PD-ABG-133

## SCHOOL CONSTRUCTION III PROJECT USAID/Jordan Project No. 278-0276

#### PROJECT ASSISTANCE COMPLETION REPORT

#### PROJECT IDENTIFICATION

: 278-0276 A.I.D. Project Number

Project Title : School Construction III

Project Title : School Const Total Project Cost : \$40 million Total USAID Contribution : \$30 million Total GOJ Contribution : \$10 million Project Agreement Signed : 9/25/1985

#### TERMINAL DATES

Original PACD : 9/30/1989 : 6/30/1992 : 6/30/1990 : 3/30/1993 Amended PACD Original TDD Amended TDD

#### PROJECT SUMMARY 2 .

The project consisted of constructing, furnishing and equipping forty eight compulsory level schools for boys and girls in cities, towns and villages throughout Jordan. project provided about 1,360 classrooms, plus associated libraries, laboratories, meeting halls, administrative rooms, toilet units, playgrounds, and furniture and equipment, to accommodate about 42,000 students in compulsory level education (Grades 1-10), thus directly benefiting 5.8 percent of the student population of 715,000 presently in the compulsory level education system in Jordan.

The project's total cost was approximately \$40 million, of which USAID provided \$30 million in grant funds, while the balance of \$10 million was provided by the Government of Jordan; this host country contribution was in addition to the cost of acquisition of land for the schools. All forty eight schools have been completed, equipped, furnished and are in operation.

### 2.A. PROJECT EVALUATION CONSIDERATIONS

Given USAID's experience in successfully implementing School Construction I and II, as well as Village Development I, II, and III Projects, no interim evaluation was planned for School Construction III. The Project Paper called only for a final evaluation to be conducted upon project completion. It was anticipated that this evaluation would occur in the third quarter of FY 1989. Project completion was delayed due to difficulties resulting from the devaluation of the Jordanian currency and the subsequent eruption of the gulf war, thus the evaluation was postponed.

In the interim, the Mission reached the conclusion that a PACR, rather than an evaluation, would be sufficient to assess this project, as adequate documentation existed on its progress and effects, no significant development issues were raised, and no follow-on activities were envisaged. Accordingly, this completion report was undertaken to assess the results achieved at the end of project implementation, i.e., June 30, 1992. Given the relatively straightforward nature of this capital assistance project, this report is based on comprehensive monitoring during project implementation, review of project documentation and progress reports, discussions with members of the Ministry of Education (MOE) senior staff, headmasters/headmistresses of the project schools, and augmented by senior Mission management monitoring of the project within the contest of the overall Mission portfolio review process. Visits to each site also were helpful in preparing this report.

## 3. PROJECT ACCOMPLISHMENTS, OUTPUTS, INPUTS AND BENEFICIARIES

#### 3.A. PROJECT GOAL

The goal for this project was to support the GOJ's own goal of achieving universal compulsory cycle education in Jordan.

The successful completion of this project was a deciding factor in the achievement of the goal: The forty eight schools completed by the project were a substantial contribution to the GOJ's original target of 190 new schools to meet the demand created by a growing school age population. Based on discussions with headmasters/headmistresses during site visits to most of the operating schools, the project officer concluded that the new schools have produced desired improvements in the space/student ratio (increased to 2.7 square meters per student) and the student/teacher ratio (reduced to 25:1).

#### 3.B. PROJECT PURPOSE

The project purpose was to "help satisfy demand for school classroom space with modern, efficient teaching facilities".

The school buildings constructed under the project were meant to replace or supplement the crowded, rented classroom space then in use. The rented buildings being used as schools were in every case built for another purpose - usually as residences. Because they were mostly built as houses, the MOE rented facilities were totally inadequate for educational purposes because their rooms did not have sufficient space or light to serve as classrooms. Since the project buildings were completed and are operational, the project purpose was achieved by providing approximately 1,360 new classrooms in forty eight schools for a total of 42,000 students. The new classrooms are specifically designed for teaching with modern and efficient facilities. These results exceeded the forty schools and 30,000 students that were called for by the project's planned outputs.

The completion of the new schools has eliminated the need for renting inappropriate buildings for classroom space. The costs of renting such space were far greater than the operating and maintenance costs of MOE-owned schools. Therefore, the savings in costs provided by the new schools are significant and have contributed to the project purpose by allowing the MOE to construct other school facilities with these cost savings.

#### 3.C PROJECT OUTPUTS

The project outputs are the construction, furnishing, equipping and staffing of the forty eight schools. All forty eight schools are completed, with utilities connected (water, sanitary facilities, telephone, and electricity), and are furnished, equipped, staffed and in full operation. The outputs called for in the Project Paper were exceeded by a total of eight schools, 160 classrooms, and another 12,000 students accommodated - all with no increase in funding.

#### 3.D. PROJECT INPUTS

The GOJ inputs are estimated at \$10,000,000. These inputs contributed towards the A & E services, construction, furnishing and equipping of the forty eight schools. Also, the GOJ provided the financial inputs needed to acquire the land for schools. Additionally, the MOE provided the faculty and administrative staff to operate each school in a timely manner as soon as furnishing was completed and equipment was in place.

USAID inputs totaled \$30,000,000, which met the cost of about 75 percent of the A & E services, construction, furnishing and equipping of the forty eight schools.

#### 3.E. PROJECT BENEFICIARIES

The most direct beneficiaries of this project are the 42,000 students who are enrolled in the newly constructed schools and those who will follow them in the future. These students will no longer be taught in sub-standard rented facilities. They are now provided with modern efficient teaching facilities. The teachers in the new schools have also benefitted substantially from these modern facilities, which will help them to be more effective teachers. Improved space-per-student and student-per-teacher ratios are indicators of the project benefits for both students and teachers.

#### 4. PROJECT BACKGROUND AND IMPLEMENTATION

One of the major goals of the Government of Jordan (GOJ) in the education sector is to effect universal, compulsory education in Jordan for all students in grades one through To help the GOJ to attain its goal, USAID provided in 1975 a loan of \$7 million under the School Construction I Project (278-0190), to help finance the cost of constructing eighteen schools with 370 classrooms. In 1980, the School Construction II Project (278-0232) provided a grant of \$6.7 million to partially finance the construction of fourteen schools with about 420 classrooms. In addition to the School Construction I and II Projects, USAID provided three loans for Village Development I, II, and III Projects in the Jordan Valley and Southern Ghor; these loans were used in part to construct 72 new schools with a total of 1,020 classrooms. The 1,810 classrooms built under these five projects provided facilities for about 63,400 students.

The School Construction III Project (278-0276), continued these efforts to help satisfy the GOJ's need for additional classroom space by providing \$30 million to finance the Architectural and Engineering (A&E) services, construction, furnishing and equipping of forty schools containing about 1,200 classrooms for boys and girls in poor, congested areas throughout Jordan. This work was undertaken to: 1) accommodate a growing school-age population; 2) replace inadequate leased or government-owned schools; and 3) reduce the need for having two class sessions per day in some schools. Criteria for selecting school sites were developed jointly by USAID and the Ministry of Education (MOE) and are listed in Annex 1. All schools constructed under the project followed a standard design adopted for School Construction I and II Projects as modified by the A & E firm FLUOR of U.S.A. for School Construction III, to eliminate

over-design. The number of classrooms per school varied between eighteen and thirty four depending upon the population to be served; see Annex 2. As examples, schools with thirty classrooms have about 3,000 square meters of usable floor space, an administrative wing, laboratory, library, storage areas, vocational and home economics education laboratories, a toilet building, and playgrounds. Where site topography permitted, half story basements were added.

All services, including design, construction and construction supervision, and supply of equipment and furniture were contracted with Jordanian firms.

A Modified Fixed Amount Reimbursement (M-FAR) method was used to disburse project funds.

The Project Grant Agreement provided \$30 million for the construction of about forty schools containing about 1,200 classrooms. As of September 30, 1987, USAID had approved forty schools. At that time, as a result of USAID's careful management of the project, contingency funds of \$3.6 million were still available, sufficient to finance an additional eight schools. Accordingly, the project was able to exceed the targeted output and to construct forty eight schools containing about 1,360 classrooms. USAID and the MOE revised the Original Project Assistance Completion Date (PACD) from September 30, 1989 to September 30, 1991, to provide ample time for construction completion, and for furnishing and equipping the last eight schools built under the project.

In its effort to introduce computer science in the primary education cycle in Jordan, the MOE supplied and installed, from its own funds, computer science laboratories for thirteen schools built under the project. In November 1991, USAID approved an MOE request to utilize a residual uncommitted balance of \$58,000 to partially finance laboratories at five additional schools constructed under the project.

Implementation of the project was delayed somewhat primarily due to: 1) the devaluation of the Jordanian currency in 1988, and the fluctuation of the exchange rates that followed in 1989 and 1990, which hampered the ability of the GOJ to secure construction and procurement bids to complete the project's different components; 2) the eruption of the Gulf crisis in August 1990, and the implementation of U.N sanctions on Iraq, which disrupted Jordan's markets, produced higher air freight costs, virtually shut down the country's only seaport, led to a severe shortage of

construction materials, equipment and furniture required by the project, and a shortage of construction workers (many of whom were foreigners and fled Jordan during the crisis). As a result of these problems, USAID and MOE agreed to further extend the PACD by an additional nine months from September 30, 1991 to June 30, 1992.

The project was audited in April 1988, and the audit report contained no formal recommendations. A second audit of the project was conducted in July 1992. That report recommended USAID/Jordan issue a Mission Order providing guidance concerning the selection of the currency to be used when USAID pays for services and goods or reimburses contractors, PVOs, or the GOJ. Accordingly, Mission Order No. 35, issued on February 25, 1993 provides guidance on selection of currency (Jordan Dinars or United States Dollars) to be used when USAID/Jordan pays for services and goods.

## 5. LESSONS LEARNED, SUSTAINABILITY AND UNPLANNED EFFECTS

There were three principal lessons learned from this project. First, the Project Agreement included a covenant that all project schools would be utilized for teaching students in the compulsory cycle of formal education (Grade 1 through Grade 10). Due to lack of secondary schools in rural areas, however, some project schools have accommodated students in secondary education i.e., Grades 11 and 12. The lesson learned is that, in the rural areas, it is not possible to build schools specifically for basic education or specifically for secondary education.

The second lesson learned is that the Modified Fixed Amount Reimbursement (M-FAR) method, which was used in disbursement of funds for School Construction III, proved to be an appropriate and efficient disbursement tool for construction, but not for procurement of furniture and equipment. AID should use M-FAR in its future construction projects, but use cost reimbursement for procuring furniture and equipment.

The third lesson learned is that Jordanian consulting firms, if properly selected, are capable of providing adequate construction supervision, and Jordanian construction contractors are capable of adequate construction.

Sustainability of project accomplishments is assured, because universal compulsory level education remains an internal feature of the Jordanian education system, The MOE has, and should continue to have, adequate resources to operate the forty eight schools.

No unplanned effects of this project have been identified thus far.

DOC:SCHPACR.DRFT DRAFTED:FSalahi REV:RHansen

#### Annex 1

## SCHOOL CONSTRUCTION III PROJECT USAID Grant No. 278-0276

## SCHOOL SITES SELECTION CRITERIA

- 1. Project schools will be sited so that they:
  - a. Primarily serve students from low income families living within two Kms. of the site.
  - b. Primarily serve male and female students in the compulsory cycle(Grades 1-10), taking into full consideration requirements for female schools.
  - c. Take into account demographic change in the community.
- 2. Sites meeting these general criteria will then be selected according to the following priorities:
  - a. Sites where no Ministry of Education (MOE) educational facilities are now available.
  - b. Sites which would replace inadequate rented facilities.
  - c. Sites which would replace inadequate MOE owned facilities.
  - d. Sites which would replace or expand MOE owned facilities where split sessions are now being held.
- 3. Other considerations (financial, economic and engineering) in making site selection:
  - a. The relative availability of services shall be considered (power, water, and sewerage).
  - b. Relative costs of site preparation and construction (level vs. difficult sites).
  - c. Land availability for future expansion.

Annex 2

# SCHOOL CONSTRUCTION III PROJECT USAID Grant No. 278-0276

No.	School Name	B/G	Classrooms No.	Total Cost (US \$)	USAID Contribution (US \$)	Character	Occupancy Date
1.	AWAJAN	GIRLS	30	817,224	612,918	RURAL	AUGUST 1988
2.	JEBEL EL NASR	GIRLS	34	846,969	635,227	URBAN	SEPTEMBER 1989
3.	WADI HAJJAR	GIRLS	34	875,738	656,804	RURAL/URB AN	SEPTEMBER 1988
4.	BIADER WADI SEER	GIRLS	30	822,980	617,236	URBAN	AUGUST 1988
5.	PRINCE HASSAN QUART	GIRLS	30	915,231	686,424	URBAN	JANUARY 1989
6.	NORTH HASHIMI	BOYS	34	913,876	685,408	URBAN	SEPTEMBER 1988
7.	KHERBIT EL SOUQ	BOYS	30	795,755	596,817	RURAL/URB AN	SEPTEMBER 1988
8.	NORTH JOUFEH	GIRLS	34	929,101	696,826	URBAN	JANUARY 1989
9.	UM EL HIRAN	BOYS	30	784,878	588,659	RURAL	AUGUST 1988

10.	SAHAB	BOYS	30	865,594	649,196	RURAL/URB AN	SEPTEMBER 1988
11.	JEBEL HUSSEIN	GIRLS	34	896,881	672,661	URBAN	AUGUST 1988
12.	DAIRAT EL SEER	GIRLS	34	885,549	664,162	URBAN	APRIL 1988
13.	AL-FUGAHA	BOYS	24	711,557	533,668	RURAL/URB AN	AUGUST 1988
14.	SHEIK KHALIL	BOYS	30	909,957	682,468	RURAL	NOVEMBER 1989
15.	MAFRAQ	GIRLS	30	912,752	684,564	URBAN	SEPTEMBER 1990
16.	MADABA	BOYS	30	909,185	681,889	RURAL/URB AN	AUGUST 1989
17.	EIN EL-BAIDA	BOYS	20	877,220	657,915	RURAL/URB AN	SEPTEMBER 1988
18.	RAMTHA	GIRLS	34	925,682	694,262	URBAN	MARCH 1989
19.	EL-BARHA	GIRLS	30	964,500	723,375	RURAL	FEBRUARY 1989
20.	KUFRANJAH	BOYS	34	1,142,132	750,000	RURAL	SEPTEMBER 1989
21.	NEW ZARQA	BOYS	30	930,547	697,910	URBAN	JANUARY 1989
22.	TEBNEH	GIRLS	34	1,083,214	750,000	RURAL	SEPTEMBER 1989

23.	KUFR AWAN	GIRLS	30	1,076,077	750,000	RURAL	AUGUST 1989
24.	JUBEIHA	GIRLS	34	1,040,747	750,000	URBAN	AUGUST 1990
25.	MA'IN	GIRLS	18	889,647	667,235	RURAL	SEPTEMBER 1988
26.	EL-AZARIEH	GIRLS	30	1,284,376	750,000	URBAN	SEPTEMBER 1991
27.	UM-ATTIEH	BOYS	34	1,028,584	750,000	RURAL/URB AN	AUGUST 1991
28.	BAL'MA	GIRLS	24	863,815	647,562	RURAL	APRIL 1990
29.	NORTH RUSEIFA	GIRLS	24	656,358	492,269	URBAN	APRIL 1988
30.	AQABA	GIRLS	34	1,026,094	750,000	URBAN	JANUARY 1989
31.	MA'AN	GIRLS	18	835,277	626,458	RURAL/URB AN	SEPTEMBER 1990
32.	EL-BURNUS	GIRLS	30	1,034,399	750,000	RURAL/URB AN	AUGUST 1989
33.	AL- HUSSEINIEH	GIRLS	24	912,332	684,249	RURAL	APRIL 1989
34.	WADI-MUSA	GIRLS	34	1,234,027	750,000	RURAL	SEPTEMBER
35.	HAWARA	GIRLS	18	667,424	500,568	RURAL	OCTOBER 1988

36.	BESHRA	BOYS	18	725,653	544,240	RURAL	DECEMBER 1989
37.	SOUF	GIRLS	30	858,832	644,124	RURAL	AUGUST 1990
38.	DAMIA	GIRLS	18	567,380	425,535	RURAL	JANUARY 1989
39.	EIDOUN	BOYS	24	747,703	560,777	RURAL	APRIL 1989
40.	IRBID	GIRLS	30	856,127	642,095	URBAN	MAY 1989
41.	EL-NUA'MEH	BOYS	18	630,355	472,766	RURAL	SEPTEMBER 1991
42.	HOSON	BOYS	30	706,662	529,997	RURAL/URB AN	FEBRUARY 1991
43.	NORTH HASHEMI	GIRLS	34	546,785	410,089	URBAN	JANUARY 1992
44.	JEBEL EL- NASR	GIRLS	34	510,075	390,806	URBAN	FEBRUARY 1992
45.	EL-TAIBEH	GIRLS	20	413,859	310,394	RURAL	OCTOBER 1991
46.	EL-IRAQ	GIRLS	34	857,107	642,831	RURAL	NOVEMBER 1991
47.	TURKI	BOYS	18	572,069 ,	429,051	RURAL	OCTOBER 1991
48.	UM-JOUZI	GIRLS	20	603,411	452,559	RURAL	NOVEMBER 1991