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Report to the Chairman and Ranking Minority Member, Subcommittee on Information, Justice, Transportation, and Agriculture, Committee on Government Operations, House of Representatives

August 1994

USDA RESTRUCTURING

Refocus Info Share Program on Business Processes Rather Than Technology



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The Honorable Gary A. Condit Chairman The Honorable Craig Thomas Ranking Minority Member Subcommittee on Information, Justice, Transportation, and Agriculture Committee on Government Operations House of Representatives

In response to your request, we are reporting to you on the results of our review of the Department of Agriculture's (USDA) Info Share program. This program is the biggest and most challenging modernization effort in USDA's history.

Info Share is designed to improve operations and delivery of services to customers of the farm service and rural development agencies through business process reengineering (BPR) and the acquisition and development of integrated information systems.¹ BPR is a management technique for achieving dramatic improvements in cost, quality, and customer service by making fundamental changes in the way an organization performs its work. The magnitude of this effort is considerable—USDA has been delegated procurement authority of \$2.6 billion for Info Share.

In view of Info Share's size and its expected significant impact on departmental operations, we reviewed USDA's planning for this program. Our specific objective was to determine whether USDA is taking appropriate BPR steps under Info Share to improve the way the farm service and rural development agencies do business.

Results in Brief

To his credit, the Secretary of Agriculture has established a vision of revitalizing USDA and improving operations. This vision includes establishing one-stop Field Office Service Centers that are to incorporate new business processes to improve service to farm service and rural development agencies' customers. However, USDA managers are not performing the key BPR steps under Info Share necessary to fundamentally improve the way these agencies do business. Instead, USDA is managing

¹The farm service and rural development agencies include the Agricultural Stabilization and Conservation Service (ASCS), Extension Service, Farmers Home Administration (FmHA), Federal Crop Insurance Corporation (FCIC), Rural Development Administration (RDA), and Soil Conservation Service (SCS).

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	Info Share primarily as a vehicle to acquire new information technology rather than as an opportunity to fundamentally improve business processes. As a result, the Department is likely to spend hundreds of millions of dollars of scarce resources continuing to automate the current way these agencies do business and not achieve the Secretary's vision of a reinvented USDA.
	At the same time, USDA may need to replace some of its aging and outdated computer technology so that these farm service and rural development agencies can continue to operate and provide services while the Department reengineers business processes. However, the Department has not identified its technology needs for this interim period or the most cost-effective option for meeting these needs.
Background	With the third largest civilian agency budget in the federal government, USDA affects the lives of all Americans and millions of people around the world. USDA delivers services through a network of over 14,000 field offices and depends on information technology to accomplish its missions and provide services to its customers. To carry out its missions, the Department and its 43 agencies reported budget outlays of about \$63 billion in fiscal year 1993, according to the President's fiscal year 1995 budget request.
	USDA has a major reorganization effort underway. In December 1993, Secretary Espy announced his reorganization plan for the entire Department. At the headquarters level, this plan includes reducing the number of separate USDA component agencies and staff offices from 43 to 29. The plan would also reduce federal employment by at least 7,500.
	Among other things, the reorganization will affect services provided to farmers and rural development customers. Under the Secretary's reorganization plan, farm services will be carried out by two new agencies: the Farm Service Agency, which would be responsible for commodity price and income support programs, agriculture loan programs, and crop insurance; and the Natural Resources Conservation Service, which would be responsible for conservation programs. In addition, the plan creates three new agencies to promote rural development. At the field level, the plan involves reducing the number of field office locations from about 3,700 to about 2,500. The resulting 2,500 Field Office Service Centers would serve the farm service and rural development customers.

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In recent years, USDA's farm service and rural development agencies invested millions of dollars in computing hardware, software applications, and personnel to automate their field offices. These investments, however, were done independently on an agency-by-agency basis which resulted in separate systems with incompatible hardware, software, and data. Even today, these agencies' systems are redundant, overlapping, and inefficient. Further, the data are incompatible, expensive to maintain, and a burden to the customer who must repeatedly submit the same data and contact several different USDA employees when conducting business at a field office.

USDA has historically had great difficulty planning and implementing these individual agency information technology projects. For example, we reported that USDA agencies had either poorly planned or inadequately managed information technology projects which wasted millions of dollars.² We also reported that ASCS' ineffective oversight of a contractor's development of grain and processed commodity inventory management systems led to the systems costing nine times more than originally estimated, being installed 6 years later than planned, and not meeting agency needs.³

In June 1992 the Senate Committee on Agriculture, Nutrition, and Forestry, noting that USDA was studying options for restructuring its organization, raised questions about whether USDA's farm service agencies should continue making major information technology investments. In this regard, the Chairman and Ranking Minority Member urged USDA to postpone purchases beyond what was necessary to maintain existing systems until the new structure of the Department was clarified. In response, USDA agreed not to purchase any new computer technology beyond what was needed to meet immediate needs and to create a consolidated program to meet these needs.

In April 1993, USDA established a consolidated, multiagency program called Info Share to improve operations and delivery of services to customers of the farm service and rural development agencies. USDA designed this program to make improvements by (1) reengineering business processes and (2) developing integrated information systems. According to the Deputy Assistant Secretary for Administration, the business process

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²ADP Modernization: Half-Billion Dollar FmHA Effort Lacks Adequate Planning and Oversight (GAO/IMTEC-92-9, Oct. 29, 1991).

³Information Resources: Management Improvements Essential for Key Agriculture Automated Systems (GAO/IMTEC-90-85, Sept. 12, 1990).

improvement aspects of Info Share will provide the greatest long-term benefits. Further, the Secretary's Reorganization Plan notes that Info Share is critical to enabling the farm service and rural development agencies to reorganize—reduce office locations and personnel—while improving service to the public through reengineering business processes.

An Executive Committee is responsible for overseeing the Info Share program. This committee is primarily comprised of the Under Secretaries and Assistant Secretaries responsible for the current farm service and rural development agencies, as well as the agencies' heads. USDA's Senior IRM Official—the Assistant Secretary for Administration—is responsible for overall leadership of the Info Share program and chairs the Executive Committee. Info Share is being managed by this Assistant Secretary's Office of Information Resources Management through two managers who share day-to-day management of the project. In addition, six staff serve as team leaders coordinating initiatives on business process analysis/reengineering, application information systems, data, acquisition/technical issues, telecommunications, and implementation.

In August 1993, USDA received a delegation of procurement authority from the General Services Administration to spend up to \$2.6 billion on Info Share. Under this delegation, USDA plans to spend about \$1.1 billion during fiscal years 1994 through 1999 primarily to acquire computer equipment, software, telecommunications, and related services. In addition, USDA plans to spend several hundred million dollars on personnel costs during this period for such functions as developing, operating, and maintaining information systems for the Info Share agencies.

Scope and Methodology

To address our objective, we identified the key BPR steps of reengineering methodologies by researching the subject area and interviewing public and private sector organizations that have implemented BPR. We also interviewed senior USDA officials, Info Share managers, and business process team leaders. Appendix I provides further details on our scope and methodology.

We conducted our work between August 1993 and June 1994 in accordance with generally accepted government auditing standards. As you requested, we did not obtain agency comments on a draft of this report. However, at the end of our review, we discussed the facts in our report with USDA officials, including the Assistant Secretary for Administration and the Director of USDA's Office of Information Resources Ì

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	Management. These officials generally agreed with our findings. We have incorporated their comments where appropriate.
USDA Is Not Performing Key BPR Steps Necessary to Reengineer the Way It Does Business	USDA is not performing the key BPR steps necessary to reinvent the farm service and rural development agencies. First, senior USDA officials are not directly involved in managing the BPR effort and directing the change. Second, USDA is not adequately analyzing the current business processes and establishing improvement goals. Third, USDA is not providing the training and expertise necessary to guide BPR efforts. Instead of following these steps, USDA is managing Info Share principally as a vehicle to acquire new information technology rather than as an opportunity to fundamentally improve the way the farm service and rural development agencies do business. Accordingly, the Department's plan to acquire new technology before completing its BPR effort is likely to result in USDA spending hundreds of millions of dollars to further automate the current way these agencies do business. At the same time, while USDA may need to replace some of its aging technology as it reengineers business processes, the Department has not identified its needs for this interim period and the most cost-effective option for meeting these needs.
BPR Involves Several Key Steps	 BPR is a management technique for fundamentally rethinking and radically redesigning major business processes to achieve dramatic changes in overall performance and customer satisfaction. It is a formidable undertaking and entails difficult, strenuous work because it requires an organization's managers and employees to change how they think and work. BPR consists of several key steps. First, senior management must recognize the need for change, commit to doing BPR, and then direct the BPR effort. Existing processes should then be described and analyzed and measurable improvement goals should be set. In addition, senior management must support the BPR effort by identifying training needs and determining whether outside expertise is necessary. New business processes should then be designed and the organizational culture, structure, roles, and responsibilities should be changed to support these new processes. Finally, new business processes should be implemented by acquiring and installing new technology or redesigning existing technology to support the new processes.

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	Technology plays a key role in BPR by enabling process improvement breakthroughs. As such, knowledge of current and emerging technology is important in planning new processes. New technology can be identified and acquired once the new processes have been conceptually designed and it is clear what technology is needed to support them. Additional information on key BPR steps is contained in appendix II.
Secretary Communicates Need for Reinventing USDA but BPR Effort Does Not Have Necessary Management Involvement	The Secretary has taken the initial steps necessary to revitalize the Department by recognizing a need for change and communicating a broad vision of improving customer service through "One-Stop Shopping". In June 1993, the Secretary stated "Reinventing government is about change. One of the cornerstones of reinventing government is to stop doing things the way that they've always been done". To begin the reinvention of USDA, the Secretary is working with the Congress to reorganize the Department. At the same time, the Secretary's Reorganization Plan states that Info Share will reengineer business processes to improve service delivery to the farm service and rural development agencies' customers. We support the Secretary's goals and efforts to reinvent the way USDA does business. In July 1993, we testified that USDA needs to be fundamentally restructured, or "reinvented," in the context of the management concepts, such as BPR, that guide many private sector corporations, federal and state governments, and governments in other countries. ⁴
	Despite BPR's critical role in reinventing USDA and the importance of senior management involvement, departmental managers responsible for the farm service and rural development agencies are not directly and personally involved and responsible for managing the BPR effort. Instead, USDA'S IRM officials are responsible for the day-to-day management of the BPR effort. These IRM officials have assigned responsibility for performing the BPR effort to one of the six Info Share teams—the Business Process Analysis team. This team is led by a mid-level manager, who is several levels below the Secretary of Agriculture. In contrast, another federal agency with a major BPR initiative underway involving its disability determination process, the Social Security Administration (SSA), has assigned responsibility for its effort to a senior manager who reports directly to the Deputy SSA Commissioner and is a member of the SSA Executive staff.

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⁴<u>Revitalizing USDA: A Challenge for the 21st Century</u> (GAO/T-RCED-93-62, July 21, 1993).

Without strong leadership and direct involvement by senior leadership, it will be very difficult to fundamentally change the culture at USDA and the processes that cross farm service and rural development agency lines, such as enrolling customers in programs or making and servicing customer loans. In this regard, in May 1994, after reviewing how leading public and private organizations improved mission performance, we reported that accountability must be aligned with decision-making authority when fundamentally changing work processes that cross functional lines.⁵ According to BPR experts, processes that cross organizational boundaries offer the greatest potential for benefits through reengineering.⁶ However, the individual farm service and rural development agencies have historically been autonomous and their mid-level managers therefore have a vested interest in continuing the existing processes.

Moreover, the BPR effort under Info Share and the Department's efforts to reorganize the farm service and rural development agencies are occurring concurrently. In addition to establishing a new organizational structure for these agencies, the Department's reorganization efforts involve defining how the agencies will operate in the headquarters and field. While representatives from the BPR and reorganization efforts have met periodically and exchanged information, these efforts are being planned and managed by four different management structures as separate initiatives that are not directly linked.

Specifically, two separate reorganization teams—one headed by the Deputy Under Secretary for International Affairs and Commodity Programs and the other by the SCS Chief—are planning how the farm service agencies will operate when reorganized, while a third reorganization team—headed by the Deputy Under Secretary for Small Community and Rural Development—is planning operations for the new rural development agencies. These three reorganization teams are defining how the new Field Office Service Centers will provide one-stop shopping for USDA customers, what services they will provide, and what the roles and responsibilities of the Field Office Service Center staff will be, before the BPR team analyzes existing processes and conceptually designs new ones.

⁵Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115, May 1994).

⁶Michael Hammer and James Champy, <u>Reengineering the Corporation: A Manifesto for Business</u> <u>Revolution</u> (Harper Business 1993) and Thomas H. Davenport, <u>Process Innovation: Reengineering</u> <u>Work through Information Technology</u> (Harvard Business School Press 1993).

	USDA's approach for defining how the new Field Office Service Centers will operate is not consistent with that recommended by BPR experts. BPR experts recommend that an organization first reengineer its business processes and then define the new functions, roles, and responsibilities that are needed to support them.
Business Process Analysis Team Is Not Adequately Analyzing Current Processes and Setting Improvement Goals	Info Share's Business Process Analysis team is responsible for identifying, analyzing, and redesigning business processes for the farm service and rural development agencies. Through June 1994, the team has been primarily (1) developing an information strategic plan and describing how data, functions, and processes could be consolidated and (2) conducting forums with customers and employees. While these are positive initiatives, they do not analyze existing processes in sufficient detail to support making meaningful changes and do not include setting measurable goals for improvement.
	In November 1993, a USDA contractor assessing Info Share program planning informed the Info Share managers that the Business Process Analysis team was focusing on consolidating existing processes at the farm service and rural development agencies rather than on fundamentally changing the way they do business. Despite this assessment, Info Share managers did not refocus the team's initiatives to ensure that real BPR was being done and that measurable improvement goals were set. They did not establish quality, cost, and service delivery measures to determine how effectively existing processes are meeting customer needs, nor did they identify weaknesses and gaps in current processes that cross farm service and rural development agency lines, such as program enrollment. While consolidating current or shared processes may result in the agencies doing what they do now faster or cheaper, it is not likely to result in serving customers in new and better ways.
	For example, ASCS' work measurement data shows that field office staff spend about 80 percent of their time maintaining customer records. However, the Business Process Analysis team is not collecting and analyzing such data to determine which processes staff spend most of their time doing, measuring the processes' quality and cost, or assessing how effectively the processes serve customer needs. By not obtaining such baseline information, USDA is not in a position to adequately identify inefficient, costly, or needless existing processes that are candidates for being eliminated and replaced with new ones and will not be able to measure the degree of improvement achieved by a new process.

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The Department has also not fully addressed the needs of its customers. To survey customer needs, USDA conducted forums with customers and employees in 10 counties across the country. However, the primary goal of these forums was to obtain information from customers regarding their needs from USDA's information systems rather than focus on the customer's process-related needs, such as problems encountered when enrolling in programs. USDA did attempt to select counties representing different demographic and agricultural areas across the country. But the limited scope of this effort, in which customers and employees from only 10 of about 3,000 counties in the United States participated, creates risk that USDA will not identify a representative set of customer needs. In this regard, USDA's planning documents note that this effort "will not provide statistically accurate requirements" and that "Info Share lacks the time and skills required for complete analysis of customer requirements." Consequently, after USDA completes these forums, it will not have results it can rely on.

USDA has also not set mission-based goals to measure and monitor BPR progress under Info Share. Instead, Info Share goals include standardizing data definitions, speeding communications, and streamlining and reducing the number of forms used to collect customer information. These goals are not stated in a measurable manner and focus primarily on technology-related issues. As a result, monitoring meaningful improvement in quality, cost, and service delivery will be difficult.

In contrast, as discussed in our May 1994 executive guide, we reported that a state agency used measurable mission goals to help focus improvement efforts and drive organizational change to address problems of high production costs, sloppy management decision-making on resource allocation, and bureaucratic stovepipes that made setting organization wide priorities next to impossible.⁷ Before establishing these measurable goals and tying them to statewide goals and service to their external customers, the state agency's improvement efforts—especially those involving information systems—had little effect. After establishing the measurable goals, the agency began to eliminate or refocus low-value projects, more sharply target existing projects on improving mission performance, and generate new ideas on how to use information systems more effectively.

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⁷Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115, May 1994).

USDA Is Not Providing the Training and Expertise Necessary to Guide BPR Efforts

USDA is also not following the key BPR step of providing the training and expertise necessary to enable the Department to successfully analyze its current processes and reengineer them. According to leading BPR consultants, a key to success lies in having reengineering teams that are knowledgeable of the key BPR steps, mindful of errors other organizations have made in their BPR efforts, and assistance by outside experts where necessary to overcome institutional bias and parochial interests. Also, these experts note that the investment of resources for BPR has a long-term payoff and sends a clear message throughout the organization of management's commitment to their effort.

While USDA has chartered a reengineering team—the Business Process Analysis team—senior USDA managers have not supported the BPR effort by ensuring that team members have acquired the skills necessary to reengineer the farm service and rural development agencies' business processes. USDA's Business Process Analysis team members did not receive training on business reengineering techniques until December 1993—9 months after they were assigned and working on the team. That training consisted of a 2-day overview course, which only about half of the team members and none of the Info Share senior managers attended. In addition, only one of the team members had previously worked on a BPR effort and this experience was limited to processes within a program area of one agency. It did not involve major processes that cross functional areas.

By contrast, in order to increase success with its BPR efforts, SSA's reengineering team members received intensive BPR training and team members visited organizations who had reengineered business processes to learn about what is needed for success. Moreover, senior officials who are involved in SSA's BPR effort have had training on the appropriate steps for BPR, including attending a session administered by leading BPR authorities.

In addition to the lack of BPR training and experience, USDA's Business Process Analysis team consists entirely of USDA employees from the farm service and rural development agencies. According to BPR experts, reengineering teams comprised exclusively of internal staff that have a vested interest in the existing processes are not likely to identify new and imaginative ways to do business. Instead, these experts say that teams should include external members that understand BPR, do not hold an institutional bias, will question widely held assumptions, and are ready to take risks. However, USDA does not plan to obtain outside expertise to š

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	assist the farm service and rural development agencies reengineer business processes. By contrast, SSA consulted with experts in several other public and private organizations who are using BPR and has consultants assisting in its effort. At the conclusion of our review, USDA officials stated that, in response to our concerns, they are now considering obtaining contractor support for their BPR effort.
USDA Plans to Acquire New Technology Before Reengineering Business Processes	One of the key steps in BPR is that an organization select and acquire new information technology after it has conceptually designed its new business processes, determined its new information needs, and identified its new application system requirements. Fundamental changes to work processes are likely to impact information flows within the organization as well as into and out of the organization. Accordingly, these changes may in turn result in new information needs, application system requirements, and technology requirements.
	Rather than acquire new technology after new business processes are conceptually designed, USDA plans to award contracts to acquire new technology before the BPR effort is completed. Specifically, USDA plans to begin awarding contracts in late 1994 and early 1995 to design, acquire, and implement about \$500 million in new office automation software, file servers, minicomputers, microcomputers, peripherals, local area networks, wide-area networks, and other equipment and support services.
	According to Info Share managers, the computer equipment to be acquired will be based on open systems and employ an integrated set of software tools. As a result, they contend this equipment will be sufficiently flexible to accommodate whatever business processes are subsequently designed, even if those new processes are substantially different than existing ones.
	However, a May 1994 report ⁸ developed for the National Institute of Standards and Technology, disputes USDA's contention. The report concludes that open systems technology currently available in the marketplace has limitations and will not meet all current and future requirements that federal agencies have. The report noted that agencies often acquire hardware and software that they end up not using because they put too much faith in open systems' standards without a clear concern for mission objectives. Therefore, the report states that federal agencies should first determine how they can best accomplish their

⁸Report of the Federal Internetworking Requirements Panel, National Institute of Standards and Technology, May 31, 1994.

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missions and then identify and acquire information technology solutions that will meet their needs.

If USDA makes a major investment in new technology before completing its business process reengineering, the Department is likely to find that it will later need to spend millions more to augment, substantially modify, or replace this equipment to support new business processes. Until then, USDA does not know if it is buying too much of some equipment, too little of other equipment, or simply buying the wrong technology solution. USDA is also likely to find that the limitations of the equipment it buys will force it to continue to use existing, inefficient processes and not allow it to achieve the dramatic improvements in customer service and efficiency that new processes could accomplish.

For example, according to the Business Process Analysis team leader, implementing one-stop shopping in the proposed Field Office Service Centers may entail new processes where services are integrated so that customers will normally deal with a single USDA employee—a customer service representative—for farm services and possibly another for rural development services rather than a number of employees. This new way of doing business may require integrated information systems with built-in decision-making tools.

Other organizations that use a customer service representative have found that this concept offers numerous benefits. For example, we reported that one organization reduced the number of employees that customers had to deal with from as many as 16 different "experts" down to 1 general purpose customer service representative.⁹ To accomplish this, the organization analyzed and reengineered its customer service process. By doing so, the organization found that its technology needs changed substantially—the number of supporting computer systems went from over 70 under the old process to 1 highly integrated system under the new process. The reengineering effort resulted in simplifying the tasks needed to service the customer and employing a highly integrated systems environment. After implementing the new process and supporting technology, the organization found that its new customer service representatives could handle inquiries without referral at all to other employees—single point problem resolution.

⁹Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115, May 1994).

	We have previously reported that choosing new technology components before reengineering business processes and adequately analyzing and understanding the technology needs to support the new processes would result in only marginal improvements in mission performance. For example, we reported in November 1992 that the Veterans Benefits Administration (VBA) was proceeding with a \$94 million acquisition of computer hardware and associated software before reengineering its claim process and determining how information technology could best be used to modernize its operations and improve service to veterans. ¹⁰ We determined that the new technology VBA intended to buy would potentially reduce the average claims processing time of 151 days by only 6 to 12 days. A VBA senior manager acknowledged that until VBA redesigned its business process, new technology would produce only marginal improvements in the delivery of services to veterans.
USDA Has Not Determined Its Technology Needs for Continuing to Operate Until BPR Is Completed	Because BPR is not a quick fix approach but rather takes considerable time and analytical effort, the Department may need to replace some of its existing aging and outdated computer technology to enable it to continue to provide current services. According to the Deputy Assistant Secretary for Administration, some existing information technology is failing and USDA is fast approaching a situation where its ability to continue delivering programs will be affected. For example, USDA officials claim that some of ASCS' field office computer equipment is experiencing maintenance and capacity problems.
	The Department's current plan is to begin awarding Info Share contracts in 1994 for information technology to meet immediate needs and to transition to USDA's future computing environment. However, USDA has neither determined the technology needed to continue to provide services while reengineering business processes nor identified the most cost-effective option for meeting these needs. Further, until USDA conceptually designs new processes and determines the technology needed to support them, the Department does not have the information necessary to define its future computing environment. Consequently, if USDA acquires technology beyond what is needed to continue to provide services while reengineering business processes, the Department risks spending millions on technology that may not meet its future computing needs.

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¹⁰Veterans Benefits: Acquisition of Information Resources for Modernization is Premature (GAO/IMTEC-93-6, Nov. 4, 1992).

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The Info Share program provides USDA with an opportunity to dramatically
improve and reinvent the way the farm service and rural development
agencies serve their customers. The Secretary has demonstrated his
commitment to revitalizing these agencies by establishing a vision for
one-stop Field Office Service Centers and embracing Info Share as the
Department's means for reengineering business processes. However, BPR
is not an easy undertaking and will not be accomplished overnight because
it will require USDA managers and employees to fundamentally change how
they think and work. The success of the Department's reengineering
efforts will depend to a large extent on the commitment and involvement
of senior USDA officials, with assistance and guidance from those with BPR
training and expertise.

Despite the Secretary's commitment, USDA's current Info Share approach runs a high risk of not resulting in significant improvements in the way the farm service and rural development agencies do business. Although touted as a BPR effort, Info Share is not that-senior agency officials are not involved, business processes are not being examined, measurable goals are not being established, and training and expertise are not being provided. Rather than focusing on reengineering business processes, USDA is using Info Share principally as a vehicle to acquire additional information technology. Unless USDA concentrates on reengineering business processes, the Department will spend millions of dollars of scarce resources and risk that this project will only further automate the current way of doing business and may not meet future needs. At the same time, it is both appropriate and necessary for the Department to devote attention and resources to satisfying its computer technology needs for continuing to operate and provide services while it reengineers business processes.

Recommendations

To ensure that USDA takes appropriate steps to reengineer business processes, we recommend that the Secretary of Agriculture refocus the Info Share program to ensure that BPR is properly planned, conducted, and implemented. At a minimum, the Secretary should:

- require that the Under Secretaries and Assistant Secretaries for the farm service and rural development agencies be directly and personally involved and responsible for directing the BPR effort;
- designate a senior manager who would be responsible for managing the BPR effort on a day-to-day basis and would report directly to the Under Secretaries and Assistant Secretaries;

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- direct that the BPR effort be linked to the Department's reorganization initiative;
- identify and provide the necessary BPR skills, training, and expertise for a team that will reengineer business processes, and, if necessary, acquire needed BPR expertise from external sources;
- establish an independent advisory group comprised of private and public sector representatives, including customer representatives;
- direct the reengineering team to identify and analyze existing business processes and work flows and apply quality, cost, and service measures to determine how effectively USDA is currently meeting customer needs; and to establish measurable, mission-driven goals;
- · determine, after analyzing existing processes and setting goals, how
 - existing processes can be redesigned or eliminated altogether to reduce costs, improve quality, and better meet customer needs and
 - systemic changes can be made to the organizational structure, culture, roles, and responsibilities in order to support the reengineered processes and implement the new processes; and
- defer the award of planned nationwide Info Share contracts for the farm service and rural development agencies until after USDA has (1) defined and tested new business processes and (2) determined new information needs, application system requirements, and technology requirements necessary to support the new business processes.

To ensure that USDA can continue to operate while reengineering business processes, we recommend that the Secretary direct the Under Secretaries and Assistant Secretaries for the farm service and rural development agencies to

- determine and document their agencies' critical technology needs for continuing to operate until BPR is completed; and
- determine, document, and pursue the most cost-effective options for meeting these needs.

Although we did not obtain agency comments on a draft of this report, on June 28, 1994, we did discuss the report's contents with senior USDA officials, including the Assistant Secretary for Administration and the Director of USDA's Office of Information Resources Management. Although these officials generally agreed with the facts presented, they pointed out that they believe senior USDA managers are involved in and responsible for the Department's BPR effort under Info Share. While we recognize that senior managers serve on the Info Share Executive Committee, the Info į

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Share Program's BPR team leader reports to IRM managers, rather than directly to the Executive Committee or to other senior managers who have the authority to make fundamental changes to business processes, such as those that cross agency lines. Moreover, departmental managers responsible for the farm service and rural development agencies are not directly and personally involved and responsible for directing the BPR effort.

These officials also stated they believe the \$500 million in technology that USDA plans to award contracts for in 1994 and 1995 will have sufficient flexibility to support migration to their future computing environment. We believe, however, that technology currently available in the marketplace has limitations and may not meet all future requirements of the farm service and rural development agencies. As such, USDA may spend millions of dollars on technology that will not effectively support its needs after business processes are reengineered.

As arranged with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days after the date of this letter. At that time, we will send copies to the Secretary of Agriculture; the Chairmen and Ranking Minority Members of the Senate Committee on Agriculture, Nutrition, and Forestry; the Senate Committee on Governmental Affairs; the Senate and House Committees on Appropriations; the House Committee on Agriculture; the House Committee on Government Operations; the Director, Office of Management and Budget; and other interested parties. Copies will also be made available to others upon request.

This report was prepared under the direction of Joel C. Willemssen, Director, Information Resources Management/Resources, Community, and Economic Development, who can be reached at (202) 512-6253. Other major contributors are listed in appendix III.

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Gene L. Dodaro Assistant Comptroller General

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Abbreviations

ASCS	Agricultural Stabilization and Conservation Service
BPR	business process reengineering
FCIC	Federal Crop Insurance Corporation
FmHA	Farmers Home Administration
IRM	information resources management
RDA	Rural Development Administration
SCS	Soil Conservation Service
SSA	Social Security Administration
USDA	U.S. Department of Agriculture
VBA	Veterans Benefits Administration

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Appendix I Scope and Methodology

To address our objective, we identified the key BPR steps of reengineering methodologies. We compiled these steps after thoroughly researching the BPR subject area by interviewing numerous public and private sector organizations that have implemented BPR (Social Security Administration, Ontario Ministry of Revenue, GTE Telephone Operations, IBM Credit, and IBM Canada); interviewing several BPR consultants (Computer Sciences Corporation, James Martin Government Consulting, Ken Orr Institute, and Pacific Rim Consulting); obtaining BPR training (James Martin's Business Re-engineering and Technology Transfer Institute's Business Process Reengineering), and researching BPR literature (Reengineering the Corporation: A Manifesto for Business Revolution and Process Innovation: Reengineering Work Through Information Technology).

We then contrasted the key BPR steps with the steps USDA is following to reengineer business processes. In doing so, we analyzed the Secretary of Agriculture's testimonies to the Congress, USDA's Reorganization Plan and fiscal year 1995 budget request, and other pertinent USDA documents. We also interviewed top Department managers, including the Deputy Assistant Secretary for Administration, heads of the six Info Share agencies, senior officials involved in the farm service and rural development reorganization efforts, and reviewed available minutes from meetings held by these officials to determine their involvement in the BPR effort.

In addition, we reviewed USDA's Info Share project management structure, particularly the positioning of the reengineering team, and contrasted this structure with other organizations doing BPR. In doing so, we also interviewed Info Share managers and team leaders to ascertain how other initiatives and projects within the Info Share program were related to the BPR effort. Furthermore, we collected data on the resources USDA allocated to its BPR effort and the BPR training received by Info Share managers and the business process analysis team members.

We also evaluated the business process analysis team's plans and activities for assessing existing business processes. Specifically, we interviewed the team leader and team members to identify the scope of their various BPR efforts. We also analyzed the team's charter, strategies, and planning documents, and reviewed the results of completed efforts to determine the extent to which the team was identifying and analyzing core business processes and applying quality, cost, and service measures to determine how effectively customer needs were being met. Additionally, we reviewed this team's plans to identify whether measurable improvement goals had

Appendix I Scope and Methodology been set for all BPR efforts. We also obtained and evaluated a contractor's assessment of Info Share's business process reengineering efforts. Finally, we interviewed Info Share project managers, including USDA's Director of Information Resources Management, and Info Share team leaders, and reviewed planning documents, budgets, and milestones to

leaders, and reviewed planning documents, budgets, and milestones to determine when USDA plans to acquire new technology. We also interviewed the Info Share agencies' Senior Information Resources Management Officials and reviewed their analysis of their agency's technology needs, if available, to assess whether the agencies had determined their needs for continuing to operate until BPR is completed, and whether they had identified the best option for meeting these interim needs.

We performed our work at USDA's headquarters in Washington, D.C., and at farm service and rural development agency's offices in Ft. Collins, Colorado; Kansas City and St. Louis, Missouri; and Washington, D.C. We also visited field sites in Bolivar County, Mississippi and Osage County, Kansas; and a contractor's site in Arlington, Virginia.

Description of Business Process Reengineering

Business process reengineering (BPR) is a management technique for achieving dramatic improvements in cost, quality, and customer service by making fundamental changes in the way an organization defines its mission and performs its work. BPR is based on a thorough understanding of an organization's customers, their needs, and the environment. BPR is focused on improving business processes that create and deliver value by satisfying the customer's needs. Generally these processes cut across functional, geographic, and organizational units.

While automation is not a necessary part of BPR, information technology plays an important role as an "enabler". Advances in information technology offer innovative opportunities for organizations to completely rethink the way they do their work. For example, organizations may (1) establish telecommunications networks to allow workers at different locations to work collaboratively, (2) employ expert systems to allow one person to do tasks that previously required several specialists, or (3) use shared databases so that customer service representatives, who have access to all information, can address customer concerns without transferring them to other components of the organization.

BPR is characterized by:

- a top management-driven effort to scrutinize and challenge the current management tenets of the organization and its mission, based on the needs of the customer and the environment;
- identifying and analyzing core business processes and applying quality/cost/service measures to determine how effectively they are meeting customer needs;
- thinking boldly about how processes can be redesigned or eliminated altogether to reduce costs, improve quality, and better meet customer needs; and
- making systemic changes to the organization's structure, culture, roles, and responsibilities in order to support reengineered processes.

The following highlight the key steps of BPR:

1. Have the organization's top management commit to the need for change and drive the effort to scrutinize and challenge the current management tenets of the organization, based on the needs of the customer and the environment. In addition, certain pre-conditions should be in place before the task of business process reengineering can proceed. Such pre-conditions include: Appendix II Description of Business Process Reengineering

- creating a shared vision of the future based on customer needs and the environment;
- communicating and gaining acceptance of the vision and the need for change from major stakeholders—internal and external people and organizations that will be affected by the change;
- developing a BPR project management structure that ensures continuous top management involvement; and
- establishing the reengineering teams.

2. Develop a strategy for reengineering that is linked to the organization's business vision and strategy. This strategy should include plans for:

- prioritizing reengineering projects;
- allocating appropriate resources; and
- training reengineering teams and if necessary, acquiring BPR expertise.

3. Assess the existing processes, including:

- analyzing the current work flow and process performance by applying quality/cost/service measures;
- understanding process-specific customer needs;
- · identifying weaknesses/gaps in existing processes; and
- setting outcome-oriented goals for new processes and defining measurable performance indicators to monitor progress in meeting the goals.

4. Create reengineering breakthroughs which include:

- creating ideas for new processes, including determining how other organizations have designed similar processes—sometimes referred to as benchmarking— which usually employs technology;
- selecting best approach;
- developing the work flow of the new processes;
- changing the supporting organizational culture, structure, roles, and responsibilities; and
- prototyping, testing, and adjusting the new processes.

5. Implement the new process, including activities such as:

- developing a transition plan that not only focuses on implementing the new processes but also the supporting organizational structure;
- acquiring and installing new technology and/or redesigning the existing technology to support the new processes;

Appendix II Description of Business Process Reengineering

• training and preparing the organization for the change, especially changes to the culture;

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- institutionalizing the new processes; and
- monitoring the new processes to determine whether they are meeting improvement goals and make adjustments, where necessary, to the new processes.

Appendix III Major Contributors to This Report

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