

PROJECT TITLE(S) AND NUMBER(S)

Village Development II and III (278-0205 and -0221)

D/W OFFICE

USAID/Jordan

PROJECT DESCRIPTION

The objective of this project is to construct social infrastructure in the Jordan Valley in order to improve access to basic services and thereby to improve the standard of living of the local population.

AUTHORIZATION DATE AND U.S. LOP FUNDING AMOUNT

II - 9/78 \$8m/III - 9/79 \$7m

PES NUMBER

82-1

PES DATE

December, 1981

PES TYPE

 Regular Other (Specify) Special Terminal

ABSTRACT PREPARED BY, DATE

Emily Baldwin, NE/DP/PAE
April 16, 1982

ABSTRACT CLEARED BY, DATE

Charles Shorter, NE/PD
Tom Miller, NE/SJL

This evaluation report, prepared by the Mission, documents two projects, which although somewhat behind schedule, are progressing well toward fulfilling the projects' purposes and goals. Both of these projects are follow-on efforts to the Village Development I project, begun in 1975, primarily for infrastructure construction. The objective of all of these projects has been to improve the living conditions -- through greater access to public services -- of the people living in the Jordan Valley, an area of growing population and of government development efforts.

The evaluation finds that the planned inputs provided by both AID (primarily funds) and the GOJ (funds and staffing) have been adequate to achieve the planned outputs of the construction of schools, health centers, government administration buildings, roads, and water supply facilities in selected areas of the Jordan Valley. The construction and subsequent utilization of these facilities in turn has lead (or will lead upon completion) to achievement of the projects' purpose of improved access to public services and improved standards of living. An additional, unplanned impact of this project has also emerged: small private enterprises have grown up in project areas as a result of the government's confidence in regional development as shown by the public investments made.

Project problems have centered primarily on the construction contracting. Initial awarding of the contract took longer than anticipated and, once a contract was signed, the contractor was overextended, understaffed and poorly managed, contributing to further delays. Construction, then, has taken longer than planned, but all work is projected to be completed by May, 1982.

Lessons Learned

The report lists the following lessons:

- 1) In an area of dynamic development such as the Jordan Valley, careful pre-project planning and flexible financing are essential.
- 2) In providing basic services to isolated and sparsely populated areas, facilities and provisions for staff to provide these services must be included in construction plans in order to attract qualified people.
- 3) Current work loads of firms should be taken into consideration in selecting contractors so as not to choose an overextended firm which may then delay planned work.

SECRET
PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U 4

1. PROJECT TITLE Village Development II			2. PROJECT NUMBER 278-0205	3. MISSION/AID/W OFFICE USAID JORDAN
4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) <u>82/1</u>			<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION	
5. PROJECT IMPLEMENTATION DATES			6. ESTIMATED PROJECT FUNDING	
A. First PRO. AG or Implementation FY <u>78</u>	B. Final Obligation expected FY <u>78</u>	C. Final Input Delivery FY <u>84</u>	A. Total \$ <u>15.1 mil</u>	7. PERIOD COVERED BY EVALUATION
			P. U.S. \$ <u>8.0 mil</u>	From (month/yr.) <u>September 1978</u>
				To (month/yr.) <u>December 1981</u>
				Date of Evaluation Review <u>December 1981</u>

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. Ltr. decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., telegram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
1. Revised implementation schedule completed.	Engineering	Completed
2. Extended PACD from 12/31/81 to 12/31/82 and extended Final Disbursement date from 9/30/82 to 9/30/83.	Engineering	Completed
3. Continue urging JVA/MOH to staff equip all Health Centers for operational use.	Engineering, also Director	Dec., 1982

This is a combined evaluation for VD II and III, and due to restricted format, there are two Part I's with the same evaluation number. Part II is a combination of the two projects.

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT	
<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify) _____	A. <input type="checkbox"/> Continue Project Without Change	
<input type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	_____	B. <input type="checkbox"/> Change Project Design and/or	
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify) _____	<input type="checkbox"/> Change Implementation Plan	
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P	_____	C. <input type="checkbox"/> Discontinue Project	
11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Name and Title)			12. Mission/AID/W Office Director Approval	
Mr. Mohammad Abu-Rumman, Director VD Projects Dr. Munther Haddadin, Vice President of JVA Mr. Farid Salahi, USAID/Jordan Project Officer Mr. Albert Karian, Chief of USAID/J Engineering			Signature <i>[Signature]</i> Director February 1, 1982	

CLASSIFICATION
PROJECT EVALUATION SUMMARY (PES) - PART I

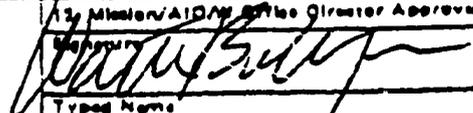
Report Symbol U 4

1. PROJECT TITLE Village Development III			2. PROJECT NUMBER 278-0221	3. MISSION/AID/W OFFICE USAID - JORDAN
			4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) <u>82/1</u>	
			<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION	
5. KEY PROJECT IMPLEMENTATION DATES		6. ESTIMATED PROJECT FUNDING		7. PERIOD COVERED BY EVALUATION
A. First PACD or Acquisition FY <u>79</u>	B. Final Obligation Expected FY <u>79</u>	C. Final Input Delivery FY <u>84</u>	A. Total \$ <u>11.8 mil</u>	From (month/yr.) <u>September 1979</u>
			P. U.S. \$ <u>7.0 mil</u>	To (month/yr.) <u>December 1981</u>
Date of Evaluation Review <u>December 1981</u>				

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
1. Revised implementation schedule completed	Engineering	Completed
2. Continue monitoring fulfillment of section 5.5 of the loan agreement with intent to disburse the loan balance	Engineering also Director	December 1982
3. Continue monitoring utilization of schools in Garandal and Beir Matkhour	Engineering	December 1982
4. Extended PACD from 10/31/81 to 5/31/83 and extended Final Disbursement date from 7/31/1982 to 2/29/1984	Engineering	Completed

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT		
<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify)	A. <input type="checkbox"/> Continue Project Without Change		
<input type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	_____	B. <input type="checkbox"/> Change Project Design and/or		
<input type="checkbox"/> Legal Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify)	<input type="checkbox"/> Change Implementation Plan		
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P	_____	C. <input type="checkbox"/> Discontinue Project		

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER FUNDING PARTICIPANTS AS APPROPRIATE (Name and Title)	12. Mission/AID/W Office Director Approval
Mr. Muhammad Abu-Rumman, Director VD Projects Dr. Munther Haddadin, Vice President of JVA Mr. Farid Salahi, USAID/J, Project Officer Mr. Albert Karian, Chief of USAID/J Engineering	 Typed Name: <u>Walter Bollinger, Director</u>
	Date: <u>February 1, 1982</u>

I. PROJECT EVALUATION SUMMARY PART I

Village Development II Face Sheet
Village Development III Face Sheet

II. PROJECT EVALUATION SUMMARY PART II

13. Summary.
14. Evaluation Methodology.
15. External Factors.
16. Inputs.
17. Outputs.
18. Purpose.
19. Goal / Subgoals.
20. Beneficiaries.
21. Unplanned Effects.
22. Lessons Learned.
23. Special Comments or Remarks.

PROJECT EVALUATION SUMMARY PART II

VILLAGE DEVELOPMENT II (PROJECT 278-0205 LOAN 278-K-024)
VILLAGE DEVELOPMENT III (PROJECT 278-0221 LOAN 278-K-027)

13. Summary

In formulating plans for the development of the Jordan Valley, the Government of Jordan recognized the need for an orderly development of communities to support both current residents and a growing population attracted by new agricultural and other employment opportunities. Adequate availability of social and public services to meet their basic needs was vital.

The needs were readily apparent. The standard of living for Valley inhabitants was low in comparison to national standards. There was much illiteracy, and school facilities were generally inadequate. Health standards were inferior, and health facilities and staffing were totally inadequate. Housing was generally of poor quality, unsanitary, and crowded.

An \$8.65 million AID loan, primarily for infrastructure construction, was extended as Village Development I, Project 278-0183, in June 1975. It became evident late that same year that inflationary pressures had made it impossible to carry out the full range of plans embodied in the agreement, so the program was revised to meet immediate, minimum needs. Another \$5.5 million in AID loan funds was added through an FY 1977 amendment to expand selected elements of the project, to include some items originally scheduled for financing by IDA, and to provide residences for GOJ employees.

An \$8.0 million AID loan, of which \$2.0 million would finance housing mortgage loans and \$6.0 million would finance the construction cost of schools, health centers, and administration buildings, was authorized for VD II Project in FY 1978 to finance similar activities in the Jordan Valley. Total construction cost of this second phase was approximately \$15.2 million.

A third tranche, \$7.0 million AID loan, was authorized in FY 1979 to finance construction cost of schools, administration buildings, and health centers in Southern Ghors, Wadi Araba, and Jordan Valley. The construction cost was approximately \$11.8 million.

An Interim USAID/JVA evaluation of Village Development I was carried out in March 1978, with the full cooperation and participation of the Ministries of Education and Health. "An Interim Evaluation of the Jordan Valley Development Effort: 1973 - 1980" by Jarir S. Dajani et al (August 1980) describes and evaluates the impact as of mid-1980 of the village development activities.

Construction of VD II facilities will be completed by May 1982. Equipping and furnishing of health centers and administration buildings are expected to be completed by June 1982. All the mortgage housing loans have been disbursed. The village streets in the project are completed. The completion date for farm roads is expected to be April 1982. Overall, the project is about 17 months behind PP schedule.

Construction of VD III project components (schools, housing and health centers) in Wadi Araba and the Southern Ghors was completed; and the other project components to be constructed in the Jordan Valley will be completed in May 1982. The JVA is constructing 20 Kms of access road and installing water lines to be connected to all facilities in the area. Completion is expected in May 1982. Overall, the project is about 7 months behind PP schedule.

All completed schools are staffed and being utilized with the exception of two schools in Garandal and Beir Matkhour in Wadi Araba. Utilization is pending tribal population movement to the designated areas. JVA is now negotiating to construct 300 community houses to encourage the movement.

As indicated in the body of the evaluation report the Purpose and Goal of these projects will be accomplished as is evidenced by the overall progress of the project.

Concerning staffing of clinics associated with the disbursement of funds, JVA has assured USAID that this issue will be resolved prior to expiration of the extended PACD.

14. Evaluation Methodology.

This is the first regular evaluation of these projects. Intensive project monitoring has been carried out since project inception by both USAID and the implementing agency. This is basically an internal evaluation carried out by USAID staff in consultation with the JVA. The evaluation plan differs somewhat from that which was originally planned in the PP to allow for the delays in the project implementation. The scheduled evaluation was for end of the calendar year 1981. The terminal evaluation will be done after the schools, administration buildings, and clinics are fully operational for approximately one year when effects of the project can be better assessed.

Evaluation methodology consisted of review of project documentation and progress reports, and discussions with USAID and JVA staff to determine project status and actions needed.

An indepth review was conducted on December 1, 1981, chaired by the Director with all senior mission staff. Progress and problems were identified and discussed in detail.

15. External Factors.

The evaluation did not reveal any external factors which might prevent the project activities from achieving their purposes or their goals. The projects' implementation suffered delays partially resulting from the building construction contractor having other contractual obligations in Jordan which placed a heavy burden on his management and resources.

16. Inputs.

The evaluation revealed that the planned level of inputs by AID for each project are adequate and that the Government of Jordan's financial inputs to the project have been provided adequately. Except for the staffing of two health centers (North and South Shuna) and two schools in Wadi Araba (Garandal and Beir Matkhour), adequate staffing was provided by GOJ. It is expected that full staffing will be provided by the end of the year 1982. Because of delays by the construction contractor, the rate of disbursements has not been as rapid as originally scheduled. The \$ 2.0 million to finance housing mortgage loans has been fully disbursed, and we expect that full disbursement of the remaining financing provided by AID will be made by the terminal dates of disbursement.

17. Outputs.

The evaluation revealed that both projects are achieving or exceeding the planned output as originally stated in the project papers, and that they will make the planned contributions to the purposes and goals. In a total of 28 villages, 46 schools have been constructed for boys and girls. The schools provide 612 rooms, some of which will be utilized for libraries, chemistry, physics, handicrafts and home economics laboratories. Some relocating and sizing of schools in specific villages were jointly agreed to by JVA and USAID, based on review of actual needs immediately prior to starting construction. As of December 1981, all schools were essentially complete. It is expected that all but two in Wadi Araba will be operational by February 1982.

The two schools in the Wadi Araba, (Garandal and Beir Matkhour) are more isolated. The area in which these schools are located does not have nearby villages from which the students could come. The JVA is contracting to construct housing units near the schools in an effort to attract permanent settlers.

Because of the effort to realize school facilities as early as possible, construction of other facilities under the VD II project was purposely delayed. Also, a review of the actual requirements of the facilities originally proposed was conducted during the construction with the result

that one Type A patient-clinic to have been constructed in the Jordan Valley was reduced to a Type B out-patient clinic with maternal health care facilities.

Some village streets and farm roads have been completed and the remaining are under contract. Because these contracts provided for the construction of considerably more roads and streets than envisioned in the original project papers, the evaluation review indicates that the outputs included in the project papers will be exceeded. Water supply facilities are also under contract, and the evaluation revealed that these facilities are in excess of those originally envisioned in the project papers and are expected to be completed by mid-1982.

The original project paper for VD II envisioned the construction of 50 family housing units in the Southern Ghors and Wadi Araba to be utilized by school teachers and staff of the health clinics. The type of housing required was evaluated prior to the start of construction, and because of the isolation of the area, the housing unit designs were changed to provide only 20 family housing units and 15 duplex units for bachelors.

18. Purpose

The purpose of these projects is to provide selected Jordan Valley communities with the facilities needed to develop adequate public services and to improve living conditions for Valley residents.

Previous evaluation of the VD I project revealed that the project purpose had been achieved by the outputs of the project. VD II and III are follow-on projects to VD I, and the evaluation team is confident that the project purpose will be obtained. Already, some of the facilities provided in VD II and VD III are being utilized, and achievement of the project purpose has been demonstrated as a result of the utilization of those facilities.

19. Goal/Subgoals

The goals of these projects are:

(1) Jordan Valley Development Goal: Improved welfare of present and future residents of the East Bank of Jordan River Valley.

(2) AID Project Goal: Stable, self-sustaining communities with basic social services established in target villages.

As was demonstrated during the evaluation of VD I, these goals are being achieved, and the evaluation team is confident that a great contribution to these goals will be made by VD II and VD III project, provided that no external political event prevents this accomplishment.

20. Beneficiaries

The beneficiaries of the Village Development projects include all the farmers and residents of the Valley. Improved schooling, health care, water supplies, and access to governmental and administrative services have contributed to the improvement of the overall quality of life in the Valley. This improvement has generated some migration into the area and has encouraged many residents, who may have otherwise emigrated, to stay in the Valley. This is evidenced by the fact that annual population growth during the period 1973-1979 has averaged 5.1%, which is about 40% higher than the national average. The number of children, both male and female, who are enrolled in schools, has increased by 61% between 1973 and 1978, which is about twice the rate of population growth. The quality of education has improved as a result of the availability of better school buildings and facilities. Better water supplies and easier access to health clinics have contributed to improving the health of all residents. The availability of housing and associated services which are provided by these projects has made it possible for a larger number of teachers and other government employees to take up residence in the Valley, rather than commute to the highlands. This, in turn, contributed to increasing the diversification of these residents, with the concomitant improvement in their social lives. All economic and social indicators of the Valley have shown significant improvements and are described in detail in a recent evaluation of the Jordan Valley Development Effort.^{1/} Many of these improvements are attributable to the Village Development Projects.

21. Unplanned Effects.

The most significant unplanned effect of the Village Development projects is perhaps the extent to which they have contributed to the development of private enterprise in the Valley. The confidence which was conveyed to the people through massive public investments in the social infrastructure, has encouraged many investments in small business and professional services to take place. Banks, general stores, gasoline stations, auto mechanics, groceries, barbers, taxi companies, radio/TV repair shops, butchers, private clinics and pharmacies, and many other types of small businesses have been introduced to many locations in the Valley during the past few years. The beneficiaries of these businesses include the small businessmen and the residents at large. The fact that a number of banks have seen fit to establish local branches at a number of locations in the Valley is indicative of the presence of a healthy private sector. There is no question that this development is at least partially attributable to the availability of the social infrastructure provided by these projects.

^{1/} "An Interim Evaluation of the Jordan Valley Development Effort: 1973-1980" by Jarir S. Dajani et al (August 1980).

One event which the evaluation team considered is the impact of the projects on local government decision-making capability. Because the JVA has undertaken development activities, the local governments were relieved of this responsibility. Since the facilities being constructed may eventually be taken over for operation and maintenance by the village governments, a difficult transition period may develop. Such a transition will have to be carefully planned. However, for the foreseeable future, it is not anticipated that this will reduce the benefits of the projects.

22. Lessons Learned

- A. In an area where dynamic development is taking place, the practices of evaluating planned project outputs prior to construction and providing flexibility in the financing of the project activities are essential for realizing the maximum benefits.
- B. Where providing basic needs is planned in sparsely populated and isolated areas, it is essential that provisions and facilities be made for staff required for the project facilities being constructed, since such staff facilities are absolutely essential to the assignment of qualified staff in such areas.
- C. In selecting contractors for award, special attention should be given to reevaluate the contractor's current work load so as not to overload him with too many contracts at one time.

23. Special Comments or Remarks

- A. The construction of the VD II project, to which were added the Jordan Valley components of the VD III project, was delayed because the contract documents required a bid guarantee of 4%, a payment guarantee of 30% (not to exceed JD 750,000), and a performance guarantee of 30%. The bid documents envisioned that the successful contractor would be able to obtain performance and payment bonds, the prices of which are reasonable. The contractor, however, was unable to obtain bonds and was required to submit bank guarantees for approximately 45% of the contract cost. Bank guarantees in this amount are expensive, and the contractor had difficulty in financing them. As a result, the time required for the contractor to obtain the bank guarantees delayed the start of construction for several months. Ineffective contractor management and a shortage of manpower also contributed to the delays.
- B. An internal evaluation report dated December 1981 is on file in USAID Jordan.

VD II AND VD III PROJECTS

III. PROJECT EVALUATION REPORT

1. PROJECT DESCRIPTION

A. Village Development II

- 1) Project Components
- 2) Project Cost
- 3) Implementation Plan

B. Village Development III

- 1) Project Components
- 2) Project Cost
- 3) Implementation Plan

2. PROJECT HISTORY

A. Village Development II

- 1) Schools, Health Centers and Administration Buildings
 - a. Contracting Process
 - b. Construction Progress
- 2) Home Mortgage Loan
- 3) Village Streets
- 4) Farm Roads
- 5) Furniture and Equipment
- 6) Disbursement Method/Progress
 - a. Schools, Health Centers and Administration Buildings

3. PROJECT EVALUATION

- A. Village Development II
 - 1) Planned Versus Actual
 - 2) Problems Identified

- B. Village Development III
 - 1) Planned Versus Actual
 - 2) Problems Identified

4. CONCLUSIONS AND RECOMMENDATIONS

- A. Summary of Project Status
 - 1) Village Development II
 - 2) Village Development III

- B. Current Constraints

- C. Recommendations

III. PROJECT EVALUATION REPORT

1. Project Description

A. Village Development II

1) Project Components

This project consists of: (a) construction of 23 schools * (300 rooms, including 237 classrooms) in 13 communities, four health centers, three government administration centers. ** (see Table 1); (b) provision of furniture and equipment for the facilities constructed; (c) paving of 43 kilometers of farm roads; (d) paving of 9 kilometers of village streets; (e) provision of \$ 2.0 million in housing mortgage loan funds; and (f) technical assistance and engineering and consulting services. The project sites are located within a 100 kilometer strip of the Jordan Valley, from Adasiya in the North of Sweima in the South.

2) Project Cost

The total cost of the project was estimated at \$ 15.2 million, including contingencies and escalation. USAID's contribution was \$ 8.0 million, out of which \$ 2.0 million would finance housing mortgage loans and \$ 6.0 million would finance the construction cost of schools, health centers and administration buildings. The GOJ would finance the balance of the total cost of the project, i.e. not less than \$ 7.2 million. Reimbursement of the project was scheduled to be made in both foreign and local currency to be fully disbursed between FY 1979 and FY 1980; that is, through construction period.

3) Implementation Plan

The following are the estimated dates for the beginning and completion of the major elements of the VD II Project:

	<u>Planned</u>	<u>Revised</u>
Prequalification of Construction Contractors.	November 1978	April 1979
Conditions Precedent Met	November 1978	January 1980
Completion of Farm Roads Construction	January 1979	April 1982
Construction Contract Awarded	March 1979	February 1980

* Actually 24 Schools Constructed

** Actually 4 Constructed

	<u>Planned</u>	<u>Revised</u>
Construction Period	May 1979 to December 1980	March 1980 to May 1982
Complete Drawdown of Mortgage Funds	September 1979	December 1981
Contract Award for Construction and Completion of Village Streets	August 1979 to September 1980	December 1980 to November 1981
Contract Award for Furniture and Equipment	March 1980	September 1981
Equipment Delivered	May-December 1980	June 1982

B. Village Development III

1. Project Components

This project is the third phase of the Village Development activities initiated in the Jordan Valley, and the initial AID-GOJ effort in the Southern Ghors and Wadi Araba. The project includes construction of: (a) 8 schools in the Jordan Valley, 10 schools in the Southern Ghors and 4 schools in Wadi Araba; (b) 2 government administration buildings in the Jordan Valley; (c) 1 health facility in the Southern Ghors and 1 in Wadi Araba; (d) 46 houses in the Southern Ghors and 4 in Wadi Araba (see Table 2); (e) water supply facilities for communities in Southern Ghors and Wadi Araba; (f) construction and/or rehabilitation of 20 kilometers of village streets and community access roads; and (g) provision of furniture, books and equipment for the units constructed.

2) Project Cost

The total cost of the project was estimated at approximately \$ 11.8 million. USAID's contribution would be \$ 7.0 million to finance the construction cost of schools, health centers, housing and administration buildings. \$ 5,420,000 were allocated to reimburse the cost of construction of facilities in the Southern Ghors and Wadi Araba and \$ 1,580,000 for construction of schools and administration buildings in the Jordan Valley. The loan was scheduled to be disbursed between FY 1980 and 1982; i.e., through the planned construction period. The GOJ would finance the balance of the cost of the project; i.e., \$ 4.8 million.

It was planned that loan funds would be disbursed as follows: (1) for facilities in the Southern Ghors and Wadi Araba, the borrower would be reimbursed by the fixed amount reimbursement (FAR) procedure; and (2) for facilities in the Jordan Valley, the contractor would be paid by a letter of credit issued under a bank letter of commitment.

3) Implementation Plan

The following are the estimated dates for the beginning and completion of the major elements of the Project;

	<u>Planned</u>	<u>Revised</u>
Prequalification of Construction Contractors	June 1979	June 1979
Construction Contract Awarded (GS/WA)*	June 1979	June 1979
Construction Contract Awarded (JV)**	September 1979	February 1980
Construction Period (JV/GS/WA)	June 1979 to October 1981	July 1979 to May 1982
Conditions Precedent Met	November 1979	December 1982
Water Supply Systems/Access Roads (GS/WA)*	September 1980 to June 1981	September 1981 to May 1982

* Ghor Safi and Wadi Araba

** Jordan Valley

2. PROJECT HISTORY

A. Village Development II

1) Schools, Health Centers and Administration Buildings

a. Contracting Process

The loan agreement was signed on September 30, 1978. In February 1979, the Jordan Valley Authority (JVA), using GOJ procurement procedures, invited contractors from the U.S., Jordan and countries eligible under AID Geographic Code 941 to submit data for prequalification; 14 contractors responded to this invitation. Although seven international construction contractors were qualified, JVA received and opened bids from only two firms (one Jordanian and one Korean). As both bids were non-responsive and were rejected by the JVA, negotiations were carried out with both firms. In February 1980, the JVA executed a construction contract with a total value of JD 1,626,347 and U.S. \$ 5,358,834 with Shin Seung Corporation of Seoul, Korea, to construct the VD II Project and the Jordan Valley components of VD III Project. USAID concluded that the GOJ procedures were followed and that specifications, plans and costs were acceptable for USAID reimbursement.

b. Construction Progress

In March 1980 the JVA issued a notice to proceed to the contractor. The contract period was 750 days and the contract called for the phased completion

15

of the different elements of the Project. It required that schools be handed over by April 1981, health centers by November 1981, and government administration buildings by April 1982.

The contractor started mobilization in April 1980, and commenced work in June at a slow and negligible rate. It continued to lag behind the revised schedule by about five months. Note: the original project schedule was revised to reflect the delay during the contracting period. Shortage of skilled labor and ineffective management were the major causes of the delay. By October 1980, when additional skilled labor were recruited from Korea, the rate of progress began to improve, while management problems continued.

Shortages and delays in the delivery of some materials such as aluminum bars for the school windows and electrical distribution boards contributed to another three-month delay. With the approval of the JVA all the aluminum work was subcontracted to a local firm. The installation of the electrical distribution boards and fixtures became possible upon receipt of these units in October 1981.

By the first week of November 1981, the contractor handed over to the JVA 12 of the 30 schools. JVA quickly turned over these school sites to the Ministry of Education (MOE) which immediately began using them, moving old furniture into the new schools. Eighteen other school buildings are complete, with the exception of aluminum windows. It is expected that all the schools constructed under the VD II contract (i.e. in the Jordan Valley) will be operational by February 1982.

Construction work at the health centers and administration buildings is progressing well. Concrete skeletons have been completed on all the buildings and the contractor has moved all his manpower to these sites. It is expected that all the health centers and administration buildings will be completed by May 1982, one month after the contract completion date.

2) Home Mortgage Loan

In July 1980, USAID approved a request from the JVA for reimbursement for the mortgage loans of 91 beneficiaries. Of these, 42 beneficiaries were classified as low income and all live in the Jordan Valley.

The remaining 49 beneficiaries were classified as high income. Of these 49 beneficiaries, 14 are not residents of Jordan Valley but are farm owners; the remaining 35 are Valley residents.

In November 1981, the JVA requested reimbursement of the balance of the mortgage loans affecting another 170 beneficiaries. This request was approved by USAID and the mortgage loans were reimbursed in December 1981.

3) Village Streets

A construction contract was awarded to El-Difaf Contracting Company (a Jordanian firm) in December 1980, for the grading and paving of 30 kilometers of village streets and access roads to villages, schools and public buildings. Work was completed in November 1981.

4) Farm Roads

A construction contract was awarded to Jahshan Contracting Company (a Jordanian firm) for grading and paving 43 kilometers of farm roads *. The notice to proceed was issued in August 1981 and the expected completion date is April 1982.

5) Furniture and Equipment

In September 1981, the JVA awarded a contract to a local firm to supply furniture for schools constructed under the VD II and VD III projects. The expected date of delivery is before January 1, 1982. All furniture will be manufactured locally. The MOE moved old furniture to the new schools pending the arrival of the new furniture and equipment.

Invitations for bids are presently prepared at the JVA for the purchase of furniture and equipment for the health centers and administration buildings constructed under the VD II and VD III Projects. Contract award is expected to be made by March 1982, and the expected date for delivery is not later than June 1982.

6) Disbursement Method

a. Schools, Health Centers and Administration Buildings

In January 1980, the JVA awarded ArabTech (a Jordanian firm) a contract to provide the staff to supervise the construction of both VD II and VD III projects. By this step the JVA met all conditions precedent for disbursement set by the loan agreements of both projects (except Condition Precedent No. 5.5 of the VD III loan which prohibits disbursement for health centers to be constructed in Southern Ghors and Wadi Araba until health centers built under the VD I and VD II Projects are staffed and operational).

Disbursement of the loan was set by the loan agreement to be made in local and foreign currency. At JVA's request USAID issued two bank letters of commitment at the Chemical Bank of New York which opened two letters of credit in favour of Shin Seung Corporation, one for a total value of \$ 4,100,945 to cover the foreign exchange cost of VD II project and the other for a total value of \$ 1,272,889 to cover the foreign exchange cost of VD III project component to be constructed in Jordan Valley. Also

* Actually JVA is paving about 400 kms.

13

in October, 1980 USAID issued a Direct Reimbursement Authority (DRA), in favour of JVA in total value of \$ 2,206,166 to reimburse the construction cost of VD II contract (VD II + VD III in Jordan Valley) in local currency. Table 3 shows amounts disbursed and the balances remaining as of December 31, 1981.

b. Home Mortgage Loan

Disbursement of home mortgage loan project funds were to be made to the Housing Bank in Jordanian Dinars at JVA's request. In July 1980, the USAID approved a request from the JVA to reimburse the equivalent of \$ 799,212 to the Housing Bank. In December 1981, USAID approved two requests by the JVA to reimburse the Housing Bank for the equivalent of \$ 1,220,788 which completes the disbursement of the \$ 2.0 million provided in the loan for this aspect of the project.

7) Revisions to Original Plans

The VD II project paper (PP) calls for the construction of 23 schools, four health centers and three government administration units. In 1978 at the time of PP preparation, in response to a Royal Decree based on urgent community needs, the JVA awarded Shin Seung Corporation a contract for the construction of two schools and one health center at the Sweima Site. Although the PP of the VD II project included these two schools and health center at the Sweima site as part of the project, the JVA financed these three units with its own funds.

Eight schools and two administration buildings planned to be constructed in the Jordan Valley under VD III project, were added to VD II contract. The decision for this move was based on the fact that the volume of construction involved in these ten buildings was not considered to be sufficiently attractive to secure reasonable bids under a separate IFB. JVA also deleted from the PP list two schools at Qarn, but added another three schools to be constructed at Abu Habel, Maisara and Sleikat, because of a change in the needs of these communities for educational facilities. USAID reviewed and approved the revisions in November 1980.

B. Village Development II

1) Schools Health Centers, Housing and Administration Buildings

a. Contracting Process

Prior to the preparation of the VD III PP and loan authorization, the JVA, using GOJ procedures, solicited bids from three prequalified firms (one Jordanian and two Korean) to accomplish the proposed construction work in the Southern Ghors and Wadi Araba under the VD III project. On June 14, 1979 the JVA executed a construction contract for the work

17

with Shin Seung Corporation of Seoul, Korea, and the notice to proceed was issued in the same month. The contract period was 15 calendar months and completion was scheduled for October 1980. This contract did not include, as discussed previously, the construction of eight schools and two administration buildings in the Jordan Valley.

b. Construction Progress

At the time of contract award, the contractor (Shin Seung) was engaged in two other large projects in Jordan. These were the Arab Potash Company township in the Southern Ghors and a contract for 1050 housing units in the Jordan Valley. The GOJ's priority was to complete the Potash Township, which was about 70 percent complete at the time. These other commitments caused the contractor to get off to a very slow start on the VD III project. Upon completion of the Housing project in the Jordan Valley, more manpower and equipment were transferred to VD III Project. It was not until the completion of the Potash township project, however, that progress on the VD III project accelerated and reached an excellent level of performance and speed. In August and December 1981 JVA and USAID representatives inspected and accepted all the schools, housing and health centers in the Southern Ghors and Wadi Araba. The JVA, in turn, handed these schools over to the MOE, which put to use all but two schools in the Wadi Araba (at Bier Mutkhor and Garandhal) immediately by transferring students from the old mud buildings to the new schools. The old furniture is being used temporarily. New furniture and equipment are expected to be delivered through December, 1981.

2) Water Supply Facilities

In September 1981, the JVA started to install water transmission lines and distribution pipelines in the Southern Ghors and Wadi Araba using its own labor force. Work is now complete on more than 4 kilometers of main transmission pipelines. More than 50 kilometers of distribution lines are expected to be completed by May 1982. These pipelines will serve villages, schools, and the new housing units which are constructed under VD III.

3) Village Streets

In October 1981 the JVA using its own funds requested Shin Seung Corporation to carry out the design and construction of about 20 kilometers of village streets and access roads for the buildings constructed under the VD III project in the Southern Ghors. Construction is expected to start by February 1982.

4) Furniture and Equipment

JVA is presently procuring the necessary furniture and equipment for this project as well as for VD II Project from a local supplier. For the details of the procurement arrangements see section 2, A.5 of this report.

12
19

>) Disbursement Method

In January 1980, all conditions precedent under the loan agreement for reimbursement of costs for construction of schools, housing and administration buildings were satisfied. Under the loan agreement USAID agreed to finance 90 percent of the cost of facilities in the Southern Ghors and Wadi Araba by the Fixed Amount Reimbursement (FAR) procedure. A fixed amount has been allocated as the contract cost of each building, with 80 percent of this amount to be disbursed upon completion of each individual facility and the remaining 20 percent to be disbursed when the facility is hooked up to utilities, equipped and staffed for operational use.

In October 1980, USAID issued a DRA in favour of JVA for a total value of \$ 4,824,982 for reimbursements to the JVA for local currency construction costs of schools, and housing in the Southern Ghors and Wadi Araba. In November 1981, USAID reimbursed JVA 80 percent of the costs of eight schools in Southern Ghors (\$ 2,163,470).

Condition Precedent No. 5.5 under the loan agreement states that before any disbursement may be made for health centers constructed under the VD III Project, the GOJ shall submit evidence that the health facilities constructed under the VD I and VD II projects are completed, equipped and staffed for operational use. Since this condition precedent has not been met, \$ 595,018 has not yet been committed under the loan to finance these VD III project health facilities. JVA requested and USAID approved extension of the TDCP until December 31, 1982.

6) Revisions to Original Plans

The original design called for 50 family type houses. Because the employees of the Ministries of Education and Health assigned to work in Southern Ghors and Wadi Araba are predominantly on single status, the JVA revised the design, changing it to 20 family-house units and 30 single units (15 duplexes). Each duplex contains six bedrooms which can accommodate six single employees in lieu of accommodating two employees with families each having three bedrooms. The design also provides for possible future reversal of the duplex type units so that they could accommodate separate families. A variation order was issued to the contractor to reflect the above changes. USAID reviewed and approved the revision of the design.

3. Project Evaluation

A. Village Development II

1) Planned Versus Actual

a) Although the project paper anticipated completion of construction of all the project components (schools, health centers, administration buildings, farm and village streets etc.) by December 1980, the actual completion date of all the project activities will be May 1982. This reflects the delay of 18 months between the dates of the major events related to project implementation as described in the project paper and the actual dates of implementation of the various project components. The main cause of delay was due to one year delay in preparing bid.

17-20

documents, prequalifying contractors and awarding the construction contract.

b) The project paper calls for the construction of 23 schools to serve 13 communities in the Jordan Valley. The total number of schools built in the Jordan Valley under the project is now 24 instead of 23, to serve 15 communities instead of 13 communities. By deleting two schools from the contract and replacing them by three other schools, two more communities in the Valley will be served by educational facilities.

2) Problems Identified

a. The bid documents called for the contractor to submit a performance guarantee of up to 30% of the contract price and a payment guarantee of up to 30% of the contract price but not to exceed JD 750,000 (\$ 2.3 million). Three months passed before the contractor was able to secure a bank guarantee in this amount. In subsequent contracts in Jordan, performance guarantees have been set at 10% of the contract price - in keeping with Guidelines of 8% to 15% as provided in the revised Chapter 2 of Handbook II.

b. The ordering of furniture and equipment for facilities constructed under the VD I project at an early stage of construction forced the JVA to store them at various locations within the Valley. Several items were lost or broken. To avoid such losses in the VD II project the JVA decided to award the furniture and equipment contract at the final stages of construction.

c. Ineffective contractor management and a shortage of manpower were the main reasons for the delays that occurred in handing over the project components as scheduled.

B. Village Development III

1) Plans versus Actual

a. The project paper anticipated completion of construction of all project components under the VD III Project by October 1981. The facilities constructed in Southern Ghors and Wadi Araba met the anticipated date. The other components of the project in the Jordan Valley are included under the VD II contract, which is expected to be completed in May 1982, i.e. a delay of 8 months beyond the VD III PP completion date. Water transmission lines and village streets in the Southern Ghors will also be completed by May 1982.

b. The project paper called for construction of 50 family housing units in Southern Ghors and Wadi Araba, but 20 family housing units and 15 duplex bachelor units were constructed.

2) Problems Identified.

Condition precedent No. 5.5 under the loan agreement specifies that all health centers constructed under VD I and VD II must be equipped, staffed and completely utilized before any disbursement can be made for construction

21

of health facilities under VD III.

The Ministry of Health (MOH) has already equipped, staffed and is operating the type "B" and "C" health centers that were constructed under the VD I project. It is expected that the MOH will face no problems in equipping, staffing and utilizing the type "B" health centers constructed under VD II project. Type "A" health centers, however, were designed to work as major hospitals, to make it unnecessary for the population of the Valley to go to the large cities for treatment. A shortage of skilled medical assistants, such as midwives, nurses, laboratory and X-Ray technicians, throughout the major hospitals in the country is a major problem for the MOH. Most of the medical assistants, especially nurses, serving in private and government hospitals are non-Jordanian. The GOJ is trying to encourage young people to enroll in medical assistant schools established by the government but still finds little response from the public. Due to these facts the MOH was able to fully staff only one type "A" health center constructed under VD I at Wadi El Yabis. The other two health centers at North and South Shunna are each served by four medical specialists. JVA/MOH hope to fully staff the type A facilities by the end of CY 1982.

Because the VD II contract was awarded after the VD III contract and the completion date of construction of health centers under VD II will be May 1982, the JVA requested (USAID approved) the extension of the terminal date to satisfy CP 5.5 until December 31, 1982.

4. Conclusions and Recommendations

A. Summary of Project Status

1) Village Development II

Construction of the VD II facilities will be completed in May 1982. Equipping and furnishing of health centers and administration buildings are expected to be completed by June 1982. All the mortgage housing loans have been disbursed. The village streets in the project are completed. The completion date for farm roads is expected to be April 1982.

2) Village Development III

Although construction of all the VD III project components (schools, housing and health center) in Wadi Araba and the Southern Ghors was completed, the other project components to be constructed in the Jordan Valley will not be completed until May 1982. The JVA, with its own labor forces, is installing water transmission lines, and will connect water to schools, housing and health centers built in the area.

The JVA is proceeding to construct 20 kilometer of access roads. The anticipated completion date for transmission lines and access roads is May 1982.

22

B. Current Constraints.

1) Section 5.5 of the Loan agreement for VD III states that " prior to any disbursement of funds for health clinics in the Southern Ghor and Wadi Araba or to the issuance by A.I.D. of documentation pursuant to which such disbursement will be made, the Borrower will, except as A.I.D. in form and substance satisfactory to A.I.D. evidence that health facilities financed under the VD I and VD II projects are completed, equipped and staffed for operational use".

The health facilities constructed under VD III are almost complete, while the health centers under VD II are still under construction. The constraint created is that the JVA must wait until all health centers under VD I and II are complete, equipped, staffed and operational before JVA can be reimbursed for health facilities under VD III project.

2) All completed schools in Southern Ghor and Wadi Araba (VD III project) are staffed and being utilized with the exception of Garandal and Beir Matkhour schools which are complete but utilization is pending tribal population movement to the designated areas. JVA is now negotiating for construction of 300 community houses to finalize this phase of the project; USAID will continue monitoring.

3) JVA/MOH are attempting to staff the Health Centers for full operational status. Indications are that this phase of the effort will be completed by the end of year 1982.

C. Recommendations.

1) USAID to continue urging JVA/MOH to complete staffing of all health centers and USAID to monitor the operational use of all health centers on regular basis with intent to meet the CP 5.5 requirements of VD III project for the purpose of disbursing funds allocated for health centers.

2) Tentatively schedule an impact evaluation by the end of the year 1983. If deemed necessary this date could be deferred to permit sufficient time for a meaningful impact evaluation.

3) Continue monitoring utilization of schools in Garandal and Beir Matkhour (VD III Project).

23

TABLE 1

VILLAGE DEVELOPMENT IIEducational Facilities

(as actually constructed)

Location	Rooms	Cl. Rooms	Library	Chem. Lab.	Physics Lab.	Hand Craft	Home Economics	Store -	Adm.	W.C.
Adasiya G E/P	4	4							1	1
Adasiya B E/P	12	8	1	1		1		1	1	1
Manshiya BE/P	12	8	1	1		1		1	2	1
Zemaliya B E/P	12	8	1	1		1		1	2	1
Zemaliya G E/P	12	8	1	1			1	1	2	1
Mashare B E	16	16							2	2
Mashare G S	4	4								
Balawneh B P/S	24	19	1	1	1	1		1	2	2
Balawneh G E/P	24	20	1	1			1	1	2	2
Dirar GE/P	8	8							1	1
Abu Zegen G E/P	8	4	1	1			1	1	1	1
Muaddi B S	16	11	1	1	1	1		1	2	1
Muaddi G E/P	16	12	1	1			1	1	2	1
Arda B E/P	8	8							1	1
Arda G E/P	16	12	1	1			1	1	2	1
Kafrein G E/P	12	8	1	1		1		1	2	1
South Shuna G E-P-S	24	19	1	1	1		1	1	2	1
South Shuna B S	16	12		1	1	1		1	2	1
South Shuna B P	16	12	1	1		1		1	2	2
Sweima B E/P	12	8	1	1		1		1	1	1
Sweima G + B E	4	4							1	1
Sleikhat B/G	8	8		1		1			1	2
Abu Habel B/G	8	8							1	2
Maisara B/G	8	8							1	2
	300	237	14	16	4	10	6	15	36	30

B - Other Facility

. Type A Health Facility will be built at Muaddi and Type B Health Facilities will be built at Manshiya, Karama and Sweima. Government Buildings will be built at Muaddi, North Shuna, Karama and Dirar.

G - Girls

B- Boys

E - Elementary

P - Pre. tory

S - Secondary

TABLE 2
Village Development III Project
Southern Ghors and Wadi Araba Components

Educational Facility												Housing	
LOCATION	CLASSIFICATION	ROOMS	CLASS ROOMS	LIBRARY	STORE	CHEM. LAB.	PHYSICS LAB	HAND CREFT	HOME ECON.	ADM. UNIT	W.C. UNIT	SINGLE UNIT	DOUBLE UNIT
Haditha	B E/P	16	12	1	1	1		1		2	1	2	1
Haditha	G E/P	16	12	1	1	1			1	2	1		
Mazra's	B S	24	19	1	1	1	1	1		2	1	4	5
Mazra's	G S	16	11	1	1	1	1		1	2	1		
Ramleh	B S	24	19	1	1	1	1	1		2	1	8	4
Ramleh	G E-P-S	24	19	1	1	1	1	1	1	2	1		
Naqa'a	B E-P	16	12	1	1	1		1		2	1	2	2
Naqa'a	G E/P	16	12	1	1	1			1	2	1		
Feifa	B E/P	8	6			1		1		1	1	2	1
Feifa	G E/P	8	6			1			1	1	1		
Feidan	B, G E/P	16	16							2	2	2	1
Beir Mathour	B, G E/P	8	8							1	2		1
Grandal	B, G E/P	8	8							1	2		
Rahma	B, G E/P	8	8							1	2		
		208	168	8	8	10	4	5	5	23	8	20	15

Type "A" Health Facility will be built at Ramleh, and Type "C" Health facility will be built at Rahma

TABLE 2 - A

Village Development III Project

Jordan Valley Components

Educational Facility												Housing	
LOCATION	CLASSIFICATION	ROOMS	CLASS ROOMS	LIBRARY	STORE	CHEM. LAB.	PHYSICS LAB	HAND CREFT	HOME ECON.	ADM. UNIT	W.C. UNIT	SINGLE UNIT	DOUBLE UNIT
Dhrat-Eralmil	B E	8	8							1	1		
Dhrat-Elramil	G E	8	8							1	1		
Karama	B P/S	16	11	1	1	1	1	1		2	1		
Karama	G P/S	16	11	1	1	1	1		1	2	1		
Kafrein	B P/S	16	11	1	1	1	1	1		2	1		
Rama	B E-P S	16	11	1	1	1	1	1		2	1		
Rama	G E-P-S	16	11	1	1	1	1		1	2	1		
Ruweiha	B, G E	8	8							1	2		
		104	79	5	5	5	5	3	2	13	9		

Government Building Type "B" will be built at Wadi El-Yabis and Arda

G - Girls

B - Boys

E-Elementary

P-Preparatory

S-Secondary

9/2

TABLE 3

Disbursement Schedule

(A) <u>AID/Funding</u> <u>VD II</u>	<u>Allocation</u>		<u>Disbursement as of 12/31/81</u>		<u>Balance undisburs.</u>		<u>Accruals</u>
	<u>L/C</u>	<u>F/C</u>	<u>L/C</u>	<u>F/C</u>	<u>L/C</u>	<u>F/C</u>	<u>F/C</u>
a. Facilities Construction (Shin Seung Contract)	1,899,054.90	4,100,945.10	1,899,054.90	2,842,460.03	----	1,258,485.07	973,347.90
b. Mortgage Funds	2,000,000.00	----	2,000,000.00	-----	----	-----	-----
<hr/>							
(B) <u>AID/Funding</u> <u>VD III</u>							
a. Facilities Construction (Shin Seung Contract)	307,111.00	1,272,889.00	253,909.36	-----	53,201.64	1,272,880.00	53,201.64
b. Facilities under FAR disb. system for construction	4,824,982.00	----	2,163,470.40	-----	2,661,511.60	-----	1,000,000.00

(A) a., (B) a. Are to finance Shin Seung Construction contract, amount to approx. \$ 10.8 million for construction of schools, clinics and government administration buildings in Jordan Valley.

(A) b. Is to finance Mortgage Funds with the Housing Bank for housing units in the Jordan Valley.

(B) b. Is to finance construction of schools, school water closet, and school administration buildings including housing units and excluding health facilities in Southern Ghor and Wadi Araba.

