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Testimony

Before the Committee on Agriculture, Nutrition and
Forestry, U.S. Senate

For Release on Delivery
Expected at
9 a.m.
Wednesday,
March 5, 1997

**USDA INFORMATION
MANAGEMENT**

**Action Needed To Address
Long-standing Deficiencies**

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Mr. Chairman and Members of the Committee:

We are pleased to be here today to assist the Committee in its assessment of progress made by the Department of Agriculture (USDA) in putting into place a foundation for effective acquisition and management of its information technology resources. As requested, this morning I will discuss past difficulties USDA has experienced in planning for and managing information technology, and will then describe the action we believe the Department must take if it is to significantly improve its management of information technology resources. I will also touch briefly on the Department's current moratorium on information technology acquisitions.

Critical legislation enacted last year, the Clinger-Cohen Act of 1996—along with other important management reform legislation—provides a framework under which sound investment in information technology (IT) can become the norm, rather than the exception. For this to happen, however, it is important that implementation actions focus not only on the means (the policies, practices, and processes) but also on end results that are expected from the management reforms. Given the problems that have plagued USDA in the past, and the Secretary's commitment to significantly improving the Department's management of IT investments, this hearing comes at an opportune time. How and how well USDA implements these laws will essentially determine whether it can begin to efficiently and cost-effectively manage its investment in information technology, one that currently totals \$1.2 billion annually.

The influence of USDA on millions of Americans makes it essential that its information technology systems be carefully managed; failure to do so could have serious consequences. USDA's size and complexity, however, make this far from a simple undertaking. The fourth largest federal agency, USDA employs over 100,000 individuals in 30 separate component agencies with multiple and sometimes disparate missions. Its responsibilities range from forests and timber to food assistance for the needy and the safety of meat and poultry products for human consumption. In fiscal year 1997 alone, USDA outlays will total about \$57 billion.

History of Problems: Inadequate Planning, Management of Information Technology Resources

As we have reported over the past several years, USDA and its agencies time and again have poorly planned or managed information technology projects. This has resulted in the waste of millions of dollars in IT investments. Specific deficiencies we have encountered include inadequate definition of system needs, insufficient analysis of alternatives, proceeding with system modernization before assessing business needs and developing a strategic business plan, not considering Departmental restructuring in the planning and acquisition of IT resources, and ineffectively managing the Department's \$100-million annual telecommunications program. What many of these actions have in common is that they have allowed programs to be unduly influenced by technology as the driving force, *rather than* choosing technology to help a program achieve certain strategic goals by first analyzing and revising the mission-related business process.

The attachment to my statement today lists previous reports dealing with these specific cases in detail. I would, though, like to highlight a few examples.

- In June 1990, we reported that the Forest Service was not ready to procure a \$1.2-billion geographic information system because alternatives for integrating this nationwide system into its existing operations had not been adequately analyzed, and system performance needs had not been adequately defined.
- In October 1991, we reported that the Farmers Home Administration was proceeding with a \$520-million project to modernize automated systems for making and collecting loans, yet those plans were not based on a strategic business plan that articulated how the agency would operate in the future, such as the impact of changes to the loan management operations. We judged the level of risk in this effort to be, therefore, unacceptable.
- In June 1992, we testified before this Committee that restructuring the Department would affect the farm service agencies' automation plans, which included four USDA agencies planning separate information technology modernizations; together, they were to spend about \$2 billion from 1993 through 1997. Such investments were unwise at the time, given the likelihood of at least some modification to reflect a streamlined field structure and new ways of doing business. The Committee agreed and at its urging the Department postponed these acquisitions and later established a consolidated, multiagency program, which came to be known as Info Share.

As you are aware, Mr. Chairman, the way USDA managed the Info Share program continued to be problematic. In August 1994, we reported that the \$2.6-billion program was basically being managed as a vehicle for acquiring new technology, rather than as an opportunity for reengineering business processes to better serve farm service agency customers. The General Services Administration subsequently canceled USDA's procurement authority for this project, and the Office of Management and Budget placed it on its list of high-risk programs. As reported by USDA's Office of Inspector General, during fiscal years 1993 and 1994 over \$100 million had already been spent, which included personnel costs. USDA finally disbanded Info Share in December 1995 and moved the program's key objectives to the Department's service center implementation effort.

The issue of streamlining and consolidating systems also applies to management of the Department's financial information. We noted in September 1995 that many of USDA's financial management systems problems would not be resolved until and unless the Department's systems were brought into compliance with USDA's financial standards. Further, absent from the Department's "Financial Information Systems Vision and Strategy" was any mention of eliminating or consolidating over 100 separate financial management systems at USDA that perform overlapping functions, or of reengineering its financial management processes.

Another area involved wasted funds for USDA's telecommunications. As we reported in April 1995, USDA had not acted on all identified opportunities to consolidate and optimize telecommunications services and thus save millions of dollars annually. Further, we reported in September 1995 that due to lax oversight, various USDA agencies were using—and paying for—redundant services in the same locations, leasing equipment they were not using, and paying for services never provided. Moreover, we reported in April 1996 that USDA had not taken sufficient action to address telephone fraud and abuse.

Recommendations that we have made over the last 3 years to address these issues have not yet been fully implemented. The Department has several actions underway; we cannot at this time, however, be sure that they will fully address our concerns.

USDA at a Crossroads: Following Legislative Prescriptions Can Help USDA Control Information Technology

USDA's problems in planning and managing IT are not unique; similar problems have been encountered throughout government. After a decade of agencies' poor planning and program management that resulted in American taxpayers' not getting their money's worth from expenditures of \$200 billion on information systems, the Congress enacted the Clinger-Cohen Act to strengthen executive leadership in information management and institute sound capital investment decision-making to maximize the potential return on information system investments. By providing specific requirements for federal agencies and holding them responsible for results, this law is far-reaching. To be effective, however, its must be supported and implemented.

A USDA that works better and costs less in the 21st century must have efficient and effective information systems. If properly implemented, the requirements of the Clinger-Cohen Act should lead to a significantly improved approach to acquiring and managing agencies' IT investments. Simply put, USDA will need to fully and properly implement the Clinger-Cohen mandates to begin resolving its long-standing deficiencies in managing and acquiring IT. The following sections of the act outline IT requirements related to planning and managing investments; they are at the core of how USDA can began to make improvements:

- capital planning and investment control,
- performance and results-based management, and
- agency chief information officer.

To its credit, USDA has begun taking steps toward meeting the Clinger-Cohen mandates. However, much remains to be done to fully implement the act's various provisions. The Department has not yet established specific time frames or milestones for full implementation; this will be an important step, as the actions that remain will be neither easy nor quick. They will require a significant amount of time and commitment by the most senior managers in the Department.

It is important to note, however, that just as technology is most effective when it supports defined business needs and objectives, Clinger-Cohen will be more powerful if it can be integrated with the objectives of broader governmentwide management reform legislation that USDA is also required to implement. One such reform includes the Paperwork Reduction Act, which emphasizes the need for an overall information resources management strategic planning framework, with IT decisions linked directly to mission needs and practices. Another reform is the Chief

Financial Officers Act, which requires that sound financial management practices and systems essential for tracking program costs and expenditures be in place. Still another reform is the Government Performance and Results Act (GPRA), which focuses on defining mission goals and objectives, measuring and evaluating performance, and reporting results. Together, Clinger-Cohen and these other reforms provide a powerful framework under which USDA has the best opportunity to improve the management and acquisition of information technology that we all want to see.

I would now like to highlight some of the specific provisions of the Clinger-Cohen Act and the steps USDA has taken to start meeting provisions of the act; I will then provide our observations on the implementation challenges facing the Department.

Capital Planning and Investment Control

Under this section of the Clinger-Cohen Act, USDA is required to design and implement a process for maximizing the value and assessing and managing the risks of information technology acquisitions. This process is supposed to be integrated with the processes for making budgetary, financial, and program management decisions, and include criteria to be applied in considering whether to undertake a particular investment in information systems. Moreover, the process is to provide for (1) identifying information systems investments that would result in shared benefits or reduced costs for other government agencies, (2) identifying quantifiable measurements of benefits and risks of proposed investments, and (3) the means for senior management to obtain information on the progress of information systems investments.

USDA has begun to act in this area and is currently designing the specific elements and criteria for its capital planning and investment control process. In light of this, and because no specific time frames or milestones yet exist, it is unclear at this time how the Department's process will operate or when the Department will be ready to fully implement the process.

Part of USDA's overall capital planning and investment control process will include its Executive Information Technology Investment Review Board, which the Secretary authorized last July. It was given responsibility for selecting, monitoring, and evaluating Departmentwide technology investments; members include the Department's most senior program

officials. The board first met this past January, but has not yet adopted operating procedures.

Full and effective implementation of this section of Clinger-Cohen provides, among other elements, potential benefits from sharing with government entities beyond USDA. For example, USDA's initial version of its information architecture includes an illustration of candidate locations for telecommunications equipment and services based on where major concentrations of USDA personnel work. At many of these locations, however, other federal agencies, such as the Department of the Interior, may already have equipment and services in place that could possibly be shared. If such opportunities to share resources exist and are ignored, the chance to achieve savings will be missed.

Performance and Results-Based Management

Under this section of Clinger-Cohen, to implement performance and results-based management for information technology, USDA is required to establish goals for improving the efficiency and effectiveness of agency operations through the effective use of information technology, and to report to the Congress on its progress in achieving these goals. USDA is also required to revise mission-related and administrative processes before making significant investments in information technology, and to ensure that performance measures are prescribed for gauging how well the technology supports USDA programs.

USDA is in the early stages of addressing these requirements, and it is unclear at this time how the Department will fully implement all the requirements under this section. From our perspective, these requirements may be the most difficult and time-consuming to implement, and will demand full commitment and involvement from senior managers for USDA's mission areas.

In establishing the mission-based goals and performance measures for IT investments, USDA will need to make sure that these are aligned with the long-term strategic goals and performance measures it is currently developing under GPRA. In a report we sent you last week, we discussed the progress USDA has made in meeting the GPRA requirements, and noted that USDA plans to consult with the Congress some time this spring after its draft Departmentwide strategic plan has been reviewed by the Office of Management and Budget and the Secretary.

Moreover, USDA historically has not demonstrated success in obtaining the necessary commitment and involvement from senior managers in revising mission-related processes. For example, as previously discussed, we noted in our August 1994 Info Share report that, despite the importance of senior management involvement to fundamentally improve the way these agencies do business, Departmental managers were not directly and personally involved and responsible. Two-and-a-half years after our report, USDA is just starting to move forward with its first projects to revise farm service agency processes.

Agency Chief Information Officer

Under this section, to help USDA carry out the new responsibilities discussed in the previous two sections, the Secretary of Agriculture is required to designate a chief information officer. The CIO is to be much more than a senior technology manager. As a top-level executive reporting directly to the agency head, the CIO is supposed to be responsible for achieving mission results through technology by working with senior managers on effective management to achieve the agency's strategic performance goals. Moreover, the CIO is to promote improvements in work processes and develop and implement an integrated, agencywide technology architecture. The CIO is also required to monitor and evaluate the performance of information technology programs, and advise the head of the agency whether to continue, modify, or terminate a program or project. Further, the CIO is responsible for strengthening the agency's knowledge, skills, and capabilities to effectively manage information resources.

USDA has taken steps to begin implementing requirements in this area. In August 1996 the Secretary established a CIO position and designated an acting CIO, who reports to the Secretary. At USDA, the CIO has been given responsibility for supervising and coordinating the design, acquisition, maintenance, use, and disposal of information technology by USDA agencies, and for monitoring the performance of USDA's information technology programs and activities. However, USDA has not yet established specific time frames or milestones for developing policies and procedures describing how the CIO's office will carry out these responsibilities.

The CIO's office has developed an initial version of an information technology architecture. The acting CIO presented this initial version of the architecture to the review board last month, and the board is now considering it. USDA has likewise not yet established a specific time frame or milestones for completing its architecture.

In our view, in order to complete a sound and integrated architecture, substantial progress must first be seen in the performance and results-based management area. Without first revising mission-related processes, at least conceptually, USDA risks developing an information systems technology architecture that supports the Department's outdated processes rather than one consistent with any future approach. Revising mission-related processes may alter the architecture components and severely affect information technology investment decisions.

A case in point is the revision of a mission-related loan servicing process at USDA. After our October 1991 report, USDA canceled its \$520-million Farmers Home Administration effort to modernize automated systems for its highly decentralized process for making and collecting single-family housing loans. Since then, with pressure from the Congress, USDA has developed and is implementing a new process for servicing these loans centrally known as the Dedicated Loan Origination and Servicing system. By moving from a highly decentralized to a centralized system, USDA expects to reduce the number of offices necessary for carrying out this process by about two-thirds—from about 2,200 in 1991 to about 800. Revising the loan-servicing process significantly affected the Department's information technology investment decisions since fewer and different computers and telecommunications equipment were needed for centralized servicing.

Once USDA is ready to implement its architecture, another critical component of implementation will be establishing a systematic process for making necessary adjustments to the architecture to reflect internal and external changes. Changes may include elements such as the impact that the fiscal year 1998 budget will have on information technology investment decisions. This is especially true at USDA's Farm Service Agency, since the Department's fiscal year 1998 budget request points out that by the end of 1999 a maximum of 2,000 field office service centers will exist, compared with more than 2,500 today. Other changes will include those opportunities identified through USDA's examination this year of operational efficiencies and cost savings from further coordinating Farm Service Agency and Natural Resources Conservation Service activities; these include alternative means of program delivery, such as centralizing servicing for Agriculture Transition Marketing Act payments. Completing the architecture and keeping it current is especially critical if it is to represent a sound and integrated tool for guiding USDA's investment decisions.

Constraining Information Technology Spending While Implementing Clinger-Cohen

Finally, Mr. Chairman, a word about the Department's moratorium on significant information technology investments. With the passage of Clinger-Cohen and concerns expressed in Senate and House appropriations and authorization language, the Deputy Secretary last November established a moratorium on all significant information technology investments. This was done to give the Department time to assess its existing and planned IT investments and constrain IT spending until it develops a Departmentwide information architecture and implementation process. We applaud this action and view it as the first step in getting a handle on information technology spending at USDA.

In addition, just 5 weeks ago, on January 27, the acting CIO also suspended telecommunications investments for the service center implementation effort, with exceptions for those sites implementing centralized rural housing loan servicing or with emergencies, until the Department can assess the impact of the fiscal year 1998 budget. We also support this action since it is designed to prevent USDA from acquiring telecommunications equipment for sites that may close.

Mr. Chairman, this concludes my statement. I would be happy to respond to any questions you or other members of the Committee may have at this time.

Related Products

USDA Management: Progress in Meeting GPRA's Requirements
(GAO/RCED-97-65R, Feb. 26, 1997).

USDA Telecommunications: More Effort Needed To Address Telephone Abuse and Fraud (GAO/AIMD-96-59, April 16, 1996).

USDA Financial Systems: Additional Actions Needed To Resolve Major Problems (GAO/AIMD-95-222, Sept. 29, 1995).

USDA Telecommunications: Better Management and Network Planning Could Save Millions (GAO/AIMD-95-203, Sept. 22, 1995).

USDA Telecommunications (GAO/AIMD-95-219R, Sept. 5, 1995).

Monitoring of the Info Share Program (USDA/OIG Report 50530-1HQ, May 4, 1995).

USDA Telecommunications: Missed Opportunities To Save Millions
(GAO/AIMD-95-97, April 24, 1995).

Review of Info Share Program Expenditures for Fiscal Years 1993 and 1994 (USDA/OIG Report 50530-2-HQ, Jan. 17, 1995).

USDA Restructuring: Refocus Info Share Program on Business Processes Rather Than Technology (GAO/AIMD-94-156, Aug. 5, 1994).

Information Resources Management in a Reconfigured U.S. Department of Agriculture (House Report 103-610), Committee on Government Operations, House of Representatives, July 19, 1994.

Information Resources: USDA Lacks Data on Major Computer Systems
(GAO/AIMD-94-31, Oct. 21, 1993).

Revitalizing USDA: A Challenge for the 21st Century (GAO/T-RCED-93-32, April 22, 1993).

Crop Insurance Program: Nationwide Computer Acquisition Is Inappropriate at This Time (GAO/IMTEC-93-20, March 8, 1993).

Department of Agriculture: Restructuring Will Impact Farm Service Agencies' Automation Plans and Programs (GAO/T-IMTEC-92-21, June 3, 1992).

Related Products

Geographic Information System: Forest Service Has Resolved GAO Concerns About Its Proposed Nationwide System ([GAO/T-IMTEC-92-14](#), April 28, 1992).

ADP Modernization: Half-Billion Dollar FmHA Effort Lacks Adequate Planning and Oversight ([GAO/IMTEC-92-9](#), Oct. 29, 1991).

Farmers Home Administration: Half-Billion Dollar ADP Modernization Lacks Adequate Planning and Oversight ([GAO/T-IMTEC-92-2](#), Oct. 29, 1991).

Forest Service Is Making Progress in Developing a Nationwide Geographic Information System ([GAO/T-IMTEC-91-11](#), April 24, 1991).

Management Improvements Essential for Key Automated Systems at the Agriculture Stabilization and Conservation Service ([GAO/T-IMTEC-90-13](#), Sept. 18, 1990).

Information Resources: Management Improvements Essential for Key Agriculture Automated Systems ([GAO/IMTEC-90-85](#), Sept. 12, 1990).

Geographic Information System: Forest Service Not Ready To Acquire Nationwide System ([GAO/IMTEC-90-31](#), June 21, 1990).

Forest Service Not Ready to Acquire a Nationwide Geographic Information System ([GAO/T-IMTEC-90-10](#), May 2, 1990).

Information Management: Issues Important to Farmers Home Administration Systems Modernization ([GAO/IMTEC-89-64](#), Aug. 21, 1989).

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