

PD-AAW-606

IAN-52790

AUDIT OF  
SELECTED U.S.A.I.D./INDIA  
IRRIGATION PROJECTS  
PROJECT NOS: 386-0481, 386-0483  
AND 386-0490

Audit Report No. 5-386-88-2  
October 30, 1987

October 30, 1987

MEMORANDUM FOR Mr. Robert Bakley, Director  
U.S.A.I.D./India

FROM: RIG/A/Singapore, *Richard E. Derrick* Richard E. Derrick

SUBJECT: Audit of Selected U.S.A.I.D./India Irrigation  
Projects (Project Nos. 386-0481, 386-0483,  
and 386-0490)

The Office of the Regional Inspector General for Audit/Singapore has completed its audit of Selected U.S.A.I.D./India Irrigation Project Nos. 386-0481, 386-0483, and 386-0490. Five copies of the audit report are enclosed for your action.

The draft report was submitted to you for comment and your comments are attached to the report. The report contains three recommendations. Recommendation No. 1(a) is considered closed and requires no further action. Recommendation No. 3 is resolved and should be closed upon our review of the U.S.A.I.D./India Mission Order giving the guidelines for monitoring projects for which A.I.D. funds have been expended, but project implementation has not been completed. Recommendation Nos. 1(b) and 2 are unresolved. Please advise me within 30 days of any additional actions taken to implement Recommendation No. 3, and further information you might want us to consider on Recommendation Nos. 1(b) and 2.

I appreciate the cooperation and courtesy extended to my staff during the audit.

## EXECUTIVE SUMMARY

The objective of U.S.A.I.D./India's irrigation sector was to increase irrigated agricultural production in India through improved delivery of water and more efficient use of the water delivered. The audit covered the Maharashtra Irrigation Technology and Management Project, the Maharashtra Minor Irrigation Project, and the Madhya Pradesh Minor Irrigation Project. These projects were approved between 1982 and 1984 and scheduled for completion between 1987 and 1990. The A.I.D. funds authorized and obligated for the three projects totaled \$143 million, of which \$58 million was expended as of March 31, 1987.

The Office of the Regional Inspector General for Audit/Singapore made a program results audit of the three Indian irrigation projects. The specific audit objectives were to (1) determine whether the projects were designed and implemented consistent with A.I.D. policies and regulations, (2) evaluate progress against project and sector objectives, and (3) review U.S.A.I.D./India's management and monitoring systems.

The irrigation projects in the Indian States of Maharashtra and Madhya Pradesh were designed but not implemented in accordance with A.I.D. policy for project assistance. The projects were not fully meeting their objectives for institutional change. In general, U.S.A.I.D. management and monitoring of active projects were satisfactory, but provisions should be made for monitoring irrigation schemes for which all A.I.D. funds have been expended.

In recent years, U.S.A.I.D./India has made a commendable effort to revise and strengthen the irrigation projects in the hope that a new project format would make the A.I.D. assistance more relevant and effective. This effort was a good step towards improving the institutional development impact of A.I.D.'s irrigation assistance to India.

The U.S.A.I.D.-financed projects had limited impact on the irrigation activities in the two States where they were implemented. A.I.D. had limited leverage to effect change because India had the resources to conduct a substantial irrigation program. U.S.A.I.D./India's irrigation projects in the two States covered in this audit were not providing project assistance but foreign exchange for the Government of India. A.I.D. financed the construction of irrigation schemes that would have been built whether or not there was a U.S.A.I.D. project. U.S.A.I.D./India had no formal arrangements for ensuring effective use of A.I.D. funds on projects for which the funds were expended but construction was not completed.

The A.I.D. irrigation program in the Indian States of Maharashtra and Madhya Pradesh was authorized as project assistance to increase irrigation coverage and to improve the water delivery system through improved planning, technology, and management systems. It was intended that technical and management improvements applied on A.I.D.-financed irrigation schemes would be uniformly adopted on similar Indian financed schemes. However, the States of Maharashtra and Madhya Pradesh did not adopt such practices in their schemes. Their construction priorities were not the same as U.S.A.I.D./India. As a result after five years, U.S.A.I.D irrigation projects made little development impact on India's irrigation program in these two States because (1) A.I.D. had limited leverage to effect institutional changes since A.I.D. funds were small in relation to the total irrigation resources invested by the States, (2) the A.I.D. funding was provided in the manner of resource transfer rather than project assistance and (3) the state irrigation departments did not establish an effective construction management and planning system. This report recommends determining if A.I.D. assistance to the Indian irrigation sector should be continued, and if continued determine whether project or program assistance can best achieve the objectives of such assistance. U.S.A.I.D./India disagreed with the finding and concurred in only one portion of the two recommendations.

A.I.D. Handbook 3 required that Mission officials ensure the effective use of A.I.D. project resources. Although A.I.D. funds for the Rajasthan Project have been expended, many of the A.I.D.-funded schemes have not been completed. U.S.A.I.D./India is not monitoring the completion of these schemes because they have not established guidelines to monitor projects after A.I.D. funding terminates, and the Government of India agency responsible for monitoring the A.I.D. project stopped reporting on project implementation in the State of Rajasthan. The project design did not anticipate the long delay between the final expenditure of A.I.D. funds and the completion of the A.I.D.-funded irrigation schemes. Without specific monitorship, U.S.A.I.D. had no assurance that the A.I.D. project funds were used effectively and that the individual schemes will be completed according to project criteria. This report recommends establishing guidelines for monitoring the uncompleted irrigation schemes on which all the A.I.D. funds have been expended. U.S.A.I.D./India concurred with the finding and recommendation.

*Office of the Inspector General*

AUDIT OF  
SELECTED U.S.A.I.D./INDIA  
IRRIGATION PROJECTS

TABLE OF CONTENTS

	<u>Page</u>
<b>Part I - INTRODUCTION</b>	
A. Background	1
B. Audit Objectives and Scope	2
<b>Part II - RESULTS OF AUDIT</b>	4
A. Findings and Recommendations	5
1. The U.S.A.I.D. Irrigation Projects Have Had Limited Development Impact on India's Irrigation Program.	5
2. U.S.A.I.D. Needs to Monitor the Progress of Incomplete Project Schemes for Which A.I.D. Funding Was Expended.	14
B. Compliance and Internal Control	16
C. Other Pertinent Matters	17
<b>Part III - EXHIBIT AND APPENDICES</b>	
A. Exhibit	
1. Examples of A.I.D. Criteria for Approval of Irrigation Schemes	
B. Appendices	
1. U.S.A.I.D./India Comments	
2. Bureau for Asia and Near East Comments	
3. List of Recommendations	
4. Report Distribution	

AUDIT OF  
SELECTED U.S.A.I.D./INDIA  
IRRIGATION PROJECTS

PART I - INTRODUCTION

A. Background

In spite of the green revolution, food supplies in India met only an estimated 90 percent of the country's minimum nutritional requirements. About 40 percent of the population was below the Government of India's nutrition-based poverty line. India's population of 785 million was growing 2.1 percent per year. Agricultural production must grow nearly 4 percent per year to feed this population and also improve its quality of life. Historically the growth rates have been only around 3 percent.

India has little additional land that can be added to the 140 million hectares that are now cultivated. Production increases that rely heavily on sufficient water must come from improved yields and greater cropping intensities on the 55 to 60 percent of the arable land that can be irrigated. About half of the land that can be irrigated is already under irrigation. The Government of India (GOI) plans to irrigate the other half by the year 2000. Water use efficiency, i.e., crop yield per unit of water, under these irrigation systems was only 25 to 30 percent rather than the anticipated 50 to 55 percent.

The objective of U.S.A.I.D./India's irrigation sector assistance was to increase irrigated agricultural production in India through improved delivery of water and more efficient use of the water delivered. U.S.A.I.D. projects intended to do this primarily by financing construction of irrigation schemes. Because of the problem of attempting to influence India's large irrigation program with modest A.I.D. resources, U.S.A.I.D. officials had difficulties finding a role for their projects in the state irrigation programs. In a draft irrigation strategy paper, U.S.A.I.D. proposed a new approach that shifted project emphasis from the on-farm water management issues to the up-stream technical and institutional problems of water supply and delivery systems. In their comments to our draft report, the Bureau for Asia and Near East stated that they approved the strategy paper in May 1987.

The principal focus of this audit was the three irrigation projects approved between 1982 and 1984 and scheduled for completion between 1987 and 1990. The Project Agreements

for these projects were with the Government of India. State governments were responsible for irrigation and water control activities, and their irrigation departments were the organizations responsible for project implementation. The A.I.D. funds authorized and obligated for the three projects totaled \$143.0 million. The table below shows \$58.1 million was expended as of March 31, 1987.

PROJECT FUNDING  
As of March 31, 1987  
(In Million Dollars)

<u>Irrigation Projects</u>	<u>A.I.D.</u>		Host
	<u>Obli- gation</u>	<u>Expen- diture</u>	Country Contri- bution
	\$	\$	\$
Maharashtra Irrigation Tech. & Mgmt. No. 386-0481	Loan 44.0 Grant 3.0	41.3 1.1	46.0
Madhya Pradesh Minor Irrigation No. 386-0483	Loan 41.0 Grant 5.0	10.6 0.4	35.2
Maharashtra Minor Irrigation No. 386-0490	Loan 46.0 Grant 4.0	4.1 0.6	42.6
Total	<u>\$143.0</u> *****	<u>\$58.1</u> *****	<u>\$123.8</u> *****

**B. Audit Objectives and Scope**

The Office of the Regional Inspector General for Audit/Singapore made a program results audit of selected irrigation projects in India: Maharashtra Irrigation Technology and Management Project No. 386-0481; Madhya Pradesh Minor Irrigation Project No. 386-0483; and Maharashtra Minor Irrigation Project No. 386-0490. The review also included selected aspects of the terminated Rajasthan Medium Irrigation Project No. 386-0467 and some of the training activities of the Irrigation Management and Training Project No. 386-0484. The specific audit objectives were to (1) determine whether the projects were designed and implemented consistent with A.I.D. policies and regulations, (2) evaluate progress against project and sector objectives, and (3) review U.S.A.I.D./India's management and monitoring systems.

Audit work included the review of files and records and discussions with responsible U.S.A.I.D./India officials. Discussions were also held with Government of India

officials at the Ministries of Finance and Irrigation and World Bank irrigation project officers in New Delhi. The audit included visits to the States of Maharashtra, Madhya Pradesh and Rajasthan where project implementation was discussed with both project managers of state irrigation departments and faculty officials of Water and Land Management Institutes of these states. During these visits, the project progress was observed at selected irrigation construction sites.

The audit covered the period from April 1982 through March 1987 and accrued expenditures of \$58.1 million. Audit field work was conducted from April 3, 1987 through June 18, 1987. Because this was a program results audit, the review of internal controls and compliance was limited to activities related to the report findings. U.S.A.I.D./India and the Bureau for Asia and Near East comments to our draft report were received in September and October 1987 respectively. Their comments have been incorporated into the report as appropriate and the full text of the comments are included as Appendices 1 and 2. The audit was made in accordance with generally accepted government auditing standards.

AUDIT OF  
SELECTED U.S.A.I.D./INDIA  
IRRIGATION PROJECTS

PART II - RESULTS OF AUDIT

The irrigation projects in the Indian States of Maharashtra and Madhya Pradesh were designed but not implemented in accordance with A.I.D. policy for project assistance. The projects were not fully meeting their objectives for institutional change. In general, U.S.A.I.D. management and monitoring of active projects were satisfactory, but provisions should be made for monitoring irrigation schemes for which all A.I.D. funds have been expended.

In recent years, U.S.A.I.D./India has made a commendable effort to revise and strengthen the irrigation projects in the hope that a new project format would make the A.I.D. assistance more relevant and effective. This effort was a good step towards improving the institutional development impact of A.I.D.'s irrigation assistance to India.

The U.S.A.I.D.-financed projects had limited impact on the irrigation activities in the two States where they were implemented. A.I.D. had limited leverage to effect change because India had the resources to conduct a substantial irrigation program. U.S.A.I.D./India's irrigation projects in the two States covered in this audit were not providing project assistance but foreign exchange for the Government of India. A.I.D. financed the construction of irrigation schemes that would have been built whether or not there was a U.S.A.I.D. project. U.S.A.I.D./India had no formal arrangements for ensuring effective use of A.I.D. funds on projects for which the funds were expended but construction was not completed.

The report contains three recommendations directed towards assessing the need for continued A.I.D. assistance to India's irrigation sector, improving the current assistance effort, and monitoring incomplete irrigation schemes for which all A.I.D. funds have been expended.

A. Findings and Recommendations

1. The U.S.A.I.D. Irrigation Projects Have Had Limited Development Impact on India's Irrigation Program.

The A.I.D. irrigation program in the Indian States of Maharashtra and Madhya Pradesh was authorized as project assistance to increase irrigation coverage and to improve the water delivery system through improved planning, technology, and management systems. It was intended that technical and management improvements applied on A.I.D.-financed irrigation schemes would be uniformly adopted on similar Indian financed schemes. However, the States of Maharashtra and Madhya Pradesh did not adopt such practices in their schemes. Their construction priorities were not the same as U.S.A.I.D./India. As a result after five years, U.S.A.I.D. irrigation projects made little development impact on India's irrigation program in these two States because (1) A.I.D. had limited leverage to effect institutional changes since A.I.D. funds were small in relation to the total irrigation resources invested by the States, (2) the A.I.D. funding was provided in the manner of resource transfer rather than project assistance and (3) the state irrigation departments did not establish an effective construction management and planning system.

Recommendation No. 1

We recommend that the Director, U.S.A.I.D./India:

- a. determine whether A.I.D. assistance to the irrigation sector in India should be continued, and
- b. if a determination is made to continue A.I.D. assistance, ascertain whether project or program assistance can best achieve the specific development objectives of such assistance to India's irrigation sector.

Recommendation No. 2

We recommend that the Director, U.S.A.I.D./India, develop a plan of action to assist the States of Maharashtra and Madhya Pradesh improve their construction planning and management capabilities, including establishment of a priority system to use the available construction funds.

Discussion

Handbook J defined a project as the total, discrete endeavor to create through the provision of personnel, equipment, and/or capital funds a finite result directly related to a

development problem. In effect, an A.I.D. project should provide resources to developing countries to help with specific, definable development activities that the countries could not carry out with their own resources. Handbook 1 stated that program assistance is a mode of assistance for alleviating policy constraints to sectoral productivity and output and provides foreign exchanges which may not be directly linked to specific project expenditures. Handbook 4 stated that program assistance is generally concerned with the transfer of resources.

In addition, an A.I.D. policy paper stated that when the recipient country's own resources are not entirely absorbed by the A.I.D.-financed project and the project is of sufficiently high priority to be otherwise undertaken with the country's own resources, then clearly the assistance enabled the country to release resources to finance some other project. In such a case, the fungibility of financial assistance means that in reality the donor provided program rather than project assistance.

The A.I.D. irrigation projects in the States of Maharashtra and Madhya Pradesh were designed to increase irrigation coverage primarily through the construction of minor and medium irrigation schemes. In addition, the projects were to improve system efficiency and water delivery performance through institutional development of planning, technology and management systems of the States' irrigation departments. It was intended that institutional changes employed on the 150 irrigation schemes financed by A.I.D. would be extended to the other 2,200 schemes financed by the States' construction programs.

In general on the A.I.D. projects, the state irrigation departments made construction plans and designs which included specific technical improvements based on extensive appraisals. In addition, they prepared operational management procedures in accordance with the A.I.D. project standards.

The States' construction program did not adopt the improved technical and management practices used on the A.I.D.-financed irrigation schemes. For example, the States did not always utilize on their schemes A.I.D. project standards such as (1) detailed hydrological, topographic, and soil surveys; (2) lining of main and distributary canals; and (3) the design and construction of water distribution infrastructure below the outlets as an integral part of each irrigation system. Exhibit 1 provides a listing of these A.I.D. irrigation project standards.

The States' irrigation department officials stated that the U.S.A.I.D. projects' design and operational requirements were not always used and would not likely be used on the state-financed irrigation schemes because the States had a different set of programming priorities from A.I.D. For example, A.I.D. emphasized qualitative improvement in irrigation planning, design, and management. On the other hand, the Indian States considered the quantitative expansion of irrigation infrastructures more essential. The States believed that, given the extreme scarcity of water resources in India outside the monsoon season, the immediate need of its irrigation program was to capture water from the monsoons and store it in reservoirs through the construction of as many dams and headworks as possible. Less emphasis was placed on the quality of the irrigation system. In essence, the States' irrigation program dictated more dams with lesser quality irrigation systems under their projects while the A.I.D. projects required better irrigation systems in fewer dams.

As a result, A.I.D.'s irrigation assistance through the construction of certain irrigation schemes did not have the broad development impact in the States of Maharashtra and Madhya Pradesh that was intended. For example in Madhya Pradesh, the possible impact was limited only to the 50 A.I.D. schemes which were less than 3 percent of the 1800 schemes in progress in that State. Generally, work on most schemes was slower than anticipated and in some cases work stopped because of a shortage of funds. Delays have increased the cost and lowered the rate of return of the schemes. The irrigation departments often compromised the quality of the construction. Farmers, seeing irrigation schemes started, only to be virtually abandoned when partially completed, have understandably lost confidence in the irrigation departments.

U.S.A.I.D./India disagreed with the auditors' analysis of project impact. In their response to the draft report, they stated that U.S.A.I.D. assistance and collaboration with the States of Maharashtra and Madhya Pradesh was resulting in significant changes in the attitudes and irrigation practices followed in these States. They cited the positive attitudes of the Secretaries of Irrigation of both States towards U.S.A.I.D. assistance and the results of a program assessment of U.S.A.I.D.'s assistance to India's irrigation program as proof of impact with some of the following specific accomplishments:

- Irrigation management concepts and applications are now considered and discussed widely in India whereas the subject was of limited interest before U.S.A.I.D. assistance.

- More vigorous economic and technical appraisal has been adopted for medium and minor irrigation development in the five states where U.S.A.I.D. is, or has been involved. In Maharashtra and Madhya Pradesh these standards and criteria were extended to all new medium and minor schemes, and in Madhya Pradesh to all new minor schemes, not just those receiving U.S.A.I.D. support.
- Comprehensive manpower planning and improvement studies are being taken up in three states with U.S.A.I.D. assistance.
- Under the Irrigation Management and Training Project, U.S.A.I.D. is expanding curriculum and training program development assistance to cover eleven rather than five States.

As a result of our audit work as discussed below, we conclude the A.I.D. irrigation projects had limited impact for several reasons. First, A.I.D.'s leverage to effect change was reduced because of the disparity between A.I.D.'s project resources and India's large irrigation program. Second, the irrigation projects were providing resource transfers rather than project assistance. Third, management weaknesses at the States' irrigation departments allowed more construction schemes to start than they had the resources to implement effectively. These reasons will continue to limit the impact of A.I.D.'s irrigation assistance to India.

Small A.I.D. Resources - Irrigation was one of India's top development priorities. Under their Five Year Plan, 1985-90, the Government of India (GOI) planned to spend over \$12 billion for irrigation activities and only 20 percent of that amount was from foreign donor assistance. The States of Maharashtra and Madhya Pradesh were to spend \$3 billion of that amount. Compared to these resources, A.I.D. project funding for these two States was small, amounting only to \$141 million or less than 5 percent of the States' irrigation program.

Most of the A.I.D. funds were for the construction of irrigation schemes. The number of irrigation schemes constructed under the A.I.D. projects was also small in relation to the total schemes constructed by the States. In Madhya Pradesh, the A.I.D. project included 50 minor irrigation schemes out of 1800 in that State. In Maharashtra, the A.I.D. projects included 10 medium irrigation schemes out of 125 and 90 minor schemes out of 450 in the State.

The State irrigation departments staffs were equally impressive. The department in Maharashtra employed over 9,000 engineers and Madhya Pradesh employed almost 12,000. Although many of these people were not well trained, a number had advanced degrees and the departments had years of experience working with irrigation in India.

Furthermore, the project objectives of providing reliable water and improving the operational management of the schemes involved technology that was generally available or known by the state irrigation department officials. The irrigation department officials in the two States stated that they were already familiar with the design and operational procedures required by U.S.A.I.D. and these U.S.A.I.D. requirements did not represent any new technologies.

In view of India's large financial and manpower resources devoted to irrigation, it was apparent that the assistance provided by A.I.D. made little difference in India's irrigation program.

Resource Transfer v.s. Project Assistance -  
U.S.A.I.D./India's irrigation development activities in the States of Maharashtra and Madhya Pradesh were authorized as project assistance, even though they did not provide assistance in the manner intended for projects. Instead, the assistance was in the form of resource transfers which did not achieve the policy initiatives generally attributed to program assistance.

When designing the irrigation projects, U.S.A.I.D. officials knew that the Government of India's funding requirements and related budgetary procedures would result in project funds being used more like program rather than project assistance. They also recognized that the U.S.A.I.D. projects could not realistically expect to achieve the significant policy changes that were required of program assistance. However, U.S.A.I.D./India's irrigation development activities were still designed and authorized as project assistance.

The Project Papers suggested a closer link between project activities and A.I.D.-funding than ever existed. They used such language as "the funds will partially cover such items as construction of the dam... and drainage system" and "the funds will be used to finance local currency costs of construction". In spite of this language, the irrigation activities of the States were primarily used to attribute the disbursement of foreign exchange to the Government of India. U.S.A.I.D.'s involvement in irrigation began in this way, and essentially, the program has not changed. India had an on-going irrigation construction program, and

U.S.A.I.D. agreed to provide assistance for a given period of time (a "time-slice") to designated schemes within that program. These schemes were not additional as a result of A.I.D. assistance; they would have been built whether or not there was a U.S.A.I.D. project.

Since the Government of India's own resources are not entirely absorbed by the A.I.D.-financed project and the project is of sufficiently high priority to be otherwise undertaken with the country's own resources, then clearly the assistance enabled the country to release resources to finance some other project. In such a case, the fungibility of financial assistance means that in reality A.I.D. provided program assistance, whether it is realized or not.

Ineffective Planning and Management - While both the Maharashtra and Madhya Pradesh States were spending large amounts of their funds on irrigation activities, the irrigation departments of these States did not have the institutional capability to administer those resources effectively nor did they have the management strength and discipline to control their work planning and priorities. Because of irrigation's potential for increasing the productivity of farm lands, people understandably wanted irrigation schemes built to serve their land as soon as possible. The political representatives of the farmers exerted pressure to start schemes that would serve their constituents. As a result, the irrigation department officials in both Maharashtra and Madhya Pradesh stated they had started more schemes than they had the resources to manage effectively and the funds were spread thinly over too many schemes.

Because the funds were spread so thinly, the irrigation department officials never felt that they had enough money to do more than the basic minimum for any given scheme. In addition, schemes that should have been completed in four to five years have often dragged on for seven to eight years. Because the funds were spread thinly and since not enough money was available for all projects, the irrigation department in Madhya Pradesh was using the U.S.A.I.D. involvement to justify concentrating resources on 50 U.S.A.I.D. schemes so that they could be completed on schedule. In doing this, progress on the other 1,750 schemes may suffer, and when the U.S.A.I.D. schemes are completed, additional pressures may have developed to complete the remaining schemes at the expense of good design and construction principles.

In short, the irrigation departments in the States of Maharashtra and Madhya Pradesh lacked the management capability to effectively control their work priorities and

consequently allowed more construction schemes to start than they had the resources to complete.

In view of the large amount of resources India is devoting to irrigation, we believe that the project designs poorly matched what the Indian irrigation departments needs with what U.S.A.I.D. had to offer. With the large force of trained manpower and a substantial budget, it appears the irrigation departments needed little assistance funding construction. Their problem was managing those resources effectively.

Conclusion - Notwithstanding U.S.A.I.D.'s continued efforts to change the program focus, we believe that as long as U.S.A.I.D.'s actions are limited to a small number of schemes, its assistance will continue to have little impact. It is doubtful that U.S.A.I.D. can provide significant development to India's irrigation sector. Continued A.I.D. assistance to the irrigation sector beyond the irrigation schemes already approved should be assessed against the need for and benefits of that assistance.

We also believe that in order to make the current A.I.D. assistance more relevant to the development need of the Indian irrigation program, U.S.A.I.D. should assess whether specified project type assistance or program assistance tied to policy/management reform can best achieve the objectives of A.I.D. assistance to the Indian irrigation sector. U.S.A.I.D. should also find a way to help the States improve the management of their irrigation programs, possibly through the introduction of scheduling and planning systems, in order to effectively prioritize their construction work to make better use of their available financial resources.

#### Management Comments

U.S.A.I.D./India disagreed with the finding. They believed Recommendation No. 1 should be dropped because the Bureau for Asia and Near East had reviewed and approved U.S.A.I.D.'s strategy to continue irrigation assistance to India. The Bureau confirmed this approval in their comments.

Also, U.S.A.I.D./India stated that the micro-computerization and management information initiatives in the Maharashtra Minor Irrigation and the Madhya Pradesh Minor Irrigation Projects should be enough to close Recommendation No. 2. However, they objected to that portion of Recommendation No. 2 concerning the establishment of a priority system to use the available construction funds because the GOI would probably consider such a system as "political interference."

U.S.A.I.D.'s disagreement with the finding focused on two issues. First, they believed U.S.A.I.D.'s assistance resulted in development impact and institutional change which had not been adequately reflected in the report. They cited several accomplishments of the assistance.

Secondly, U.S.A.I.D. did not believe the audit conclusions, relating to the reasons why the assistance had limited impact, were valid. For example, they stated that the irrigation program addresses itself to project assistance rather than resource transfers as indicated in the report. They added that each project is a discrete activity in which U.S.A.I.D. is supporting specific medium or minor irrigation schemes as well as other related activities under these schemes. They acknowledged that A.I.D. foreign exchange disbursements are not directly transferred as a flow of resources for these schemes/activities, but the disbursements are linked through the project agreements, implementation letters, and GOI's reimbursement claims. They further stated that:

"According to Chapter 1 of A.I.D. Handbook 4, nonproject (or program) assistance is a mechanism for providing short-term relief from constraints on the economy (such as balance of payment deficits), which our assistance is clearly not designed to do. By contrast, project assistance is designed to effect a long range change in the conditions of a target population, which is what our assistance to India is all about."

U.S.A.I.D. believed the audit conclusion, that irrigation schemes would have been built without A.I.D. assistance, was not justified. They stated that it is appropriate for A.I.D. assistance to supplement GOI resources which in turn accelerates the country's economic development. They added that U.S.A.I.D. assistance provided a better guarantee of an adequate budget for irrigation schemes. They further stated that without U.S.A.I.D. assistance most of the schemes would neither have begun nor been completed.

#### Office of Inspector General Comments

U.S.A.I.D./India's response and actions are sufficient to close part (a) of Recommendation No. 1.

Part (b) of Recommendation No. 1 is considered unresolved. U.S.A.I.D.'s and the Bureau for Asia and Near East's comments do not provide adequate information that U.S.A.I.D. or the Bureau in its review of the U.S.A.I.D. irrigation strategy paper adequately considered the merits of project versus program assistance. Based on our review during the audit, we found that the available draft irrigation strategy

paper did not include an analysis of project versus program assistance. In our view, the audit report makes the point that U.S.A.I.D.'s assistance is more like program rather than project assistance. In its June 1987 project paper amendment to the Madhya Pradesh Minor Irrigation Project, U.S.A.I.D. recognized that a change to performance disbursement in its project assistance would be a better means to achieve the project's policy/management reform objectives. We believe U.S.A.I.D. should fully explore whether the policy/management reform objectives could be achieved even better under program assistance tied to these objectives rather than specified project assistance.

Clarifying information was added to the report regarding U.S.A.I.D.'s comments on the impact and institutional change resulting from A.I.D. assistance. Whereas U.S.A.I.D. comments indicate A.I.D. assistance to the irrigation sector is having major impact resulting in institutional change, audit results do not substantiate that view. A major reason for this difference is that the audit focused on institutional change at the implementation level of the State Governments, while U.S.A.I.D. comments centered on the policy level within these Governments. We believe, audit results show that institutional change is not actually practiced.

We disagree with U.S.A.I.D.'s comments that most of the schemes would neither have begun nor been completed without U.S.A.I.D. assistance. In a meeting with the Joint Secretary to the Irrigation Department in one of the States and several members of his staff, we were told very specifically that the schemes in the A.I.D. project would have been implemented regardless of A.I.D. assistance. In fact, the Indian States started a number of the irrigation schemes before the schemes were included in the A.I.D. project. We believe the audit report provides a proper perspective of A.I.D. assistance to the Indian irrigation program by stating that the assistance provided the leverage to complete irrigation schemes faster.

Recommendation No. 2 is unresolved until U.S.A.I.D./India provides further details as to how the micro-computerization and management information initiatives will improve the States' construction planning and management capabilities. That portion of the recommendation, regarding assisting the two States establish a priority system to use the available construction funds, was never intended to interfere with the GOI's political process. Rather, the principal thrust was to assist the state irrigation departments better cope with pressure to start more schemes than they can handle. In effect, we believe U.S.A.I.D.'s assistance can have more impact if it assists the State Governments construct irrigation schemes based on priority need.

2. U.S.A.I.D. Needs to Monitor the Progress of Incomplete Project Schemes for Which A.I.D. Funding Was Expended.

A.I.D. Handbook 3 required that Mission officials ensure the effective use of A.I.D. project resources. Although A.I.D. funds for the Rajasthan Project have been expended, many of the A.I.D.-funded schemes have not been completed. U.S.A.I.D./India is not monitoring the completion of these schemes because (1) they have not established guidelines to monitor projects after A.I.D. funding terminates, and (2) the Government of India agency responsible for monitoring the A.I.D. project stopped reporting on project implementation in the State of Rajasthan. The project design did not anticipate the long delay between the final expenditure of A.I.D. funds and the completion of the A.I.D.-funded irrigation schemes. Without specific mentorship, U.S.A.I.D. has no assurance that the A.I.D. project funds were used effectively and that the individual schemes will be completed according to project criteria.

Recommendation No. 3

We recommend that U.S.A.I.D./India establish Mission guidelines to ensure continued U.S.A.I.D. monitoring of irrigation projects for which the funds have been expended but the A.I.D.-funded schemes have not been completed by:

- (a) specifically defining and assigning monitoring responsibilities; and
- (b) requiring the Government of India to periodically report on the uncompleted irrigation schemes.

Discussion

A.I.D. Handbook 3, Chapter 11, stated that project monitoring was important because A.I.D. must ensure that goods and services financed are utilized effectively to produce intended results. Chapter 14 of Handbook 3 emphasized that monitoring responsibilities do not end when the A.I.D. project funds have been expended.

For the Rajasthan Medium Irrigation Project, U.S.A.I.D. agreed to fund a "time slice" of the construction costs of designated irrigation schemes. Although "time slice" implied a section out of the middle of the projects, the intent was to fund schemes that could be completed by or soon after the project assistance completion date (PACD). Because of delays that were usual for the irrigation departments, none of the schemes were completed by the PACD and in some cases were not planned to be completed for as long as four or five years after the PACD.

The Project Paper called for the Central Water Commission (CWC) of the Ministry of Irrigation to prepare quarterly and annual progress reports. These reports supplemented by site visits by U.S.A.I.D./India irrigation advisors, were the basis of project monitoring. With the termination of the A.I.D.-funding, CWC stopped submitting progress reports, and U.S.A.I.D./India no longer had personnel assigned to monitor the terminated project. In addition, U.S.A.I.D. had no established procedures to ensure that projects are monitored after A.I.D. funding ceases.

The lack of monitorship prevented U.S.A.I.D. from assuring that (1) A.I.D. financing for the Rajasthan Project was effectively used and (2) the individual irrigation schemes were constructed in accordance with U.S.A.I.D. project criteria. The level of monitoring required needs to be specifically defined to avoid using more manpower than is required.

#### Management Comments

U.S.A.I.D./India agreed with the finding and recommendation. They issued a mission order which included guidelines to ensure U.S.A.I.D. monitoring of irrigation projects for which A.I.D. funds have been expended but the A.I.D. financed irrigation schemes have not been completed.

#### Office of the Inspector General Comments

The recommendation is resolved and should be closed upon our review of the mission order.

## B. Compliance and Internal Control

### Compliance

The review of compliance was limited to areas related to the findings presented in the report. The irrigation projects did not comply with the requirement to meet a discrete development need in the recipient country (Finding No. 1). In addition, the irrigation projects were not designed to comply with Agency guidelines for project assistance (Finding No. 1).

### Internal Control

The review of internal controls was limited to areas related to the findings presented in the report. U.S.A.I.D./India did not have provisions to ensure the effective use of the A.I.D. project resources for which A.I.D. funds have been expended but project construction has not been completed (Finding No. 2).

## C. Other Pertinent Matters

### Performance Disbursement

The performance disbursement procedure used in two of the irrigation projects in India did not conform to existing Agency policy. Disbursements made under that procedure were not directly related to the cost of goods and services under those projects. This occurred primarily because A.I.D. had not issued formal guidelines for the use of performance disbursement.

U.S.A.I.D./India adopted the performance disbursement method of financing for the Maharashtra and Madhya Pradesh minor irrigation projects. In June 1987 the Bureau for Asia and Near East approved a Project Paper amendment that authorized the performance disbursement method of financing for the Madhya Pradesh minor irrigation project. The Maharashtra Minor Irrigation project was originally designed and approved for performance disbursement on July 13, 1984.

The performance disbursement method designed and used for these projects did not conform to the existing A.I.D. policy because the projects did not result in the delivery of goods and services or the financing of local costs. The distinctive feature of this performance disbursement method was making the disbursement of project funds based on host country action, usually policy or institutional reforms rather than traditional project costs. The release time was geared to provide the leverage required for making institutional or policy changes. When the irrigation departments took the actions that triggered the release of the project funds, U.S.A.I.D. disbursed dollars to the Reserve Bank of India.

As a result of the performance disbursement arrangement in India, the project funds have lost identity with specific project activities. In effect, this arrangement bought institutional action with no regard for project funding that delivers goods or services, which is contrary to the existing A.I.D. financing policy and regulations.

A.I.D. approved the performance disbursement method of financing project activities in India and other countries on a project-by-project basis. Although performance disbursements to the India irrigation sector could not be tied to specific project-like activities, such disbursements could be tied in some other countries. For example in the Bangladesh credit project, the A.I.D. funds were used for actual farmer loans, even though the performance disbursement was based on the lending organization's institutional reforms.

General guidelines have emerged from several A.I.D. Washington offices in relation to the performance disbursement projects. These guidelines helped formulate general principles and raise questions concerning the use of performance disbursement, but to date the guidelines have not been formalized. The deficiency in the India performance disbursement procedures occurred because A.I.D. did not establish agency guidelines, procedures, and regulations governing design and use of this financing method.

U.S.A.I.D./India and the A.I.D. Office of Financial Management agreed that A.I.D. needs to develop overall policies and guidelines on the use of performance disbursements. The Office of the Inspector General will be following agency progress in developing such guidelines.

AUDIT OF  
SELECTED U.S.A.I.D./INDIA  
IRRIGATION PROJECTS

PART III - EXHIBIT AND APPENDICES

Examples Of A.I.D. Criteria  
For Approval Of Irrigation Schemes

- Distribution system to be designed starting with farmer's field and moving upward through the system to the main canal outlet level.
- Conveyance channels regulated with control structures to permit full delivery to all outlets, and protected by cross-drainage structures and escapes (wasteways) along the canal alignment.
- Water measuring devices to be provided at the main canals, each offtaking distributary and each outlet to a watercourse.
- Dam and conveyance system of each scheme constructed within four years of initiation including the distribution network to individual farms.
- Water requirements for crops based on climatological, detailed soil survey data, and projected cropping patterns.
- The layout of the water conveyance and distribution system to be based on detailed soil and topographic surveys.
- Main and branch/distributary system to be lined based on detailed soil survey data and hydraulic conductivity-seepage loss correlation.
- Plan for land development activities to be completed by the time the irrigation distribution system is completed.
- Complete surface drainage system to be designed and constructed in the entire cultivative command area (CCA).
- An Economic Rate of Return (ERR) of 12 percent or more, or 10 percent in tribal/droughtprone areas.



UNITED STATES AGENCY for INTERNATIONAL DEVELOPMENT

NEW DELHI, INDIA

September 11, 1987

MEMORANDUM

TO: Mr. Richard E. Derrick  
RIG/A/Singapore

FROM: *Robert N. Bakley*  
Robert N. Bakley, Director  
USAID/India, New Delhi

SUBJECT: Draft Audit Report on Irrigation Projects in India

Our comments on the subject draft report transmitted through your memo dated August 7, 1987 are as follows:

Summary

The auditors correctly state the challenge facing Indian agriculture: "...agriculture production must grow nearly 4 percent per year...." This is an almost unheard of rate anywhere. The draft report also correctly notes that agriculture growth will have to come from "...improved yields and greater cropping intensities .... on ... land that can be irrigated." With respect to the agricultural developmental needs of India this hits the strategic nail squarely on the head. Indeed this context provides the *raison d'etre* for USAID involvement in irrigation and water resources. AID/W's recent approval of USAID's Irrigation Strategy is an affirmation of this fact and our consequent substantial involvement in this sector.

Overall, the draft audit report does attempt to place in perspective USAID's continuing efforts to give its irrigation portfolio an effective, high impact focus in the context of (a) the fiscal, bureaucratic and socio-political constraints in which we operate, (b) the host government's own enormous development efforts and matching resources which make AID's selective efforts and limited resources seem relatively small, and (c) the importance of irrigation and water resources to India's economic development. However, the draft report appears to have only partially succeeded in this effort apparently because of unfamiliarity with critical program details and strategy, concentration on construction activities alone, and narrow interpretation of AID policy. We are surprised by and have noted substantial inaccuracies and major incorrect and categorical conclusions in the draft report which are discussed in the following paragraphs. Similarly, it seems that action on at least three of the recommendations was already completed even before the audit was wound up. The draft report should reflect that. We, therefore, suggest that many of the report's findings and recommendations be dropped and/or modified as appropriate in light of our comments.

Finally, the use of past tense throughout the draft report conveys a wrong image in the reader's mind about where these projects are in their life span (only one project is mature, nearing PACD). We suggest that the report be written in present tense.

### Scope

It is initially stated that the audit only covers three projects. It should also be stated that the audit focussed primarily (if not entirely) on the loan-financed construction. Several general statements in the report may lead one to believe otherwise. This is particularly important since grant activities in these three projects and the IM&T Project are now leading our program. For example:

- Title should read: "Audit of Selected USAID/I Ongoing Irrigation Projects"
- Pg.11, para (3) should read: "The USAID-financed construction projects in the two states covered had limited impacts....."
- Pg.111, para (2) should read: "These three AID irrigation projects in India....."

The premise of our revised irrigation program is to focus all inputs, construction loans and training and research grants, on the overall goal, i.e. improving systems designs, planning and management. When the construction is lifted out of the program for separate examination, as has been done in this audit, it leads to distorted conclusions. We believe it is a fundamental weakness of the audit that no comment or assessment is made about any of the considerable institutional and manpower development elements of these three projects or the program in general.

### Impact and Institutional Change

1. Pages 11, 111, 5, 7-14: The report mentions categorically in several places that the projects in Maharashtra and Madhya Pradesh have not had "impact", and that they were not fully meeting their objectives for institutional change.

With most development projects, particularly those concerned with infrastructure, benefit streams and full impacts cannot be assessed until well after the project completion date. This is particularly true for medium irrigation systems/schemes which typically take from 10 to 15 years to complete. Only one of the USAID projects reviewed by the auditors was even mature (5 years old), one was in the midst of a major redesign, and another was still in early phases of implementation. None of the project-assisted schemes were complete and operational. Given the early stages of these interventions, impacts would be impossible to judge. Two auditors having spent several days each in these large States, reviewing mostly the early

- 3 -

implementation phases of projects would hardly be able to even qualify, much less quantify, project impacts.

The Mission's experience and a major recent program assessment indicate that, institutionally, USAID's assistance and collaboration with the two State Irrigation Departments concerned is resulting in significant changes in both attitudes and the way things are done in public irrigation in those States, and dialogue is continually improving and expanding. In recent discussions with the Mission Director the Secretary of Irrigation of the GOMP stated that although small in budgetary terms, USAID's contribution to irrigation in M.P. was "...very important in improving his Department." Likewise the Secretary of Irrigation of Maharashtra State spoke of USAID's "...catalytic role..." in improvements in his State. The specific accomplishments are:

- Irrigation management concepts and applications are now considered and discussed widely in India--at the Center, in the States, and over the past three years, in over 200 conferences/seminars--whereas in the 1970s this subject was of limited interest. USAID's leadership and involvement has clearly helped stimulate this and continues to shift dialogue to planning and operational performance issues.
- More rigorous economic and technical appraisal has been adopted for medium and minor irrigation development in the five states where USAID is, or has been, involved. Prior to that, little or no attention was given to vigorous analysis for minor and, in some cases, medium projects. In Maharashtra and Rajasthan these standards and criteria were extended to all new medium and minor schemes, and in Madhya Pradesh to all new minor schemes, not just those receiving USAID support.
- Irrigation planning and management training is being funded by Irrigation Departments in ten states, in response to the joint effort of the World Bank and USAID. Comprehensive manpower planning and improvement studies are being taken up in three states with USAID assistance. Previously, almost no training was systematically planned or provided to irrigation officers.
- Farmer involvement is on the policy discussion agenda at both Center and state levels and the subject of numerous meetings and seminars. The Government of Rajasthan is reviewing its water code to incorporate provisions to cover water user organizations. The Government of Maharashtra is actively encouraging the formation of water user cooperatives/associations. USAID has directly and actively promoted and encouraged this interest.

- 4 -

- Increased emphasis is on institutional strengthening in Himachal Pradesh, Maharashtra and Madhya Pradesh. USAID is programming Grant assistance to directly strengthen the central design organizations in the Irrigation Departments in two of those States. This establishes a critical institutional link between the learning acquired in USAID assisted projects and the broader work of Irrigation Departments.
- Under the IM&T Project, USAID is expanding curriculum and training program development assistance to cover an eleven states network of irrigation management in-service training institute (WALMIs) rather than the five originally planned for in that project.

Besides, there are also a number of potential impacts, from simply acceleration of construction all the way through to better water management. Therefore, to assess actual "impact" at this stage would be a vast over-simplification.

2. Pg. 111, para (2) and pg. 7 para (1):...."Maharashtra and Madhya Pradesh did not adopt such practices in their schemes" and later "...little development impact....in Maharashtra and Madhya Pradesh...."

A recent formal assessment of USAID's irrigation program in Maharashtra (by four noted irrigation development experts) stated "The team is satisfied that the Irrigation Department has actually institutionalized critical technical design features of the USAID projects, particularly for minor projects, and feels that they represent significant improvements over previous practices". In both States the Irrigation Departments are improving their minor project designs and operations by adoption of USAID-prescribed technical criteria. They are doing so by:

- using internal rate of return analysis to gauge project size and feasibility;
- carrying out detailed topographic mapping and soils surveys of command areas;
- discussing field channel layout and outlet locations with farmers;
- rationing water supply with rotational schedules based on holding size.

These were not "S.O.P." of the Irrigation Departments prior to USAID assistance as is amply documented by early project design specialist teams. Some of these design improvements and their adoption in another State are further detailed and documented in the Final Evaluation of the Rajasthan Medium Irrigation Project.

- 5 -

3. Page 14, para (1): "...These USAID requirements did not represent any new technologies..." This is not true. Five specific new technologies are now actually in use:

- "pucca nucca" outlet gates for water control;
- Replogle flumes for water measurements;
- methodology for calculating crop-water requirements;
- micro-computerization of IRR and water balance analysis;
- irrigation system diagnostic analysis methodology.

However, beyond and more importantly than "technologies" are the institutional, procedural and management improvements described in (1) and (2) above which the projects are inculcating.

4. Pages 18-19, conclusion: "...as long as USAID's actions are limited to a small number of schemes, its assistance will continue to have little impact." This is a very subjective statement and, as stated above in (2), not in line with what irrigation experts and officials of the participating states have concluded. Experience indicates that attribution and concentration of our efforts on a particular, identifiable set of schemes will have greater effects than would "program drop" of our funds in the enormous bucket of Irrigation Department budgets. The GOMP Secretary made this point clear during the M.P. Minor Irrigation Project amendment negotiations. The reasons:

- The power of demonstrable, feasible improvements to real schemes, i.e. doing it, rather than simply talking about it. These schemes are in situ demonstrations and examples.
- The on-the-job training spread effects: Each engineer who learns, understands and applies AID's design and operational criteria on these selected systems will also work on dozens of other systems. This skills transfer reinforced by subject-specific training is intended and is inevitable.
- The Indo-US collaborative process: In a socio-technical endeavor such as irrigation management we cannot directly transfer new technologies. Working in the field together on selected schemes enables technology adoption and iterative learning by both donor and recipient.

In fact, contrary to the report's conclusion we believe that we have too many, not too few, schemes to ensure demonstrable impacts and "seeds" for replication. The draft audit report unfortunately

- 6 -

focuses on actual construction (which is not what our irrigation program is all about), that it loses sight of our irrigation development and management objectives, i.e. requisite planning, design, operations and participation (which is what our program is all about).

#### Project Assistance or Foreign Exchange for the GOI

Page(11), Page 7, Pages 14-16: The statement that we are not providing project assistance in the two states covered is questionable. Project assistance addresses itself to a discrete development problem and, to that extent, specific, selected irrigation systems do identify themselves with such assistance. Each project is a discrete activity where we are supporting specific medium or minor irrigation schemes as well as other related activities under them. Each project has specific goals and objectives and is designed to effect medium and long range changes in the conditions of a target population. Our assistance can be traced directly upto the scheme or activity level. The costs to be financed by AID are identified in the Project Agreements and PILs, and the GOI reimbursement claims specify these costs against the related approved budget categories. Admittedly, the AID foreign exchange disbursements are not directly transferred as a flow of resources for those schemes/activities, but they are linked. Under the GOI/State planning and budgeting process, the projects have already been advanced funds upfront by the States which they spend and for which reimbursements are made to the GOI and through it, to the State exchequer.

It is pertinent to mention that the AID financing of local costs with dollars was approved by the Development Coordination Committee when aid to India was resumed in 1978. This policy is reviewed and approved annually during the ABS review process. Individual project authorizations also reflect the approval of local cost financing with dollars for that particular project.

The AID supported projects, like all other Plan activities, are included in the concerned State's Plan upfront and the outlay levels are approved on the basis of the overall State Plan size. The fact that AID assistance forms a part of the total Plan does not mean it is not project assistance. App. 1A of HB 3 states the development plan of the host country and Congressional mandate for AID provide the basic framework and guidelines for establishing objectives and selecting problems/projects. We have followed this. These activities (projects) fall within our CDSS objectives. Each one of them has been approved as a project and clearly qualifies for project assistance. All other bilateral donors in India operate in much the same fashion.

According to Chapter 1 of AID Handbook 4, nonproject (or program) assistance is a mechanism for providing short-term relief from constraints on the economy (such as balance of payment deficits), which our assistance is clearly not designed to do. By contrast, project assistance is designed to effect a long range change in the conditions of a target population, which is what our assistance to India is all about.

### Projects Would Have Been Built Without AID Assistance

Page 11, 6, para (1): "...schemes would have been built (anyway)..." This statement is conjectural. We feel it may be useful to summarize here how the GOI's economic development planning process works, and how foreign assistance fits into it.

India follows an integrated economic development planning process under which Five-Year Plans are prepared. These Plans encompass the entire range of development activities of interest and concern to the Center and the States. The Center assumes the primary role in the formulation of policy and overall plans, while the states take on administrative and development functions. Briefly stated, the planning process tries to (a) identify the country's economic development needs and priorities, (b) assess resource availability to implement approved program and projects, and (c) allocate total estimated available resources on a sector-wise and activity priority basis.

Because of the shortage of internal resources, the GOI continually investigates the possibilities of augmenting them from external sources in the form of multilateral and bilateral assistance to finance the economic development plans. Such external assistance is only open to those activities that have been included in the Five-Year Plan. The Plan outlays for different sectors are fixed on the basis of total resource availability estimates, of which external assistance estimates already form a part. Thus, the size of external assistance has an important bearing on sectoral economic development plan resource outlays. In other words, if external assistance is not forthcoming or is less than that anticipated, the GOI will curtail the Plan size by deleting or deferring implementation of certain activities. What external aid, therefore, does is accelerate their implementation and, consequently, the pace of India's economic development. Although external assistance (both multi-lateral and bilateral) amounts to less than 3% of India's gross domestic product, it plays an important part in its economic development and is mostly provided for specific purposes.

All AID-financed projects are covered in the GOI or State Plan, as applicable, and funds are budgeted by the concerned Central or State ministry. Since the States are constitutionally barred from direct foreign aid relations with external agencies/governments, all agreements are signed with the GOI. Similarly, all disbursements of loan and grant funds are also made to the GOI, but funds for related activities are already included upfront in the outlay levels approved for the concerned States and advanced to them periodically during each year.

GOI may have taken up the implementation of such projects but only when resources are available, and that is why it seeks aid to supplement its own resources to accelerate economic development. This is the quintessence of all foreign development assistance, including ours. Otherwise, there is no need for any foreign aid if the argument is made that GOI would have eventually financed the

costs out of its own resources. In view of this direct linkage between our assistance and accelerated economic development, the auditor's argument is not valid.

It is pertinent to mention that even with the foreign aid, the GOI is facing a resource crunch as a result of which the Seventh Plan size may be reduced and the ministries have already been asked to cut their proposed expenditures by 1/3rd. Nonetheless, we have not only been able to get increased budget flows for our projects thus far but we also expect that needed budgetary provisions will continue to be made for them in the future despite the planned overall budgetary cuts.

In sum, donor assistance gives the GOI and the concerned States a better guarantee of adequate development plan budget for those schemes. Therefore, most of the schemes would neither have begun nor been completed without the USAID assistance and consequent budgetary provision. None of the schemes would benefit from the qualitative design and operational improvements.

#### Performance Disbursement

Pages (ii), 20-25: "USAID/India's use of performance disbursement did not conform to Agency Policy." We agree that performance disbursement method is not yet a formal mechanism, but it has been approved and used elsewhere on a case-by-case basis. Its use has also been specifically approved by AID/W in the case of M.P. Minor Irrigation Project.

We also question such statements as "...the projects...were designed but not implemented in accordance with AID policy" made in the audit report. During the audit period, both the MMI and MPMI projects were implemented exactly as designed. Before the audit only the MIM project was restructured to include some performance disbursements and AID/W was advised about it. The MIMI project disbursement procedures were under redesign at the time of audit and even there have since been approved by AID/W. Therefore, this statement needs clarification. Also, the disbursement "benchmarks" listed on pp. 22-23 are so incomplete as to be incorrect. A list of the actual PII benchmarks is attached for your reference. On Page (iv) the audit report states that "the performance disbursement procedure...did not conform to the existing Agency policy because disbursements...were not directly related to, or used for, project activities."

This is not an accurate statement since, under this procedure, all the disbursement tranches are being released only for those schemes and activities which have been identified for AID assistance. It may be correct to say that the disbursements are not directly related to the cost of actual goods delivered or services performed, but not that they were not directly related to project activities. Through this performance disbursement mechanism, we are disbursing funds which have been approved for the construction of the schemes in direct proportion to the successful completion of discrete planning, design and operational activities necessary for the full

development of, and benefits from, these schemes. The completion of certain associated grant-funded activities are also included in the disbursement requirements. Thus performance disbursements will ensure the project's chances of achieving institutional and management objectives.

The related PILs for MITM and MMI provide us the needed leverage in that the GOI is expected to refund all amounts released for a subproject or activity if it is not completed as planned. In the case of the MPMI Project, where the PIL has still to be formally approved by the GOI, we have recourse to the Standard Project Agreement clause on refund.

### Construction Management

Pages 7, 12 & 17: The lack of construction management capability is mentioned as a critical problem. While this capability is valuable and is needed, the reason that too little funds are spread over too few schemes has much less to do with construction management than with the indiscipline of a fast growing democracy and the political process. Of course professional strengthening of irrigation departments can help. It is not a question of management capability but perhaps the over-zealous but democratic political process that makes unrealistic demands on limited resources. Our continued attribution to specific sub-projects in M.P. results from the desire in that State to counter just this pressure. Remember that our own U.S. Army COE and USBR bend to the same pressures (eg. the Tennessee - Tonbigbee Canal). In any case, the lack of construction funds is not a primary cause of inequity, underutilization and inefficiency in irrigation development in India.

Consequently, although we are and intend to continue assisting management improvements within Irrigation Departments, we can only hope that the logic of not spreading the limited resources too thinly is also accepted by the State Legislatures. A dialogue on this issue is ongoing among the GOI and the States. The GOI is considering switching over to the zero-based budgeting concept. Under that concept it has been suggested that focus should be on projects that are moving well so that they are completed at the earliest, and that non-performing projects should be deferred or wound-up.

### Recommendations

- No. 1: USAID/India submitted a comprehensive strategy paper to AID/W in May 1987 outlining the rationale for our involvement in irrigation, the lessons learned so far and the future directions of our irrigation water resources program. The strategy was reviewed and approved by the Bureau on May 11. In view of this, we feel this recommendation is no longer timely and should be dropped.
- No. 2: The micro-computerization and management information initiatives in the MMI and MPMI Projects should in principle close this, although "...establishment of a

- 10 -

priority system to use construction funds" would be unacceptable to the GOI and would likely result in charges of political interference. For that reason, we strongly suggest that this final portion of the recommendation be dropped.

- No. 3 Both (a) and (b) seem closed by the approval of the MPPI project amendment (see attached cable and PP Amendment) since the ANE Controller, Counsel, DAA and PPC all concurred with the performance disbursement procedure designed for the project.
- No. 4: We agree that AID/W needs to formalize the performance disbursement funding method. However, since AID/W has already reviewed and approved this method for the M.P. Minor Irrigation Project, we feel part (b) of the recommendation has become redundant and, therefore, should be deleted.
- No. 5: USAID/India has already established the guidelines in a USAID Order (No. 650 dated 6/25/87), a copy of which is attached for your records. We are also asking the GOI to provide us copies of progress reports on the Rajasthan and Gujarat Medium Irrigation Projects on a regular basis.

UNCLASSIFIED

STATE 334189

Appendix 2

(4) ACTION AID2 INFO AMB DCM

VZCZCGP0973  
OO RUEHC  
DE RUEHC #4189 3002036  
ZNR UUUUU ZH  
O R 272035Z OCT 87  
FM SECSTATE WASHDC  
TO RUEHGP/AMEMBASSY SINGAPORE IMMEDIATE 2873  
INFO RUEHNE/AMEMBASSY NEW DELHI 2825  
BT  
UNCLAS STATE 334189

LOC: 571-572 624  
27 OCT 87 2305  
CN: 07055  
CHRG: AID  
DIST: AID

AIDAC

E.O. 12356: N/A

TAGS: N/A

SUBJECT: DRAFT AUDIT OF USAID/INDIA IRRIGATION

1. THE PURPOSE OF THIS CABLE IS TO COMMUNICATE AA/ANF COMMENTS ON RECOMMENDATION NO. 1 OF THE DOCUMENT ENTITLED QUOTE AUDIT OF USAID/INDIA IRRIGATION PROJECTS UNQUOTE AS RECOMMENDED IN THIS REPORT.

2. AA/ANF NOTES THAT THE AUDIT COVERS THE PERIOD FROM APRIL 1992 THROUGH MARCH 1997. IN MAY 1997 USAID/INDIA SUBMITTED A COMPREHENSIVE STRATEGY PAPER ENTITLED "INDIA IRRIGATION SECTOR REVIEW" TO AID/W. THIS REPORT PROVIDED A FULL PRESENTATION OF THE RATIONALE FOR AID'S INVOLVEMENT IN IRRIGATION, DESCRIBED LESSONS LEARNED TO DATE IN THE SECTOR, AND LAID OUT PROPOSED FUTURE DIRECTIONS OF THE AGENCY'S IRRIGATION STRATEGY IN INDIA. THE DOCUMENT WAS SUBJECTED TO A THOROUGH REVIEW WITHIN THE ANE BUREAU AND WAS FORMALLY APPROVED BY THE BUREAU ON MAY 11.

3. I BELIEVE THIS ACTION RESPONDED TO THE INTENT AS WELL AS THE SUBSTANCE OF THE DRAFT AUDIT REPORT RECOMMENDATION NO. 1 AND, THEREFORE, BELIEVE THAT THIS RECOMMENDATION IS NO LONGER TIMELY AND SHOULD BE CLOSED.  
SHULTZ

BT

#4189

NNNN

UNCLASSIFIED

STATE 334189

28 OCT 87

28 OCT 87

RIG/A/S

LIST OF RECOMMENDATIONS

Recommendation No. 1

We recommend that the Director, U.S.A.I.D./India:

- a. determine whether A.I.D. assistance to the irrigation sector in India should be continued, and
- b. if a determination is made to continue A.I.D. assistance, ascertain whether project or program assistance can best achieve the specific development objectives of such assistance to India's irrigation sector.

Recommendation No. 2

We recommend that the Director, U.S.A.I.D./India, develop a plan of action to assist the States of Maharashtra and Madhya Pradesh improve their construction planning and management capabilities, including establishment of a priority system to use the available construction funds.

Recommendation No. 3

We recommend that U.S.A.I.D./India establish Mission guidelines to ensure continued U.S.A.I.D. monitoring of irrigation projects for which the funds have been expended, but the A.I.D.-funded schemes have not been completed by:

- (a) specifically defining and assigning monitoring responsibilities; and
- (b) requiring the Government of India to periodically report on the uncompleted irrigation schemes.

REPORT DISTRIBUTION

	<u>No. of Copies</u>
Mission Director, U.S.A.I.D./India	5
Assistant Administrator, Bureau for Asia and Near East (ANE)	1
Office of South Asian Affairs (ANE/SA)	1
Audit Liaison Office (ANE/DP/F)	1
Assistant Administrator, Bureau for External Affairs (XA)	2
Office of Press Relations (XA/PR)	1
Office of General Counsel (GC)	1
Office of Legislative Affairs (LEG)	1
Assistant to the Administrator for Management (AA/M)	2
Office of Financial Management (M/FM/ASD)	2
Office of Agriculture (S&T/AGR)	1
Office of Rural and Institutional Development (S&T/RD)	1
Center for Development Information and Evaluation (PPC/CDIE)	3
Inspector General	1
Deputy Inspector General	1
Office of Policy, Plans and Oversight (IG/PPO)	2
Office of Programs and Systems Audit (IG/PSA)	1
Office of Legal Counsel (IG/LC)	1
Executive Management Staff (IG/EMS)	12
Assistant Inspector General for Investigations and Inspections (AIG/I)	1
Regional Inspector General for Investigations/ Singapore (RIG/I/S)	1
RIG/A/Cairo	1
RIG/A/Dakar	1
RIG/A/Manila	1
RIG/A/Nairobi	1
RIG/A/Tequeigalpa	1
RIG/A/Washington	1