REPORT BY THE

Comptroller General

OF THE UNITED STATES

Estimated Personnel Needs Of The Agricultural Stabilization And Conservation Service--Are They Reliable?

The Agricultural Stabilization and Conservation Service's budget request for personnel increased significantly after fiscal year 1977 due to work brought on by the Food and Agriculture Act of 1977 and by Department of Agriculture policies. The Chairman, Subcommittee on Agriculture and Related Agencies, Senate Committee on Appropriations, asked GAO to review the validity of the Service's work measurement and workload forecasting systems for determining staffing requirements.

GAO found that these requests may not be reliable because of

--weaknesses in the way work measurement standards are developed and

--a lack of documentation needed to assess the validity of workload forecasts.

Service headquarters should increase its oversight of State and county administrative offices, but the Service believes these offices should manage their own day-to-day operations. GAO believes the Service should improve the way it implements administrative procedures related to procurements with Nation-wide applicability.

FPCD-80-5
NOVEMBER 26, 1979

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

SEN 301

B-183124

The Honorable Thomas F. Eagleton
Chairman, Subcommittee on
Agriculture and Related Agencies
Committee on Appropriations
United States Senate

Dear Mr. Chairman:

This report points out that the Agricultural Stabilization and Conservation Service (ASCS) of the Department of Agriculture needs to improve its work measurement and workload forecasting systems before they can be relied on for estimating annual personnel requirements. It also discusses the need for ASCS to increase its oversight of State and county operations.

Our review responds to your request of February 15; 1978, and subsequent discussions with your office. At your request, we did not ask the Department of Agriculture for formal written comments on this report. However, ASCS officials provided extensive written comments which we considered in preparing the report.

As arranged with your office, we will make copies available to the public 3 days after you receive this report.

Sincerely yours,

Comptroller General
of the United States

AGC 4/2

Personnel management
Future budget projections
Work measurement standards
Funds management
Agency evaluation
Land management

COMPTROLLER GENERAL'S REPORT TO THE SUBCOMMITTEE ON AGRICULTURE AND RELATED AGENCIES, COMMITTEE ON APPROPRIATIONS, UNITED STATES SENATE

ESTIMATED PERSONNEL NEEDS OF THE AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE--ARE THEY RELIABLE?

D I G E S T

The Agricultural Stabilization and Conservation Service administers farm commodity and land-use programs through a network of service offices in States and counties. Each State has an administrative office to provide oversight and support to county offices, but most services to the farmer take place at over 2,700 federally funded county offices.

The Service's budget request for personnel increased significantly after fiscal 1977 because of work brought on by the Food and Agriculture Act of 1977 and by Department of Agriculture policies. The Chairman, Subcommittee on Agriculture and Related Agencies, Senate Committee on Appropriations, asked GAO to review the validity of the Service's work measurement and workload forecasting systems for determining staffing requirements.

For some time, the Service has used these systems for developing and justifying budgeted staff needs for its county office operations. However, because of weaknesses, GAO believes information from these systems cannot yet be relied on as representing the minimum number of people needed.

GAO found several weaknesses in the Service's systems:

--Service work measurement standards are based on past data and, therefore, include whatever inefficiencies may result from the way work is actually done.

--The Service too often changes its definitions for units of output. This makes determining the accuracy of its workload projections impossible.

--Statistical sampling procedures need to be changed to conform to accepted practices and assure that the sample of work measurement counties accurately represents the work done by all county offices.

--Recording of workload information is poorly controlled.

--Documentation is lacking to support assumptions about increased work resulting from the Food and Agriculture Act of 1977 and the Secretary of Agriculture's policy changes.

Work measurement standards establish a relationship between each defined unit of output and the amount of labor needed to complete it. Workload forecasting attempts to estimate how many units of output are expected to be produced. Workload standards multiplied by forecasts provide estimates of labor time needed to complete an organization's work and, ultimately, the number of people needed to do the work efficiently.

If such systems are reliable they can provide valid staffing estimates, a way of tracking and improving productivity, and useful reports for management. Top management should insist that such data be used within the Service to improve operations. Top management support is the key to implementing needed improvements.

Stronger top management oversight is also needed in coordinating the Service's spending decisions for items other than staffing. Now, its basic management philosophy is that

because it is decentralized and county office employees are not Federal employees, the Service's offices should have much discretion in managing their own affairs.

Although GAO agrees field managers should have flexibility to manage day-to-day operations, headquarters top management has a vital oversight role to assure that the Service is operating effectively. The Service needs to improve oversight of its field offices in several areas. For example, because Service headquarters did not do the proper analysis and give better direction to its county offices, the Service bought calculators at a cost $1.2 million higher than necessary. Further, the Service was planning to implement a new program of using cameras in aircraft (aerial observation) to perform its compliance activities without evaluating different ways of doing aerial observation or looking at all available equipment used to facilitate aerial observation efforts.

Service headquarters can improve in other management areas too. It needs to better analyze the need for additional low-density and combined county office funding. Funding for these offices is currently based on judgment but should be based on more objective analysis. In another area, the Service has imbalances in the number of staff in State offices. Further, some county offices which are small geographically or have small workloads may be candidates for being combined.

RECOMMENDATIONS

To correct weaknesses in the Service's work measurement and workload forecasting systems, we recommend that the Secretary of Agriculture direct the Administrator, Agricultural Stabilization and Conservation Service, to:

--Perform methods studies or other similar studies to find the most efficient way of doing the tasks being measured.

--Perform a small initial statistical sample and, on the basis of its results, assess the costs and benefits of obtaining a more representative agencywide sample of county offices.

--Improve controls for collecting data from all counties about the number of units completed. These controls should require that output be recorded as completed and that recordkeeping be done in the same way at each county office.

--Decide on the best definition for a completed unit of work as output for a given task. This definition should not change unless organization or procedural changes make it obsolete.

--Document the process of and basis for assumptions used to estimate workload and keep data on program changes following major policy or legislative decisions. This data can then be used for future estimates.

--Establish a review process for comparing workload projections to actual work done. This can be a basis for evaluating the accuracy of estimates and for improving the accuracy of future estimates.

To increase top-level management oversight of Service resources, the Secretary of Agriculture should also direct the Administrator, Agricultural Stabilization and Conservation Service, to:

--Strengthen the decisionmaking process for buying new equipment by determining organizational needs, doing cost-benefit analyses, properly evaluating competing equipment, considering the advantages of buying

equipment in bulk, and by providing direction to State and county offices on the best buy for the money.

--Perform a needs analysis for low-density and combined county office funding.

--Review staffing imbalances in State offices and the need to have an office in each State.

--Review the current county office field structure to find out what county offices could be combined without affecting the quality of service to farmers.

AGENCY COMMENTS

The agency disagreed with our assessment that its work measurement and workload forecasting systems could not yet be relied on for projecting personnel needs. It believes there are adequate system controls to assure their reliability. In addition, it also disagreed with our recommendation to improve top management oversight of its State and county offices. It believes that strong oversight is already given to these offices. A more detailed presentation of agency comments and our evaluation is in appendix V.

Although the Service provided written comments on our report, it did not present any data which would cause us to change our opinion. GAO still concludes that the Service's work measurement system cannot yet be relied on and that it needs to improve management oversight of its field offices.

Contents

ABBREVIATIONS

ASCS	Agricultural Stabilization and Conservation Service
GAO	General Accounting Office

CHAPTER 1

INTRODUCTION

It may be a cliche to say that "time is money," but that may not be far from the truth. Increasingly in our society, people look for the most for their money. This includes employers who need to know how productive workers are for the wages they earn and what will improve workers' productivity.

The need for better data on employee productivity or performance becomes even more important as the Federal Government moves toward implementing the Civil Service Reform Act of 1978 which calls for employee incentives on the basis of their performance. In our report, "Federal Agencies Should Use Good Measures of Performance to Hold Managers Accountable" (FPCD-78-26, Nov. 22, 1978), we stated that a major difficulty in holding managers accountable for efficient use of workers is the lack of reliable data on performance. We went on to state that:

> "* * * quantified data from work measurement, productivity, and cost systems need to be developed to compare performance with established goals as a basis for evaluating the effectiveness of managers."

Within the Federal Government, productivity and work measurement concerns have congressional and executive attention. One of the major contributors to the Nation's inflation problem is the declining rate of productivity. The conditions of the Federal work force affect the national productivity growth. With about 2.8 million civilians and 2 million military personnel, the Federal Government is the Nation's largest single employer. It can enhance productivity by insuring that agencies do not have more people than they need to work efficiently. Reliable work measurement and workload forecasting systems can help to insure this.

The Congress has recognized the importance of work measurement systems for determining reliable personnel needs in the budgeting process. Commenting on our prior review of the Department of Housing and Urban Development's work measurement system, the Senate Committee on Appropriations in 1977 stated that:

> "The Committee firmly believes that a need exists * * * governmentwide for objective, systematic ways to reliably estimate personnel requirements.

The Congress, too, needs budget requests that are based on reliable personnel requirements estimating techniques. The concept of work measurement offers potential for yielding more objective and reliable personnel requirements estimates."

We also have a longstanding interest in improving Federal employee productivity and assuring the efficient use of limited personnel resources. Our efforts have included (1) monitoring the status of productivity in Government, (2) identifying barriers to improving productivity, (3) improving methods of auditing productivity programs, and (4) encouraging development of work measurement systems which management can use to improve efficiency and to support annual budget requests to the Congress. (See app. II for list of GAO reports on work measurement and productivity.)

The Agricultural Stabilization and Conservation Service (ASCS) has a challenging task in determining the number of people it needs to do its work efficiently. ASCS State and county offices manage commodity and land-use programs, including those for farmers' voluntary production changes, farm-related conservation and price, and market and farm income stabilization. Although each State has an administrative office to provide oversight and support to county offices, most service delivery to the farmer takes place at over 2,700 federally funded county offices.

ASCS budget requests for personnel increased significantly after fiscal year 1977 because of work brought on by the Food and Agriculture Act of 1977 (Public Law 95-113) and other Department of Agriculture policy decisions. The following table shows changes in ASCS staffing needs for the 4 years beginning in 1977.

	FY 1977 (actual)	FY 1978 (actual)	FY 1979 (estimate)	FY 1980 (estimate)
Headquarters	594	611	655	655
Field offices (note a)	1,005	1,127	1,179	1,159
State	1,037	1,108	1,169	1,169
County	10,650	14,052	14,501	14,424
Total	13,286	16,898	17,504	17,407

a/Commodity offices, aerial photo labs, and management field offices.

As a result of these increasing budget requests, the Chairman, Subcommittee on Agriculture and Related Agencies, Senate Committee on Appropriations, asked us to review the validity of ASCS' work measurement and workload forecasting systems for determining staffing requirements. The Subcommittee wanted this information for its evaluations of ASCS' personnel estimates in the budget.

Our review concentrated on ASCS' method for estimating county office staffing needs. As the following table shows, most of ASCS' work measurement standards relate to county office staffing needs.

Staff-Year Estimates

	Covered by work measurement standards	Not covered by work measurement standards	Estimated total	Percent covered by work measurement standards
Headquarters	0	655	655	0
Aerial photo lab	0	112	112	0
Field offices (note a)	985	62	1,047	94
State offices	0	1,169	1,169	0
County offices	13,151	1,273	14,424	91
	14,136	3,271	17,407	81

a/Includes the management field office and the Kansas City Commodity Office and its branches.

DEVELOPING WORK MEASUREMENT AND WORKLOAD FORECASTING SYSTEMS

Work measurement generally means the knowledge and techniques used to determine the time it should take to perform a job efficiently. This average time to do a job becomes a standard for comparison with actual performance. Work measurement standards are developed through engineered and nonengineered methods.

Engineered standards provide the most accurate basis for estimating the time it should take trained workers, working at a normal pace, to produce a defined unit of work of an acceptable quality. They are based on an objective analysis of work elements using techniques such as time

studies and work sampling. The high initial cost and time it takes to develop engineered standards are the main drawbacks. Further, much of the work done by civilian Government agencies does not lend itself to engineered methods. This is because the work varies according to the season of the year, is not routine, and may take a long time to complete.

When work is not suited for engineered standards, non-engineered methods may be more cost effective. These include standards based on past experience or properly developed technical estimates. These standards can be established quickly and at much less cost than engineered standards. However, their techniques are less reliable than engineered techniques since they usually reflect past experience and therefore incorporate existing inefficiencies in the way work is done. These standards can eventually be upgraded either by work sampling or methods studies to better show how much time it should take to do the work.

Through workload forecasting, organizations can estimate future workload which will be produced during a specific time. The method used to estimate workload can vary from mathematical projections to educated guesses, depending on future plans and past experience. All workload forecasting systems involve some degree of uncertainty, but a good workload forecasting system provides data that is reasonably accurate and timely, documents how estimates are developed, uses properly defined outputs, and improves with experience. By applying soundly developed work measurement standards to reliable workload forecasts, an organization can come up with the "best estimates" of future staffing needs. Yet, even in the best of situations there may be significant uncontrollable factors such as weather and foreign and domestic market conditions that affect the degree to which workload can be reliably estimated.

USES OF WORK MEASUREMENT DATA

A good work measurement system gives management at all levels timely and accurate data to (1) support budget requests, (2) plan for and allocate staff, (3) evaluate staff performance, (4) identify areas to improve efficiency, (5) compare cost benefits, and (6) determine the most efficient operating policy and organizational structures to get the job done.

Our experience has been that, without a link between an agency's measurement systems, its budget process, and its use by management to improve efficiency, the emphasis

and commitment to develop valid systems is usually not enough to insure reliable data. Managers must routinely analyze variances between standard and actual labor hours for individual jobs and continually monitor trends to provide a valuable means of indicating where corrective action is needed to improve efficiency. (See app. II.)

CHAPTER 2

ASCS WORK MEASUREMENT AND WORKLOAD FORECASTING SYSTEMS DO NOT YET PROVIDE FOR RELIABLE ESTIMATES OF PERSONNEL REQUIREMENTS

ASCS' work measurement and workload forecasting systems cannot yet be used to reliably estimate the minimum number of people needed to do the agency's work because of the following weaknesses:

--No methods studies were performed, before or after the standards were developed, to correct inefficiencies in the way work was done.

--Sampling techniques used to develop standards did not conform to accepted practices. Therefore, the work done by sample counties may not represent all county offices. This could mean inaccurate estimates of staff requirements.

--Controls for recording work units were poor, and this resulted in inaccurate records of work actually done. Such problems are likely to cause inaccurate standards and poor workload projections.

--Units of output and associated tasks were not properly defined and this can result in not accurately measuring the work done.

--Constant changes in definitions of work unit output prevent the workload forecasting system from being accurately evaluated.

--Some workload estimates lacked supporting documentation.

Also, changes in legislation, policy decisions by the Secretary of Agriculture, and other environmental influences make workload forecasting difficult.

We do not know, in most cases, whether these weaknesses also cause personnel requirements to be overstated or understated or to what degree they are offsetting estimates. Nor does ASCS know. If there is any one weakness which, in our view, is likely to cause personnel requirements to be overstated, it would be the lack of methods studies to assure that the standards developed represent the time it should take to do the work efficiently.

NO METHODS STUDIES

Work measurement standards should be based on the most efficient and economical ways for performing tasks. If standards are based on existing procedures they will incorporate whatever inefficiencies those procedures may have and will perpetuate them. Therefore, methods studies to identify inefficiencies should, where practical, be done before developing standards. Methods studies identify the way work should be performed and then used to establish standard times to perform that work. Yet, because of the time involved, it may be more practical to establish standards on the basis of past experience or technical estimates without first making methods studies. However, in these cases, methods studies should be made as soon as possible after the standards are developed.

ASCS did not do methods studies before or after developing its work measurement standards. As a result, its standards incorporated certain inefficiencies which are likely to result in overstated staff requests.

We hired a consultant to analyze the procedures of two ASCS county offices in administering programs in their jurisdictions to get a general idea of the potential for improving ASCS' efficiency. Both offices used the same procedures for administering feed-grain program activities. The consultant found that procedures used to administer three of the feed-grain program activities (set-aside payments, deficiency payments, and payments for diversion of feed grains) could be revised with a resulting savings in staff time.

To participate in the feed-grain program, a producer must agree to "set aside" (not plant) a certain percentage of acreage originally intended for planting. A producer may voluntarily set aside additional cropland when planting certain program grains. For this additional voluntary diversion of cropland, the producer receives payment. A producer qualifies for a deficiency payment if the average selling price of the grain does not reach or exceed a predetermined "target price."

Part of the administrative activities associated with the feed-grain program involves county employees' completing three separate forms. These forms require much of the same information. The consultant found that, by combining the forms into one, these county offices could eliminate duplicate processing and provide one record of an individual farm's participation in the feed-grain program. He estimated this change would reduce workload by 15 percent in the

offices visited. ASCS officials agreed that the combined form had merit, and they told us they would look into its potential use. Because ASCS did not make methods studies, it is likely that the standards developed for these tasks overstate the actual time needed to complete a given workload.

ASCS stated that methods studies were commonplace. It cited as examples, the batch cotton loan system, use of aerial observation for doing compliance work, and use of programable calculators to save processing time. While we agree that these changes may improve productivity, they did not result from methods studies but rather through employee suggestions. We encourage ASCS to continue fostering employee suggestions for improvements. ASCS also told us that in 1979 it initiated a task program using specialists to annually review operating provisions, procedures, and forms. This program was implemented after our audit work was completed, and it was not evaluated.

IMPROPER SAMPLING PROCEDURES

In selecting the counties for its sample, ASCS did not use standard statistical methods. It failed to choose the counties randomly. Further, it set up additional selection criteria which should not have been used with this statistical method. Specifically, these criteria included selecting (1) counties from each State, (2) counties with small to very large workloads (currently ASCS uses five workload groupings), and (3) all programs and major operations of the county offices.

To obtain a valid and representative picture of its total county office workload, ASCS should have selected county offices at random which would have given each county office an equal chance to be chosen. Also, because of the statistical method chosen, ASCS should not have used additional selection criteria. When it adopted these criteria, ASCS should have used statistical sampling guidelines which would have resulted in a different sample size.

Each year ASCS selects new counties to replace those that leave the sample. Although each county remains in the sample for 3 years, about one third of them rotate out each year. ASCS's selection of new counties is also inconsistent with any one statistical method and is not statistically random. For example, ASCS instructed State offices selecting new counties for the sample to look for those engaged

in tobacco marketing and rice, cotton, and sugar loan activity; use criteria which reject counties with executive directors who are new, ready to retire, or sick; and exclude counties that are considered poor performers. These factors can bias ASCS' sample and, therefore, cause its results to be unrepresentative of overall county office operations. Thus, the standards developed may not accurately reflect the time counties actually use to accomplish work nor accurately project county office staffing needs. However, the criteria which exclude poor-performing counties would tend to result in standards which represent a more efficient work pace than normally kept by rejected counties.

ASCS states that it was never its intention to go to a pure random sample because of the cost associated with selecting a random sample of sufficient size to insure validity of results. While it is true that ASCS will likely have to increase its sample size to insure agencywide representation, neither we nor ASCS now knows how large a sample would be required and how much additional expense would be involved until ASCS performs a statistically random presample.

In the final analysis, ASCS must weigh the costs and benefits associated with a more representative sample. We believe ASCS should do the presample and, on the basis of its results, assess the costs and benefits of obtaining a more representative agencywide sample.

POOR PROCEDURES AND CONTROLS FOR RECORDING WORKLOAD INFORMATION

ASCS does not give its county employees enough guidance on how to record work produced. As a result many errors occur in recording workload data. Timely and accurate recording of workload data is very important to ASCS for (1) developing its annual staffing standards and (2) estimating staff required to complete its county work.

All ASCS counties record output (work completed) but only sample counties measure input (time used to do the work). ASCS instructions require sample counties to record input daily in half-hour increments and output as it is completed and report this data quarterly to ASCS headquarters. All other counties are required to record only output and report it twice each year to ASCS headquarters.

In some sample counties output was inaccurate because program specialists were recording it much later than on an as-completed basis. Some were recording output only quarterly, in time for reporting to headquarters. Many nonsample

counties followed suit by recording output at the end of the fiscal year. (In fiscal year 1978 they also recorded output about midyear.)

Employees at some of the 22 counties we visited (both sample and nonsample) told us they had to go through many files to record output because the forms they needed had already been filed. One county kept all forms in a pile for recording a single-line item and counted the forms before filing. Some counties organized their files by program year but recorded their output by fiscal year. As a result they had to review the records for 2 years to record output for 1 fiscal year.

We found little evidence, either in sample or nonsample counties, of control procedures to insure the accuracy of reports submitted to headquarters. Program specialists were often designated to record output relating to their program areas. But reviews for accuracy above the county level consisted mostly of scanning reported figures for reasonableness.

During limited reviews of ASCS output for a number of line items from 10 counties (sample and nonsample), we found errors ranging up to 60 percent. Examples follow:

--Personnel understated fiscal year 1978 output for one item by about 25 percent. This occurred because they omitted some output completed in the first quarter of the fiscal year which was recorded in the 1977 "program year" and other output which was never counted. Two other counties understated output by between 26 and 30 percent because records were inadvertently omitted.

--In two cases errors occurred because the county offices did not understand how to record particular output.

--In one case ASCS' recorded output was 57 percent higher than ours, but it did not explain the error.

If these kinds of errors are occurring often in sample counties, they will bias annual work measurement standards and thus distort estimated staffing requirements. If such errors are prevalent in all counties, report workload for the current year will be incorrect as well as estimated workload for the coming year.

We recognize that it is frequently very difficult to get employees to take the time to accurately record output

and input of work measurement and workload forecasting systems. Yet, if these systems are to be reliable, efforts must be made to improve accuracy. Employees can help. For example, employees in one county developed a way to help avoid recording problems. They kept activity ledgers for major work items and recorded each action affecting output. These procedures allowed them to quickly tabulate output for a work item. County employees said these ledgers required little time to maintain and reduced the time needed to recheck quarterly work measurement data. Also, we found the data much easier to verify than in other counties. When differences occurred between our totals and county totals, we were able to find the reasons for the differences and to determine which totals were correct.

While ASCS believes it has sufficient quality controls over its work measurement systems, it said it would strive to improve the quality of data by upgrading controls in counties, States, and management field offices.

NEED FOR BETTER DEFINITION OF "OUTPUT"

Establishing a clear definition of output is absolutely necessary if the work measurement and workload forecasting systems are to be useful in estimating staffing requirements.

ASCS defined output--work completed--as three elements: (1) the specific unit of measure (for example, a written document such as a form), (2) when a unit should be counted as completed, and (3) operations or job tasks to include when recording input or time spent completing the work (for example, time spent filling out a form). In reviewing ASCS' output, we found certain problems. For example, units of output were improperly defined, and specific activities associated with completing work were too broad. Discussion of these problems follows.

Definition of output can be misleading

Farmers who want to take part in conservation programs submit applications for conservation cost-sharing to ASCS. Conservation programs range from planting grasses as a permanent vegetative cover, to more expensive irrigation projects. A county office receiving many cost-sharing applications does not approve them all.

Regardless of whether the ASCS county committee approves an application or not, county offices must spend time processing paperwork. Yet, they can only record output when the committee approves an application. Thus, when

sample counties have a lot of disapproved cost-sharing applications, the standard time used to assess staffing needs for this work would be inaccurate. For example, in two counties (one sample and one nonsample) the committee disapproved a total 955 applications out of 1,329.

County	Total applications	No. of disapprovals	No. of approvals
Florence, S. C.	268	79	189
Horry, S. C.	1,061	876	185
Total	1,329	955	374

To illustrate the significance of the matter, let's assume it takes 1 hour to process each application, whether it is approved or not; Florence County then would have spent 268 staff-hours on these applications. The standard for this task, however, is based on the number of approvals, not total applications processed. Therefore, Florence County's standard by ASCS' definitions would be 1.42 hours per unit. The Horry County rate would be 5.74 hours per unit. These varying work rates are mathematically averaged and are used to represent the standard time required to administer cost-sharing. Such a standard would then have little or no relationship to the actual time required to complete the approved applications and would consequently result in inaccurate estimates.

In addition to its impact on work measurement standards, this problem also results in inaccurate workload forecasts for conservation cost-sharing work. Unless otherwise instructed, county offices use their most current year's actual workload as the projected workload for the next budget year. Using the example above, both Florence and Horry Counties would project 189 and 185 units of work, respectively. But, actually, much more work was done, and therefore the workload projections would be understated.

ASCS acknowledged that recording only approved Agricultural Conservation Program applications may not be the "best" indicator, but it believed it was a "good unit which could not easily be manipulated." Also, ASCS agreed that the definition of work units should be changed as little as possible.

DIFFICULTY IN FORECASTING WORKLOAD

Since forecasts of ASCS workload must be made far in advance of the budget year, many unpredictable factors can affect these forecasts between the time they are made and

the time the workload materializes. Many aspects of county office workload are subject to rapid and unanticipated changes over relatively short periods, including economic, environmental, policy, and legislative changes.

The environmental and economic factors which affect ASCS workload include

--general weather conditions,

--domestic and foreign demand rates for individual commodities,

--existing supplies of commodities in the United States and abroad,

--insect damage to crops,

--use of fertilizers which can affect the yield from a given field, and

--natural disasters such as floods and droughts.

These factors can cause great increases or decreases in expected workload levels, depending on the market supply and demand for commodities. For example, if the supply of a given commodity is much higher than its demand, many producers may decide to obtain loans from ASCS and store the commodity until the market price is favorable or until the producer decides to turn the crop over to the Government. In addition, if a flood, drought, or other disaster affects their crops, farmers may request reimbursement for part of the losses incurred.

Examples of new or amended legislation and ASCS policy changes are the combined effects of the Food and Agriculture Act of 1977 (Public Law 95-113) and the Secretary of Agriculture's decision to implement a set-aside program to help control the production of wheat, feed grains, and upland cotton. Before the 1977 act, participation in the ASCS programs for these crops was limited to farms with established allotments which qualified them for loans, disaster payments, and other benefits. The act removed this restriction, at least temporarily. Then, the Secretary decided to embark on a Nation-wide set-aside program in which all producers of wheat, feed grain, and upland cotton could elect to participate by establishing a normal crop acreage. This increased farmer participation caused workload to increase in the following ASCS county office operations:

--Establishing farm yields for certain crops.

--Accepting producers' certifications of planted acreages.

--Administering signup for producers interested in available programs.

--Conducting more farm visits to insure that farmers comply with program requirements.

--Processing more payments to producers for voluntarily setting aside land.

--Distributing disaster payments to farmers who were not previously eligible for them.

--Establishing and updating basic farm records.

CHANGES IN DEFINITIONS AFFECT THE RELIABILITY OF ASCS WORKLOAD FORECASTS

From year to year ASCS regularly changes individual definitions of work units completed. Such changes make it impossible to establish the reliability of workload forecasts.

The effect of so many changes is well illustrated in the budget item for annual elections of county committee persons. This function involves such activities as conducting county conventions, developing election instructions, counting ballots, and certifying election results. The table below shows how units vary when definitions change.

Fiscal year	Definition of completed unit	Units completed
1978	One unit for each eligible voter.	5,384,859
1977	One unit for each eligible voter.	5,343,750
1976	One unit per community committeeman, except alternates (but count three units in one-community counties), plus one unit for each valid vote cast in the elections.	1,420,811
1975	One unit for each county and community committeeman, except alternates (but count six units in one-community counties), plus one unit for each valid vote cast in committee elections.	1,434,189
1974	One unit for each county and community committeeman, except alternates (but count six units in one-community counties).	55,935

If one were unaware of these constantly changing definitions, it would appear that workload increased drastically between 1974 through 1978. We do not know if it did or not. Therefore, the changes in definition of tasks made it impossible for us to evaluate the overall reliability of ASCS workload forecasts.

ASCS maintains that it develops the best definition of completed units and only changes them when the program changes or when the system needs improvement. We agree that ASCS does try to develop the best definition of a completed unit, but the many changes in definitions remain a problem. Many ASCS officials indicated that changes in definitions of completed units were often not based on program or policy changes but on complaints from some county offices that they were not receiving proper credit for work done under a particular work unit definition. As a result of these changes, we could not determine how much ASCS workload was increasing or decreasing. We believe that ASCS could minimize these problems by hiring a work measurement expert who is trained in defining measures of work.

WORKLOAD FORECASTING ASSUMPTIONS SHOULD BE DOCUMENTED

Assumptions used to forecast workload should be documented, both to evaluate their reasonableness and to gradually improve the reliability of the forecasting system. In some cases ASCS had limited documentation, but in other cases no documentation supported the assumptions. As a result ASCS has to rely heavily on employees' memories.

A good example of an undocumented assumption occurred as a result of the policy and legislative changes related to the Food and Agriculture Act of 1977. After determining which programs would be affected by these changes, ASCS estimated new staffing requirements and requested a supplemental appropriation for fiscal year 1978. Before developing these estimates for its 1978 supplemental budget, ASCS assumed the following, which appeared to have had a great impact on staffing levels (since the basis for estimates used from year to year is not documented, there is no way to evaluate it):

--ASCS will service 3 million farms.

--Commodity and storage facility loan volume will increase 50 percent.

--Farms whose crops have to be verified for compliance with the program will increase from the current level of 20 percent to 30 percent of all participating farms.

These workload estimates were then multiplied by the standard time to perform the task, which was based on fiscal year 1976 sample counties' data. In estimating staffing time required to verify crops, ASCS decided to use two farm visits a day. In the past it had used an average four farms a day. ASCS officials said that the time was cut in half because ASCS felt farm visits would take longer since all crops had to be verified. Before, only selected crops were verified.

In cases such as these, when assumptions dramatically influence many estimates, ASCS needs to evaluate and document their reasonableness. Without such evaluation and documentation, it does not know how accurate assumptions are and would not have the information available for future program changes. For example, the 3-million-farms assumption was used to estimate the number of expected farm visits, crop certifications, and changes, which would require updating basic farm records. Estimates based on the 3-million assumption accounted for more than 3,000 of the staff-days requested in the fiscal year 1978 supplemental request. ASCS has not yet determined if its assumption was accurate.

ASCS says it uses current Department of Agriculture statistics on the number of farms for making projections. However, ASCS officials did not provide this information to us during our audit. In fact, they informed us that no current data was available on the number of farms in the United States and that, therefore, they had to use their best judgment. ASCS informed us that the Census Bureau is currently surveying U.S. agriculture and that ASCS will use this data as a basis for estimating program workload. This current data should help ASCS to better estimate its workload.

CONCLUSIONS

ASCS needs to improve its methods for estimating staffing requirements before submitting its budget to the Congress.

First, ASCS work measurement standards are based on past data and, therefore, include any built-in inefficiencies in the way work is actually done. Methods studies should be done to refine these standards. Second, ASCS too often changes its definitions for units of output. This makes it impossible to determine the accuracy of its workload projections. Third, ASCS statistical sampling

procedures do not conform to accepted statistical practices. It needs to assure that its sample of counties accurately represents the work done by all ASCS county offices. Fourth, ASCS lacks documentation to support assumptions about workload which increased as a result of the Food and Agriculture Act of 1977 and the Secretary of Agriculture's policy changes. ASCS has previously based its assumptions primarily on intuition and general knowledge about past workload needs, but it needs to maintain up-to-date records to weigh against any future changes in workload demands. Finally, ASCS has poor control over the way workload information is recorded. As a result, errors cause inaccurate work measurement standards and workload forecasts and, therefore, inaccurately estimated staffing needs.

RECOMMENDATIONS

We recommend that the Secretary of Agriculture direct the Administrator, ASCS, to:

--Perform methods studies or other similar studies to find the most efficient way of doing the tasks being measured.

--Perform a small initial statistical sample and, on the basis of its results, assess the costs and benefits of obtaining a more representative agencywide sample of county offices.

--Improve controls for collecting data from all counties about the number of units completed. These controls should require that output be recorded as completed and that recordkeeping be done in the same way at each county office.

--Decide on the best definition for a completed unit of work as output for a given task. This definition should not change unless organization or procedural changes make it obsolete.

--Document the process of and basis for assumptions used to estimate workload and keep data on program changes following major policy or legislative decisions. This data can then be used for future estimates.

--Establish a review process for comparing workload projections to actual work done. This can be a basis for evaluating the accuracy of estimates and for improving the accuracy of future estimates.

CHAPTER 3

NEED FOR STRONGER ASCS HEADQUARTERS

MANAGEMENT OVERSIGHT

ASCS headquarters needs to strengthen its oversight of State and county offices' spending decisions for items other than county office personnel expenses. Until it does, it will likely result in the agency's not making the most effective and efficient use of its limited resources.

In recent years Government officials have been under increasing pressure to do more with less--that is, to maintain or improve public services while keeping costs down. To achieve this goal, managers at all levels must be sure that their decisions are sound and that they provide the best results for the costs. Top management should assure the best use of very costly and limited resources, and reliable work measurement system data can help do this.

During our review of the ASCS work measurement and workload forecasting systems, we found that ASCS does not exercise enough management oversight over its State and county offices.

WHY DOESN'T ASCS STRENGTHEN ITS OVERSIGHT?

Top management views ASCS as a decentralized operation. We were told that ASCS rejects centralization of anything and that this philosophy dates back to its authorizing legislation. It reflects the way ASCS has always done business. For example, ASCS gives its State and county offices limited procurement guidance because it feels that these local offices are in the best position to make decisions affecting their own operations. Thus, it generally does not get involved.

In our viewpoint, headquarters is apparently concerned that strong management supervision would lessen State and county offices' responsibility to make decisions affecting local operations. Management oversight is a control process that helps assure the most effective use of resources. It should not conflict with State and county responsibilities for administering ASCS programs and serving the farmer; in fact, it will be supportive of them.

CALCULATORS BOUGHT WITHOUT PROPER HEADQUARTERS ANALYSIS

A recent ASCS effort to reduce staff time and increase productivity involved the purchase of calculators for State and county offices. Although the idea to use these calculators was innovative and may have increased productivity, headquarters did not properly analyze the idea before implementing it systemwide. As a result ASCS spent more money than necessary.

The use of programable calculators began late in 1976 in ASCS county offices in Texas. Personnel saw them as a way to reduce time needed to compute some loan and disaster payments. As word of the calculators' use spread, additional county offices in different parts of the country began buying them.

Not until early 1978 did ASCS headquarters learn of the calculators' potential for increasing productivity and program accuracy. From February through July 1978 various headquarters personnel recommended using the calculators in ASCS. As a result, ASCS management increased county office procurement authority for the calculators from $800 to $1,500 and provided State offices with over $1.5 million to buy them.

ASCS could have gained valuable insight by first analyzing (1) the calculators' impact on productivity, (2) which county offices really needed them, and (3) the costs and benefits of competing brands. Its procurement provisions required the last two analyses. For example, ASCS could have questioned if county offices were saving time primarily by using programable calculators or, as was the case for one program function, by revising processing procedures. (The new procedures in this case involved batching work; that is, accumulating a number of forms or loans and processing them all at about the same time instead of case by case.) According to an ASCS official, new procedures accounted for about half the time saved.

In mid-August 1978 after increasing county offices' purchase authority and making funds available to States, ASCS finally did a study using its work measurement data to determine the potential time savings from using programable calculators and the county offices which might be eligible to buy them. The study, however, was based mainly on judgment instead of objective, documentable estimates of time savings from a sample of county offices. The study concluded that 1,530 counties qualified to buy the calculators--1,310 calculators more than the 220 ASCS had already bought.

Finally, at no time did ASCS headquarters give counties information on competing brands of calculators. Counties bought or ordered 98 percent of the calculators at about $1,280 each, although a comparable calculator was available for about $408. Thus, ASCS spent almost $1.2 million more than necessary.

ASCS believes it performed the proper analysis. We disagree. Its analysis was based primarily on judgment and did not include an assessment of competing brands. ASCS also disagreed that it should have considered bulk purchases of the equipment. In our opinion, this should be a consideration in any procurement decisionmaking process.

MORE MANAGEMENT OVERSIGHT NEEDED FOR IMPLEMENTING AERIAL OBSERVATION

Using observers in aircraft to verify farmers' certifications of their acreage is another innovative measure which ASCS believes will improve productivity. ASCS county offices began using aerial observation methods about 4 years ago.

State and county offices have planned for and acquired flying services and aerial observation equipment, and headquarters has little involvement in these decisions. Almost 700 county offices in 34 States used aerial observation in fiscal year 1978, and almost 1,600 counties in 40 States expressed plans to use it for fiscal year 1979. These offices select the location of planes and pilots to be used. Headquarters did not analyze the selections to insure that they were sound and were the most efficient way to accomplish aerial observation.

In January 1979 ASCS headquarters instructed State and county offices to use aerial observation (unless ground methods could be shown to cost no more). However, headquarters officials did not require State or county offices to justify how they planned to implement aerial observation nor did they know how much equipment the offices would need. For example, ASCS had not determined how many planes would be required, how many cameras would be needed in the planes, or how much ground equipment would be needed. This data is important because plane rental can cost up to $50 an hour, and each plane must be modified to house a camera. Cameras may cost between $120 and $600; and the ground equipment, up to $7,300.

An ASCS headquarters official told us that State and county offices determine the need for such purchases. After further questioning on how ASCS planned to pay for needed aerial observation equipment, we were told that "the budget

people usually come up with the money." But ASCS budget office officials told us they were unaware that aerial observation was to be used widespread and that funds would be needed for equipment.

After our questioning on how ASCS planned to implement aerial observation, ASCS headquarters directed all State and county offices to report how much related equipment they would need. Nevertheless, headquarters still did not plan to determine the soundness of these needs.

The question is what combination of planes and equipment is needed to most efficiently provide aerial observation within and among counties. Intracounty and intra-State analyses cannot answer this. What is needed is a national perspective to avoid spending more than necessary. The Deputy Administrator for State and County Operations explained that ASCS is now evaluating competing models of equipment to determine the most cost-effective way to use widespread aerial observation. This analysis should help to assure that ASCS makes the best decision for the money. Similar analyses should be made whenever a proposed major change applies Nation-wide.

DO LOW-DENSITY AND COMBINED COUNTIES NEED ADDITIONAL FUNDING?

ASCS states that it needs extra funds to operate combined and low-density counties. ASCS defines a low-density county as one having great distances between its farms, and therefore additional travel costs in time and money are incurred in administering ASCS' programs. It defines a combined county as two or more counties administered by one executive director. As noted in chapter 2, we found a number of deficiencies in the way ASCS defined its sample for accumulating work measurement data. In spite of these deficiencies, ASCS technical staff and financial management officials expressed confidence that the work measurement sample accurately represents county office operations in general. But ASCS also believes that it incurs extra expenses when operating in combined and low-density counties, which may well be the case. As a result it includes the estimated costs it associates with combined and low-density counties in the staff-year cost used in its annual budget request. For fiscal year 1980, ASCS budgeted additional funding of almost $1 million and $690,000 for low-density and combined counties, respectively.

Extra funding for low-density counties

Since fiscal year 1973 when funds were first distributed for low-density counties, ASCS has arbitrarily allocated as much as $1.8 million.

Between fiscal year 1973 and 1978, low-density funds were distributed only to Western States and Florida. This was because ASCS management believed that these States had great distances between farms and, therefore, required county office personnel to spend more time traveling to individual farms. In fiscal year 1977, however, ASCS management decided that low-density funding should be allocated for all the continental United States. Thus, this funding included such widely separated and different States as Georgia and Nevada, which have average square miles per county of 365 and 6,868, respectively. As a result of this change, one State that received low-density funds of $225,000 in fiscal year 1973, received only $86,000 in fiscal year 1978.

ASCS established this funding level on the basis of its judgment. Thus, it cannot be sure that the current funding level for low-density counties is needed.

Extra funding for combined counties

As in the case of the extra funding for low-density counties, ASCS has also provided additional funds to com bined counties without an analysis to justify such funds. All sample counties record time spent by their committees according to the various ASCS work items. ASCS management, however, decided that the work measurement system did not sufficiently represent the committee's time and travel for combined counties. Thus, in the late 1960s ASCS began allocating extra funds to combined counties. The estimated extra funding for combined counties totaled almost $690,000 in fiscal year 1979 and is expected to stay at this level for fiscal year 1980.

Because ASCS did not analyze the need for these funds, it does not know whether combined counties are being compensated through their work measurement and workload forecasting systems.

ASCS stated that estimates of additional funding needs are received from combined county offices and are analyzed for reasonableness by State office and headquarters personnel. In addition, the agency believes it would be very difficult to analyze how much low-density funding is needed. It uses experience and judgment instead.

WORK MEASUREMENT REPORTS ARE OF LIMITED USE IN ASCS

An integral part of management oversight is information that is accurate, timely, and useful to management at all levels.

ASCS keeps work measurement reports, but they are of limited value to management for improving and tracking performance. Area directors do not use them, State directors use them only as a basis for initial county office fund allocations, and district and county directors use them only to project workload for the coming year.

A principal reason for the limited use of these reports is due, in part, to the small number of counties in each State recording output and input for work items. Only sample counties record this data. Therefore, State, district, and county officials would have no information on actual performance for most county offices and, as a result, no basis for evaluating why actual performance differs from a standard. However, nonsample counties which do not collect this data could use the work measurement data. To accomplish this, these counties would be required to report output for each work item periodically and keep track of time used for discretionary activities such as training. Then, standards of overall office performance could be established to show only time spent doing all measurable work. If ASCS were to have all offices record output for each work item, and total time expended (as opposed to recording time by unit completed), it would have a valuable tool for improving productivity of county operations.

ASCS NEEDS A MORE OBJECTIVE MEANS FOR ASSIGNING STATE OFFICE STAFF

Currently, ASCS does not have a work measurement system for determining its State office staff needs. Instead, it relies on its area directors' judgments. State offices incurred a workload of 1,108 staff-years in fiscal year 1978. But labor at these offices is indirect--that is, not producing a measurable unit of direct output. ASCS State offices primarily support direct services done by the counties. These services include giving program advice and general management oversight.

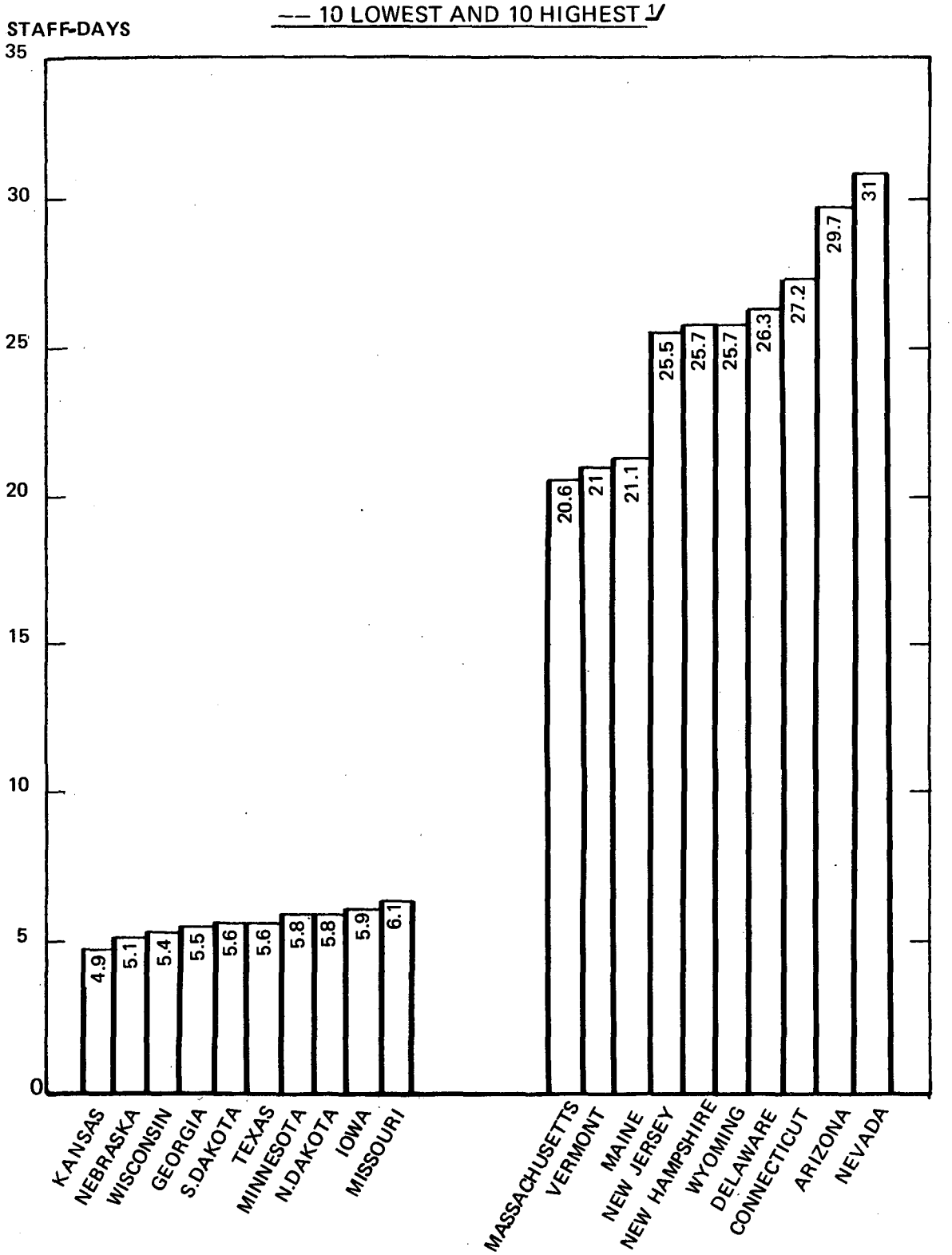
Five directors at ASCS headquarters who have management oversight responsibility for State and county operations now approve State office assignments under an allotted staffing ceiling. They can increase staff under this ceiling if State

office work warrants it. Generally, headquarters officials assume that the current staffing level is required to do the work. If, however, a State office does request an increase, area directors decide if it is needed on the basis of their periodic visits to State offices and general knowledge about the number of ASCS programs, extent of farmer participation in those programs, number of county offices, and the efficiency of State office staff. (In regard to the last point, area directors have no specific knowledge about State office efficiency. The directors decide on this on the basis of their knowledge of the employees in each State office.)

While good judgment in assigning State office staff is important, ASCS can strengthen its basis for assigning staff by developing staffing ratios that relate indirect labor needed to direct workload or direct labor hours. This would mean relating State office staffing to county office workload or staff-days spent. We developed ratios of State to county staff-days and found imbalances in State office staffing. These imbalances indicate some State offices may be overstaffed or understaffed.

The following chart compares certain State office and county office staff-days used. For instance, our analysis shows that during 1978, in Wisconsin, for every 100 county office staff-days used, the State office used 5.4 staff-days. On the other hand, in Nevada, for every 100 county office staff-days used, the State office used 31 days.

RATIO OF STATE TO COUNTY STAFF DAYS
— 10 LOWEST AND 10 HIGHEST 1/



1/State staff days incurred for every 100 county staff days incurred.

At least two possible reasons may explain these inconsistent State staff levels. First, ASCS relies primarily on subjective evaluations of reasonable State staffing levels and this causes inappropriate allocations of staff. Second, ASCS feels its State offices must maintain adequate support services for the county offices even though many States have relatively low workload in some county offices. Therefore, the agency keeps "skeleton crews" at these offices--that is, each State office must have a minimum staffing level, such as a State executive director and several assistants.

In State offices with similar total county office staffing levels, we also found large staffing inconsistencies. For instance, county and State staffing in Wisconsin and Indiana for fiscal year 1977 follows:

	County office staff-days	State staffing	State to county staff ratio (note a)
Wisconsin	102,298	5,499	5.4 to 100
Indiana	93,677	8,593	9.2 to 100

a/For every 100 days of county staff time spent, the State ASCS offices in Wisconsin and Indiana used 5.4 and 9.2 staff-days, respectively.

If Indiana's staff had been able to perform at the same level as Wisconsin's, it could have saved over 3,500 staff-days (about 40 percent) and approximately $250,000. ASCS needs to review its State office staffing levels to find out why some offices appear overstaffed.

ASCS stated it has a State office staffing guide and maintains that its State offices are doing more work with less staff. Since it did not have a State office staffing guide when we performed our audit, we did not evaluate it.

ASCS NEEDS TO REVIEW ITS CURRENT COUNTY AND STATE OFFICE FIELD STRUCTURE

By assessing data from its work measurement and payroll systems, ASCS should be able to identify opportunities to combine some of its more than 2,700 county offices and 50 State offices. Such a move could improve efficiency and reduce personnel costs. Current State and county office workloads vary from relatively light to heavy; some offices are now responsible for very small geographic areas and others for large ones. ASCS could link the information from its work measurement system with other information about the

characteristics of specific offices to determine which offices can be combined without sacrificing the quality of ASCS services or reducing needed State office support.

Past attempts at combining county offices

ASCS and other Department of Agriculture offices attempted to combine county offices in the early 1960s and again around 1973. Although some ASCS county offices were combined, the efforts generated criticism by State and county officials. Also, the States and counties saw the consolidation guidelines as arbitrary, and attempts to combine county offices met strong county opposition, some of which was expressed to the Congress. Because of this opposition, ASCS stopped combining county offices and limited its efforts to colocating Department of Agriculture offices within counties.

ASCS has been reluctant to try again to combine county offices. Now, State and county officials, with headquarters and area directors' approval and with input from a newly formed National Administrative Committee, make all decisions about combining offices.

Current trend toward separating previously combined county offices

Currently, local ASCS officials seem to be moving toward separating previously combined county offices whose workloads have increased. ASCS maintains that these separations are done to improve service to the farmer. However, increasing workload alone should not be the sole basis for separating combined county offices. Other factors should also be part of the decision, including the impact on productivity, the net cost of this action, and farmers' closeness to ASCS services.

One State's recent request points out how the work measurement system can be used to analyze the impact on productivity and potential costs caused by such proposed organization changes. The Georgia State office asked for guidance from ASCS headquarters in determining new staffing levels for several recent changes in the alinement of county offices and for other changes it was considering.

ASCS headquarters' analysis for the Georgia State ASCS office shows that the work measurement system allocates more staff-days to separate county offices than it does to combined offices and thus increases overall staffing and

operating costs. The following table shows the increased staff-days and expenses which were estimated from the ASCS work measurement system in separating the Calhoun and Dougherty county offices in Georgia.

	Calhoun and Dougherty Counties Combined	Separate	Percent of increase
Staff-days	1,272	1,680	32
Expenses	$70,100	$92,500	32

In this case the Georgia State office did not use this data when it decided to separate these counties and, therefore, did not consider the cost impact of its decision.

ASCS officials rightly believe that an important factor to providing service to the farmer is accessibility, although they currently have no definitions either for "service" or "accessibility." A 1970 study by ASCS established a general guideline which said no farmer should have to travel more than 1-1/2 hours one way to reach a county office. Today, however, there is no such criterion. Properly defining service and accessibility is essential for ASCS to examine the continued need for offices that do not measure up.

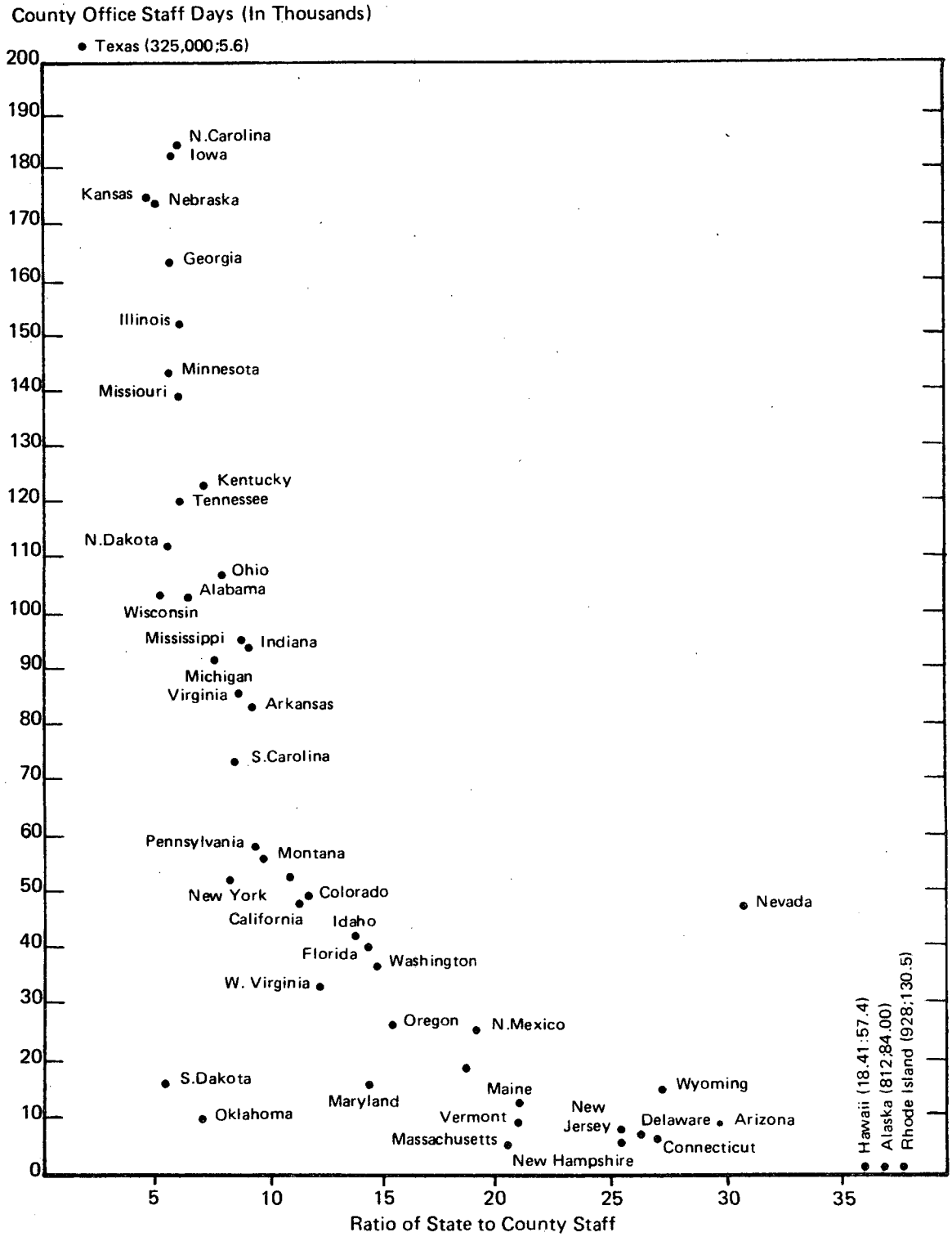
ASCS should look at the need to maintain all of its current county administrative offices and should consider the changes in cost, productivity, and accessibility of combining offices.

Reducing the number of State ASCS offices

ASCS has a State administrative office in every State and Puerto Rico. These offices, like county offices, vary in size and amount of activity.

In many cases, having an ASCS office in all States seemed to result in higher staffing levels than those required to adequately service local county operations. For instance, the following chart shows that the Northeastern States generally required a very high ratio of State-to-county staffing. In fact, 8 of the 13 States in the ASCS northeastern area had a State-to-county office staffing ratio of 20 or more State staff-days used for every 100 county staff-days used. This is very high when compared to most other States.

RATIO OF STATE TO COUNTY STAFF DAYS
PLOTTED BY COUNTY STAFF DAYS



To illustrate the staffing effect of ASCS' State organizational structure, we compared State staffing and workload in Texas to total State staffing and workload in the 13 States of the ASCS Northeast area. We chose the two areas because they have about the same geographic area (in square miles) and county office staff-days. Texas does have more program responsibilities, including those for administering the peanut and upland programs and the extra-long staple cotton and rice programs.

	Size of area (sq. mi.)	Total State office staff-days	Total county office staff-days	State to county staff
Texas	262,134	18,371	325,013	5.7 to 100
Northeast	256,029	35,391	299,284	11.8 to 100

The table shows Texas was able to support a State office operation similar to the entire Northeast, using about half the staff. Thus, if the Northeastern States were combined into one office, they might have needed over 18,000 fewer staff-days of support and might have saved over $1.3 million annually. Top management should assess the need for maintaining an office in every State.

- - - -

ASCS cited its past political problems in attempting to consolidate offices and stated that it is not "desirable, reasonable, or possible to go through another county office consolidation * * *." It added that consolidation of State and county offices predictably will fail and further deter service delivery.

CONCLUSIONS

Stronger top management oversight is needed in coordinating ASCS spending decisions for items other than staffing. This need stems from its basic management philosophy that because it is decentralized and county office employees are not Federal employees, ASCS' offices should have much discretion in managing their own affairs. ASCS headquarters officials say these offices know best how to accomplish their objectives; therefore, ASCS headquarters interferes with their operations as little as possible. The ASCS management philosophy of noninterference has reduced its ability to provide effective supervision, particularly as it relates to costly county office procurement decisions. Seemingly small procurement decisions by county offices become large and costly when multiplied by the over 2,700 counties making them.

County involvement in aerial observation and programable calculator purchases exemplified such widespread procurements. Further, ASCS needs to (1) perform an objective analysis of its needs for low-density and combined county office funding, (2) look carefully at the staffing in its various offices and eliminate staffing imbalances, and (3) review its current organizational field structure to find out what can be combined without affecting the quality of services to farmers.

RECOMMENDATIONS

To increase top-level management oversight of organization resources, we recommend that the Secretary of Agriculture direct the Administrator, ASCS, to:

--Strengthen the decisionmaking process for buying new equipment. When deciding on potential purchases, determine organization needs, do cost-benefit analyses, properly evaluate all competing equipment, consider advantages of buying equipment in bulk, and provide direction to State and county offices on the best buy for the money.

--Evaluate and document the need for low-density and combined county office funding.

--Develop and implement a program of measuring county office efficiency against developed standards to help improve office productivity.

--Integrate work measurement, workload forecasting, and productivity improvement with other management processes such as procurement management and quantitative methods such as cost-benefit studies.

--Review State office staffing levels and review the need to have a State office in every State.

--Evaluate the need to staff all county offices. This should be done case by case by determining what improvements could be made by consolidating offices, calculating costs and benefits associated with this action, and evaluating other local factors which may affect the soundness of this decision.

CHAPTER 4

SCOPE OF REVIEW

We performed our fieldwork between May 1978 and February 1979. During this time we evaluated policies and procedures, examined records, and interviewed personnel about:

--ASCS' uses of its work measurement and workload forecasting systems.

--The way estimates are made for State office employees who are not covered by work measurement and workload forecasting systems.

--Selected procurement practices and procedures.

--Headquarters management oversight of State and county office operations.

We conducted our review at ASCS headquarters in Washington, D.C., and at selected ASCS field offices. (See app. I.)

APPENDIX I

SELECTED ASCS FIELD OFFICES

State offices	Location	County offices	Location
Georgia	Athens	Emanuel	Swainsboro, Ga.
		Johnson	Wrightsville, Ga.
South Carolina	Columbia	Fairfield	Winnsboro, S.C.
		Horry	Conway, S.C.
		Charleston	Charleston, S.C.
		Florence	Florence, S.C.
Kansas	Manhattan	Sherida	Hoxie, Kans.
		Wichita	Leoti, Kans.
		Logan	Oakley, Kans.
Missouri	Columbia	Daviess	Gallatin, Mo.
		Audrain	Mexico, Mo.
		Caldwell	Kingston, Mo.
Oregon	Portland	Clackamas	Oregon City, Oreg.
		Jefferson	Madras, Oreg.
		Marion	Salem, Oreg.
Washington	Spokane	Grant	Ephrata, Wash.
		Stevens	Colville, Wash.
Nevada	Reno	Elko	Elko, Nev.
Virginia	Richmond	Bedford	Bedford, Va.
		Cumberland	Cumberland, Va.
		Charlotte	Charlotte, Va.
North Carolina	Raleigh	Johnston	Smithfield, N.C.
		Wake	Raleigh, N.C.

ASCS Management Field Office--Kansas City, Mo.

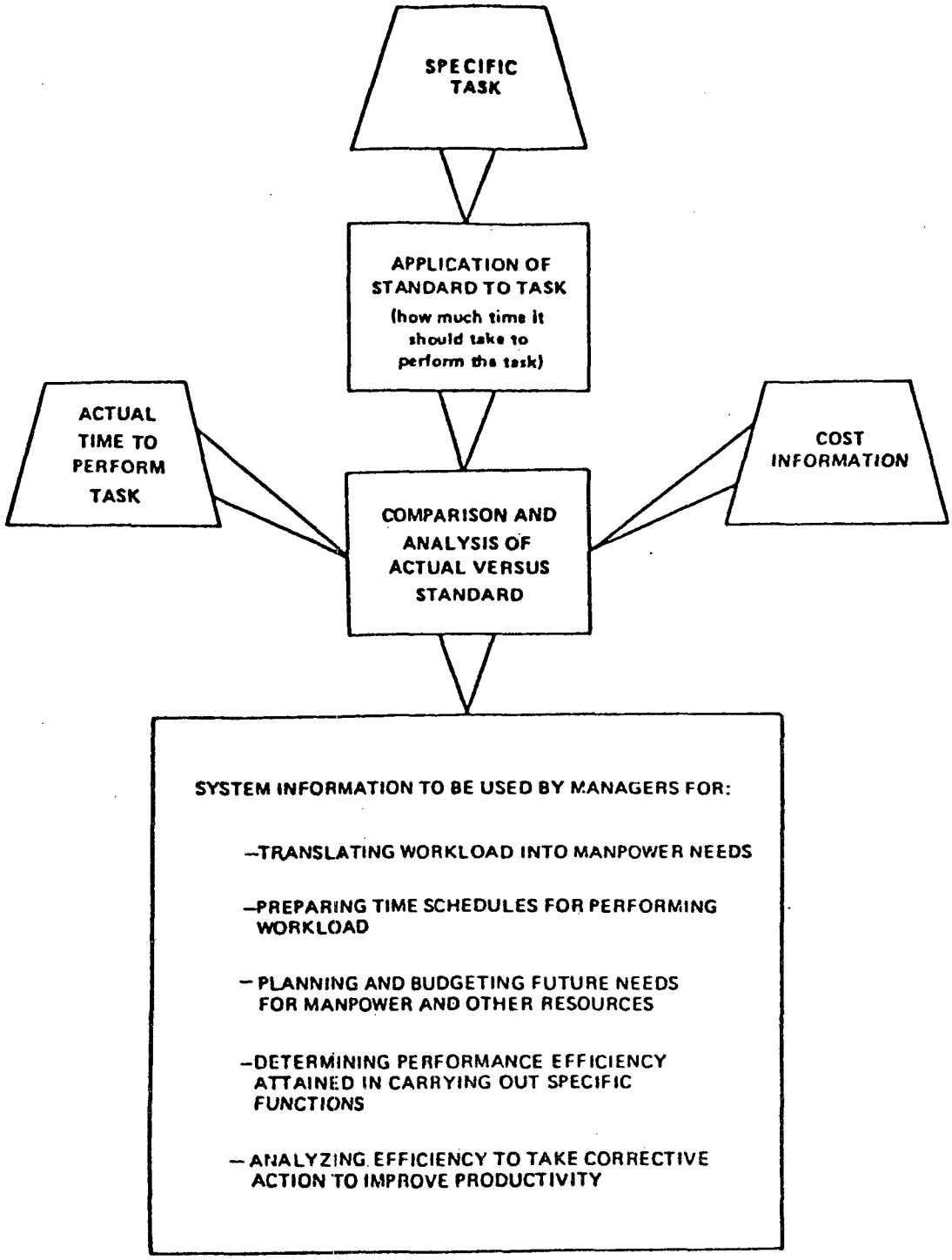
Kansas City Commodity Office--Prairie Village, Kans.

Locations visited by productivity counsultant

Johnston County, N.C.

Frederick County, Md.

ELEMENTS AND USES OF A WORK MEASUREMENT SYSTEM 1/



1/From a GAO report issued May 2, 1978, "Improved Productivity In Real Property Management Would Save Money for Certain Agencies" (LCD-77-343) p.5.

SELECTED BIBLIOGRAPHY OF GAO REPORTS

RELATED TO WORK MEASUREMENT AND PRODUCTIVITY

Substantial Staff and Cost Reductions Possible at Military Telecommunications Centers Through Use of Uniform Staffing Standards	LCD-74-120	1/07/75
Resource Management Can Be Improved by Greater Use of Productivity Techniques (District of Columbia)	GGD-75-56	4/16/75
Personnel Management Improvements Initiated or Needed to Help Farmers Home Administration Meet Its Expanded Missions	RED-76-16	9/10/75
Improvements Needed in Defense's Efforts to Use Work Measurement	LCD-76-401	9/31/76
The Work Measurement System of the Department of Housing and Urban Development Has Potential But Needs Further Work to Increase Its Reliability	FPCD-77-53	6/15/77
Air Force Maintenance Depots--The Need for More Responsiveness to Mobilization as Well as Peacetime Efficiency	LCD-77-403	11/23/77
Improved Productivity in Real Property Management Would Save Money for Certain Agencies	LCD-77-343	5/02/78
Improving Federal Agency Efficiency Through the Use of Productivity Data in the Budget Process	FGMSD-78-33	5/10/78
The Federal Role in Improving Productivity--Is the National Center for Productivity and Quality of Working Life the Proper Mechanism?	FGMSD-78-26	5/23/78
OMB Needs to Intensify Its Work Measurement Effort	FPCD-78-63	7/24/78

APPENDIX III

Federal Agencies Should Use Good Measures of Performance to Hold Managers Accountable	FPCD-78-26	11/22/78
Development of A National Productivity Clearinghouse	FGMSD-79-4	12/12/78

APPENDIX IV

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE
P. O. BOX 2415 * * * WASHINGTON, D. C. 20013

MAY 1 [illegible]

Mr. Henry Eschwege
Director, Community and Economic
Development Division
General Accounting Office
Washington, D.c. 20548

Dear Mr. Eschwege:

Enclosed is the ASCS response to your draft report "The Agricultural Stabilization and Conservation Service Needs to Improve Its Work Measurement and Workload Forecasting Systems and Strengthen Its Oversight of State and County Operations."

We are a little puzzled by the sequence of events surrounding this audit. GAO has already reported to the Subcommittee on Agriculture, Rural Development and Related Agencies, Senate Appropriations Committee, that our Agency's work measurement system is unreliable. In spite of that conclusion made without our input, we assume GAO is sincere in requesting our comments.

We agree that improvements are needed on several points raised. However, we cannot agree with the overall conclusion expressed that our work measurement and workload system is unreliable and that Agency headquarters has not exercised oversight of county office operations. These issues are further amplified in our detailed response.

Our work measurement and workload system was thoroughly reviewed by the House Appropriations Committee in 1974. It underwent an extensive audit by the Department's Office of Audit in 1976. Including your recent review, to date the Agency has not been presented an effective alternative to use to forecast county office workload and budget estimates.

To our knowledge (according to USDA and OMB budget analysts) we are unique in that we have one of the few, if not only, zero based workload forecasting systems that is credible. It is not perfect. It can be improved. We intend to follow some of the recommendations outlined in your report. To have already advised the Subcommittee that our system is "unreliable" seems rather harsh in light of the facts available.

APPENDIX IV

Mr. Henry Eschwege 2

We have developed the enclosed response with thoughtful and meaningful input from several segments of our Agency. With this additional background and information, the Subcommittee will have a better basis to evaluate the effectiveness of our work measurement and oversight activities.

Sincerely,

Gary Fitzgerald

Administrator

Enclosure

AGENCY COMMENTS AND GAO EVALUATION

GAO RECOMMENDATION 1

Use accepted sampling techniques so that its sample of counties is statistically reliable.

ASCS RESPONSE

"The audit makes the determination that the only valid sampling technique is 'random.' It was never ASCS' intention to go to a pure random sample because of the cost associated with selection of a random sample of sufficient size to ensure validity of results. In the discussion with the auditors, it was mutually agreed that a random sample of sufficient size to assure all programs and their validity would approach 100 percent if stratified. This would add some $10,000,000 annual costs to operations, likely reduce the quality of data input and be unacceptable both in use of resources and an an extreme extra and unnecessary administrative burden, and would be counter productive to program administration.

"There are other acceptable sampling techniques. Stratified sampling has been established as a standard statistical technique for many years.

"The original development of the sample followed in general terms the 'Sampling by Attributes' technique promulgated in the DOD Military Standards Series on Sampling by Attributes. A significant factor not reflected in the report, but reported to the auditors, is that at the time the stratified sampling technique was being developed, the standard accepted statistical practices most frequently used in the Government stemmed from the above military standard. It should be remembered this sampling technique was developed and tested in 1963 and 1964.

"Workload range and program inclusions are valid stratification points rather than 'subjective selection criteria.'

"The stratified sample drawn by ASCS is drawn on a program area basis and stratified to include all programs and program volume variances. The particular type of county needed is described by headquarters, but others more knowledgeable about county management capability make the selection. By omitting those offices with management weakness, we may not be statistically pure, but we are by that act, establishing a standard based on higher than normal productivity. The fact that one-third of the sample rotates every year adds to the objectivity of coverage.

"Two other factors dealing with system acceptability are considered on the basis of many years' management experience.

"First, the sampling assignment is an extra burden for the sample counties. They generally do it quite well with a fairly positive attitude largely because they will complete their term in 3 years. Secondly, the sample is intentionally stratified over all States over time so that the employees and managers in all areas will have personal knowledge of how it works and that their conditions are represented in the system.

"In summary, the ASCS system is based on accepted statistical techniques. The representative nature of the sample was thoroughly explored and found valid in the 1969 study and in a more recent update study in 1976 to assure that the sample was representative of total workload distribution. The nearly two decades of experience has been used to continually refine a system that is both objective and acceptable to those who must make it work. There is a success story here that many other organizations could well emulate. However, we don't view it as perfect, improvements will continue."

GAO EVALUATION

ASCS recognizes that it does not have a sample of sufficient size to insure valid results. Basically, its sampling procedures are defective in two important areas: (1) the sample is not drawn randomly but rather judgmentally and (2) the orginal sample size was determined by using inappropriate sampling techniques--sampling for attributes instead of variables sampling.

We never questioned ASCS' use of stratifications. Regarding random versus judgmental samples, the following excerpt clearly explains why judgmental samples cannot be objectively analyzed:

> "Any sample for which the selection of the items to be included is independent of the sampler may be termed an objective sample. However, an effective sampling method also requires a means of establishing the required sample size objectively and a means of objectively appraising the sample results. The only type of sample that accomplishes such objectives is the statistical sample, sometimes called a probability or random sample.

"The term 'probability' sample arises from the fact that a sample drawn in this manner will have a behavior which is predictable in terms of the laws of the theory of probability.

"Samples obtained by other than the methods * * * which result in a probability sample are considered together under the term 'judgment' sample.

"Judgment samples, though not necessarily less accurate than probability samples as a description of a field of documents or entries from which they are drawn, do not have two important characteristics--scientific determination of the required sample size and of objective projection or evaluation of the sample results.

"In other words, while the judgment sample may provide an excellent description of the field investigated, there is no way of establishing this fact objectively." 1/

Since the judgmental sampling used by ASCS cannot be evaluated objectively, such sampling may lead to biased results. For example, we wouldn't expect to make reasonable generalizations about personal income in the United States by only taking a sample of doctors' incomes. However, as the excerpt states, judgmental samples may provide an "excellent description of the field investigated." So ASCS' use of this technique in collecting work measurement data may be representative of its county office operation. Nevertheless, its current sample's representation and reliability cannot be objectively evaluated using accepted and mathematically provable statistical principles.

The other problem with ASCS sampling procedures involves the use of attributes sampling techniques when ASCS should be using variables sampling. ASCS stated that it developed its sampling plan in the early 1960s, using the attributes sampling technique from the DOD Military Standards Series on Sampling by Attributes. It contended that the accepted statistical practice then most frequently used followed this military standards series. However, when formulating its sampling plan, ASCS officials did not refer to

---

1/Arkin, Herbert. Handbook of Sampling for Auditing and Accounting. New York: McGraw-Hill Book., Inc., 1963. pp. 8-9.

such DOD publications and tables for use with variable-type data. Attributes sampling measures a particular quality such as blue versus green, or heads versus tails. Variables sampling measures, on a continuous scale, factors such as inches per second or units per staff-day (in the case of ASCS).

Since ASCS is using the work measurement sample data to project continuous information (number of units and hours required to perform activities), variables sampling techniques should have been used. Finally, ASCS states that it was never its intention to go to a pure random sample because of the costs it believed would be involved. When using appropriate techniques, ASCS may have to increase its sample size to insure agencywide representation. However, neither we nor ASCS will know the size that will be involved until ASCS performs a statistically random presample.

In the final analysis, ASCS must weigh the costs and benefits associated with a statistically reliable sample. We believe ASCS should do the presample; then based on its results, assess the costs and benefits of obtaining a representative agencywide sample.

GAO RECOMMENDATION 2

Decide on the best definition for a completed unit of work as output for a given task and not vary it. This definition should not change unless organizational or procedural changes make them obsolete.

ASCS RESPONSE

"That in theory is a good idea, and that is what ASCS attempts to do. This sytem has evolved from the early 1960s and we continue to learn better and more clear means of describing work. A national work measurement committee assists in identifying and clarifying areas that are being misunderstood. Changes in the work unit counted are not made unless directed by law, policy or program changes, and those needed to provide a significant improvement in the system. The county office work measurement committee has five county employees, five State office employees, and six national office employees. We believe that this grass-roots involvement in the development and maintenance of the system results in a better system through identification at the user source of the needed changes or clarifications.

"ASCS agrees that definition changes should be limited to the fewest possible. That does not mean that a unit count

initially selected for an item of new work is the best unit. Experience and/or testing often proves that another unit is much more representative of the work."

GAO EVALUATION

We agree that ASCS does try to develop the best definition of a completed unit, but the many changes in definitions remain a problem. Discussions with many agency officials indicated that changes in definitions of completed units were often not due to program or policy changes. Instead, changes were based on complaints from some county offices that they were not receiving proper credit for work done under a particular work unit definition. As a result of these many changes, we could not determine how much ASCS workload was increasing or decreasing. We believe that ASCS could minimize these problems by hiring a work measurement expert who is trained in defining measures of work.

ASCS RESPONSE

"The election work item cited in the audit provides a good illustration of work measurement improvement over time. It is also a good example of increased productivity. The audit states that comparative costs of the election could not be determined because of changed definitions. This is not true. One can easily determine election workdays from the system. They were 1974, 206,022; 1975, 148,016; 1976, 116,830; 1977, 102,180; and 1978, 105,881. The variances between these years are also explainable from existing records. The overall trend is definitely toward more efficient elections. The small increase in 1978 reflects the considerable increase in community committees as a result of an ASCS policy change.

"Objective audit analysis of this work item should also report that from 1974 to 1978, through method improvement, ASCS increased productivity in holding elections by 100,141 workdays per year or 48.6% and is now saving about $5,007,050 in salaries per year on committee elections."

GAO EVALUATION

Our examples of changes to the definition of a completed unit for administering elections was used to support our discussion of the inability to establish the reliability of ASCS' workload forecasting system. Our discussion of the ASCS workload forecasts does not state that comparative costs of elections could not be determined because of changed definitions. On page 14 of the report we state in part that from year to year ASCS regularly changes individual definitions of

work units completed. Such changes make it impossible to establish the reliability of workload forecasts. But this has nothing to do with establishing the costs of elections. However, actual costs of elections cannot be determined, nor does ASCS' example show increased productivity.

The 1974 through 1978 county office workdays for administering elections is a computed figure from work measurement formulas, and not actual data. They do not have actual costs because this data is not accumulated by each county. Because of weaknesses in their work measurement procedures. We cannot determine if these computed figures are accurate representations of actual experience. Further, the data ASCS cited does not by itself indicate increased productivity. To do this, it would have to define a completed unit which over a period of years would be compared to workdays spent to complete those units. For example, if we assume that ASCS completed 100,000 election units in the years 1974-78 and divided this into the workdays allocated each year, we would have a units-per-staff-day figure to perform a comparative productivity analysis. This would result in the following yearly productivity rates:

Year	Ratio	Units per staff-day
1974	$\frac{206,022}{100,000}$	2.06
1975	$\frac{148,016}{100,000}$	1.48
1976	$\frac{116,830}{100,000}$	1.17
1977	$\frac{102,180}{100,000}$	1.02
1978	$\frac{105,881}{100,000}$	1.06

At present, however, this cannot be done because ASCS' data is not reliable and unit definitions change too frequently.

ASCS RESPONSE

"The definition of work units for many of the work items have not changed over the years. However, as program forms or policies change, a corresponding change is required in work measurement. Example: When rice was under Marketing

Quotas, the form MQ-24 was used to issue the allotment notice. The MQ-24 was used as the unit count. After marketing quotas were dropped, the ASCS-476 was used to issue the allotment. We now count the number of rice farms. The same amount of work is involved and we still count one unit per farm. Work measurement changes are made when:

"a. Legislation provides changes in programs or methods of handling programs.

"b. Program policy changes require changes in program operations.

"c. 'Significance testing' of units determines that a different work unit measures the work performed by counties more accurately. This was the basis for changes in the election work items."

GAO EVALUATION

We did find about 16 other examples where the unit definition did not change for at least a 3-to-5-year period. Most of these dealt with cotton and tobacco program operations which play only a small part in ASCS' operations. ASCS was using about 160 work unit definitions during our audit.

ASCS RESPONSE

"d. Some changes have been made over the years because of potential work measurement system abuse. This was the basis for counting ONLY approved Agriculture Conservation Program requests. A review in county offices showed that national program procedures had been followed by some county offices. Some counties signed up every farmer possible with as many practices as possible with costs far in excess of available; funds as a means of enhancing the fund allocations. We acknowledge that counting only approved Agricultural Conservation Program requests may not be the 'best' but it is a 'good' unit and cannot be easily manipulated. The fact that ASCS does continually review the units being used as measurement of activities and makes needed adjustment for improving the 'system' reflects both a 'system improvement' approach and strong oversight of this function from headquarters. We should, perhaps, better document the relationship between the units from year to year if, in fact, that can be done."

GAO EVALUATION

An important attribute of a work measurement system is that it accurately indicates the work performed so that staff needs can be accurately projected. Thus, work measurement unit definitions should not be changed to control an operational problem where strong management supervision is the solution. To do otherwise could result in inaccurate projected personnel requirements.

GAO RECOMMENDATION 3

Improve controls for collecting data from all counties on the number of units completed. These controls should include requirements that units of work be recorded as completed and that recordkeeping be done in the same way as each county office.

ASCS RESPONSE

"More controls exist on the ASCS work measurement/ workload reporting system than are implied by the audit. We acknowledge that more field visits to work measurement counties and States are desirable. We believe the once-a-year State staff training by Washington staff and the twice-a-year training of counties by States are minimal. Our limited staff and travel funds virtually preclude any increase in these areas of management oversight. Recordkeeping methods may be standardized more to increase reporting uniformity. Much study has already been done on this subject. We will seriously consider it again.

"We believe quality controls of ASCS' work measurement/ workload system are adequate to ensure a highly reliable system for establishing work standards and forecasting the workload for the coming year. Some could be reinforced. Among these controls are the following:

"1. Work measurement counties

"a. Work measurement county employees are instructed to record their time at least each half hour. Units are recorded as they are completed. A daily worksheet is provided for each person for keeping these records. One person in each office is designated to count units for each work item. This is to avoid duplicate counts.

"b. Each quarter a county summary of the time and units is made. Instructions require an accuracy review by the CED and State office personnel in

the administrative and program sections. District directors are instructed to check work measurement counties during the year to ensure accurate record-keeping. The reports from all 159 counties are sent to the Technical Service Staff where they are reviewed. Questionable entries are verified or corrected. When this quarterly review is completed, a Quality Control Worksheet is furnished to each State showing corrections made for each work measurement county.

"2. All county offices

"a. Workload units completed and projected for the future are reportd by all county offices as of September 30 and April 30 of each year. Instructions require special internal controls to avoid duplicating and missing workload count.

"b. After they have personally reviewed their reports, the County Executive Directors meet with the District Director and perform a 'county by county' comparative analysis for the District. CED peer pressure in these meetings is very effective in identifying and correcting errors.

"c. At the State office the reports are checked by the Administration Division and by each program section. The workload units reported are compared to the various available program and administrative reports.

"d. The reports are spot-checked by a specialist from Financial Management Division (FMD) before they are subjected to an extensive validity check by the computer system. Any 'exceptions and rejections' are analyzed and resolved. The computer printout is reviewed again for reasonableness by FMD.

"Errors will occur in this or any statistical reporting system with more than 2,700 sources with more than half a million entries. Not all errors will be detected and corrected. We will strive to improve our work measurement system and to improve the quality of data by upgrading controls at the county, State, and management field offices."

GAO EVALUATION

ASCS believes it has adequate work measurement system controls, but said it would strive to upgrade its controls

at the county, State, and management field offices. ASCS presents a lengthy set of management controls that it uses to help assure the reliability of data. As described in the report on page 9, however, these controls for the most part require evaluating submitted data. These procedures may detect the relatively few dramatically out-of-line errors that occur. ASCS is not catching the types of errors we found, which can be large and generally caused by poor data entry procedures. A requirement for a simple activity ledger as described in the report would help minimize this problem.

GAO RECOMMENDATION 4

Perform methods studies or other similar studies to find the most efficient and effective way of doing the tasks being measured.

Develop and implement a productivity improvement program. This should establish organizational goals at each level, set priorities for improvement projects, and provide for measuring results and taking needed management action.

ASCS RESPONSE

"Methods studies are commonplace in ASCS--we agree they are important--this audit discusses three improvement activities that have resulted from such studies, the batch cotton loan system, the use of aerial observation compliance, and the use of programmable calculators. Other productivity improvement methods are constantly being developed throughout the agency. ASCS management encourages and provides incentives for such improvements.

"We do not agree that methods improvement studies should be a part of work measurement. Work measurement, as nearly as possible, should measure the work as it is being performed and without interfering with it or changing it. Program managers should institute methods improvements as a part of their program management. The work measurement system should be able to measure the impact of such improvements. We do not agree that work measurement should be based on the 'lowest cost' or some engineered standard which may or may not provide quality service. In our opinion, a far more statistically valid 'normal' standard has been developed through quality sampling and regression analysis. Figure 1 illustrates the impact of that audit proposal. The application of the work measurement productivity rates to workload information from each county provides a meaningful funding and staffing guide for State and county office managers. It, however, is a guide, not an exact measure of requirements.

"The GAO report cites the results obtained by a hired productivity consultant who visited two county offices and made an analysis of procedures used in administering three of the feed grain program activities. The purpose was to get a general idea on the potential for improving ASCS' efficiency through a comprehensive and sytematic plan to look at the way it does its work. The expert concluded that three forms could be combined and would result in a 15-percent reduction of workload. The expert failed, however, to consult with any of the people at the headquarters office who developed the procedures and designed the forms. Had he done so he would have found that there was a comprehensive and systematic examination of how the process was to work and that the three-form approach was the best process for 1978. The combined form was aggressively considered, but rejected for a variety of reasons. A major factor overlooked by GAO in their 'methods' effort for county offices is what workload impact would result at MFO. Many times what is the least costly route at the county level will, in fact, result in more expense at MFO. Both have to be looked at simultaneously.

"We do not believe it is valid for the GAO to make sweeping recommendations based on flawed observations. We do not believe it is appropriate to imply that the ASCS has no interest in or plans for improvement of its operations.

"Operations are improved and made more efficient as as result of several endeavors that we vigorously support. One is the employee suggestions program. Last year there were 176 suggestions of which 42 were adopted for a savings of $37,713. Present volume indicates there will be more this year. Many of our county employees are quite perceptive to flaws in our program operating procedure and they are quick to point them out to us.

"In 1979, we initiated a meaningful task force program. Task forces are organized for each of the major commodity groups and for several functional areas. Each group consists of a small number of Washington specialists, State and county committeemen, and State and county employees. All were selected because of their expertise and ability to communicate. The groups meet annually, in Washington, for the purpose of thoroughly examining operating provisions, procedures, and forms. The objective is to design the programs to accomplish the objectives, to provide better service to our farmer-clients, and to do it most efficiently. The task force product is a detailed report to the Administrator. Many, if not most, of their recommendations are

adopted. Plans are underway to repeat this process this year before detailing our procedures for the 1980 program.

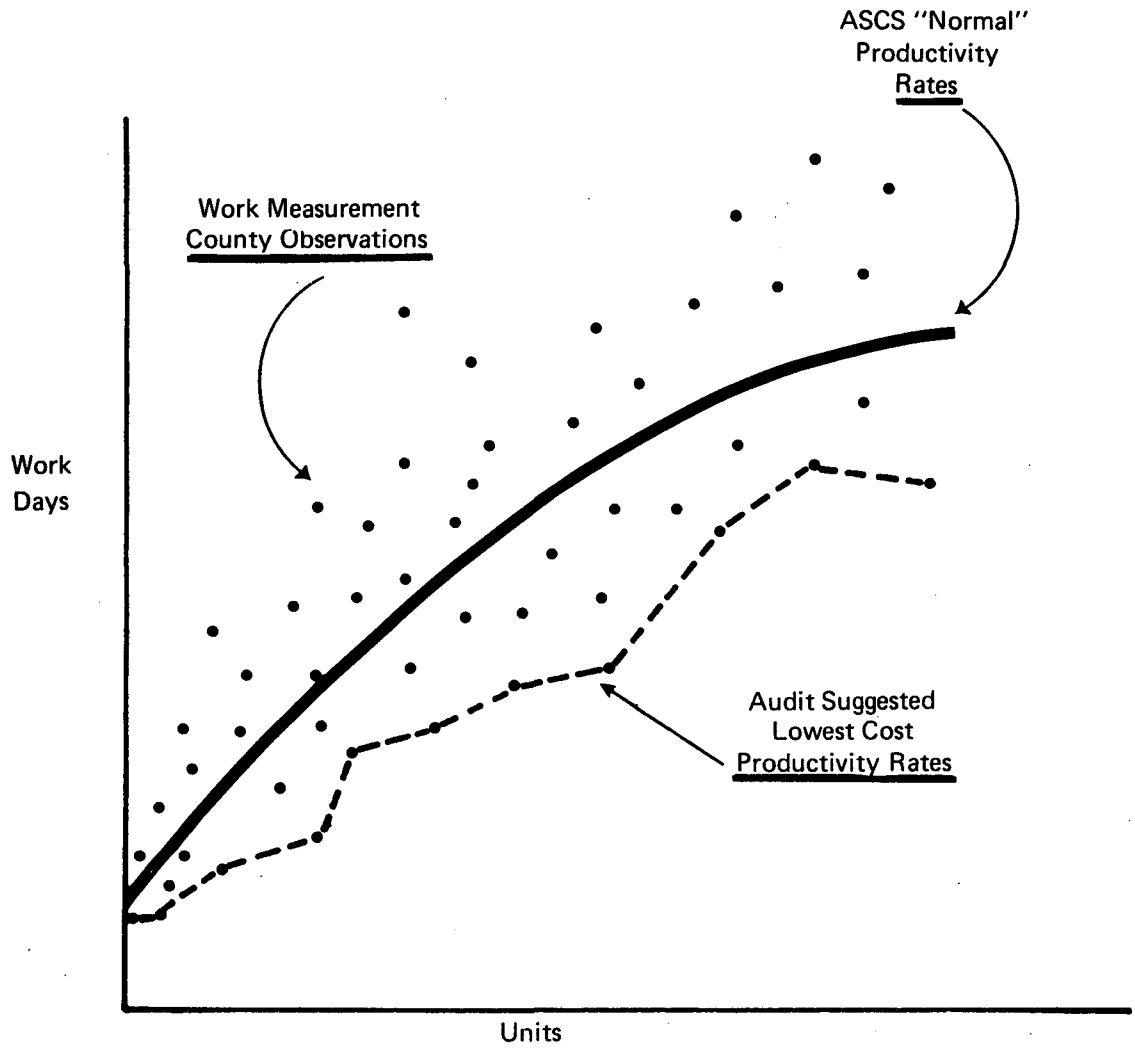
"We encourage innovation and pilot projects for improvement. Many county people are capable of identifying those tasks that lend themselves to creative and, hopefully, more efficient ways of being accomplished. Two such recent efforts, initiated at county levels have been mentioned in this report. One is the use of programmable calculators and the other is compliance by aerial observation. Both promise to save considerable sums. Significant improvement in 1979 county operations for peanuts and commodity loans resulted from the task forces. GAO auditors were made aware of these improvements also.

"Finally, management and program specialists in Washington are engaged in a year-round effort to make our programs and procedures better. Working in an environment that is continually impacted by suggestions, compliants, audits, investigations, etc., program managers are put on ample notice as to where the flaws are and, often, what to do about them. Hopefully, with increased program staff at ASCS headquarters, we will be able to effectively do more program review work of county and State office operations. We agree more is needed."

APPENDIX V

Illustration of "Normal" Work Days vs "Lowest Cost" Work Days

(Typical Work Item)



GAO's approach would fund counties on the basis of identified or engineered "lowest cost." This would mean annually adjusting funding rates to the unstable minimum extremes of the statistical sample. The time it takes to do certain county functions would be secondary to "what counties need." Service quality would not be considered.

GAO EVALUATION

ASCS disagrees that methods studies should be a part of a work measurement system and they also contend that methods studies are commonplace. First, as described on page 3 of the report, a basic element of a work measurement system is the application of standards to a task (how much time it "should take" to perform the task). Developing this "should take" time is the essence of a methods study. It requires one to determine how long it should take a trained worker, working at a normal pace, to produce a defined unit of work of an acceptable quality. It does not develop a "lowest cost" as suggested by ASCS.

ASCS does try to develop sound procedures for implementing the administration of farm programs. (Developing these procedures are what ASCS classifies as methods studies.) It does not do methods studies, but should, and they should be performed as part of the work measurement sytem.

ASCS took exception to our consultant's proposal to combine several forms for administering feed grain programs. We met with cognizant ASCS headquarters program officials and they agreed that the proposed combined form had merit and they told us they would look into its potential use. They had not considered the format that our consultant proposed.

Finally, ASCS makes several observations about management improvements which will improve operational efficiency. We encourage the implementation of such improvements. We believe, though, that to achieve maximum productivity gains, managers must go beyond merely installing efficient practices. They must actively participate in a continuing and coordinated productivity program. This program should establish performance goals and timetables for holding managers accountable for developing and using measures of performance.

GAO RECOMMENDATION 5

Evaluate and document, by objective analysis, the need for additional low-density and combined county funding.

ASCS RESPONSE

"ASCS Budgets additional funds for low-density and combined counties although the need for these funds has not been adequately documented and seems to be arbitrary.

"The report includes two comments which deserve further development: (1) 'ASCS also believes that it incurs extra expenses when operating in combined and low-density counties, which may well be the case'.... 'ASCS established this funding level without basis. The agency merely believed the amount is adequate.'

"Low Density

"If one looks at a relief map of the United States and has some appreciation for the difficulties involved in administering programs where great distances and difficult travel are involved for both farmers and employees, it seems quite reasonable to compensate for some of these problems with about 4 tenths of 1% of our county funds.

"This is a difficult problem to scientifically analyze and resolve. Much time and effort has been expended in finally developing a method that works to most people's statisfactions. A natural tendency seems to be to let fringe areas that don't truly fit the system 'sink or swim' without special attention. By contrast, ASCS has very conscientiously addressed this problem as evidence by the series of studies and actions.

"The audit contention that special funding of low density and combined counties indicates the ASCS system is inadequate--completely misses the point. No system is not perfect; unusual situations cannot always be handled by scientific formulas. Experience and judgment also must have impact. In our view, our recognition of our system's limitations in certain circumstances, and taking steps to redress the inequities caused, is reasonable management action and in no way discredits to the overall system."

GAO EVALUATION

Low-density funding

ASCS states that, if one looks at a relief map of the United States and further has an appreciation for the difficulties in administering programs where great distances and difficult travel are involved, a natural conclusions might be to compensate persons for these problems. This is exactly why we questioned the need for these funds. When ASCS first began compensating large sparsely populated counties for unusual travel expenses, 16 States received these funds. These included 15 Central and Western States and Florida. Today, however, all States receive low-density funding. When asked

why such States as Georgia, Rhode Island, and Maryland receive these funds we got no answers. As a result of allocating funds to all States some Western States had reductions in low-density funding. We discussed the problems these States were having completing their program responsibilities. A responsible ASCS headquarters official states there has been no complaints from these States. The reason is that these States don't know how much additional expenses were needed to begin with.

ASCS RESPONSE

"Combined Counties

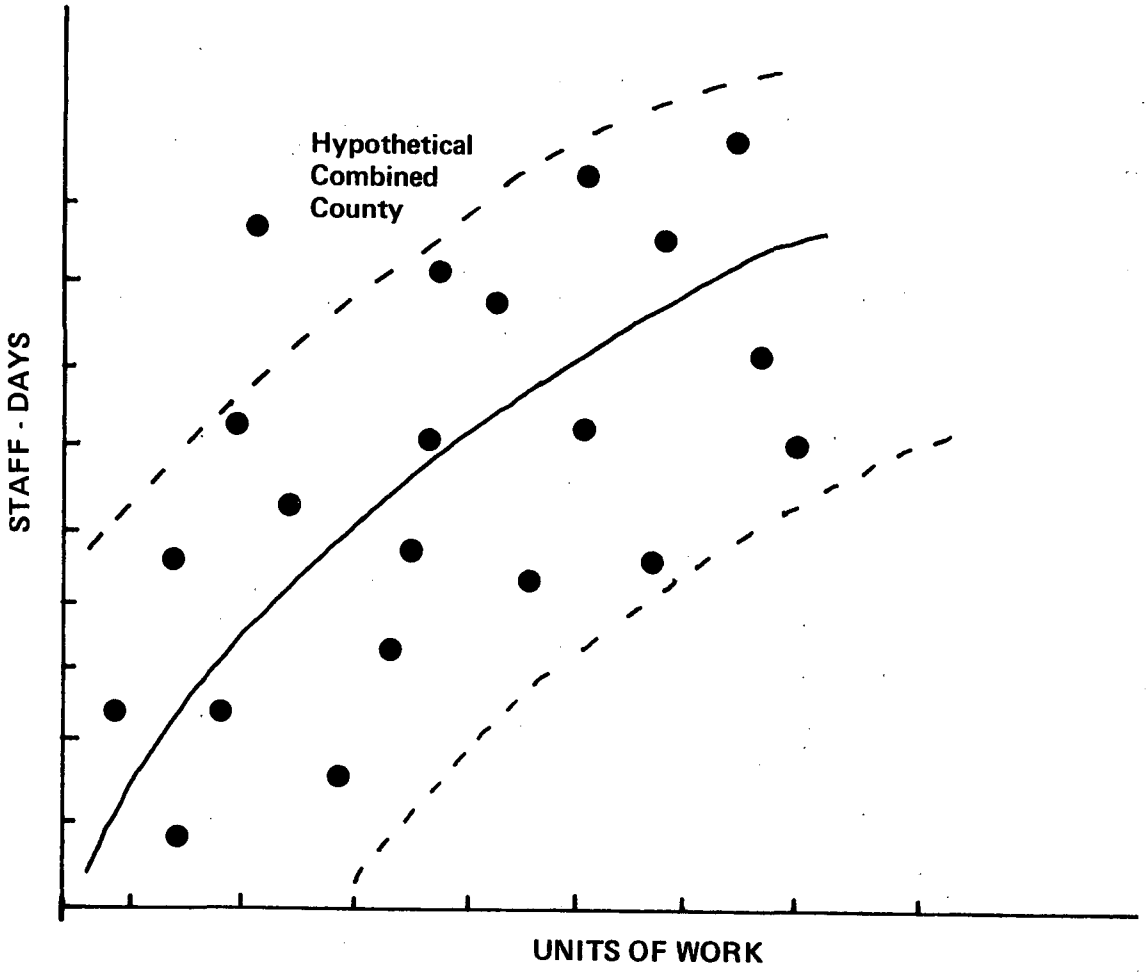
"The work measurement system does not account for the additional committee time involved in the non-headquarters counties of a combined county operation. Nor does it compensate for the additional start-up time a combined office must expend for each extra county in the combination. We realized this lack of equity between combined counties and counties that are not combined and have chosen to do something about it. We do not feel that combined county offices should be penalized because they must cope with multiple committees. Each county in a combined county operation by law has a separate committee.

"To provide equity for these combined counties, estimates are received annually from combined county offices to fund the additional committee member's salary and travel. These estimates are analyzed for reasonableness by State office and Washington personnel prior to the allocation of funds."

GAO EVALUATION

ASCS provides additional funding for combined county operations. Counties and States subjectively estimate their needs, and these estimates are included in annual budget requests. We are concerned about the reasonableness of and need for these funds for two reasons. One, there is no documentation to support the need for extra funds. Second, all counties allocate committee time spent to measured work items in the work measurement sytem. ASCS' sample of counties represents combined counties, and they contribute to determining the normal workday expenses which are developed through the agencies' regression analysis.

An example will help illustrate problem. A typical result from the work measurement process is a regression line which gives the agency an average staff-day guide. It looks like this:



The solid line is a regression line which represents a mathematical average. Funding is based on this line. Each dot represents a county office. Thus all county offices with incurred staff-days falling above the regression line are awarded fewer days' funding than they incurred. Those below the line receive more. The dotted lines are parameters which establish a reasonable distribution of points.

For combined counties to receive additional funding, they should be awarded only an incremental increase which could compensate them only for the difference between the established parameter and their actual location on the graph. ASCS had performed no such analysis, but should.

GAO RECOMMENDATION 6

Develop more current data on U.S. farms to provide a more up-to-date basis for program estimates.

ASCS RESPONSE

"Almost three pages of the report were devoted to how difficult it is to forecast workload because of the many unpredictable factors that affect these forecasts. Our budget estimates must be made almost two years in advance. We use the best data available and develop assumptions based primarily on judgment and experience of program specialists and knowledge of farm program economic indicators. There is no precise or exact formulas that will measure these requirements. We have the same problem on program outlays for CCC programs.

"For the 1978 supplemental requests, the total number of farms in the U.S. to be serviced by ASCS was determined to be approximately 3 million. This was based on the most recent data available. The 1978 USDA agricultural statistics show that there are 2.7 million farms in the U.S. This includes farms of 10 or more acres that had annual sales of agricultural products of $50 or more. ASCS provides service to all agricultural producers without regard to the size of farming operation or farm income. Therefore, an additional 300,000 farms were added to the 2.7 million farms shown in the 1978 agricultural statistics.

"USDA annually updates the total number of farms in the U.S. The Census Bureau is currently conducting a survey of U.S. Agriculture. This data will be used by ASCS in the future as a basis for developing program estimates for workload requirements."

GAO EVALUATION

We agree that ASCS must use judgment and experience in making its projections. The report points this out.

ASCS states it uses current Department of Agriculture statistics on the number of farms for making projections. However, ASCS officials did not give us this information during our audit. In fact, we were informed that no current data was available on the number of farms in the United States and that agency officials used their best judgments. ASCS informed us that the Census Bureau is currently performing a survey of U.S. agriculture. This data will be used by ASCS in the future as a basis for developing program estimates for workload requirements. Use of this data will satisfy our concerns about having reliable and timely data on the number of farms in the United States.

GAO RECOMMENDATION 7

Document the process of and basis for developing assumptions used for workload forecasts for budget as well as supplemental budget requests for staffing.

ASCS RESPONSE

"Quite frankly, we feel that adequate documentation does exist to provide assumptions used to forecast workload requirements for the fiscal year 1978 supplemental appropriation request. This documentation was furnished to GAO representatives during the course of their review.

"The reliability of the forecasting system used can be validated only after the fact. At the time assumptions were developed, they were based on the most reliable information available to the Agency. Assumptions were formulated on the provisions of the Food and Agriculture Act of 1977 and the administration's initiatives and policies. Historical data from the county office work measurement system was used as a guide to establish standards for the tasks to be performed. For example, our assumption that storage facility loan volume will increase 50 percent was right on target. In fiscal year 1977 there were 61,525 loans disbursed in comparison to 92,218 in fiscal year 1978 or an increase of exactly 50 percent. Commodity loans, including grain reserve loans, exceeded our expections. In other cases where new work was involved we had no other choice but to rely heavily on the subjective judgment of our employees. Workload data has since been accumulated for fiscal year 1978 and has proven our assumptions to be reasonably valid.

"Summary

"Our work measurement system is statistically sound. To increase the sample size to provide for random sampling as suggested by GAO would significantly increase administrative cost with no proven significant increase in reliability. Our method of changing units measured reflects a continuous review of the system to assure we are measuring the most appropriate work item which will reflect staffing requirements. We will continue this approach. We do need to tighten the controls over gathering and monitoring data submitted by counties. We will do this. We have solid evidence of need to augment funding of low-density and combined counties and this is no discredit to the work measurement system. We will try to improve to the extent possible, the reliability of the data we use for projecting workload cost and better document our assumptions accordingly."

GAO EVALUATION

ASCS provided us documentation showing the assumptions used for workload forecasts. However, the assumptions were based on the personal judgments of agency managers. Our concern is, that unless the bases for these judgments are recorded and then comparisons made to determine if they were valid, the agency risks losing institutional knowledge as individuals leave the organization and it will not have a sound basis for improving on the system.

Thus, our intent is not to criticize the use of judgment but to suggest a means to improve on its accuracy and reliability.

GAO RECOMMENDATION 8

Improve supervision of State and county offices. This will require ASCS headquarters to improve and better use its management information system.

ASCS RESPONSE

"The report is critical of the basic philosophy of ASCS with respect to headquarters management of State and county offices. They correctly observe that it is a decentralized operation. We recognize that we cannot--and should not--make every decision in Washington. We believe that placing these responsibilities at subordinate levels results in more efficiencies, not less. It is a valid organizaitonal scheme.

"Even if we wished to alter it, and we don't, the concept of local control of subordinate offices is contained in the implementing legislation, the Soil Conservation and Domestic Allotment Act of 1935. The law provides for county direction to be provided by farmer-elected county and community committeemen and for State direction to be provided by committeemen appointed by the Secretary. This organizational scheme is unique in government and may not conform to a casual observer's notion of how things should be, but it works well and has done so for a good many years. GAO's recent report on 'collocation' has input from OPM. That report cited several legislative and legal 'benchmarks' regarding ASCS county office operations. While the report seems critical of top management's view of ASCS as 'decentralized,' it does not recommend the this concept be changed. Rather, the report states that 'ASCS management (philosophy) incorrectly assumes that decentralized authority decreases top level management's need to be concerned about oversight.' That observation is absolutely wrong.

"On the contrary, the Administrator, the Associate Administrator, and their Deputies have made and continue to make vigorous efforts to improve oversight of county office operations. One of the principal oversight tools is to have regular audits of county office operations. We have held frequent meetings with representatives of the Office of the Inspector General to use them to increase their commitment to audit of ASCS offices.

"We have made repeated formal requests for increases in this assistance. The results have been disappointing. For example, in fiscal year 1972, the Office of Audit spent 21,701 workdays in county office audits. For fiscal year 1978 it was only able to devote 3,750 workdays in county office audits.

"Oversight of the State offices is largely carried out by Directors of the five area offices. Top management works directly with these directors on a continuing basis to assure that agency objectives are being carried out and to obtain feedback necessary to know what is going on. Area directors have the responsibility for the proper administration of the programs, the prudent expenditure of administrative funds, and the overall management efficiency of subordinate offices within their areas. They are accountable to top management and do regularly account to top management regarding their oversight.

"The Food and Agricultural Act of 1977 became law on September 29, 1977. Under the previous administration, because of lack of substantial program activity, headquarters, State and county office staffing had been reduced to a historic low through attrition and RIFs. The new act required crash effort at all levels to staff up, train, develop programs, and implement them in order to be responsive to the congressional mandate. We perceived our first responsibility was to get the programs in operation on a timely basis. We did not feel we could enjoy the luxury of waiting for time and motion studies before we acted. We believe that the national interest was better served by acting as we did in 1978. The ASCS has a long history of gearing up in a hurry in response to massive legislative mandates. The act of 1977 was one of the most comprehensive in recent history. We are proud of the way ASCS responded to it.

"That is not to say that we are content to leave things as they were in 1978. We are not. We perceive 1979 as a year to improve our overall operations, including our oversight capabilities. We have been unable to reinforce our headquarters' staff during the past 2 years because of the

hiring freeze imposed by the CSC and USDA Office of Personnel. We currently have 74 vacancies. The freeze was lifted on April 8, 1979, and recruitment and hiring is under way. We expect, soon, to have more adequate headquarters staffing to assist top management in oversight. The point we wish to make is that management in ASCS does not have a 'hands off' policy, but rather is committed to vigorous oversight. We regard this function in ASCS as being even more essential than in a conventional organization because of the unique nature of the semi-autonomous county committees and county office staffs."

GAO EVALUATION

We do not take issue with the vesting of management decisionmaking responsibilities in ASCS field offices. The law mandates this. As a matter of good management, it is a necessity in an organization with so many geographically dispersed offices. However, stronger supervision of decisionmaking in the field is required to assure efficient management. We agree with ASCS that it does not have a hands-off policy. That is too strong. However, the examples presented in the report suggest a need for ASCS to strengthen its supervisory functions. Appropriate wording changes were made to recognize this point.

GAO RECOMMENDATION 9

Establish a review process for comparing workload forecasts with actual work done.

ASCS RESPONSE

"Increasing productivity is a continuing ASCS goal at all levels of the agency. As illustrated in response to 'data collection controls,' there is considerable evidence of ASCS productivity improvements if one seriously searches for them.

"As mentioned in discussion of work measurement sampling, the current system has an increased productivity bias built into the standards produced because the poorly managed offices are excluded from the standard setting function.

"In addition to having substantial ongoing productivity improvement, ASCS now has a breakthrough in productivity measurement and has been able to produce the first credible county productivity index.

"During the audit, the planned development of a County Productivity Index (CPI) was discussed. The index has now

been produced, user tested and is being distributed in Notice A0-606 dated 5-4-79. Refinements in the ASCS county work measurement system in recent years have made the productin of a credible county index possible for the first time in ASCS history. Only with further experience using this 'index' would goal setting be seriously considered."

GAO EVALUATION

Our recommendation to compare workload forecasts with actual work done, was made to control and improve ASCS forecasting. It had nothing to do with productivity improvement. We reviewed the county productivity index and informed ASCS that, without changes to its content, it would be of no value as a management tool. In order for this index to provide valuable information to management, it must be developed using only measurable work. But the ASCS index includes all staff-time spent which includes all unmeasured work. Without segregating unmeasured work, managers have no baseline from which to evaluate performance.

GAO RECOMMENDATION 10

ASCS has not established objective staffing criteria for State ASCS offices. State office staffing levels vary considerably. Establishing criteria could help ASCS evaluate and minimize State office staffing levels.

ASCS RESPONSE

"ASCS does not have a work measurement system per se for State offices because State office functions are not adaptable to the type of work measurement system we have for county offices. The ultimate staffing level for State offices is determined by use of a guide and periodic judgmental reviews. The judgments are made by Area Directors and DASCO.

"ASCS does have a State Office Staffing Guide. The guide is developed by use of multiple regression analysis using actual employment as the dependent variable. The viariable factors used which are statistically significant are number of programs administered, number of county committees, and number of county workdays. The systems will not identify required staffing, but will compare one State to another based on those workload variables.

"There is an inference that our State offices are overstaffed. Assumption is false. From a comparison of workdays, back in 1972 when county office workyears were approximately 16,000, our State office employment was about

1,700 manyears. Our 1979-80 workyear estimates for county offices is approximately the same as 1972, however, our State office workyears are approximately 1,200. The number and complexity of programs has increased significantly which brings added dimensions to the staffing problem."

GAO EVALUATION

We believe that ASCS did not properly respond to the issue. We make specific observations in the report on pages 29 and 30 concerning staffing inconsistencies. ASCS chose not to address these issues and instead dismissed them because it is operating under staffing ceilings.

ASCS states it has a State office staffing guide. However, this guide was not used by area directors during our audit. We were provided very limited documentation on State staffing criteria, usually only that which was provided by State offices. Further, we asked each of the area directors about the validity of developing a staffing guide such as the one we developed or a similar one. They responded that, while no index was available, the guide would be a desirable tool for enhancing personnel allocations.

GAO RECOMMENDATION 11

Evaluate the opportunities for consolidating State and county offices.

ASCS RESPONSE

"The audit states that combining offices will improve efficiency... through economics of scale. That is an unsubstantiated opinion that reflects the 'big is efficient, little is inefficient' belief that permeates certain disciplines but has little basis in fact."

GAO EVALUATION

ASCS raises three broad issues on consolidating State and county offices:

--"Consolidating offices will not accrue economies of scale"--it believes this to be an unsubstantiated opinion.

--A few inefficient large operations can waste many times the additional funds spent by small operations.

--ASCS participated in a Department of Agriculture study on county office locations, and we corroborated

the study and intended actions. Further, ASCS implies that the Secretary's Memorandum No. 1971 supports a policy of no consolidation of offices.

We believe the example of separating two county offices in Georgia (see p. 28 of the report) is strong support for our point regarding economics of scale. By separating two county offices, projected costs were to increase 32 percent. The reason for this increase results from having to hire a second county executive director and incurring additional overhead expenses for maintaining separate offices. Conversely, economies of scale result from combining operations, and thus, save personnel and overhead expenses.

ASCS argues that maybe more time should be spent reviewing large inefficient operations than concentrating on combining small ones. It maintains that small county offices comprise only 2 percent of administrative funds and therefore are insignificant.

ASCS RESPONSE

"It is probably true that the more inaccessible we made our services, the less the farmers will find them so the costs of providing services should decrease. In fact, we could lock our doors and save all of the money but the equitable delivery of services to all farmers would not occur.

"In an answer to an audit in 1978, ASCS made some relevant comments that are equally pertinent now.

"'Are Small ASCS Offices Inefficient?'

"'The often heard presumption that substantial efficiencies could be obtained by concentrating on the elimination of the smaller operations is also highly questionable. Whether discussing small farms or small offices, there are other important considerations besides size in determining the effectiveness of a service organization. In this case, the closed county offices would continue to have county committees with all of their current expenses plus added cost of travel time and travel. The CED and other county people would likely have more travel time and travel costs. Net savings to the government that may occur in some counties would likely be even less than the extra expenditure required of farmers as they must travel to a more remote office. (This is becoming increasingly more critical as energy supplies diminish.)

"'Perhaps the biggest cost of office closings would be the loss to some individuals that would occur with the withdrawal of services from some of the most remote and/or disadvantaged farmers in some of the most remote areas. Conservation programs, some emergency programs, and some other programs ASCS operates and assists others with should be made available at least equally, if not with increased emphasis, to remote/or depressed areas. A nearby office location is particularly important where people do not readily understand what is available and how it could meet their needs.

"'How Should County Office Effectiveness be Measured?

"'It appears that small county offices could spend up to 2% additional administrative funds, as they extend services to all farmers and ranchers, regardless of their remote location or size of operation. It also appears that excessive audit and other management effort, over recent years, may have concentrated on this small part of total ASCS operations. How efficiently ASCS uses the other 98% of its money might be a more important concern. A few inefficient large operations can waste many times the additional funds spent by small operations.

"'Agency Policy.

"'County office location in agricultural counties and whether it is to be full-time or part-time office, and will continue to be, a determination the county committee will make with State committee concurrence. Funding and staffing of offices will continue to be the prerogative of the State committee. The SED will use the guidance provided by the workload and funding system, and the information provided by county and State committee and employees and the Area Director, in making and adjusting funding recommendations for State committee approval. Guidelines as to what constitutes "too small" an office or, for that matter, "too large" an office will not be issued by the National Office.'

"ASCS Current Policy

"ASCS has been politically burnt twice on this office consolidation issue. The issue got so hot in 1974 that the Department finally had to refer to all office location decisions to Congress to prevent the enactment of legislation that would mandate maintaining current offices.

"During the last year, the USDA had produced a comprehensive study on agency county office locations. ASCS participated in that study and strongly supports the policy that

evolved in Secretary's Memorandum No. 1971. GAO audited the entire operation and wrote a report CED-79-74 dated April 25, 1979, which corroborates the USDA study and intended actions. ASCS is going to follow the interagency cooperation policy as stated in Secretary's Memorandum No. 1971 and does not think it would be desirable, reasonable, or possible to go through another county office consolidating fiasco independent of other agencies. Such an effort that predictively will fail and further deter service delivery, should not begin. The same situation with even more severe political consequencies applies to the suggested consolidated of the State offices."

GAO EVALUATION

We believe ASCS could save substantial amounts of money by consolidating small offices. If one looks at a relief map of the United States, it is clear that there are large numbers of very small counties which could be considered for consolidation. On the other hand, if ASCS believes money can be saved by reviewing large county operations, then it should have a multifaceted program of consolidating offices and reviewing office efficiency.

ASCS also discusses a Department of Agriculture task force study on agency county office locations. This study was aimed at colocating varied Department of Agriculture field offices under one roof. It did not review consolidating existing ASCS county offices. As a result of the task force recommendations, the Secretary of Agriculture on January 26, 1979, issued Memorandum No. 1971. This memorandum established a national policy supporting colocation and resource sharing among Agriculture's field offices. We agreed that colocating Agriculture's offices can increase efficiency and improve program delivery. (See CED-79-74.) We also made recommendations to improve decisionmaking on this subject.

GAO RECOMMENDATION 12

Strengthen the decisionmaking process for buying new equipment. When deciding on potential purchases, determine organization needs, do cost benefit analyses, properly evaluate all competing equipment, and provide direction to State and county offices on the best buy for the money. Consider advantages of bulk purchases of equipment rather than leaving each county office to buy its own.

ASCS RESPONSE

"ASCS does in fact delegate procurement authority consistent with our decentralized management philosophy. We do so because we have found it the most effective way to manage an agency as widespread and diverse as ASCS (2,800 State and county offices). However, we must disagree with the GAO assertion that this decentralized philosophy includes lack of management oversight in our procurement function.

"As in other operations, the procurement function is designed to give the local office managers as much discretionary authority in purchasing equipment and supplies as is feasible. However, this authority is constrained by adherence to prescribed processes and purchasing limits. These constraints are spelled out in ASCS handbooks which are issued to all ASCS offices. Further, we believe the oversight of these functions by the management structure in ASCS is very effective. The fact that GAO could find no specific case of mismanagement or lack of efficiency in our procurement operations seems to bear this out.

"We believe the actual issue in this case is whether or not more or all procurements should be handled in the Washington headquarters rather than in individual field offices. We recognize the arguments that can be made for centralized procurement, however, we also must point out its weaknesses. Equipment can be purchased that is not easily adaptable or acceptable to all offices. Personnel in field offices lose the incentive to be innovative and try new equipment when they are forced to rely totally on headquarters personnel for the procurement function. You lose the goodwill of local government offices dealing with local merchants. In essence, centralized procurement does not guarantee purchases that are free from mismanagement and inefficiency as can be seen by the current problem at GSA.

"GAO's major issue concerning need for centralized procurement centers around the conclusion that ASCS spent more money than necessary on programmable calculators. We believe the conclusion is not supported by facts. The calculators were tested in actual operation and their performance analyzed over a two-year period. The Technical Services Staff evaluated their performance and analyzed their potential in February and March 1978. When it was determined that the calculators may have nationwide application, a national task force was set up to analyze their performance and to determine know and potential uses in all ASCS county offices. A Washington group analyzed the calculators for potential savings and developed cost/benefit guidelines to assist State and counties in acquiring the calculators.

The study was done in a professional manner, and it was done in time to be used by States prior to the purchase of a large majority of the calculators.

"The supposition that ASCS may have spent $1.2 million more than necessary is based on a comparison of the costs of the Monroe 325 calculator and the Texas Instrument TI-59. It is not proper to assume that purchase price can or should be the sole criteria on which to base acquisition. There are several good reasons why the TI-59 has only been purchased by a few counties.

"First, the TI-59 is not even classified as a 'business machine' by Texas Instruments. It is in a category called 'home product' meaning that Texas Instruments recognizes that the TI-59 could not be seriously marketed as a business machine. Secondly, normal marketing techniques for the TI-59 are through third-party vendors. This fact alone leaves questionable the level of maintenace service individual counties would receive. Finally, the TI-59 in actual demonstration proves to be cumbersome to use. The small size of the keys and keyboard simply prevented consistent accuracy and expeditious operations.

"We are convinced that had ASCS made a centralized procurement and specified the performance and maintenance requirements, Texas Instruments, if they had responded, would not have responded with the TI-59. They have 'business' and 'office' machine products that are comparable to the Monroe 325. We also are convinced that a national procurement (as you suggest) of TI-59 would have proven disastrous as far as overall acceptance and use by counties.

"ASCS now spends $43 million for compliance activities. We are still experimenting with aerial observation as an alternative method of accomplishing those functions at a reduced cost. We have provided, those States and county offices involved in the use of aerial observation:

"a. On-site training in how-to-do aerial observation.

"b. Specifications and standards on camera types and film and other equipment to be used.

"c. Altitudes for flying when using cameras of various focal lengths.

"d. Instructions on preflight preparation and flight scheduling.

"e. Plans and list of materials for construction of various types of projection equipment.

"f. Provided 'program' for use with programmable calculator to convert from one scale to another and corrects for tilt.

"g. Guidance and standards to use when obtaining aircraft consistent with FAA and CAB standards.

"We have five different types or methods of aerial observation being tested by county offices this year. We encourage innovative and new approaches by State and county within the guidelines for accuracy and farm coverage. We will be analyzing results later this year. A Task Force has been appointed for evaluating these efforts.

"Any further expansion and use of aerial observation will be based on cost/benefit principles. At that time we can evaluate the most practical and economical combination of plans and equipment.

"If we do decide to accomplish a major share of our compliance with aerial observation, I am hopeful GAO will evaluate the facts at that time to form a basis for concluding whether ASCS increased cost. Any conclusion at this time would be premature.

"Summary

"The organization is unique in that there is a large measure of autonomy vested, by law, in local ASCS committees. While decentralized, it is effective. We agree that adequate oversight of an essential top-management responsibility. There is, however, a significant amount of oversight carried out by management. We do not have a 'hands off' policy. We plan to strengthen our oversight capabilities consistent with our success in adding Washington and State office staff and obtaining increased OIG auditings of our counties office tasks, we will continue to seek better ways to do our work. We have made a start on productivity measurements and will do more as we test the validity of present effort. Because of our inability to adequately staff State offices, staffing decisions are being done subjectively and are under continual review. We plan to continue our present policy of delegating authority to local offices to buy equipment within the guidelines furnished by the headquarters office. Innovative endeavors such as compliance by aerial observation will continue to be encouraged with active involvement of the headquarters office. Any conclusions on aerial observation regarding increased or additional cost is premature."

GAO EVALUATION

We issued a letter report to ASCS on January 24, 1979, about weaknesses in its procurement of calculators. ASCS provided us a written response and we subsequently sent a rebuttal letter to the Agriculture Inspector General. Our rebuttal letter follows.

UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

COMMUNITY AND ECONOMIC
DEVELOPMENT DIVISION

MAR 28 1979

Mr. Thomas F. McBride
Inspector General
U.S. Department of Agriculture

Dear Mr. McBride:

The ASCS reply to our January 24, 1979, report on weaknesses in ASCS procurement of programable calculators does not give adequate consideration to their failure to make cost-benefit analysis and follow their own procurement regulations. We are bringing this matter to your attention for consideration in any future reviews of procurement practices you undertake in ASCS. Copies of our report and the ASCS reply are enclosed.

Apparently, ASCS officials mistakenly believe GAO agreed that use of programable calculators in county offices was cost-effective. This is not so. Our report did state that "* * * these machines may be able to increase the accuracy of computations and save staff time * * *." This statement was based on our prior knowledge of the potential benefits of programable calculators, not on any examination or analysis done by ASCS. Our report also noted that ASCS has never done a cost-benefit analysis to find out which calculator would best meet its needs at the least cost.

Determining cost-effectiveness implies gaining specific knowledge of

--how much time potentially will be saved by using calculators,

--the capabilities of competing calculator models, and

--the various costs of this equipment.

This data can then be used to select the most "cost-effective model."

In its reply, ASCS states that it did develop cost-benefit guidelines to assist States and counties in acquiring calculators. However, we found that these guidelines were not based on objective analyses of competing calculator brands. Further, potential time savings shown in the guidelines generally reflected personal judgments rather than direct observations.

APPENDIX V

ASCS did conceed in its reply that analysis of calculator purchases and development of guidelines could have been done sooner. However, as we discussed in our report, such analysis was required by ASCS State and county procurement provisions before the calculators were ever purchased. Handbook 23-AS states that purchases be justified according to the need for the product, its cost, and its reliability. Clearly, in this case, ASCS was not following its own procurement regulations.

Finally, ASCS raised a question about the Texas Instruments calculators. The agency contends that Texas Instruments classifies its calculator as a "home product" which, therefore, could not be marketed seriously as a business machine. We do not understand the reasoning behind this conclusion. For years, Texas Instruments has been a GSA schedule contractor selling a variety of calculators, including programable ones. All of these calculators are listed on the GSA schedule as "office machines."

If we can provide any additional information, please let us know.

Sincerely yours,

Oliver W. Krueger
Assistant Director

Enclosures

bc: Mr. Hirschhorn, CED
Mr. Schaefer, WRO

We believe ASCS is on the right track in its current effort to evaluate various types and methods of aerial observation. At the time of our audit, ASCS did not plan to test competing models and methods. In fact, it planned to have all county offices involved in aerial observation without first doing a complete analysis of the situation.

(961073)

*U.S. GOVERNMENT PRINTING OFFICE: 1979 620-386/371 1-3