories of farm size are likely to contain considerable amounts of variation in levels of farm ownership, management and labor by individuals and families they do not provide an unequivocal base from which to approximate the family and nonfamily extremes.

SUGGESTIONS FOR A MORE DEFINITIVE ASSESSEMENT OF FAMILY, NONFAMILY AND OR CORPORATE/INDUSTRIAL TYPE FARMS

If a number of the changes recommended in earlier sections were adopted, it would be possible to classify all farms at a minimum in terms of the extent to which the same (or different) individuals or families provided for farm land ownership,

nonland resource ownership, farm operational decision-making and farm labor. Firstly, a major recommendation in point number 2 (pp. 3-8) was to return to the enumeration of the individual or family managing farm operating units on a daily basis (or that individual with the major responsibility for the making of these decisions).

A second major recommendation in points 3 and 4 (pp. 8-16) was to classify farms according to both the percentage of total land owned by the operational manager and if no land was owned by the type of rental arrangement or remuneration. The following classification categories were suggested: full-owner operated (100% owned by operational manager); majority owner operated (50.1 percent to 99.9 percent owned); minority owner operated (0.01 percent to 50 percent owned); hired manager operated (zero percent owned: salaried); cash renter operated (zero percent owned, rented); share-renter operated (zero percent owned, rented on a livestock-, crop- or combination-share basis).

A third recommendation was that the percentage of total farm work provided by the operational manager (along with other family members) should be determined (point 7, pp. 20-23). Six classification categories were suggested (all; not all but more than $\frac{3}{4}$; $\frac{1}{2}$ to $\frac{3}{4}$; $\frac{1}{4}$ to $\frac{1}{2}$; less than $\frac{1}{4}$ but some; and, none. At a minimum, it would be important to determine whether the operational manager provided more or less than half of the total farm work.

If the preceding types of information were obtained, then it would be possible to classify farms in terms of both the extent of land ownership by the individual or family managing the farm on a daily basis (along with type of rental arrangement or remuneration) and their involvement in farm labor. All farms could be classified into one of five classification systems, varying in their levels of specificity and numbers of classification categories. These classification systems and their constituent categories are as follows:

- A. A 12-category classification of farms by the type of farm operational manager, the percentage of total land owned by the operational manager and the percentage of total work provided by the operational manager.

<u>Type of Farm Operational Manager</u>	<u>% of Land Owned by Manager</u>	<u>% of Farm Work Done by Manager</u>	
		0.0-50.0 (Non-manager worked)	50.1-100.0 (Manager worked)
Full owner	100	A	G
Part owner			
Majority owner	50.1-99.9	B	H
Minority owner	.1-50.0	C	I
Non-owner			
Hired manager	0.0	D	J
Cash renter	0.0	E	K
Share-renter	0.0	F	L

- B. A 10-category classification of farms by the type of farm operational manager, the percentage of total land owned by the operational manager and the percentage of total work provided by the operational manager.

<u>Type of Farm Operational Manager</u>	<u>% of Land Owned by Manager</u>	<u>% of Farm Work Done by Manager</u>	
		0.0-50.0 (Non-manager worked)	50.1-100.0 (Manager worked)
Full owner	100	A	F
Part owner			
Majority owner	50.1-99.9	B	G
Minority owner	.1-50.0	C	H
Non-owner			
Hired manager	0.0	D	I
Cash or Share Renter	0.0	E	J

- C. An 8-category classification of farms by the type of farm operational manager, the percentage of total land owned by the operational manager and the percentage of total work provided by the operational manager.

<u>Type of Farm</u> <u>Operational Manager</u>	<u>% of Land</u> <u>Owned by Manager</u>	<u>% of Farm Work</u> <u>Done by Manager</u>	
		0.0-50.0 (Non-manager worked)	50.0-100.0 (Manager worked)
Full owner	100	A	E
Part owner			
Majority owner	50.1-99.9	B	F
Minority owner	.1-50.0	C	G
Non-owner	0.0	D	H

- D. A 6-category classification of farms by the type of farm operational manager, the percentage of total land owned by the operational manager and the percentage of total work provided by the operational manager.

<u>Type of Farm</u> <u>Operational Manager</u>	<u>% of Land</u> <u>Owned by Manager</u>	<u>% of Farm Work</u> <u>Done by Manager</u>	
		0.0-50.0 (Non-manager worked)	50.0-100.0 (Manager worked)
Full or majority owner	50.1-100.0	A	D
Minority owner	.1-50.0	B	E
Non-owner	0.0	C	F

- E. A 4-category classification of farms by the type of farm operational manager, the percentage of total land owned by the operational manager and the percentage of total work provided by the operational manager.

<u>Type of Farm</u>	<u>% of Land</u> <u>Owned by Manager</u>	<u>% of Farm Work</u> <u>Done by Manager</u>	
		0.0-50.0 (Non-manager worked)	50.0-100.0 (Manager Worked)
Full or majority owner	50.1-100.0	A	C
Minority or non-owner	0.0-50.0	B	D

The advantages of the preceding classification systems are considerable. Either the 12- or 10-category classifications maintain comparability with the pre-1969 classification of farms by tenure of operator (full owner, part owner, hired manager, tenant). Secondly, categories are collapsed to maintain a viable classification of farms according to whether the operational manager provides more or less than half of both land ownership and labor. Thirdly, it provides a more adequate classification of farms on the basis of their approximation to the family and non-family extreme types. The degree of approximation could be expanded further if the constituent dimensions were divided into larger numbers of categories. Fourthly, while it permits farms to be classified in terms of their approximation to the family and nonfamily extreme types, it imposes no *a priori* definition of either family, nonfamily or corporate/industrial type farm on the data user. Fifthly the underlying dimensions of the classification system are equally applicable and measurable for all farms.

The major deficiencies are that when less than half the land is owned and less than half of the labor is provided by the operational manager, no determination is made of the number or types of (nonmanaging) land owners or laborers or the extent to which single individuals or families provide for this ownership and labor. These questions could be answered in part by investigating the legal organization of the farm and by obtaining the additional information recommended in point 6 (pp. 19-20). The other major shortcoming is that information on the extent of nonland resource ownership by the farm operational manager has not been assessed simultaneously. If the additional information recommended in point 8 was obtained by the Census, it would be possible to determine if the farm operational manager owned all, a majority, a minority or none of the total: farm machinery, livestock and crops. Farms previously classified into any of the preceding systems from 12-4 categories could be further subdivided according to each of these three scores or a composite of all three. If this was done, farms could then be classified on the basis of the extent of land ownership, nonland resource ownership and labor provided by the individual or family managing the farm on a daily basis. The extreme types would consist of (a) those farms where all of the land and nonland resources were owned by the farm manager, who also did all or most of the farm physical labor; and (b) those farms where the farm manager owned none of the land, none of the nonland resources and did a minority of none of the farm labor.

Numerous (up to 46) other structurally unique farms could be arrayed between these two extremes on the basis of extent of land ownership (6 categories), nonland resource ownership (14 categories) and labor (2 categories) provided by the farm operational manager.

My major recommendation in this section would be for the Census to classify all farms at a minimum in terms of either the 12- or 10-category classification system and provide extensive information on these farm types. More limited (but basic) information could perhaps be provided for the 24 or 48 resultant categories when nonland resource ownership (2 or 4 categories) is incorporated into the system.

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