

UNITED STATES GOVERNMENT

Memorandum

TO : Mr. Edgar C. Harrell, Director
USAID/Jordan

FROM : E. H. Gustman
Area Auditor General/NE

SUBJECT: Memorandum Audit Report No. 5-278-81-3
Audit of Jordan Valley Authority Activities

October 27, 1980

DATE:

INTRODUCTION AND SCOPE

We have reviewed nine AID-financed projects that were designed in cooperation with the Jordan Valley Authority (JVA) of the Government of Jordan (GOJ). As of June 30, 1980, AID had obligated a total of \$43.1 million for the projects and expenditures totalled almost \$41 million. Individual project status and financial details are shown in Exhibit A.

The Jordan Valley is below sea level and, as a result, functions as a natural greenhouse with the capability of producing at least two crops a year. Its winter crop is generally ready for market nearly two months earlier than crops of other producers in the area which gives the Valley farmers a distinct marketing advantage. In recognition of this unique characteristic, the GOJ is pursuing a massive development program to exploit the Valley's potential for substantial agricultural production.

Under GOJ mandate, the JVA and a predecessor commission have been responsible for the economic and social development of the Jordan Valley since 1972. The JVA has designed a large, integrated rural development program which is supported by many donors and has concentrated on increasing the availability of water for irrigation purposes, provision of social services, establishing public utilities, and developing various organizations to promote the efficient and equitable use of the land. The law establishing the JVA extended its broad powers to control government services and the redistribution of land in the Valley. The JVA was also able to offer salary incentives above GOJ wage

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scales and thus was able to attract highly capable people. By 1979, their staff numbered about 1,800 and included trained engineers, economists, architects and other professionally skilled persons who created a capacity within the JVA to plan and manage their projects effectively.

The AID assistance reviewed in this audit has been directed toward key development issues of the GOJ. Six projects deal with water development, two with farmer cooperative and credit issues, and one is directed toward village development by financing construction of schools, health clinics, and residential facilities. Funding for the projects has been provided from Economic Support Funds and is intended to help Jordan maintain their independence in Middle East affairs.

The purpose of our audit was to determine if project resources were used effectively and efficiently, to review compliance with AID policy and regulations, and to identify areas warranting further management attention. Our examination included a review of appropriate records of USAID/Jordan, and the JVA. We also held discussions with cognizant project officials and contractors and visited project sites in the Jordan Valley. Our audit covered the period from October 1, 1977 through June 30, 1980.

Most of our audit field work was completed during October 1979 but issuance of this report was delayed due to our evacuation from Pakistan in November 1979. Additional field work was performed during July and August 1980 to update the report and to reflect management actions taken during the intervening period. Our audit was carried out in accordance with generally accepted auditing standards and included such tests of records and other procedures we considered necessary under the circumstances.

AUDIT FINDINGS AND RECOMMENDATIONS

Substantial progress has been made in implementing five of the nine projects included in our review. For all practical purposes, these five projects have been completed and are meeting project objectives. In the case of the Village Development I project, however, additional effort is needed to ensure that the resources provided are fully utilized,

The four on-going projects have experienced a number of implementation problems that will detract from their effectiveness unless the issues are

resolved promptly. For example, the JVA has sold very little of the equipment purchased for an irrigation project, progress has been slow in establishing an effective farmers organization, farmer loans are seriously delinquent, and the effectiveness of a water management project has been limited due to delayed procurement of project commodities. In each case, USAID and JVA officials are aware of the problems and are maintaining close follow-up.

Overall, we believe USAID and JVA management and monitoring of these nine projects has been satisfactory. Some serious problems have developed but both organizations have addressed the issues and have started corrective actions to improve project performance as summarized in the following analysis of current project status.

Village Development I

This project funded the construction of 26 schools, 1 community center, 8 government buildings, 10 health clinics and 300 houses for government employees. It also included \$2 million for housing mortgages to assist Valley residents to build or improve their housing, and mortgage applications have been processed for the entire amount.

The buildings had all been completed at the time of our initial review but were largely unoccupied except for the schools and community center. The JVA has had coordination problems with other GOJ organizations in occupying and using the buildings according to the project plans. At the time of our follow-up review (over a year after the buildings were completed) only one of the government buildings was fully occupied, five were partially occupied and two were not being used. We were advised that most of the unoccupied buildings were for use by local governments that were being organized more slowly than had been anticipated by the JVA.

The health clinics were not occupied when completed because of delays in the delivery of equipment. At the time of our follow-up review three small clinics and four mid-sized clinics were in use with doctors coming at regularly scheduled times to see patients. The large clinics, however, were still not being used because additional equipment and building fittings were needed.

Occupation of the 300 houses by government employees assigned to work in the Valley has been delayed because the GOJ has not decided on a standardized rental policy. For instance, the Ministry of Health provides

nurses with free housing while other agencies charge rental fees that recover all costs. We were advised that a committee has been appointed to establish policy and a solution is expected shortly.

USAID/J has closely followed this non-utilization and, in a follow-on project, they have imposed restrictions making disbursements contingent upon readying the above buildings for occupation. In view of this Mission action and the efforts of the JVA we do not consider a recommendation necessary.

Maqarin Dam Projects

The Maqarin Dam Feasibility and Design Studies have been completed. When constructed, the dam will control the waters of the Yarmouk River which is the largest water resource in the Jordan Valley system. The design and recommendations have been presented to the JVA and to potential donors. The World Bank has since made an appraisal of the project, but its report has not been distributed to the donors.

The United States plans to contribute \$150 million to the project, but no funds have been obligated because AID participation is contingent upon assurances that the interests of all riparian states have been taken into account and funding commitments from other sources. So far agreement has not been reached with regard to the specific riparian rights, and the GOJ has not made arrangements with Syria for the Wadi Raqqad diversion, a new element to the project design since the original Syrian-Jordanian understanding on Maqarin. The GOJ will not be in a position to present a financing plan until the World Bank appraisal report is reviewed by the potential donors.

Other Completed Projects

The East Ghor Canal Extension and the Zarqa Triangle Irrigation Projects, although delayed, were completed and the contractor's performance was considered satisfactory. Both projects have met their objectives of extending irrigation service to additional farmers.

Sprinkler Irrigation Equipment

This loan funded project provided funds to purchase 2,785 farm units of sprinkler equipment. By September 1979, nineteen months after the

equipment arrived, only 47 units had been sold. An extended drought was believed to have been the cause of the slow sales but, with ample water for the Spring 1980 farming season, only a small number of additional units have been sold. Despite the unexpected slow acceptance of the sprinkler equipment and the farmers' apparent preference for the drip system, USAID believes the cost and technical reasons for selecting sprinkler equipment for the project were sound. JVA management believes the sprinkler equipment will be sold when a planned water price increase causes farmers to buy equipment rather than use the inefficient gravity methods. They expect further sales to develop when farmers using drip equipment must use sprinklers to leach their land to control the salinity caused by the use of drip equipment.

In the meantime, the slow sale of sprinkler equipment has left the JVA with a storage problem. The unsold equipment is stored in three locations in the Jordan Valley and, at the time of our earlier review, we found that rubber gaskets and other similar components were deteriorating from exposure to sunlight. The JVA has since placed these parts in covered storage and is taking action to erect other storage facilities to prevent similar problems.

Farmer Association Projects

The Jordan Valley, with much of the irrigation infrastructure in place, is still producing below its potential; the yields are low and the quality of the crops is poor. Because of the recent development in the Valley, the support services available to the farmers have not kept pace with the infrastructure construction. Recognizing the need for improved services, the GOJ established the Jordan Valley Farmers Association (JVFA) to provide essential services such as production supplies, credit and marketing and to give the farmers an organization through which they would have a strong, unified voice in dealings with government and middle men.

Despite having a four man team of consultants for almost two years to assist in its organization and development, the JVFA has made slower progress than anticipated, largely because of staffing problems and an early jurisdictional dispute between the Board of Directors and the JVFA executive staff. The initial team of advisors completed their tour and have departed. The JVA and JVFA have since requested extending the project for further advisory assistance, short-term staff

training and additional commodities. Because the initial contract advisory effort fell short of its objectives, the JVA believes it needs a credit advisor for six months and a supply advisor for two years even though the earlier contract team included advisors in both of these areas.

At the time of our initial review we recommended that USAID evaluate this project and develop a plan with the JVA to increase the JVFA's capacity to perform basic services. We still believe that, with the proposed continuation of the project, the evaluation should be completed with emphasis on the arrangements for improving credit and supply functions and taking into account the additional advisory assistance requested.

Recommendation No. 1

The Director, USAID/J should complete an evaluation of the JVFA project with special emphasis on determining actions necessary to improve the credit and supply functions of JVFA.

USAID/J supported the JVFA credit program with an advisor and a loan of \$1.5 million which was to have been used for supervised seasonal production loans, particularly for operators of small irrigated farms. The loan program was intended to be part of an integrated package of services provided by JVFA but thus far only loan services have been started. Delinquent accounts have become more of a problem than was anticipated. As of June 30, 1980 the delinquency rate was 69.2 percent. At that time and at USAID's urging JVFA began a collection campaign that reduced delinquencies to 41.5 percent as of August 31, 1980. Apparently aggressive collection effort is required to control delinquency and we suggest that USAID/J continue to support expansion of the JVFA loan collection staff.

Water Management Technology

A three man team of advisors is assisting the Jordan Valley farmers to increase agricultural production by improving water utilization and other cultivation practices. The advisors have set up demonstration plots to compare water usage and yields using various methods of irrigation. One significant success of the advisory team was the development of methods to reduce the effect of the tomato yellow leaf curl virus and thus improve the yield of this important crop.

The JVA's delay in procuring project commodities has limited project effectiveness. Project funding included \$386,000 for commodities but, after more than a year, only four vehicles costing \$42,000 have been procured. Requests have been sent to JVA for equipment and supplies, but with the exception of small items procured locally the JVA has failed to act. At the time of our earlier review we recommended that USAID/J work with project personnel and the JVA to develop a plan for procuring commodities but no additional commodities were procured up to the end of August 1980. We have since been told that the advisors home office has now been designated U.S. procurement agent for the project and has begun action to procure project commodities. In view of this action we are making no further recommendation, but USAID/J should closely monitor procurement activities to ensure prompt delivery of the commodities.

JORDAN VALLEY AUTHORITY
SUMMARY OF PROJECT STATUS AND FINANCIAL CONDITION
AS OF JUNE 30, 1980

<u>Project Number</u>	<u>N a m e</u>	<u>Loan/ Grant</u>	<u>D a t e</u>		<u>Obli- gations (000)</u>	<u>Expendi- tures (000)</u>
			<u>Started</u>	<u>Completed</u>		
278-0183	Village Development	L	June 1975	June 1980	\$14,150	\$14,150
278-0188	Maqarin Dam Feasibility Study	L	Mar. 1976	June 1977	1,000	1,000
278-0200	Maqarin Dam and Jordan Valley Irrigation System Design	L	Sept. 1977	May 1980	5,000	5,000
278-0175	East Ghor Canal Extension	L	Feb. 1973	May 1979	10,000	10,000
278-0179	Zarqa Triangle Irrigation	L	July 1974	Dec. 1979	4,500	4,500
278-0195	Sprinkler Irrigation Equipment	L	Sept. 1976	On-going	4,500	4,117
278-0186	Jordan Valley Farmers Association	G	Sept. 1977	On-going	1,161	777
278-0207	Credit for Jordan Valley Farmers Association	L	Sept. 1978	On-going	1,500	1,124
278-0192	Water Management Technology	G	Sept. 1977	On-going	1,320	323
					<u>\$43,131</u>	<u>\$40,991</u>

LIST OF REPORT RECIPIENTS

USAID/Jordan

Director 5

AID/W

Deputy Administrator (DA/AID) 1

Bureau For Near East

Assistant Administrator (AA/NE) 5

Office of Jordan/Lebanon/Syria Affairs (NE/JLS) 1

Audit Liaison Officer 1

Bureau For Development Support

Assistant Administrator (AA/DS) 1

Office of Development Information and Utilization (DS/DIU) 4

Bureau For Program and Policy Coordination

Office of Evaluation (PPC/E) 1

Office of Legislative Affairs (AA/LEG) 1

Office of General Counsel (GC) 1

Office of Financial Management (FM) 1

IDCA Legislative and Public Affairs Office 1

Office of Auditor General

Auditor General (AG) 1

Communications and Records Office (AG/EMS/C&R) 12

Policy, Plans and Programs (AG/PPP) 1

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