

UNITED STATES
INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER

JORDAN - SCHOOL CONSTRUCTION II

Project No. 278-0232

AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT PAPER FACESHEET		1. TRANSACTION CODE <input type="checkbox"/> A ADD <input type="checkbox"/> C CHANGE <input type="checkbox"/> D DELETE	PP 2. DOCUMENT CODE 3
3. COUNTRY/ENTITY JORDAN		4. DOCUMENT REVISION NUMBER <input type="checkbox"/>	
5. PROJECT NUMBER (7 digits) <input type="text" value="278-0232"/>	6. BUREAU/OFFICE A. SYMBOL NE	7. PROJECT TITLE (Minimum 40 characters) <input type="text" value="SCHOOL CONSTRUCTION II"/>	
8. ESTIMATED FY OF PROJECT COMPLETION FY <input type="text" value="82"/>		9. ESTIMATED DATE OF OBLIGATION A. INITIAL FY <input type="text" value="80"/> B. QUARTER <input type="text" value="3"/> C. FINAL FY <input type="text" value="89"/> (Enter 1, 2, 3, or 4)	

10. ESTIMATED COSTS (\$000 OR EQUIVALENT \$1 -)						
A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FX	C. L/C	D. TOTAL	E. FX	F. L/C	G. TOTAL
AID APPROPRIATED TOTAL						
(GRANT)	()	(6700)	(6700)	()	(6700)	(6700)
(LOAN)	()	()	()	()	()	()
OTHER U.S.	1.					
	2.					
HOST COUNTRY					6547	6547
(Contingency)					(1728)	(1728)
TOTALS		6700	6700		13247	13247

11. PROPOSED BUDGET APPROPRIATED FUNDS (\$000)									
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. 1ST FY <u>80</u>		H. 2ND FY		K. 3RD FY	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	I. GRANT	J. LOAN	L. GRANT	M. LOAN
(1) ESF	629	636		6700					
(2)									
(3)									
(4)									
TOTALS				6700					

A. APPROPRIATION	N. 4TH FY		O. 5TH FY		LIFE OF PROJECT		12. IN-DEPTH EVALUATION SCHEDULED
	Q. GRANT	P. LOAN	R. GRANT	S. LOAN	T. GRANT	U. LOAN	
(1) ESF					6700		<input type="text" value="01"/> <input type="text" value="81"/> <input type="text" value="4"/>
(2)							
(3)							
(4)							
TOTALS					6700		

13. DATA CHANGE INDICATOR. WERE CHANGES MADE IN THE PID FACESHEET DATA, BLOCKS 12, 13, 14, OR 15 OR IN PRP FACESHEET DATA, BLOCK 12? IF YES, ATTACH CHANGED PID FACESHEET.

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14. ORIGINATING OFFICE CLEARANCE SIGNATURE: Edgar C. Harrell <i>[Signature]</i> TITLE: Mission Director USAID/Jordan		15. DATE SIGNED <input type="text" value="0"/> <input type="text" value="4"/> <input type="text" value="0"/> <input type="text" value="2"/> <input type="text" value="8"/> <input type="text" value="0"/>	16. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION... <input type="text" value="0"/> <input type="text" value="1"/> <input type="text" value="8"/> <input type="text" value="1"/> <input type="text" value="4"/>
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7. PROJECT TITLE (MAXIMUM 40 CHARACTERS)
 SCHOOL CONSTRUCTION II

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 A. 3 2 = PRP
 3 = PP B. DATE 04 81 0

10. ESTIMATED COSTS
 (\$000 OR EQUIVALENT, \$1 =)

FUNDING SOURCE		AMOUNT
A. AID APPROPRIATED		6700
B. OTHER	1.	
	U.S. 2.	
C. HOST COUNTRY		6547
D. OTHER DONOR(S)		
TOTAL		13247

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION
 a. INITIAL FY 81 0 b. FINAL FY 81 0

11. PROPOSED BUDGET AID APPROPRIATED FUNDS (\$000)

A. APPRO- PRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. FIRST FY 80		LIFE OF PROJECT	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	H. GRANT	I. LOAN
(1) ESF	629	636		6700		6700	
(2)							
(3)							
(4)							
TOTAL				6700		6700	

12. SECONDARY TECHNICAL CODES (maximum six codes of three positions each)

13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH)

14. SECONDARY PURPOSE CODE

3. PROJECT GOAL (MAXIMUM 240 CHARACTERS)
 To effect universal compulsory cycle education in Jordan.

16. PROJECT PURPOSE (MAXIMUM 480 CHARACTERS)
 To help satisfy demand for school classroom space with modern, efficient teaching facilities

17. PLANNING RESOURCE REQUIREMENTS (staff/funds)
 PP to be prepared by USAID Project Committee.

18. ORIGINATING OFFICE CLEARANCE

Signature: Edgar C. Harrell *E. C. Harrell*

Title: Mission Director
 USAID/Jordan

Date Signed: 04 02 81 0

19. DATE DOCUMENT RECEIVED 1: AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

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ANNEXES TO PROJECT PAPER

SCHOOL CONSTRUCTION II

- A. "Education and Training System in Jordan,
An Overview"
- B. Statistical Section.
- C. Social Analysis
- D. Evaluation of School Construction I Project
- E. Logical Framework Matrix
- F. Grantee's Application for Assistance
- G. PID Approval Cable
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- I. Draft Grant Authorization
- J. Grant Agreement
- K. Statutory Checklists

PROJECT PAPER

HASHEMITE KINGDOM OF JORDAN

SCHOOL CONSTRUCTION II PROJECT

SUMMARY AND RECOMMENDATIONS

1. GRANTEE: The Hashemite Kingdom of Jordan
2. IMPLEMENTING AGENCY: The Ministry of Education (MOE) will have overall responsibility for Project implementation. The Ministry of Public Works (MPW) will have responsibility for construction of school buildings per se.
3. AMOUNT: U.S. \$6,700,000 (Six Million Seven Hundred Thousand Dollars) to be authorized as grant in FY 1980.
4. TERMS: The Project is proposed for grant financing from the Economic Support Fund. The Grant will finance local costs for goods and services. There will be no foreign exchange costs. Disbursements from the Grant will be on the basis of modified Fixed Amount Reimbursement (FAR) payments in dollars for satisfactory completion of pre-determined stages of construction of each school to be financed.
5. TOTAL PROJECT COST: Total Project costs are estimated at \$13.25 million equivalent, including 15% contingency amount of \$1.73 million which is judged extremely unlikely to be required. Thus, the Government contribution is expected to be \$4.82 million equivalent, or 42% of anticipated Project costs. (The Government understands that A.I.D.'s obligation will be limited to \$6.7 million and that any expenditures in excess of this amount will be financed by the Government.)
6. DESCRIPTION OF PROJECT: The Project involves the construction, equipping, furnishing and staffing for teaching of 14 schools in 9 cities, towns and villages of Jordan. The schools will be used by both girls and boys (usually separately) in the "compulsory cycle" of education, i.e. the elementary (grades 1 through 6) and preparatory (grades 7, 8 and 9) levels which all Jordanians in the appropriate age groups are required to attend by law. All of the 14 schools will be on the escarpment plateau of Jordan, home to more than 70% of the country's people.
7. PURPOSE: To help satisfy demand in Jordan for school classroom space with modern, efficient teaching facilities.

8. SUMMARY FINDINGS:

(a) Technical Analysis: All aspects of the proposed Project are technically feasible, as has been demonstrated by the SCI Project. The proposed Project will utilize the plans, specifications, etc. used in the previous project, as modified to make slight improvements indicated as desirable during implementation of the SCI project. The MOE has the technical capacity to keep the Project schools maintained and is in the process of augmenting its capacity through the acquisition of 8 mobile maintenance units.

(b) Administrative Feasibility: Experience with the previous SCI Project has demonstrated that the proposed Project is fully feasible administratively. The GOJ implementing entities, the MOE and the MPW, have both the staff capability and staff capacity to perform their assigned roles in Project implementation. The Mission also has sufficient trained staff to monitor the Project adequately.

(c) Financial Analysis: The only source of Project capital and operating funds (aside from the A.I.D. Grant and minimal student contributions) will be the regular GOJ budget; therefore, none of the normal tests of financial viability could be performed. The only assessment possible was a judgement of the probability of continued financial commitment to the Project by GOJ decision makers. Based on the generally strong social, cultural and financial value placed on education in Jordan, and the resulting political constituency which has developed to support education, the Mission has concluded that the probability of continued GOJ financial commitment to education in general and to the Project's requirements in particular is high. Analysis of recent GOJ budgetary commitments to education and the experience of the previous SCI Project to date with regard to Project financing both confirm this judgement.

(d) Economic Analysis: Project benefits are unquantifiable in any meaningful economic sense; therefore, no attempt has been made at any sort of cost/benefit analysis. Various unmeasurable economic costs (particularly the costs of double-shift instruction) also rule out a rigorous least-cost analysis.

(e) Social Analysis: Specific criteria have been applied in selecting sites for Project schools to insure that the students served will be, to the maximum extent possible, from relatively disadvantaged areas economically which are experiencing high student-age population growth and, thus, have the greatest demand for classroom space. Positive efforts were made also to achieve an equitable balance between the sexes and to insure that representative proportions of the schools are in urban, "urban-rural" and rural areas. Thus, project

benefits have been targeted to strike a balance among various social desiderata. The Mission confidently believes that no aspects of the Project will conflict with any of the social norms or cultural patterns of the intended beneficiaries or any other Jordanians. Indeed, as noted earlier, there is strong social and cultural value placed on education in Jordan. (Coeducational instruction does pose a possible cultural conflict and the MOE therefore avoids it whenever possible; all of the 14 Project schools are designated to be used for only girls or only boys.) The judgement that the Project is socially sound is strongly supported by the enthusiasm for their new schools found among both students and staff by the MOE/USAID evaluation of the previous SCI Project (see Annex D).

(f) Environmental Considerations: The proposed Project is judged to be environmentally sound. The basic conclusion of the Initial Environmental Examination conducted by the Mission's Environmental Officer and submitted with the PID is that the Project will not have a significant impact on the environment; accordingly, the Threshold Decision recommended a negative determination and this was approved by the Mission Director. The Project has been accorded environmental clearance by the NE Bureau.

9. STATUTORY REQUIREMENTS: All statutory criteria have been met. (See Annex K for the Statutory Checklist.)

10. ISSUES: There are no unresolved issues. (Issues raised in AID/W's PID approval cable -- see Annex G -- are addressed in Section III, Project Analysis, particularly in the technical and social analyses found there.)

11. MISSION VIEW: The Mission supports the Project fully because the requirement for more (and more effective) classrooms is extremely great in Jordan. Assistance in providing more classroom space has been designated a priority activity for outside donors by the GOJ. (The FAA Section 611(e) certification executed by the Mission Director is included as Annex H.)

12. RECOMMENDATION: Approval of the proposed Grant Project by authorization of U.S. \$6,700,000 from FY 1980 appropriations on the terms and conditions found in the Grant Authorization (Annex I).

I. PROJECT BACKGROUND

A. Overview of Education in Jordan

Starting from a very small and rudimentary educational system at the time of the formation of the State of Transjordan in 1921, today's Jordan has a modern system which is providing basic education and advanced training to progressively larger numbers (and proportions) of its citizens. A well-educated and trained labor force is Jordan's single most important asset today, particularly considering the relative dearth of other resources. Large numbers of skilled Jordanians have migrated to the high remuneration available in the oil states and their repatriated earnings constitute Jordan's single largest source of foreign exchange apart from official transfers. At home, the widespread and high education and skill levels of Jordanians is one of the major bases for success of the domestic development programs. Thus, the Government of Jordan sees a well-educated work force with the skills necessary to respond to the demands of rapidly developing economies as a sine qua non to its overall development strategy.

The year of the formation of the State of Transjordan, 1921, marked the start of the modern Jordanian education system with the construction of about 20 elementary schools and the establishment of three intermediate secondary schools. Prior to 1921 Jordan had only a very restricted education system established under Ottoman rule consisting of a limited number of religious schools, several primary schools (three years of education) and four elementary schools (six years). Regardless of the different titles of these three types of schools, all were engaged in providing basic reading, writing and, in some cases, mathematical skills. Even the rudimentary education offered by these schools was a relatively rare privilege accorded to only a small proportion of the population. The period to independence in 1946 saw a slow and steady process of constant enlargement and improvement of Transjordan's education system with a major milestone being reached in 1939 when, for the first time, education was made compulsory by a law which required all Jordanians to attend the first five years of elementary education. By independence in 1946 there were 70 primary and secondary schools in the country.

After independence began the era of rapid and intensive development of Jordan's education system. The system's development was impelled primarily by two powerful engines: the forces

of modernization and development, including decolonization, unleashed by the Second World War and the country's rapid population growth, with the latter being augmented greatly by the migration of refugees to Jordan, particularly in the wake of the events of 1947-1948 and 1967. To give an idea of the rapidity of development of the education system in response to these tremendous pressures placed upon it, between 1950 and 1956, the numbers of students, teachers and schools were all doubled. Looking at a different time span, the total number of schools in Jordan increased from 691 in 1950 to 2582 in 1979 while enrollments increased from 250,000 in 1950 to more than 700,000 in 1979, an increase of 280% (even these figures are conservative because those for 1950 include both West and East Banks while those for 1979 are for the East Bank only).

A large part of the rapid growth of numbers of students in Jordan's education system has been due simply to the strong pressures caused by extremely rapid population growth. Jordan has a high population growth rate conservatively estimated at 3.4 percent per annum and, as a result, over half of all Jordanians are under the age of 15. Beyond the strong push of ever greater numbers, however, has been a further strong pressure exerted by the high level of demand for education to meet the social and economic aspirations of Jordanians. The best single reflection of the strength of this demand can be found in the net enrollment ratios which compare, for each age group, the number of students in school against the total population. As the following table shows, the net enrollment ratios have climbed dramatically at all levels in the past ten or so years. As can be seen, while the ratios have climbed strongly for both sexes, those for girls (who started with much lower participation rates) have grown faster than those for boys.

TABLE I-1

NET ENROLLMENT RATIOS

<u>Level/Sex</u>	<u>1969/70</u>	<u>1974/75</u>	<u>1978/79</u>
Elementary	65.6	96.5	90.9
Male	69.7	100.9	92.7
Female	61.1	91.8	88.9
Preparatory	51.4	79.9	81.9
Male	58.9	87.5	85.5
Female	42.5	71.7	78.2
Secondary	32.1	45.9	57.8
Male	42.6	53.8	64.7
Female	20.5	37.8	51.0

Source: MOE "Statistical Educational Yearbooks" (Obviously, a "net enrollment ratio" of 100.9, as reported for males in the elementary cycle in 1974/75, is an impossibility by definition. The apparent drop in net enrollment ratios from 1974/75 to 1978/79 is due to an updating of estimates of total population in various age groups. Thus, the above figures must be taken as indicative only.)

So great is the demand for education that almost every third Jordanian today is a full-time student (at the end of 1979 there were more than 670,000 students out of a population of about 2,150,000).

Accompanying the constant and rapid growth in numbers (and percentages) of Jordanians in the education system has been a steady effort to improve the quality of the education system by a process of deepening and broadening of its course content. A major milestone in this process occurred at the time of unification of the West and East Banks in 1950 when all schools in the country were placed under the supervision and control of the Ministry of Education (MOE). The diversification of education to meet the increasing needs for varied skills in the economy began in 1952 when commercial, agricultural and industrial education were added to the academic curriculum at the secondary level. (As will be discussed further below, this effort has been greatly expanded recently in an effort to meet the country's high demand for skilled labor.) Also in 1952, responding to the increasing need for trained teachers, the MOE established the first two teacher training institutes, one for men in Amman and the other for women in Ramallah.

The basic law governing education in Jordan today was promulgated in 1964 -- Law No. 16 of that year. This law formalized the following three major principles: (a) all Jordanians should have equal access to basic education; there should be no discrimination with regard to sex, religion, or similar factors; (b) education is compulsory for the first nine years of formal education, that is for the grades 1 through 9, comprising the primary (grades 1 thru 6) and preparatory (grades 7, 8 and 9) levels ("the compulsory cycle") enrolling children normally in the age groups 6 to 16 years*; and (c) education is free for all Jordanians, at least in the compulsory cycle.

University level education was added to the system in 1962 with the establishment of the University of Jordan which is a modern institute of higher education with eight major faculties; 1975 saw the establishment of Jordan's second university, Yarmouk, in Irbid. Today, approximately 11%, or 20,000 out of 182,000 of the university-aged population are enrolled in these universities and other higher educational institutions (mostly teacher training

*While the phrase "the age groups 6 to 16 years" is the one most commonly used in Jordan to describe the students in the compulsory cycle of education, the group encompassed by this phrase is somewhat larger than that used by the MOE for statistical purposes such as calculating net enrollment ratios. For its statistics program, the MOE uses the following age groups for each of the three cycles of formal education: elementary, ages 6 through 11; preparatory, ages 12 through 14 and secondary, ages 15 through 17. Thus, for the MOE, the "compulsory cycle" technically comprises the age groups 6 through 14 years.

institutes and other technical institutes) in Jordan. Despite these varied domestic opportunities for higher education, another 45,000 or so university-aged Jordanians study abroad. At the "other end of the spectrum," the GOJ intends to address the education and training needs of the estimated 30 percent of the population over 12 years of age classified as illiterate and to provide continuing education for literate adults. The MOE is encouraging adults and out-of-school youths to attend day and evening classes that cover in four years the content of the primary curriculum adapted to adult learning needs. Students who complete such programs are considered to have the equivalent of the primary school certificate for admission to preparatory school education, appropriate skill training programs (vocational education) or continuing education programs. Although the anti-illiteracy effort is outside the normal purview of formal education, prime responsibility for its implementation has been assigned to the MOE. Literacy training is receiving particular emphasis in rural areas but in the past ten years only about 20,000 have been trained from a target population estimated in 1976 to have numbered 338,000. Necessary legislation is being enacted to ensure coordination between the MOE and the various other ministries concerned in the provision of adult education. (Agriculture, Labor, Health and Religious Affairs).

As a result both of the strenuous effort made by the Government in implementing educational policies and strategy and of the high level of demand for education, progress in the overall development of Jordan's education system has been remarkable, especially over the past decade. Today in Jordan, there are no significant disparities in the distribution of compulsory school education opportunities among regions. The rapid expansion of education has naturally not occurred without problems, however. The following two major deficiencies have persisted -- after having been first identified by the MOE working in conjunction with a UNESCO/IDA appraisal team in 1970-71:

1. Unabated expansion of school enrollments not matched by a corresponding increase in physical facilities and qualified teaching staff, and
2. A continuing imbalance between general secondary education and much needed vocational education, despite efforts to increase numbers of vocational courses and students.

Projects subsequently designed and implemented with external donor financing to address these deficiencies included the previous AID School Construction Project and other major donor inputs to education discussed below. Despite the relatively good record to date, however, further improvements in both quality and quantity must be achieved if Jordan's educational system, broadly defined, is to meet the country's need for trained manpower in the future and the populace's expectations for future economic well-being. Quality improvements required are courses better designed to meet the actual needs of the Jordanian economy, particularly for more skilled workers (vocational education) and increasingly better qualified teachers to upgrade the effectiveness of the course material offered (improvements in both of these areas are primary goals of the ongoing IBRD education projects discussed below). As is discussed in more detail below, on the quantitative side, the major present need is for more schools.

Under the Three-Year Development Plan (1973-75) and the current Five-Year Plan (1976-80), GOJ educational development policies and strategies have been directed towards extending basic schooling, while reorienting education and training towards meeting skilled manpower needs. The major GOJ educational development objectives upon which this strategy is based and which are relevant to this Project are:

- a. Provision for all children of the nine years of the "compulsory cycle" of education.
- b. Improvement in the relevance of basic (compulsory cycle) schooling through the provision of practical pre-vocational studies for all students.

B. School Construction II Project Background

The MOE's history is a story of ceaseless effort to meet the rapidly increasing demand for education in Jordan caused by the dual factors of fast population growth and quickly widening and increasing social and economic aspirations. A further impetus to the MOE's efforts to satisfy the demand for education is its desire to fulfil its legislative mandate to provide education to all young Jordanians in the age groups of the compulsory cycle. Until fairly recently, satisfying the increasing demand for education in Jordan meant providing both more teachers and more classrooms.

Today, thanks to persistent efforts of the MOE to increase the number of available teachers, with much of this effort occurring within the framework of the ongoing IBRD education projects, there are enough teachers in Jordan to meet the country's needs (although some relatively minor quality problems remain).

Historically, shortages of qualified teachers in Jordan have been due to two separate but interrelated causes: insufficient training facilities and low pay levels. The MOE has been working to effect improvements in both of these areas. As an example, between 1974/75 and 1978/79, the number of Teacher Training Institutes (TTI's) for the compulsory cycle increased from 5 to 11 and yearly output has more than trebled to 3,300 graduates per annum. The MOE has two main incentive programs for teachers. The first consists of stipends to attend the TTI's -- the two years of TTI training are virtually free of cost to the student, but each student incurs an obligation to teach in MOE schools for two years for every year of training. Secondly, the MOE controls the flow of teachers to the oil states on the Arabian Peninsula which have large numbers of openings for teachers with relatively high salaries to be filled each year. The MOE will not approve a candidate for such position who is on its rolls or was trained at Government expense until he has served a certain time teaching in MOE schools. Thus, the MOE purposely utilizes its control over which Jordanians can accept teaching jobs in the oil states as an incentive to teachers to join and remain in the MOE system.

On the whole, the MOE's efforts to increase the number of qualified teachers has been successful -- the recent past has witnessed a constant improvement in the student/teacher ratios in the compulsory cycle which in 1978/79 reached the satisfactory (estimated) proportions of 32:1 in the primary and 21:1 in the preparatory levels. Today, supply and demand for qualified teachers appear to be roughly in balance. However, this balance is in virtually constant jeopardy of being upset. Future demand for teachers for the compulsory cycle alone has been conservatively forecast at a minimum of 3,200 per year. While the MOE has the facilities to train this number of new teachers, the question always remains whether the profession and its rewards will continue to be seen as attractive enough to lure sufficient new entrants. It is possible for a graduate of the TTI's to sidestep his teaching obligation by repaying the cost of this education to

the Government, and the number who will choose to do this at any time is unpredictable because it is determined by the graduates' perceptions of the financial rewards to be gained elsewhere.

While the number of teachers is satisfactory today, there remain some quality problems, largely at the secondary level where there is a shortage of qualified teachers in certain academic subjects especially English, mathematics and science and in many vocational training and allied areas, such as pre-vocational crafts in the compulsory cycle. In addition, about 6,200 of the teachers in the compulsory cycle, 33% of the total, are underqualified by MOE standards because they have not completed two years of post-secondary training. These and other quality problems being encountered by the MOE as it strives to develop and maintain a qualified teaching force are being attached on a systematic basis. Upgrading programs are being provided in the TTI's to reduce the accumulated backlog of underqualified teachers. Other programs are designed to provide qualified manpower for the MOE's current emphasis on establishing a strong vocational education curriculum at the secondary level. The MOE plans to institute soon a program of providing incentives and fostering professional growth among all of its staff, both teachers and administrators. This program will have as its core a master's degree program in education to be completed by MOE personnel during summer vacation.

The MOE has had assistance from outside donors in its efforts to upgrade the quality of its staff and provide sufficient monetary and professional incentives to retain adequate staff strength. A major thrust of the IBRD education projects has been assistance in such MOE efforts (see Section I.D.1 below). (AID is considering providing technical assistance in establishing the MOE's new incentives program discussed above in the form of the services of an eminent educator with prior experience in Jordan to help lay the final detailed plans for implementing the program.)

While the MOE's efforts to meet the demand for increased numbers of teachers have been successful overall, it has been less successful in meeting the demand for new classrooms, despite impressive increases during the past five years in the number of classrooms under its control. The MOE's relative lack of success in providing needed new classrooms is due mostly to the high costs

of construction in Jordan today. These high building costs have been encountered in the face of persisting strong inflation, which has exerted constant pressure on the MOE's operating costs and, thus, has prevented the MOE from increasing its capital expenditures for new classrooms as much as it has desired. To meet the constantly swelling demand for more classrooms, the MOE has been forced by these circumstances to utilize two types of stopgap measures to acquire classrooms which have lowered the standards of education below desirable levels: double-shift instruction and renting buildings (most of which were originally constructed as residences) to use as schools. By the end of the 1978/79 school year, the MOE had a total of about 14,900 classrooms under its control. Of these, about 7,000 (47%) were rented; double-shift classes were conducted in a total of about 2,900 (19%) (see Tables 8 and 10, and Annex B).

Both double-shift teaching and using rented buildings for classrooms have negative effects on the quality of education in Jordan. The major negative effect of double-shift teaching is to reduce the number of hours each student spends in school each day: students in double-shift schools attend classes for only four hours each day (i.e., from 7:30 to 11:30 or from 11:30 to 3:30) while those in single-shift school have six full hours of classes daily (from 7:30 to 1:30). In addition, double-shift classes increase the strain on both teachers and students, thus reducing the quality of instruction, and they also reduce the amount of time available to teachers to help students in extracurricular activities.

The rented buildings being used by the MOE as schools in every case were built originally for another purpose -- usually as residences. The MOE has found that there are three major negative effects of using former dwellings for instructional purposes, as follows:

- 1) Pupils cannot get practical instruction in science, vocational and agriculture courses in rented facilities due to a shortage of adequate laboratories and workshops. Graduates from primary and preparatory cycles, therefore, lack incentive to enter these courses in secondary schools. This has resulted in overcrowding in the general education courses of the secondary schools and a shortage of trained labor force emerging from the public schools.

ii) Because they usually are older homes, rented facilities almost invariably have few large rooms and inadequate ventilation, lighting and sanitary facilities. This situation contributes little to qualitative progress in education and undoubtedly is a major cause of increased repeats and dropouts at the primary level.

iii) Perpetuation of the classroom rental system will result in an increase in educational costs per student, teacher and graduate. The overall effect of over-crowded rented facilities is that more teachers are required so that per student costs are increased. Added to this, increased student attrition increases the cost per graduate.

The current Five-Year Plan (1976 through 1980) period has seen a rather extensive classroom building program in Jordan. During the first four years of the plan, from 1976 through the end of 1979, about 2,200 classrooms were added to the stock of MOE-owned classrooms in Jordan (more than 370 -- or 17% -- of these were financed by the previous AID Schools Construction I project -- see below). This is an impressive 75% increase in publicly MOE-owned classrooms, from about 4,500 to about 7,900. Moreover, 1,200 more classrooms are under construction and scheduled to be completed by the end of 1980. (See Table I-2).

This relatively large number of new classrooms has succeeded in reducing the proportion of rented classrooms among MOE-operated schools from more than 55% at the start of the building program to about 47% at the end of 1979 (see Table 8, Annex B). This is still an unacceptably high percentage of rented classrooms, however. With regard to double-shifting, the MOE reports that a greater-than-anticipated increase in the student population during the same period has forced a disturbingly sharp increase in the use of classrooms for double-shifts. Today, in the MOE system, more than 29% of all elementary level students are in double-shift classes. At the preparatory level, more than 18% are double-shifting.

Thus, despite the impressive record of classrooms completed during the past four years, a serious shortage of adequate classrooms continues to prevail. Because of the extremely deleterious effects of both practices, the MOE wants to eliminate both rentals and double-shifts and has laid plans to do so at the rate of about 5% per year beginning in 1980. But this planned effort represents in itself

TABLE I-2 (A)
NEW CLASSROOM CONSTRUCTION
CURRENT FIVE YEAR PLAN PERIOD
(1975-1980)

COMPLETED - 1976 THROUGH 1979

<u>Education Districts</u>	<u>Ministry MRA *</u>	<u>MVLF*</u>	<u>MOE Budget</u>	<u>JVA * (AID Loan Financed)</u>	<u>Locally Syndicated Loan **</u>	<u>AID Schools Construction I Project</u>	<u>IBRD</u>	<u>All Sources</u>
Anman	-	-	12	-	342	110	38	502
Anman Suburbs	10	86	-	-	95	24	-	215
Zarqa	20	18	-	-	76	24	-	138
Irbid	7	215	12	210	38	58	-	540
Balqa	29	41	6	190	-	48	-	314
Madaba	7	27	-	-	-	-	-	34
Jarash	11	15	6	-	-	-	-	32
Ajlun	3	27	-	-	19	17	-	66
Ramtha	-	7	-	-	-	16	-	23
Mafraq	15	104	-	-	-	18	-	137
Karak	-	125	-	-	-	24	-	149
Tafila	8	3	-	-	-	16	-	27
Ma'an	-	4	12	-	57	16	-	89
TOTALS	110	672	48	400	627	371	38	2266
	(4.8%)	-(29.7%)	(2.1%)	(17.7%)	(27.7%)	(16.4%)	(1.7%)	(100%)

* Eurocurrency sources * NRA = Municipal and Rural Affairs; MVLF = Municipal and Village Loan Fund; JVA = Jordan Valley Authority

Source: MOE Buildings Department

TABLE I-2 (B)
NEW CLASSROOM CONSTRUCTION
CURRENT FIVE YEAR PLAN PERIOD
(1975-1980)

TO BE COMPLETED DURING 1980

			<u>MOE Budget</u>	<u>JVA AID Loan Financed)</u>	<u>Locally Syndicate Loan</u>	<u>I Project</u>	<u>IBRD</u>	<u>Sources</u>
Amman	-	-	65	-	-	-	-	65
Amman Suburbs	22	27	12	-	-	-	-	61
Zarqa	20	22	60	-	-	-	38	140
Irbid	24	72	36	130	-	-	19	281
Balqa	24	11	12	200	-	-	19	266
Madaba	27	24	-	-	-	-	-	51
Jarash	16	11	6	-	-	-	-	33
Ajlun	9	-	-	-	-	-	-	9
Ramtha	17	18	24	-	-	-	-	59
Mafraq	32	86	12	-	-	-	-	130
Karak	30	56	-	-	-	-	-	86
Tafila	15	3	-	-	-	-	-	18
Ma'an	29	3	-	-	-	-	19	51
TOTALS	265	333	227	330	-	-	95	1250
	(21.2%)	(26.6%)	(18.2%)	(26.4%)	-	-	(7.5%)	(100%)

* MRA = Municipal and Rural Affairs; MVLF = Municipal and Village Loan Fund; JVA = Jordan Valley Authority

Source: MOE Buildings Department

only about one-third of the new classrooms needed in Jordan over the period 1980-1985. Two-thirds or more of the required new classrooms needed will be necessary just to stay ahead of the burgeoning numbers of new students caused by Jordan's high population growth rate.

The most recent MOE classroom construction plan calls for 10,648 new classrooms over the five-year period 1980-85. Of these, 6,668 will be needed just to accommodate the increase in the size of the student population, 2,540 will be required to replace rented classrooms and the remaining 1,440 will be needed to eliminate double-shift teaching. The annual requirement under this plan ranges from 2,055 in the first year to 2,227 in the fifth. Thus, during its first year alone the plan calls for constructing a number of new classrooms which equals 90% of the new classrooms constructed during the entire previous four years to the end of 1979 (see Table I-3).

TABLE I-3

REQUIREMENTS FOR NEW MOE-OWNED CLASSROOMS
SECOND FIVE-YEAR PLAN PERIOD
(1980-1985)

<u>Year</u>	<u>Increased Student Population</u>	<u>Replacing Rented Classrooms^{1/}</u>	<u>Eliminating Double Shifts^{1/}</u>	<u>Total Annual Requirement</u>
1980-81	1,259	508	288	2,055
1981-82	1,279	508	288	2,075
1982-83	1,324	508	288	2,120
1983-84	1,375	508	288	2,171
1984-85	1,431	508	288	2,227
Totals	6,668	2,540	1,440	10,648
	=====	=====	=====	=====

^{1/} Assumes reduction of about 5% per year in both rented classrooms and those used for double-shift instruction

Source: MOE Planning Department

By far the greatest proportion of new classrooms needed -- about 80% of the total -- are required for students in the compulsory levels. For instance, the following table shows the MOE's estimate of the breakdown among the different education levels of the component of the requirement for new classrooms over the next five years which will be caused by increases in the number of students. (According to the MOE, the breakdowns for the other two components of the requirement for new schools -- the plans to eliminate slowly both the need to use rented classrooms and the practice of double-shifting -- are similar to the following.)

TABLE I-4

ESTIMATED NEW CLASSROOM REQUIREMENTS
CAUSED BY INCREASES IN STUDENT POPULATION
BY EDUCATIONAL LEVEL
SECOND FIVE-YEAR PLAN PERIOD
(1980-1985)

Educational Level	School Years					Totals	Percent-ages
	80/81	81/82	82/83	83/84	84/85		
Elementary	559	579	602	628	656	3,034	45.5%
Preparatory	410	418	432	447	446	2,171	32.6%
Secondary	280	287	290	300	311	1,463	21.9%
Totals	1,259	1,279	1,324	1,375	1,431	6,668	100%
	=====	=====	=====	=====	=====	=====	=====

Source: MOE Planning Department

While education is highly valued and esteemed in Jordan and while the GOJ recognizes the absolute importance to the country's future development of providing all Jordanians with at least a good basic education, it is still true that the education section in general and MOE in particular face stiff competition for resources from other high-priority development projects -- such as

major water sector infrastructure -- and by the perceived need to maintain a high degree of defense preparedness. Thus, although over the past five years the MOE has been allotted -- on the average -- large budget increases on a year-by-year basis, the MOE budget has virtually remained the same as a percentage of the total GOJ budget, about 7.5% on the average (see Table I-5).

There are two important points to make concerning the MOE budgetary figures presented in Table I-5. First, the GOJ budget has both operating and capital expenditures for education in the budgets of a number of other ministries. Thus, as one example, the Ministry of Defence runs a series of schools for military personnel which parallel to those of the MOE. As another, funds for constructing schools are available from various other ministries, such as the Ministry of Municipal and Rural Affairs. Thus, the 7.5% average of the GOJ budget which the MOE budget itself represents understates the amount of its total budget which the GOJ is expending on schools. Because of the accounting system in use in Jordan today, it is extremely difficult for USAID to ferret out the true total amount being expended from the GOJ budget for education, but it is judged unlikely that it reaches 9%. Also, UNRWA runs an extensive school system for refugees in Jordan and there are a fairly large number of private schools active at all grade levels. To give some idea of the magnitude of the educational effort in Jordan outside the MOE system, the figures for students in pre-higher education for 1977/78 show that 70% studied in MOE facilities, 20% in UNRWA facilities, 9% in private schools and the remaining 1% in facilities run by other GOJ ministries (largely the Ministry of Defence).

The second point is that while Table I-6 shows a constant increase in real terms of the MOE's budget of about 10% per annum over the last four years, it must be borne in mind that during the same period the MOE also has been experiencing a constant increase in students of between 7% and 8% per year. Thus, the "real" budget increases have been virtually matched by the increases in student population, yielding a very marginal increase in real terms per student over the period. However, given the rapid rate of increase in the number of students over the period, the fact that per capita student expenditures have remained abreast of the increasing student population in the face of the other extremely pressing demands on the GOJ's resources can be seen as impressive testimony to the degree of commitment to education in Jordan. This is reflected in the fact that in general the MOE has not been experiencing any problems with operating -- as opposed to capital -- expenditures during the recent past. Indeed, during the two most recent budget years, the GOJ has had an absolute hiring freeze except for teachers (and one other category of skilled personnel-paramedicals).

TABLE I-5

MOE BUDGET
(1976-1980)

<u>Year</u>	<u>MOE Budget</u>	<u>Percent Increase</u> ^{1/}	<u>Percent of GOJ Budget</u>
76	19,493,000	23.3%	7.4%
77	24,622,000	26.3%	7.4%
78	28,540,000	15.9%	7.7%
79	36,040,000	26.2%	7.0%
80	40,619,000 ^{2/}	12.7%	7.7%

1/ Percent increase over budget amount for previous year

2/ Indicative only.

TABLE I-6

MOE BUDGET ADJUSTED FOR INFLATION
(1976-1980)

<u>Year</u>	<u>Inflation Rate</u> ^{1/}	<u>Price Index</u> ^{2/}	<u>MOE Budget Adjusted For Inflation</u>	<u>Percent Increase (Real Terms)</u>
76	11.5%	111.5	17,482,500	10.5%
77	14.3%	127.4	19,326,500	10.5%
78	7.0%	136.4	20,923,700	8.3%
79	14.2%	155.7	23,147,100	10.6%
80	15.0%	179.1	22,697,500	(-1.9%) *

1/ 1976-79: Official GOJ Rates; 1980: USAID Estimate

2/ 1975 = 100

Source: GOJ Budget Yearbooks and MOE "Statistical Education Yearbooks".

* Because the 1980 budget is at this time indicative only, this figure has no real significance.

Thus, while the MOE has been able to devote modestly increasing amounts of resources to new classroom construction in real terms, the number of classrooms it has been able to construct with resources from its own budget have remained disappointingly small, largely because of constant need for increases in operating funds. As noted above, it is true that the MOE budget is not the only source within the GOJ budget for funds for MOE classroom construction -- funds are currently available for this purpose from two other ministries. Nonetheless, during the four-year period 1975-79, only about 36% of all newly constructed MOE classrooms were financed from GOJ budgetary funds per se. Of the remaining MOE classrooms built during this period, about 55% (36% of the total) were built with concessionary donor funds. The remaining 45% (28% of the total) were built with a eurocurrency loan syndicated for the MOE by a local bank. (This loan was obtained for the MOE at full market interest rates and is an expensive indicator of the MOE's need for funds to build new classrooms. Despite the high costs of borrowing money under the terms of this loan, the current new rental market is so expensive that such loan financing is a less expensive alternative than renting new rooms.) Another piece of evidence of the inability of the GOJ budget alone to finance needed new classrooms comes from a comparison of the new classrooms planned for completion in 1980 -- all financed from the GOJ budget -- with the MOE's estimates of new classrooms needed during the 1980/81 school year (see Tables I-2 and I-3). As can be seen, the number of new classrooms which the GOJ will be completing in 1980 is only 60% of the number anticipated to be needed in 1980/81.

Given the pressures at work currently within Jordan, the basic situation as outlined above is unlikely to change through the next plan period. That is, the MOE will continue to face a large unmet demand for increased numbers of classrooms, but will continue to be unable to budget enough of its own resources or to garner enough funds from all the possible other GOJ sources to meet more than half of the requirements. In this set of circumstances, both the GOJ and the MOE have put classroom construction very high on the list of possible activities for outside donors.

Because the need for classrooms is so great in Jordan at the present time, AID will have a high degree of assurance that its resources will be very usefully employed and that they will make a definite contribution to Jordan's goal of ensuring that all Jordanians attend the first nine years of formal education and receive a quality education while doing so.

C. Previous AID School Construction Project

The proposed Project will be a follow-on to the School Construction I Project ("SCI" - Project No. 278-0190) which was authorized during FY 1975 as AID Loan No. 278-K-016. The previous Project provided for construction of 371 elementary, preparatory and secondary classrooms in 18 school buildings located in 11 separate cities, towns and villages in Jordan.

As of March 30, 1980 the SCI Project was almost completed with 14 of the 18 schools completed and in operation, 2 more being furnished to be in operation by April 30, 1980 and one of the two uncompleted schools scheduled to be in operation by the end of June and the other by the end of August 1980. The SCI Project has been the subject of two Mission evaluations, the first conducted in April 1978 and the second in October 1979 (see Annex D). The basic finding of the first evaluation was that Project implementation was behind schedule because of construction supervision deficiencies which were corrected when an outside consulting firm was contracted to perform this function in lieu of the Ministry of Public Works (MPW). The basic conclusion of the second evaluation as determined by observation of the nine Project schools then operating was that the SCI Project's goal and purpose were both being met through the provision of much needed and high quality classrooms to replace or supplement rented facilities. Evidence of the need for the Project's classrooms was provided by the fact that virtually all of the Project's nine operating schools had been fully utilized within a short time of their completion. Indeed, even though it is one of the main aims of the MOE in constructing new classrooms to eliminate double-shift instruction, double-shifting was being conducted already in three of the nine new Project schools simply because there was no other possible way to meet the need for teaching space in those particular areas. Other highlights of the second evaluation are as follows:

-- There is a definite, if not discretely measurable, correlation between the improved environment provided by Project schools and more effective education as reflected in better overall morale, greater interest in learning on the part of students and greater dedication to teaching on the part of teachers.

-- The MOE has met all of its obligations with regard to Project inputs fully and in a timely manner. It has provided all required funds when and as needed to construct, furnish and equip Project

schools and, once construction has been completed, the Ministry has moved expeditiously to staff Project schools and put them into operation in accordance with the "implementation plan" submitted for each school prior to final AID reimbursement.

-- Project schools have fostered improved community spirit and cooperation; more than half of the operating schools are being utilized by community groups after school hours, largely for adult education.

-- Project schools serve poorer, more congested areas in virtually every case. Females share fully in Project benefits -- half of Project schools have been allocated to girls. Project schools are overwhelmingly in urban areas, coinciding with the faster growth of those areas because of rural-urban migration.

-- The faster growth of demand for secondary school education and the difficulty of acquiring school sites in built-up areas close to the homes of younger children made it virtually impossible to restrict the utilization of Project schools to classes in the "compulsory cycle," despite the fact that all Project schools were intended to be only for the two lower levels of education. At the time of the evaluation, 60% of the students in the nine operating Project schools were studying at the secondary level. (It should be noted, however, that use of Project schools for secondary instruction freed other facilities for elementary and preparatory level use -- see Annex D.)

-- Construction of Project schools has been good in general. The schools are, however, somewhat overdesigned with regard to structural members, and they lack several easily incorporated, minor features and amenities which would have made them even more effective at very little additional cost (see Section III.A below).

D. Other Outside Assistance

Since 1970, the MOE has continued to seek opportunities to work with outside donors to ameliorate deficiencies in the Jordanian education system. These efforts have been based on the findings of the MOE - UNESCO/IDA appraisal which identified the following two previously noted deficiencies:

i) Unabated expansion of primary and secondary school enrollments not matched by a corresponding increase in physical facilities and qualified teaching staff; and,

ii) A persisting imbalance between general secondary education and much needed vocational education.

Assistance has come from many quarters including the World Bank, AID, UNESCO, UNDP and others. The major outside donor has been the World Bank which has concentrated the efforts of its education projects with the MOE on addressing the above noted deficiencies.

1. World Bank Assistance

Following is a brief review of the IBRD/IDA efforts to assist the MOE since 1970:

a. The first IDA-assisted education project (Credit 285-JO approved in 1972 for U.S. \$4 million) was designed to improve the quality of education and to address deficiencies in the supply of skilled manpower. Particular emphasis was given to vocational training for women to improve their employment potential. This project introduced diversified secondary education, post-secondary technician training, new forms of trade training, and agricultural and technical teacher training. Specifically, the project assisted in providing two comprehensive secondary schools, a polytechnic and trade training center, a co-educational teacher training institute and provision for training of agricultural teachers; also, technical assistance was provided for institutional support, curricula development and teacher training.

A Project Performance Audit Report for the first IBRD (IDA) education project in Jordan concluded that the project was justified and worthwhile. The report stated that the project has been catalytic in that it stimulated educational planning, the concept of diversification of secondary education, and the better integration of technical/vocational programs with the needs of the labor market. It has helped to develop project implementation capabilities and procedures.

b. The second IDA project (approved in 1975 for U.S. \$6.0 million) is assisting in providing a polytechnic, three comprehensive secondary schools, extensions (workshops and laboratories) to 16 preparatory and secondary schools, a trade training complex, a hotel training school, and a rural development center, each element including appropriate technical assistance.

c. The latest project, an IBRD loan of U.S. \$19.0 million, was approved in December 1979. This project will continue the emphasis of the first two IDA education project on increasing the supply of better trained skilled workers, technicians, and teachers for particular specializations. This project will assist the GOJ in implementing programs fully consistent with its educational

development strategy to (a) expand vocational/technical training to meet the continuing shortage of skilled manpower in the commercial, industrial and construction sectors, and to improve the quality of agricultural secondary education; (b) assist in meeting the needs for technicians and teachers through the development of a new type of post-secondary training institution (the community college concept); (c) improve the relevance and quality of basic and secondary education through the training of prevocational subject teachers and the expansion of the comprehensive secondary school system; (d) initiate continuing education using the facilities of the project institutions; and (e) improve school building maintenance capabilities of the District Education Offices by providing mobile maintenance units (see Section III.A.5 below). The GOJ plans to contribute almost \$20 million to the project.

d. Planning is underway between the IBRD and the GOJ for a fourth education project which will continue the thrust of the previous project and assist in expanding opportunities in nonformal adult education and training.

2. AID and Other Donors

Major AID assistance has been extended for school construction. In addition to the previous discussed AID School Construction I Project, which provided \$7.0 million between 1977 and 1980 to assist the MOE in constructing 371 new classrooms, part of the financing of each of three AID loans for Village Development in the Jordan Valley is being and has been used for school construction. The implementing agency, the Jordan Valley Authority, has used these AID loan funds to construct 25 new schools and put additions on 7 others. All school facilities were turned over to the MOE after completion (see Table I-2). AID also has extended assistance to the Vocational Training Corporation for the construction and equipping of a Vocational Training Center in Amman and associated technical assistance in the form of a \$2.125 million grant signed on September 29, 1979. Finally, AID participant training funds have supported over 100 training programs in the field of education since 1970. *

Assistance from other donors received in the past ten years by the MOE has been extremely limited, having consisted mostly of small amounts of technical assistance -- largely of an analytical and planning nature -- from UNESCO and various small donations, often of equipment for vocational training, from a number of bilateral donors.

* In the 1950's and 1960's, A.I.D. was a major donor to all aspects of education in Jordan.

II. PROJECT DESCRIPTION

A. Project Goal and Purpose (Logical Framework)

The GOJ goal which the project will assist is to "to effect universal compulsory cycle education in Jordan." The Project purpose is to "help satisfy demand for school classroom space with modern, efficient teaching facilities." The Project logical framework, showing the Project goal and purpose in relationship to inputs, verifiable indicators and important assumptions is found in Annex E.

B. Number, Location and Use of Schools

The Project will provide all inputs necessary, including land, construction services, construction supervision, equipment and furniture and a staffing plan to construct and prepare completely for use 14 schools in 9 different cities, towns and villages of Jordan (see Table II-1). As is standard practice in Jordan, the schools will be slated to be used either for boys or for girls - because of cultural considerations, co-educational instruction is practiced only when absolutely required by space shortages. All schools to be built under the Project are planned for use by students in the compulsory cycle of education. However, as noted in the most recent evaluation for the SCI Project, while all of the schools constructed under that project were to be for compulsory level education, about 60% of the students were at the secondary level (see section I.D.2 above). Despite this experience with the SCI Project, the MOE has expressed a high degree of confidence that all schools selected for construction under the proposed Project will be used exclusively for compulsory education for at least the foreseeable future. After examination of all the proposed sites by Mission personnel, USAID agrees with this MOE assessment. However, in the light of experience with the SCI Project, USAID must point out that it is impossible to predict fully the educational needs of any area. Thus, it is possible that various exigencies might cause one or more of the project schools to be used in one degree or another for secondary education, even within the next five years. (It can be noted

TABLE II - 1
SCHOOL CONSTRUCTION II
LIST OF PROJECT SCHOOLS*

<u>Location</u>	<u>Town/Area Name</u>	<u>Character ^{1/}</u>	<u>Sex of Students</u>
A. Amman	1. Jabal Al-Taj	U	B
	2. South Marka	U	G
	3. Jabal Al-Nasr	U-R	G
	4. Ras el-Ain	U	G
B. Zarka	5. Dharat Awajan	U	B
	6. Ma'sum	U-R	B
C. Irbid	7. East Side	U-R	G
	8. al-Muajeh	U	B
D. Ramtha	9. Western Area	U-R	G
E. Kufor Khal	10. Kufor Khal + Kafkafa + Balila	R	G
F. Ajlun	11. Ain Jeneh	R	B
G. Salt	12. Housing Area	U-R	B
H. Madaba	13. Central	U	B
I. Karak	14. al-Marj	<u>U-R</u>	<u>G</u>
		U = 6	G = 7
		U-R = 6	B = 7
		R = 2	

* See Figure 1

^{1/} U = Urban; U-R = Urban/Rural; R = Rural (See Section III.E for definition of "Urban/Rural".)

that in virtually every case encountered in the evaluation of the SCI Project where schools intended for compulsory level education were actually used for secondary students, accommodation of the secondary students in Project schools resulted in the release of space elsewhere for compulsory level students. Thus, the net effect was to make increased space available for compulsory education, although the "new" compulsory level facilities were inferior to those constructed under the Project). All 14 project schools will offer grades 1 through 9 of the compulsory cycle.

Locations have already been chosen for all 14 Project schools. These locations place the schools along the length of the "escarpment" or highlands separating the Great Rift Valley, including from North to South the Jordan Valley, the Dead Sea and the Wadi Araba, from the Great Syrian Desert to the east. The escarpment highlands are home to more than 70% of all Jordanians. (A map showing all 14 locations is found in Figure 1.) As described in the following project analysis section, the MOE and USAID/Jordan used discrete criteria in selecting all 14 sites to ensure that schools constructed under the Project would meet the objectives of both organizations. As a result of this selection process, 6 of the 14 schools will be in urban areas, 6 in "urban-rural" areas and the remaining 2 in rural areas; half (7) of the Project schools will be for boys and the other half for girls. Section III.E under Project Analysis below provides a full description of the selection process and criteria used and detailed information on each site chosen for a Project school, including a discussion of how it fits the selection criteria of both the MOE and AID.

C. Description of Schools

All the schools to be constructed under the project follow a standard pattern. A full description of this design is provided in Section III.A below under Technical Analysis.

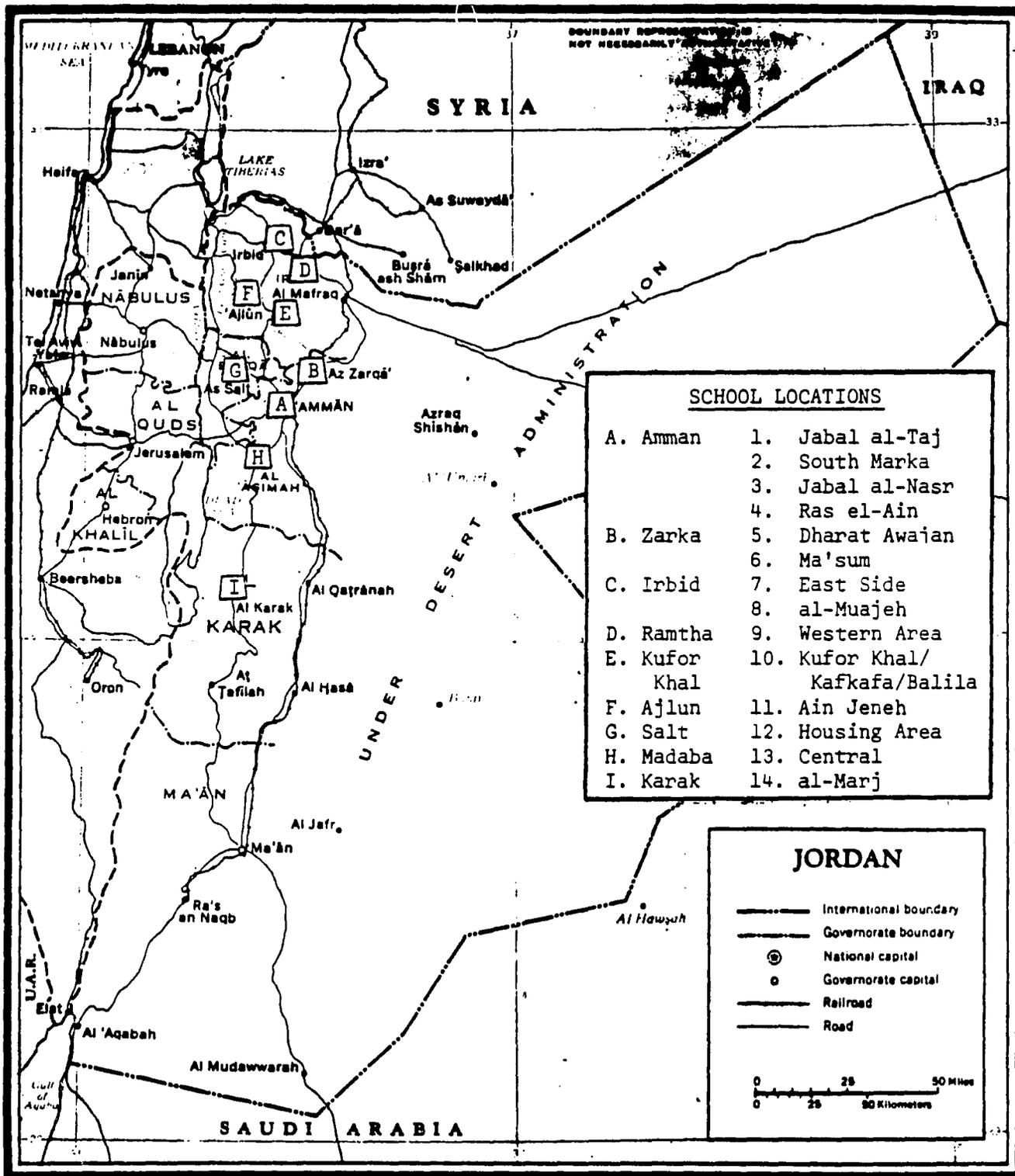
D. Project Finances

1. Cost Estimates

Each of the Project's 14 schools is estimated to cost about JD 200,000 (\$ 680,272 at \$1 = JD 0.294). Land at all but one of the proposed 14 project school sites is already owned by the GOJ and therefore land costs are considered

FIGURE 1

MAP OF SCHOOL LOCATIONS



sunk and not included in Project budgeting. (The MOE has assured USAID that the land at the 14th site will be acquired by the GOJ well before school construction is slated to begin. Assurances that sufficient land is owned by the GOJ and is available for construction is a condition precedent for each of the 14 Project schools -- see Section IV.E.1 below.) Construction supervision is estimated at 6% of construction cost. Furnishings and equipment are estimated at 15% of construction cost. Finally, an overall contingency of 15% is being included in the pro forma budget presented below, although both MOE and USAID engineers are convinced that given the current relative slackening in the Jordanian construction market, the contingency will not be required. (The GOJ and the MOE understand fully that per standard A.I.D. terms, A.I.D.'s obligation will be limited to the amount of the Grant and that they will be responsible for all other financing required to complete the Project.)

The overall Project budget is as shown in the following table. (Although the table below provides Project costs in equivalent U.S. Dollars, it should be noted that all actual Project costs will be in Jordanian Dinars.)

TABLE II - 2
ESTIMATED PROJECT COSTS

<u>Expenditure Item</u>	<u>Amount (U.S. \$ Equiv.) ^{1/}</u>
A. Construction of 14 Schools	9,520,000
B. Construction Supervision (6% of A)	571,200
C. Furnishings and Equipment (15% of A)	<u>1,428,000</u>
Subtotal (Basic Project Cost)	11,519,200
Contingency (15%)	<u>1,727,880</u>
TOTALS	13,247,080

^{1/} \$ 1 = JD 0.294

2. Financing Plan

Following is the financing plan for the basic project cost, as detailed above.

TABLE II - 3

PROJECT FINANCING PLAN

<u>Source</u>	<u>Amount (U.S. \$ Equiv.) ^{1/}</u>	<u>Percentage</u>
AID Grant	6,700,000	58.2%
MOE Budget	<u>4,819,200</u>	<u>41.8%</u>
TOTAL	11,519,200	100.0%
Contingency(15%)	<u>1,727,880</u>	
Estimated Maximum Cost	13,247,080	

^{1/} \$ 1 = JD 0.294

Because the FAR payment experience under the previous AID SCI Project was completely satisfactory from the Agency's viewpoint, it is planned that FAR payments under the proposed Project will be disbursed in the same manner, with one exception. The exception is that FAR payments under the proposed Project will be in U.S. Dollars instead of Jordanian Dinars, as they were under the previous project. For a full description of the FAR payment procedures, including explanation of why payments for the proposed Project are to be made in dollars instead of dinars, see Section IV.B.1 below. See Section IV.B.2 below for the estimated disbursement schedule.

III. PROJECT ANALYSIS

A. Technical Analysis

1. Standard Design

The Ministry of Education presently utilizes a standard school building design which has been in use for 5 years; all buildings constructed under the School Construction II (SCI) Project were of this design. During the construction of SCI school buildings it became apparent that some revisions in the design, mostly to eliminate overdesign, could be made to facilitate construction and possibly to economize in construction costs. Additionally, the USAID/GOJ evaluation of the SCI project produced a list of recommended minor changes which will make the schools more responsive to the needs of the students and teachers utilizing them. Such possible changes are (1) a covered walkway from the school to the separate lavatory facilities, (2) a few moveable partitions between rooms to provide space for large meetings, (3) storage space for books, materials and recreation equipment and (4) potable water facilities for students in the main school building, as well as in the student lavatory. The Ministry of Public Works has employed a consulting engineer (funded by AID under Technical Services and Feasibility Study, Grant Project 278-0131) to review the standard design and recommend changes which would facilitate internal movement, better utilize the available space or reduce construction costs. The Mission/GOJ evaluation recommendations will be considered by the consulting engineer during his review. The overall dimensions of the school building will not be altered and any modifications to layout are expected to be minor. It is anticipated that any construction cost reductions effected by such redesign will only partially offset the effect of inflation on SCI costs. USAID Engineers have worked with the existing standard plans, which have proved to be workable documents, and are convinced that the review by the consultant will result in improving them for this project and for other buildings to be built by MPW.

2. Building Layout

The standard school layout design adheres to most standards for educational institutions, meets acceptable requirements for student/space ratios and is acceptable to USAID. The main buildings are three-story structures with a total of about 3000 square metres of floor space comprising 30 classrooms, a library, laboratory, storage areas, toilet facilities for staff members, a meeting hall and office space for faculty and administration. A separate toilet structure of 150 square metres floor space with appropriate utility connections will be constructed for students adjacent to each main school building.

Copies of the existing standard school construction plans, specifications and contract documents have been reviewed by AID engineers, found acceptable and filed for reference. (There will be a condition precedent requiring the GOJ to provide USAID inter alia with final plans for each school prior to any reimbursement for that school. - see Section IV.E.1 below.)

3. Building Structural Design

All proposed school buildings will conform to the standard structural design as revised by the consultant and reviewed for approval by GOJ/USAID. After examining all proposed sites, USAID engineers believe that only minor - if any - variations in foundation design may be required to accommodate specific soil and site conditions. (The central laboratory of the MPW will investigate the soils and site conditions of each school during foundation excavation and will refer problem cases, if any, to the design section of the MPW to provide the required design changes.)

The exteriors of the main building consist of reinforced concrete column framing with concrete block walls, except that the four corner classrooms have a stone facing. The interior partition walls are of concrete block. The floors are concrete slab covered with terazo tiles. The exterior walls are painted with latex water repellent paint and the interior walls with emulsion paint. Fluorescent lighting will be provided in the classrooms and offices. Plans also include sufficient built-in laboratory tables, storage bins, shelves, black-boards and cupboards. The toilet block will be constructed of concrete blocks with pertinent facilities and connections.

4. Utilities

All schools will be connected to municipal utilities where available including water, sewerage and electricity. Water storage tanks will be installed for all schools. In locations where municipal piped water supply is not available arrangements will be made to provide regular water delivery by tankers. Where municipal sewerage facilities are not available for connection the construction contract will include septic tanks.

5. Maintenance Capacity

School maintenance is funded in several ways: (i) the MOE annual budget has items for maintenance of both school buildings and school grounds. These amounts, which tend to be relatively modest (in 1979 they were JD 190,000 -- \$646,000 equivalent - for school buildings and JD 25,000 -- \$85,000 equivalent -- for

grounds -- see the tables in Annex B) are allocated to each District Director for major maintenance/repair activities (including, theoretically, painting each school on an annual basis).

(ii) All students are supposed to make an annual contribution to the "school fund", which can be used for various purposes including, when needed, maintenance. The amounts to be contributed are JD 1.750 for secondary students, JD 1.500 for preparatory students and JD 1.250 for elementary students*. These contributions are not collected from students judged or claiming to be too poor to afford them. Assuming that they were paid by 80% of the secondary and preparatory students and 75% of the elementary students in 1978/79, they collectively would have yielded an amount of JD 685,800 for that year (which is over 3.5 times the MOE budget item for school maintenance for 1979 -- see above).

(iii) The superintendent of each school is further authorized to use other operating funds (petty cash funds) for maintenance if necessary.

(iv) The MOE salary item includes funds for a janitor (and a guard) for each school.

In the event that any maintenance required is judged to be more than of a routine nature, and thus beyond the capacities of the local school administration, it is referred to the District Director for action. Each District Director has authority to sign contracts for work estimated at JD 5,000 (\$17,000) or less. Any work estimated to cost more than JD 5,000 is referred to the MOE in Amman for transmittal to MPW to contract for the required maintenance or repair.

While the maintenance system as described above has generally worked satisfactorily, it has been plagued by one major difficulty: many of the small schools, who have no maintenance staff of their own, have found skilled craftsmen to do needed repair work unavailable in their communities. To solve this problem the Third World Bank Education Project has provision for procuring eight mobile building maintenance units to be stationed at the various District Education Offices in the country. These units will be staffed with experienced full-time maintenance crews, each comprising a carpenter, a plumber and an electrician (along with a driver). Tenders for these units were issued in March 1980 and it is anticipated that they will be in service by mid-1981 at the latest.

* \$ 5.95, \$ 5.10 and \$ 4.25 respectively.

The recent evaluation of the SCI Project (carried out in October 1979), found operating schools built under that project to be in good condition and maintenance arrangements to be adequate. It is recommended that the Project Agreement for the proposed Project, like that for the SCI project, have a special covenant requiring the GOJ to insure that adequate funds are provided for operating and maintenance of Project schools (see Section IV.E.2 below).

6. Construction

a. General

Contracting and construction methods to be utilized for the proposed project will be the same as those used for the SCI Project. The experience gained under that project indicates that although there are some variations in contractors' performances, there is in general more than sufficient capability among Jordanian contractors to assure completion of the proposed 14 school buildings in both a timely manner and in accordance with contract plans and specifications. One problem encountered in the SCI project was a series of delays caused by overcommitment of resources by contractors in the environment of an extremely tight construction market in Jordan at the time. All signs now point to a much less constrained construction market during the proposed period of implementation of this Project. It is therefore anticipated that unless some unforeseeable change in this situation occurs the proposed Project schools will be completed on the implementation schedule laid out in Section IV.A below.

b. Construction Contractors

For the past 29 years, the MPW has maintained an annually updated list of contractors prequalified in relation to their financial and technical capability. At present, 32 contractors are prequalified as Class I (work up to 1,000,000 JD); 26, Class II (work up to 500,000 JD); 53, Class III (Work up to 100,000 JD) and 42, Class IV (work up to 50,000 JD). (For this project only contractors qualified as Class I and II will be eligible to submit bids.) As indicated above, although there is a considerable amount of construction work presently underway in Jordan, sufficient reserve contractor capacity exists to assure fair competitive prices.

c. Construction Materials

The majority of materials used in construction are readily available in Jordan and are of Jordanian origin; however, small amounts (estimated not to exceed 5% of total cost) of imported building specialities such as wood trim, glass, blackboards, electrical items, and built-in laboratory equipment are available on the local market and will be acquired as "off-the-shelf" items (see Section IV.E.4 below).

d. Construction Labor

Although the supply of skilled Jordanian construction workers is tight, sufficient numbers of various classes of skilled and unskilled labor (Jordanian and foreign) are available on the local labor market to perform the construction work. The skilled craftsmen have been trained as a result of other building projects undertaken in the country in recent years. No difficulties were experienced in finding labor for the SCI Project and the Mission anticipates no problems in finding sufficient construction labor for this Project.

7. Construction Supervision

The MPW has overall responsibility for design and construction of all government buildings (except military) in Jordan. However, actual supervision of construction for this Project will be done by a consulting engineer contracted by MPW. USAID experience with Jordanian consulting/supervising engineering firms under the SCI and other previous projects has demonstrated fully that such Jordanian engineering firms are fully capable of providing required construction supervision on the proposed project.

B. Administrative Feasibility

The Ministry of Education is considered by outside observers to be one of the best managed and most capable GOJ ministries in terms of organization, qualified professional staffing, financing support, performance and potential. It is clear that significant progress has been achieved by the MOE in the development of the national system of education and there is positive evidence, in the form of examples of externally-financed projects, that its ability to design and implement projects while adhering to rigorous donor standards is substantial. This PP proposes a project which readily fits into the overall GOJ development strategy for education. Experience under the SCI project has demonstrated that the Ministry of Public Works is fully capable of performing the role it will be assigned under this project. Its personnel, at least down to the rank of section head, are all highly trained, experienced and technically qualified to perform their jobs. The best proof of administrative feasibility in general is the experience under the SCI project which worked extremely well administratively after an initial change in administrative procedures.

C. Financial Analysis

A true "financial analysis" in the sense of testing the financial viability of the Project is not possible for the proposed Project. The only significant source of financing is the GOJ budget (i.e., outside of the A.I.D. Grant for construction and small amounts collected as

non-compulsory fees from students for operations) and, therefore, the only test of "financial viability" is a judgment of the GOJ's willingness to finance their portion of construction costs and to provide sufficient financing for operation, including full staffing and all necessary maintenance, after construction is completed. As a general observation, it can be noted that the experience with the SCI Project is encouraging with regard to both of these types of expenditures. The GOJ (MOE) provided all financing necessary for construction, equipping and staffing the SCI Project schools on a timely basis and are now providing sufficient operating funds to those which have been placed in actual use.

1. Capital (Construction and Outfitting) Costs. The construction cost estimate is considered reasonable and realistic. Quantity estimates were based on actual take-offs required for the standard plans in constructing the SCI project schools. The cost estimate was prepared by the Ministry of Public Works (MPW) in January 1980 and is based on competitive bid prices received by MPW in late 1979 with appropriate adjustments made to account for inflation to and during the period of construction. These estimates were reviewed and accepted as reasonable by Mission engineers. The estimated cost for each school, JD 200,000 (or about \$680,000) is about \$ 225 per square metre.

The proposed FAR payment procedures provide strong incentives to the MOE to complete construction of all Project schools simply because the GOJ cannot receive all FAR payments until all construction is completed to A.I.D.'s satisfaction. As indicated above, the previous record with regard to GOJ/MOE financing of construction is excellent and given the strong desire within the MOE to acquire its own schools, which is buttressed by the incentives created by the high cost of new rentals, the Mission judges it highly unlikely that the GOJ or the MOE would fail to take any actions necessary to ensure that all financial resources are available which are required to complete construction of the 14 Project schools.

2. Operating Costs. The Mission also believes that it is highly unlikely that the GOJ or the MOE would fail to abide the proposed covenant requiring the provision of sufficient "budgetary support for teacher salaries, other operating costs and school maintenance for all Project schools." The basis for this judgment is essentially the high priority within Jordan for education combined with recognition within the Government of the importance of basic education to the success of the country's development plans. These factors have generated a political constituency for education which has ensured to date that the MOE's budget in real terms has stayed

abreast of relatively rapid growth in the student population -- even to increase slightly, in actuality (see Section I.B above). Barring some unforeseen and radical change in circumstances, the Mission believes that education will continue to command sufficient priority to insure that per capita student expenditures do not decline. In addition, because of the strength of these forces it can be noted that in the absence of the proposed Project virtually all of the students to be instructed in Project schools would be accommodated through other means, probably mostly by increased double-shifting, but also through the acquisition of additional rental space. If the MOE were forced to make these other arrangements for instruction, they would require the same number of teachers -- or more -- to instruct the equivalent number of students to be accommodated in Project schools. In addition, rental and maintenance costs would be significantly higher. Thus, the overall conclusion is that the completion of the Project's schools will have little or no incremental effect in increasing expenditures for teacher's salaries (by far the single largest MOE budget item) or other important operating cost categories, i.e., in causing operating cost increases beyond those which would be encountered anyway in the absence of the Project. Indeed, it is expected that to some extent the better design of the classrooms constructed under this Project will allow a more efficient use of teaching staff, thus lowering operating costs overall. Finally, as noted before, the MOE has not been having any particular problems with operating cost budgets in the recent past. In summation, after considering all these factors, the Mission believes that sufficient operating budget will not be a problem for Project schools.

D. Economic Analysis

The proposed Project does not lend itself to normal cost/benefit types of economic analysis. For the previous school construction project, the SCI Project, a least-cost analysis was performed by comparing the project costs amortized over a 25-year period against the costs of renting sufficient facilities to serve the same number of students over the period. However, the rationale for the proposed Project is based on providing school facilities for new entrants to the school population for which a least-cost analysis would not suffice. For these new enrollees the economic benefit of compulsory education would be impossible to quantify. Certainly, there should be some assumed increase in future income for those students completing their compulsory education over those students who do not and an even greater increase for those who subsequently go on to secondary and post-secondary training. About 81% of students successfully completing the compulsory level go on to secondary education and the remainder are eligible for vocational training, which together open up opportunities for the significantly higher wages available in Jordan or in the Gulf States for skilled and semi-skilled workers.

E. Social Analysis

1. Site Selection Criteria

a. Jordanian Ministry of Education Criteria

In selecting schools for funding under this project, the Mission collaborated with the Jordanian Ministry of Education's Office of School Buildings. In discussions between D. Sharry, A. Ahmad, and F. Salahy of the Mission staff and Mr. Ahmad Isis, Director of School Buildings, sites were chosen which would meet MOE and AID criteria for prioritizing school construction.

First, the following MOE Office of School Buildings criteria were applied in the selection of 21 suggested sites:

1. to accommodate growth of school-age population.
2. to replace government-owned buildings in poor condition. (Condition of school is graded and this information is available in MOE/Director of School Building files)
3. to replace rented buildings in poor condition.
4. to replace buildings with inadequate educational facilities
5. to construct new buildings which meet required standards in terms of facilities.

Ability to meet priority needs is subject to meeting MOE/NPC location criteria and MOE Planning Office feasibility criteria, some of which correlate.

Location Criteria (MOE/NPC)

Feasibility criteria (MOE/ Planning Office)

- | | |
|---|--|
| - National Budget Limitations | |
| - Manpower Development Requirements | |
| - Local Constraints to increased enrollment at the Primary Level. | |
| - Extent of Overcrowding in rented and MOE-owned facilities | - Number of Student in Present School/Extent of Overcrowding |
| | - Number of Villages to be served by the school |
| | - Status of School Buildings in the area |
| - Cost of Land when purchased and Estimates of Site Preparation | - Land Availability |

To the task of prioritizing school construction, the GOJ brings three sets of criteria which reflect the emphases of the respective Government agencies which spawned them. It is not surprising that the National Planning Council is most concerned with allocation of RESOURCES from the national budget to the education sector

As might be expected, the Ministry of Education's Planning and Research Office is most concerned with the extent and distribution of DEMAND, i.e. the number and type of students which require accommodation.

Finally, the MOE's Office of School Buildings is primarily concerned with the present condition of, and future need for, physical FACILITIES.

These three government organs exchange information and reach a determination of priorities in school construction which attempts to balance resources, demand, and condition/availability of present facilities.

b. USAID Criteria

The problem of providing educational facilities for the students of Jordan is enormous, as statistics exhibited in Section I.B., above, attest.

The minimum classrooms estimated by the MOE to be required during the period 1980-85 cost not less than \$300 million equivalent in 1978 prices. In the context of this effort, the proposed AID contribution for fiscal 1980 (\$6.7 million) appears modest enough to raise the question: How to fund construction which would represent a socially sound and at the same time identifiable contribution to the solution of the problem?

The substance of this analysis is that the Mission believes it has found a way to do both. Perhaps the clearest way to analyze the proposed project from the point of view of attainment of these two objectives would be:

1. to state the criteria developed by the Mission for the selection of schools to be funded.
2. to present the rationales used in the development of these criteria.
3. to present evidence¹, where necessary, supporting the adoption of these rationales¹.

1. Such evidence will appear as Annex C.

Criterion 1. Distribution of Schools to "urban" and "rural" areas should reflect the relative pressure for compulsory-level classroom space in those areas. "Urban" areas, here defined as the thirteen municipalities recognized by the Department of Statistics¹, have experienced a significant growth rate. In addition to the birth rate (4.5%), there is an important rural-urban migration occurring. Indication of this migration is contained in the following statistics:

- a. Jordan's natural growth rate estimated at 3.8%²
- b. The growth rates of the country's three (3) major cities:
Amman 5.37%
Zarqa 4.49%₃ and
Irbid 5.15%₃
which are significantly higher than Jordan's natural growth rate.

The major problem in rural areas, on the other hand, is not the unavailability of school buildings. It is, rather, the siting of preparatory and secondary schools, which may be inaccessible to many students due to economic or cultural constraints, the cost of transportation and the deeply rooted aversion to sending female students out of their villages daily.

Another impetus to funding construction in urban areas or on their outskirts is the fact that the 30-classroom elementary and preparatory schools which the MOE has requested USAID to fund are appropriate to the rapidly expanding urban concentrations.

It is important to point out, however, that six (6) of the twelve (12) schools sited in areas designated as "urban" will serve surrounding village areas. This is because, while located within municipal districts, they are on the urban fringe and will accommodate students from satellite villages. To emphasize this fact, these sites are labelled neither "urban" (u) nor "rural" (r) in Table III-1, but "urban-rural" (u-r).

-
1. The DOS' Multipurpose Household Survey, 1976 states: urban: cities the population of which exceeds 10,000 persons. i.e. Amman, Zarqa, Madaba, Irbid, Jerash, Ajlun, Mafraq, Ramtha, Deir Abu Said, Salt, Kerak, Ma'an and Aqaba.
 2. Source: Department of Statistics, Preliminary Results of the 1979 Census.
 3. Ibid.

Criterion 2: Schools to be funded should serve low-income areas.

Rationale: Satisfying the humanitarian dimension by providing help to areas of greatest need enhances identifiability of project as a positive step to equity in Jordanian society by providing greater accessibility to basic education for the lower income group in the population. The greatest numbers of "poor" people in Jordan are found in urban areas.

Criterion 3: The principal impact of the proposed schools will be to accommodate increase in the compulsory-level school population.

Rationale: The purpose of this project, as stated in the attached Logical Framework: "to help satisfy unmet demand for educational facilities," is a recognition of the fact that the need for new classrooms and the prevalence of overcrowding and double-shifting of classrooms result from an estimated 4.8% yearly increase in enrollment at the compulsory level.

The growth rate figures found in Table III-1 are an indication that the proposed schools sites are located in areas of rapid increase in the school-age population.

Criterion 4: Separate schools for male and female students should be funded in proportion to the representation of the sexes in the general population. The 1979 National Census shows that the population of the East Bank of the Jordan has the proportion 52% male: 48% female, or roughly equal. Of the schools proposed for funding under this project seven will serve boys and seven, girls.

Rationale: This is in accordance with the objective of the Ministry of Education that there be universal compulsory education and with USAID's concern for provision of equal education opportunities for female students.

Criterion 5: Proposed schools should be at the compulsory level (grades 1-9).

Rationale: The Government of Jordan considers the first nine years of education to be necessary for all citizens. This criterion also accords with AID's emphasis on the provision of basic education.

Criterion 6: Proposed Schools will be fully utilized in the future.

Rationale: Under-utilization due to population shifts represents a waste of scarce resources. Given urban growth patterns and the age structure of Jordan's population - over 50% below age 15 - combined with a population growth rate of 3.8%, school enrollments should remain high and rising for several decades.

Table III-1

3 & 6 Evidence

School Construction (II) Proposed Sites

Name and Location	Sex	Urban/Urban Rural/Rural	Population of Communities			Annual Growth Rate (%) ⁽¹⁾
			1961 Census	1974-75 Agric. Census	1979 Census	
Jabal al-Tadj - Amman	B	U)	246,475 ⁽²⁾		648,587	5.5
South Marka - Amman	G	U))				
Rasel-Ain - Amman	G	U)				
al-Muajeh - Irbid	B	U				
Madabah Center	B	U	11,224		28,509	5.3
Ma'sum - Zarka	B	U/R	96,080	184,586	215,687	4.6
Dharat Awajan - Zarka	B	U	No figures available			
Jabal al-Nasr - South al-Manara - Amman	G	U/R				
East Side - Irbid	G	U/R	44,685		112,864	5.3
Housing Area - Salt	B	U/R	16,176	29,179	32,866	4.0
Western Area - Ramtha	G	U/R	10,791		27,292	5.3 ⁽⁴⁾
Ain Jeneh - Ajlun District	B	R	5,390	4,320	4,557	
al-Maruj - Karak	G	U/R		7,422	11,805	9.7
Kufur Khal)			1,159	1,190	4310 ⁽⁵⁾	3.9
Kafkafa)) Irbid District	G	R	702	1,130		
Balila)			761	1,990		

B = 7, G = 7, U = 6, U-R = 6. R = 2

- (1) Growth rate, 1961-79, where possible; otherwise, 1961-74/5
- (2) Correspondence between 1979 census figures and school districts is not available at the present time. Disaggregation of 1979 census data by census district (nahiya) should be completed by May, 1980.
- (3) Presented here are aggregate figures for municipalities, of which school location figures are not available.
- (4) A comparison of census figures for the locale labeled "Ain Jenneh" for the years 1961 (5390) and 1979 (4557) reveals an apparent decrease, though the MOE presents the area as one of increasing population. The apparent discrepancy is explained by the fact that during the 1961 census the boundaries of "Ain Jenneh" were not formally defined and were therefore arbitrarily assigned by the Census Office. Since that time the village has been incorporated as a Village Council covering a more limited area. Ministry of Education officials estimated that the population living within the boundaries of Ain Jenneh Village Council has doubled in the interim.
- (5) Figures from the November 1979 National Census are not yet available for these areas,

Criterion 7. Separate schools should be provided for boys and girls.

Rationale: A strongly held cultural preference in favor of compulsory education in separate facilities for boys and girls is ultimately related to exigencies of the marriage contract and may be assumed to have continuing importance.

Criterion 8. Proposed schools should be sited to serve a radius of 2 km.

Rationale: School sites should reflect the deeply rooted popular preference for short home-school distance at the compulsory level, especially for girls. All schools are expected to serve a 2-km radius except East Side-Irbid (3 km) and the centralized rural school at Kufur Khal (5 km).

2. Sociocultural Feasibility

Criterion 7 and 8 describe Jordanian concerns which have been accommodated in the Project design.

It is apparent from this listing that MOE criteria and AID criteria are compatible and that, in fact, AID criteria nest within those of the MOE. AID criteria, focussing on specific problems, reflect general stated concerns of the Jordanian Government.

Following MOE's suggestion of 21 sites, USAID selected 14 based on the application of its own criteria.

The third step in the selection process was a series of visits to all proposed sites to verify conformity to AID criteria through inspection and interviews with local MOE personnel.

3. Benefit Incidence

The direct beneficiaries of the proposed Project may be viewed as constituting the following categories:

- a. Regular students in the compulsory curriculum: approximately 14,700 (14 schools x 30 classrooms x 35 students per classroom = 14,700, assuming no double shifts).
- b. Teachers in the compulsory curriculum: approximately 420 (14 schools x 30 classrooms = 420 teachers, assuming no double shifts).
- c. "Dropouts" defined as those leaving school before the age of 16, other than handicapped students, who are transferred to the care of the Ministry of Social Affairs. The highest dropout rate occurs

at the preparatory level¹.

Dropout rate:	Elementary	Preparatory	Secondary
	2.9%	9.6%	6.6%

It is expected that the proposed schools will alleviate the dropout rate in their areas by minimizing transportation costs and providing preparatory education at a socially acceptable home-school distance, especially in the case of female students.

d. Students in: "Strengthening Classes" (Remedial) classes for week students in the regular curriculum.

e. "Deepening" (Advanced) Classes for excellent students.

f. Evening classes, which allow working and/or married people to study for the preparatory and secondary (Tawjihi) certificates.

g. Adult literacy classes, aimed at productive workers in the age group 20-40.

h. Civil Defense classes, providing training in: first aid for victims of natural disasters and civil strife. emergency procedures to cope with such events.

i. Women. Jordanian women have been major beneficiaries of the Government of Jordan's education policies and programs and of assistance provided by AID in the field for 27 years.

1. The two main causes of dropping out during the preparatory years are: for boys 14-16: poverty, which causes boys to enter the Army as a way of being self-supporting and of receiving useful training in auto-mechanics, communications, administration, tailoring, cooking.

: for girls 12-16: 1/marriage, especially in rural areas and among urban dwellers of rural origin 2/ difficulty of transportation to post-elementary schools, especially in rural areas (4 of the proposed Project's 6 "urban-rural" schools have been designated for girls as is 1 of the 2 rural schools).

At the time Jordan gained its independence in 1946, education was a privilege, not a right. That privilege depended primarily on living in the right place at the right time -- and on being male. There were 70 schools, with a total enrollment of 9,900 students and 200 teachers. The great majority of schools were exclusively for boys.

With the addition in 1948 of the West Bank, a more educationally advanced area, some 123,000 students were attending school in Jordan in 1950. The total more than doubled to 284,000 in 1960. Continuing major emphasis was given to education, and by 1970 some 531,000 children were attending schools on the East Bank alone (West Bank schools dropped out of the totals following the 1967 war). In 1978/79 there were 656,000 students in Jordanian schools, well over five times the 1950 number.

In percentage terms, female students are currently making the greatest educational attendance gains and are swiftly approaching equality with male students. In the 1978/79 school year, 45.5 percent of all students in Jordan were female, including 47 percent of students in the elementary cycle, 45 percent in the preparatory cycle, and 41 percent in the secondary cycle. In contrast, figures for 1969/70 show that 43 percent of all elementary students were female, 33 percent of preparatory students, and 27 percent of secondary students.

Today, as in the past, most schools are segregated, not coeducational, because that is the cultural preference in Jordan. Facilities are being made available for girls at an equal or higher rate than for boys. Under this particular project 7 of a proposed 14 schools will be for girls, providing new classrooms and modern facilities for an estimated 7350 female students.

Predictable Population Shifts:

The MOE method for projecting classroom needs for the following year consists of one basic measure: tracing the membership of the relevant class back five (5) years, subtracting drop-outs and placing repeaters on the roles of the succeeding class. This method is useful in projecting from trends in numbers of students in school.

Error in the projection is reported by the MOE Planning and Research Office to be ± 3 per cent.

F. Environmental Consideration

The Initial Environmental Examination (IEE) conducted by the Mission's Environmental Officer concludes that the proposed Project will not have a significant impact on the environment. Essentially, the IEE determined that while the Project will have normal short-term adverse impacts caused by pollution such as that from noise and dust the Project will have no uncontrolled adverse long-term impacts while its long-term positive benefits will be large. Therefore, in a Threshold Decision based on the IEE, a negative determination (i.e., no further environmental consideration) has been recommended and approved by the Mission Director. The latest issuance of the NE Bureau's "Environmental Status Report," dated March 11, 1980, indicates that the proposed Project has been reviewed for environmental considerations and accorded the requisite clearance.

IV. PROJECT IMPLEMENTATION AND EVALUATION

A. Project Implementation Schedule

Major events related to project implementation, the time of their completion and the entity(ies) having primary responsibility for their execution in each case are set out in the following table. MPW is considering constructing the 14 Project schools in up to four tranches of 2 to 5 schools each, grouped according to geographical proximity. Those actions preceded by a "+" below indicate instances where all 14 schools have to be dealt with separately (such as No. 11 -- meeting the CP's to 1st FAR payments) or in such tranches (such as No. 10 -- awarding construction contracts). In these instances, it is assumed either that the actions for the different tranches are completed one month apart or that a given amount of time -- usually 3 months -- is required to complete the action for all 14 Project schools.

B. Disbursement Method and Schedule

1. Method

Disbursement under the AID Grant will be made on the basis of the Fixed Amount Reimbursement (FAR) method, modified to provide for staged payments as described below. Of the estimated \$11.5 million equivalent Project cost (\$13.2 million equivalent with contingencies), the AID contribution will be limited to the \$6,700,000 amount of the Grant. Thus, on a per school basis, AID will reimburse the Government of Jordan fixed U.S. Dollar amount of \$478,571.43, provided that the stage of completion for which each payment is made has been accomplished to AID's satisfaction. To avoid the situation where the GOJ is expending its funds for initial and intermediate construction work while no AID disbursements are made until all construction is completed, AID FAR payments will be disbursed in four stages for each school instead of in a lump sum at the completion of the school's construction. Following is a description of the four FAR payments to be made for each school, including for each payment a description of the tasks which must be accomplished prior to application for reimbursement. The various construction tasks have been assigned weights which are represented by the various percentages of total payment to be made at each stage.

TABLE IV-1

PROJECT IMPLEMENTATION SCHEDULE

<u>Action</u>	<u>Date</u>	<u>Responsi- bility <u>1/</u></u>
1. Project Paper submitted	4/07/80	USAID
2. Grant authorized	4/30/80	AID/W
3. Scope of Work for construction supervision contract approved	5/15/80	MPW/USAID
4. Grant Agreement signed	5/15/80	NPC/USAID
5. Implementation Letter No. 1 issued	5/30/80	USAID
6. Revised building plan and design reviewed and approved	6/15/80	MPW/USAID
+ 7. Construction contracts advertised	6/15/80- 9/15/80	MPW
8. Construction supervision contract awarded	8/15/80	MPW/MOE
9. Initial Conditions Precedent met	8/15/80	NPC/MOE
+10. Construction contracts awarded -- notices to proceed issued	9/15/80- 1/15/81	MPW
+11. Conditions Precedent to 1st FAR payments met and payments requested	10/01/80- 01/01/81	MOE
+12. Construction begins	10/15/80- 01/15/81	MPW
+13. 1st FAR payments approved	10/15/80- 01/15/81	USAID
+14. 2nd FAR payments requested, approved and disbursed	11/15/81- 03/15/82	MOE/USAID
+15. 3rd FAR payments requested, approved and disbursed	07/15/82- 11/15/82	MOE/USAID

<u>Action</u>	<u>Date</u>	<u>Responsibility</u> ^{1/}
+16 Construction of schools completed; all utilities installed and connected and schools furnished and equipped	01/31/83- 04/30/83	MPW/MOE
+17. Implementation plans submitted and final (4th) FAR payments requested (conditions of "timed" covenant met for each school)	01/31/83- 04/30/83	MOE
+18. A.I.D. final inspections conducted and final FAR payments approved and disbursed	01/31/83- 06/30/83	USAID
+19. PACD of Grant	09/30/83	USAID/NPC
+20. In-depth evaluation conducted and reported	01/01/84- 04/15/84	MOE/USAID

+ Indicates actions involving schools separately or in "tranches" (see text).

1/ MPW = Ministry of Public Works
NPC = National Planning Council
MOE = Ministry of Education

a) 1st FAR Payment (Advance). Thirty percent of total (30% -- \$143,571.43). This payment is made before any construction is actually undertaken. The payment will be made for each school only after (i) initial conditions precedent for the Grant have been met (includes submission of an acceptable construction supervision contract -- see Section III.E.1.a below); and, (ii) the conditions precedent for FAR payments have been met with respect to the particular school in question (includes for each school (ii.a) assurances that sufficient land is owned and available for construction and (ii.b) submission of final plans and an executed construction contract and evidence that a notice to proceed with construction of the school has been issued to the contractor -- see Section III.E.1.b below).

b) 2nd FAR Payment (Interim). Thirty-five percent of total (35% -- \$167,500). This payment will be made for each school when all structural framing and floors, and the roof, have been completed and found acceptable by USAID.

c) 3rd FAR Payment (Interim). Twenty percent of total (20% -- \$95,714). This payment will be made for each school when all internal plastering and floor tiling have been completed and found acceptable by USAID.

d) 4th FAR Payment (Final). Fifteen percent of total (15% -- \$71,786). This payment will be made when the school building in question is fully completed in compliance with approved plans and specifications. For the purposes of determining whether payment is warranted, the term "fully completed" will mean that (i) all construction work has been completed satisfactorily; (ii) all specified utilities have been installed and connected (or acceptable alternate arrangements have been made); and (iii) the MOE has submitted an "implementation plan" detailing the arrangements to be made for staffing, furnishing and equipping the school. (Submission of such an implementation plan for each school is necessary in order for the GOJ to satisfy the first special covenant of the Grant Agreement, as proposed in Section IV.E.2 below).

As can be seen, under the proposed FAR payment procedure outlined above, the amount to be disbursed by AID from the Grant will be fixed for each school in U.S. dollars. Under the previous AID School Construction (SCI) project, the amounts of all FAR payments were fixed in Jordanian Dinars, while AID's financial

TABLE IV-2

ESTIMATED DISBURSEMENT SCHEDULE
(\$000's)

SOURCE BY U.S. FISCAL YEAR <u>1/</u>	FISCAL YEAR QUARTERS				TOTALS
	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>	
GOJ Disbursements <u>2/</u>					
1981	385.9	796.0	838.6	838.6	2,859.1
1982	838.6	838.6	838.6	2,134.5	4,650.3
1983	2,004.3	2,005.5	-0-	-0-	<u>4,009.8</u>
					11,519.2
A.I.D. FAR Payments <u>3/</u>					
1981	1,435.7	574.3	-0-	-0-	2,010.0
1982	1,005.0	1,005.0	335.0	957.1	3,302.1
1983	382.9	430.7	574.3	-0-	<u>1,387.9</u>
					6,700.0

CAPITULATION

SOURCES	U.S. FISCAL YEARS <u>1/</u>			TOTAL	Percents
	<u>1981</u>	<u>1982</u>	<u>1983</u>		
GOJ (MOE) Contribution <u>4/</u>	849.1	1,348.2	2,621.9	4,819.2	41.8%
A.I.D. Grant	<u>2,010.0</u>	<u>3,302.1</u>	<u>1,387.9</u>	<u>6,700.0</u>	58.2%
TOTALS:	2,859.1	4,650.3	4,009.8	11,519.2	
(Percents)	(24.8%)	(40.4%)	(34.8%)		100%

1/ From October through September, i.e., FY 1981 runs from 10/01/80 to 09/30/81.

2/ In equivalent U.S. Dollars (\$1=JD 294).

3/ U.S. Dollars

4/ GOJ Disbursements less A.I.D. FAR Payments

obligation was limited to the U.S. dollar value of the AID Loan. The appreciation of the dinar against the dollar since the fixed dinar amount per school was originally established has resulted in a situation where there are insufficient unexpended dollar funds remaining in the AID Loan to allow full payment by AID of the fixed dinar amount for the last school finished under the project. Thus, AID is neither able nor obligated to pay fully a supposedly "fixed" amount of a particular FAR payment, a situation which has led to some misunderstanding.

2. Disbursement Schedule

Based on the assumption that all construction contracts are let by January 15, 1981 at the latest and that 27 months is the longest likely construction period (see implementation schedule above), funds should be disbursed as shown in Table IV-2.

The Table IV-2 figures are, of course, estimates only. Consequently, it is possible that actual disbursements will either lead or lag the above schedule. The Mission attempted to utilize conservative assumptions in preparing the above schedule; given the experience already gained by the GOJ implementing agencies during the SCI project, the Mission believes the most likely actual disbursement schedule will be one leading the above discussed estimates by about one quarter.

C. Project Implementation

1. Ministry of Education

The Ministry of Education has prepared a detailed program of school construction requirements and priorities. With regard to provision of education services and construction of schools, the Ministry has been and is expected to continue to participate fully in planning sessions, development or modification of design specifications, selection of equipment and furnishings, and project evaluation. When school construction is completed the Ministry will, as they have done with the facilities built under the SCI Project, assume responsibility for the staffing, operation and maintenance of the schools. The Grant Agreement will have a covenant to this effect.

2. Ministry of Public Works

The implementing agency for actual school construction will be the Ministry of Public Works (MPW) with prime responsibility resting with the Directorate of Buildings. The MPW is responsible for the design, contracting and construction of the project schools and will coordinate all of these activities closely with the Ministry of Education and National Planning Council. The responsibilities of MPW will include the following:

- a) Following through with the consultant to complete the revision of contract documents.
- b) Preparing a scope of work selecting and signing a contract for construction supervision of all schools.
- c) Issuing IFB's, advertising for bids and analyzing bids for construction awards.
- d) Certifying completion of buildings and requesting grant disbursements under FAR procedures.

3. Construction Supervision

Because the MPW is short of construction supervision staff and because of AID experience with the SCI project, the MPW will enter into a construction supervision contract with a Jordanian engineering firm to supervise construction of all project-financed schools. The engineer will oversee the construction of each school and will be required to certify adherence to approved plans, specifications, contract documents and acceptance prior to any FAR payments. It is estimated that six engineers and 14 inspectors will be required for the supervision of the proposed schools.

4. Construction

Construction of the proposed schools will be accomplished by private contractors. The MPW will follow its standard contracting procedure under which a notice will be published in local newspapers inviting bids from prequalified contractors of the appropriate class. Bids will be evaluated, and contracts awarded, by a committee chaired by the Undersecretary of MPW and with members consisting of representatives from the Ministries of Education, Finance and Industry (a representative from the GOJ Audit Bureau -- Ministry of Finance -- also sits on the committee as an observer).

Standard Jordanian construction contracts, as modified to meet AID requirements, will be used. These are based on the "Conditions of Contract (International) for Works of Civil Engineering Construction", dated July 1969. These standard contract documents have been reviewed by, and are satisfactory to, USAID. After contract execution, the Mission will review individual contracts only to determine conformance to these standard documents.

D. Project Monitoring and Evaluation

1. AID Monitoring

AID monitoring and implementation responsibilities will be carried out by USAID/Jordan Engineering Office. These activities will include:

- a) Approval of revised standard plans, specifications and contract documents.
- b) Review of the contracts for the construction of each school only for conformance to the standard contracts (see above).
- c) Periodic field inspection of the schools under construction to ascertain conformity with pre-agreed standards of design and construction and adherence to the construction schedule.
- d) Preparation of Project progress reports and reports on the status of FAR payments.
- e) Certification of construction progress for FAR payments at various stages of completion.
- f). Certification of completion of schools for final FAR payments.

The Mission engineering and other staff, as now constituted, has both the ability and capacity to accomplish the above tasks.

2. Project Evaluation

The Mission's experience with the previous SCI Project indicates that no interim evaluation of the proposed Project is required. Normal AID monitoring activities should be

sufficient to determine whether actual Project implementation is staying within acceptable bounds of planned implementation and to alert Mission Management to take corrective action if troubles develop.

The only planned Project evaluation is an in-depth evaluation to be conducted jointly by the MOE and USAID in the first quarter of Calendar Year 1984. Per the implementation schedule, this evaluation will occur fully six months after completion of all schools; at the time of the evaluation, all schools should have been in full operation for at least four months. The evaluation will include the following in its scope:

a) Confirmation of completion of physical facilities in accordance with plans and specifications.

b) Establishment for each school data on the area served; details of the students attending the schools, including education levels, grades, and sex; details of the staff assigned and working at the school; whether rental facilities were replaced with the opening of the school; whether double-shift instruction was eliminated as the result of the school's opening; amount the school is used for extra-curricula activities and nature of the activities and their attendees; dropout experience; etc.

c) Comparison of this data with project plans, as detailed in the PP, and MOE system-wide statistics, to ascertain to what degree the Project purpose and goal were met and to determine the nature and magnitude of any spread effects of the Project.

The Mission cannot gauge at this time whether it will have sufficient staff resources to complete this final evaluation without outside assistance; AID/W will be informed toward the end of Project implementation if the Mission believes that it will require assistance to complete the evaluation.

E. Proposed Grant Terms and Negotiating Status

1. Conditions Precedent

a. Initial Conditions Precedent

The following two conditions precedent to any disbursement of Grant funds are proposed:

i) Standard requirements for the receipt of a statement from the NPC of the name(s) of the person(s) representing the GOJ, a specimen signature of each person so designated, and receipt of a legal opinion from the GOJ stating that the agreement has been duly authorized

and/or ratified by, and executed on behalf of Jordan, and that it constitutes a valid and legally binding obligation of Jordan.

ii) An executed contract for providing construction supervision for the 14 Project schools.

b. Conditions Precedent for Reimbursement for Each School

It is recommended that the following two conditions precedent be established for any disbursement from the Grant for FAR payments for each school:

i) Assurance that sufficient land designated for the school is owned and available for construction of the school.

ii) Submission of final plans and an executed construction contract and evidence that a notice to proceed with construction of the school has been issued to the contractor.

2. Special Covenants

The following two special covenants are recommended:

a) That prior to final disbursement for any given school the Ministry of Education will have an implementation plan covering staffing, furnishing and equipping for such school.

b) That the Grantee will assure that sufficient budgetary support will be provided for teacher salaries, other operating costs and school maintenance for all Project schools.

3. Previous Experience with Similar Conditions and Covenants

The conditions and covenants recommended above for the proposed project are virtually the same in content as those established for the previous AID-financed SCI Project. Implementation experience under and evaluation of the previous school construction project demonstrates that the GOJ met all conditions and complied with all covenants satisfactorily. The Mission believes that the experience under the proposed Project with regard to meeting conditions and covenants will also be completely satisfactory.

4. Procurement

The source and origin of eligible goods and services shall be Jordan. The Grant is designed to finance local costs of the Project. No direct foreign exchange costs are anticipated and no equipment and materials are to be imported specifically for the Project. All services, including design, construction and construction supervision, will be contracted with Jordanian firms in compliance with AID's nationality rules. Almost all construction goods and materials required for the project are manufactured and available in Jordan. Nonetheless, some items associated with AID's FAR payments can reasonably be anticipated

to be of non-Jordanian origin. For instance, equipment used in construction and specialized fixtures, furnishings and other equipment used in classrooms and laboratories may not be of local origin. The contemplated shelf item procurement, however, will not constitute more than 25% of the estimated cost of the commodity element of the Project.

The Project has been designed to use a modified Fixed Amount Reimbursement (FAR) method of financing. Pursuant to Handbook 1, Supplement, B, Chapter 20, Section 20A (1)(c), the Mission Director has reviewed the procurement of the implementing agency (MPW) and is satisfied that such procedures are sound. Therefore, USAID will not review individual contracts or other procurement documents used by the MPW in implementing this Project except to confirm their conformity with standard, pre-agreed documents. Payment by GOJ/MPW to contractors will not be based on proof of purchase or use of goods. Instead, it will be based on completed sections of school construction as certified by USAID staff in accordance with joint MPW/AID procedures spelled out by Implementation Letters. (All work in the project will be done by Jordanian contractors who are experienced in this type of construction and who follow normal commercial practices for purchasing equipment and materials from local outlets. For reasons of efficiency of operation and fullest utilization of the FAR method, USAID wishes to conform to those practices to the greatest extent possible.)

5. Negotiating Status

Given (i) the close correspondence between the nature and conditions of the proposed Project and those of the just-completed SCI Project; (ii) the successful nature of the previous project which encouraged the GOJ to request a replication in the form of the proposed Project; and (iii) the fact that the proposed implementing entities of the GOJ have worked closely with the Mission in implementing the previous project and in preparing for the proposed Project, the Mission confidently believes that negotiation and signature of the Grant Agreement for the proposed Project will proceed smoothly and require a minimum of time.

AN OVERVIEW OF EDUCATION AND TRAINING IN JORDAN

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USAID/Jordan

Winter 1979-80

I

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I.A

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P R E F A C E

This document was compiled by USAID/Jordan for use as background data and information related to the Schools Construction II Project Paper. It is a composite collection of information from several sources, the principal one being a paper prepared by Mr. I. S. Sha'ban of the Jordanian Ministry of Education, Educational Research and Planning Department, in conjunction with the trainees program of the International Institute of Educational Planning (IIEP) for 1978/79. IBRD Staff Appraisal Reports for the Second and Third Education Projects, Ministry of Education Statistical Yearbooks, census data, the December 1978 USAID report on Vocational Training in Jordan, and other sources were also used and are gratefully acknowledged.

AN OVERVIEW OF EDUCATION AND TRAINING IN JORDAN

I. POPULATION STRUCTURE

Jordan's population in 1977 was estimated at 2,883,000 distributed as follows: 1,468,700 males and 1,414,300 females (51% males, 49% females). About 30% of the 1977 estimated population lived in the West Bank. The population of Jordan (East Bank) was estimated in the November 1979 census at slightly more than 2.1 million, with females comprising 48% and males 52% of the total population. These figures do not include those Jordanians out of country at the time of the latest census, estimated at 300,000-400,000. Current estimates place the number of Jordanian families at 320,000 with each family containing an average of 6.7 persons.

Regardless of the actual numbers, certain demographic trends are apparent which affect the national educational system. The population in Jordan is characterized by:

(1) a relatively high growth rate of 3.4% per annum.

(2) an increasing tendency to settle in the urbanized areas, particularly in the three major cities of Amman, the capital, Zarqa, and Irbid; over 65% of the population live in urban areas. Only 3.5% are Bedouins, the rest, about 31.5%, live in rural areas.

The high growth rate results in a large proportion of the population being under 15 years of age (52%), which places heavy pressures on educational, health and social services. It also results in a relatively low proportion - only 38% - of the population in the economically active age group of 15 to 64 years.

Most of the labor force, 56%, falls in the age category 19-39 years. The Jordanian labor force is characterized by:

(1) low participation of women (about 12%),

(2) very low unemployment (about 2%). (These are concentrated among academic graduates of secondary schools and university graduates of certain arts subjects.)

Since 1973, the Arab region has been in a period of rapid development which has created a quickly increasing demand for trained manpower. Jordan has suffered a drain on its trained personnel, particularly among technical and professional people. This has placed pressures on the domestic labor market and has limited Jordan's ability to implement and manage development projects.

Labor is a major resource in the Jordanian economy and it is by far the main earner of foreign exchange (about \$0.5 billion in 1978) outside of official transfers. While labor emigration acted in the 1960's and early 1970's as a safety valve by siphoning out some of the unemployment affecting the economy, since 1973 the massive investment plans promoted by the Gulf States as a result of oil price increases, and the acceleration of domestic economic growth, have drastically changed the picture. In a few years Jordan has moved to a situation of full employment and the continuing manpower outflow has turned into a potential threat to domestic development opportunities. Jordanians working abroad are currently estimated at 220,000-250,000. The Government considers emigration to be economically beneficial and has been pursuing an open emigration policy. At the same time, priority is being given to rapid expansion of vocational/technical education and training and encouraging increased female participation in the workforce to meet the gap locally in the availability of skilled workers created by emigration.

Latest educational statistics used by the IBRD and the GOJ in the development of the Third Education Project approved in December 1979 indicate that there were 632,500 persons (ages 6-22) enrolled in all schools in Jordan, excluding kindergarten, and about another 42,000 students overseas. Gross enrollments at the primary (grade 1-6), preparatory (grade 7-9) and secondary (grades 10-12) levels now represent a high 97 percent, 76 percent and 44 percent of the relevant age groups. There are no significant disparities by region or by sex. Female enrollments, as a percentage of total enrollments (47 percent at the primary level, 43 percent and 39 percent at the preparatory and secondary levels respectively), are among the highest in the Middle East. These ratios have not changed significantly in the 1979 educational statistics. Major strides have been made towards the goal of nine years of basic compulsory schooling, incorporating both the primary and preparatory levels, for all children.

II. A BRIEF SURVEY OF THE DEVELOPMENT OF EDUCATION IN JORDAN

The government of Jordan, when it was first established as the State of Trans-Jordan in 1921, inherited from the Ottomans (who had ruled the country for four centuries) a traditional system of education. This consisted of a limited number of religious schools known as the "Kuttabs," several primary schools providing three years of education,

and four elementary schools providing six years of education were located in Salt, Karak, Irbid and Ma'an. The primary schools were similar to the "Kuttabs" where the Holy Koran, religious instruction, penmanship and simple arithmetic were taught in Arabic. In the elementary schools of six years of education, history, geography, sciences, and geometry were taught in both the Arabic and Turkish languages.

In 1921, many new schools were built reaching a total of 25 with 59 teachers and an annual budget of 6,000 Palestinian pounds. Three intermediate secondary schools were established in the towns of Salt, Irbid and Karak. Later, the two intermediate secondary schools at Salt and Irbid were upgraded to full secondary schools. The Amman Secondary Industrial School was established in 1924 as a trade school, accepting students who had finished elementary education but were unable to join the available secondary schools. By 1930 there were 65 schools in Trans-Jordan, 53 of them were elementary schools for boys and girls, and 12 were intermediate and full secondary schools for boys, with a total enrollment of 4,415 and 120 teachers and a budget of 20,000 Palestinian pounds. At that time, the educational organization was seven years of primary and four years of secondary. Several private schools were also established and their role in the development of education cannot be overlooked. Education developed rapidly in the thirties, and the compulsory education started in Jordan in 1939 under the Law of Education of that year which made the first five years of primary education compulsory.

After the Second World War, and with the independence of Jordan in 1946, a desire for learning gathered momentum which now has reached major proportions. With the unification of the two banks of Jordan in 1950 schools were placed under the supervision and control of the Ministry of Education in Amman. In 1956 the numbers of students, teachers and schools were doubled in comparison to 1950. In the early fifties, a diversification of education began. Commercial and agricultural secondary education were introduced in 1952 in addition to industrial education, but on a limited scale. Appreciating the increasing need for trained teachers, the Ministry of Education in 1952 established the first two teacher training institutes, one for men in Amman and one for women at Ramallah.

University education in Jordan began in 1962 when the University of Jordan was established. This university developed very rapidly - it now includes 8 faculties. In 1975, Yarmouk University was

established in order to meet the tremendous social demand for university education. In spite of the existence of these two universities, a large number of Jordanian University students study abroad because of the relatively low number of places available at home. Statistics of the Ministry of Education indicated that there were 39,365 students studying abroad in 1975/76 - this was 8 times the number of the Jordan university students in that year, and about 9 times the number of university students abroad in the year 1960/61, which reached a total of 4,542. 1978 estimates indicate that more than 42,000 university students were abroad. It is estimated that the enrollment/population group ratio for higher level students in Jordan is 21%, if students enrolled abroad are included.

In 1964, Law of Education No. 16 set forth the philosophy, aims and objectives of education. This law was designed to control all agencies of education, organize the educational administration, govern the whole educational system in the country and regulate all other aspects and services related to education. By 1966, the numbers of students, teachers and schools were doubled again in comparison to 1956.

In spite of the aftermath of the 1967 war and all its ramifications, Jordan continued its educational development, characterized by dependence on comprehensive planning, the goal of access to all, stimulation of social demand for education, and incorporation of education as an element of the general development of the country and of the individual development of its citizens.

III. EDUCATION POLICY

Education development strategies are directed towards ensuring the availability of a well-educated work force with the skills required for a rapidly developing economy. Increasingly, while continuing to pursue vigorously a policy of generalized basic schooling, greater stress is being placed on reorienting education and training needs.

Progress in the overall development of the education system has been remarkable, especially over the past decade. From where Jordan began in 1921, both quantitative and qualitative improvements have been made. The government in early 1980 called for still further improvements to get the educational system in line with economic and social development goals, including curricula revisions (see Attachment A).

Prime minister calls for reorientation in education

AMMAN, Jan. 2 (JNA) -- The Prime Minister, Sharif Abdul Hamid Sharaf, has called for a revision in the orientation of some of Jordan's educational methods and material to bring them in line with the requirements of social and economic development in the country.

During a meeting this morning with top Ministry of Education officials, including Education Minister Mohammad Nouri Shafiq, the prime minister said that he is not introducing a new concept, but rather trying to get the educational process into step with the country's economic and social progress.

The prime minister added that curricula should be revised and shortened so that they will not

burden the students, but rather serve the educational process of intellectual and psychological development. He also stressed the importance of spiritual values, the Arab heritage, allegiance, good conduct and respect for the law, constitution and national institutions.

The prime minister noted the value of sports and scouting as extra-curricula activities and called for their further development.

He urged the educators to activate and encourage the relationship between schools and the community and to incorporate Jordan's national characteristics, antiquities, afforestation and environmental programmes as part of regular education.

The prime minister said that coeducation in the elementary schools helps in the provision of educational facilities for a greater number of students and creates a healthy relationship among them at this early stage.

Later a discussion took place on problems of education and how best to deal with them.

Participants discussed affairs of Jordanian students abroad, curricula issues, incentives for teachers, the teachers housing fund, school buildings and the brain drain.

The prime minister asked the minister of education to draw up, in cooperation with other ministry officials, a comprehensive plan of action, to present to the cabinet as soon as possible.

IV. PHILOSOPHY, GENERAL AIMS AND OBJECTIVES OF THE JORDANIAN SYSTEM OF EDUCATION

Law Number 16 issued in 1964 set forth the general philosophy, aims and objectives of education in Jordan. These reflect the spirit of the Jordanian constitution and the aims and expectations of the Jordanian society in existing and future needs. These are listed in detail in Attachment B. Although the MOE is expected to publish in 1980 a revised statement of philosophy, aims and objectives with a revised educational strategy, these are not expected to differ significantly from those shown here, especially at the compulsory (basic) cycles of education.

V. THE STRUCTURE OF THE EDUCATIONAL SYSTEM

Formal education in Jordan is conducted by the Ministry of Education, other ministries, UNRWA (United Nations Relief and Works Agency) and international and national private agencies. The Ministry of Education effectively controls curricula and instruction in all elementary, preparatory and secondary schools.

According to Chart No. 1, for formal educational system in Jordan follows the 6-3-3-4 model: that is six years of elementary school, three years of preparatory, three of secondary and 4 (or more) of university. The first nine years are designated the compulsory cycle. The term applies insofar as the Ministry is "compelled" to provide free education for these grades. While enrollments for the 6-11 age group are at 90.9% of the total for that age; students aged 12-14 form 81.9% of the total in that age group. (1978-79 figures). At the secondary school level (age 15-17), 37.8% of the total is accommodated in schools while in higher educational institutions -- universities, teachers training institutes, technical institutes -- are found 28,000 students or 14% of the total. This latter figure is for Jordan only. Counting in the vast number of Jordanians in post-secondary institutions abroad would bring the figure to 60,000 or almost 3% of the entire population of the country.*

The highly structured administration of the Ministry is assisted by regional directorates in each governorate or district. With few exceptions, administrators are former teachers holding at least a bachelor's degree but lacking training in administration.

*These are "net" enrollment rates, which represent the number of enrolled students in the relevant age group compared to total population in those groups. The earlier enrollment rates were "gross" rates. These represent all students in the relevant grades, regardless of age, compared to the total population in the relevant age groups.

ATTACHMENT B

PHILOSOPHY, GENERAL AIMS AND OBJECTIVES OF THE JORDANIAN SYSTEM

OF EDUCATION 1/

- A. The fundamentals of educational philosophy are:
1. Faith in God and the basic ideals of the Arab Nation.
 2. The unity of the Arab Nation.
 3. The Hashemite Kingdom of Jordan is an Arab State.
 4. Palestine and other usurped territories of the Arab Homeland are Arab in essence and origin, and they should be regained.
 5. World understanding based on justice, equality and freedom.
 6. The respect of the dignity of the individual and his freedom, and the realization of the welfare of society.
 7. Social justice and the provision of equal educational opportunities to all young people of Jordan within the capacity of the individuals.
 8. Helping every student to grow physically, intellectually, socially, and emotionally, so that he might become a good citizen, responsible for himself and his society.
 9. The importance of education in developing the society of Jordan within the general framework of an Arab Nation.
- B. The general aims and objectives of education in Jordan are:
1. Preparing the good citizen who believes in God, country, and the basic ideals of the Arab Nation; who adheres to all rights, duties and obligations of good citizenship; who realizes practically the moral ideals in all fields of individuals and collective behaviour; and who co-operates positively with others, following the democratic approach in human relations.
 2. Analytic understanding of all physical, social and intellectual aspects of the environment, its characteristics and problems, and its existing and future needs, beginning in the home, the school, and gradually in the village/city, the district, Jordan, the Arab Homeland, and the world community.

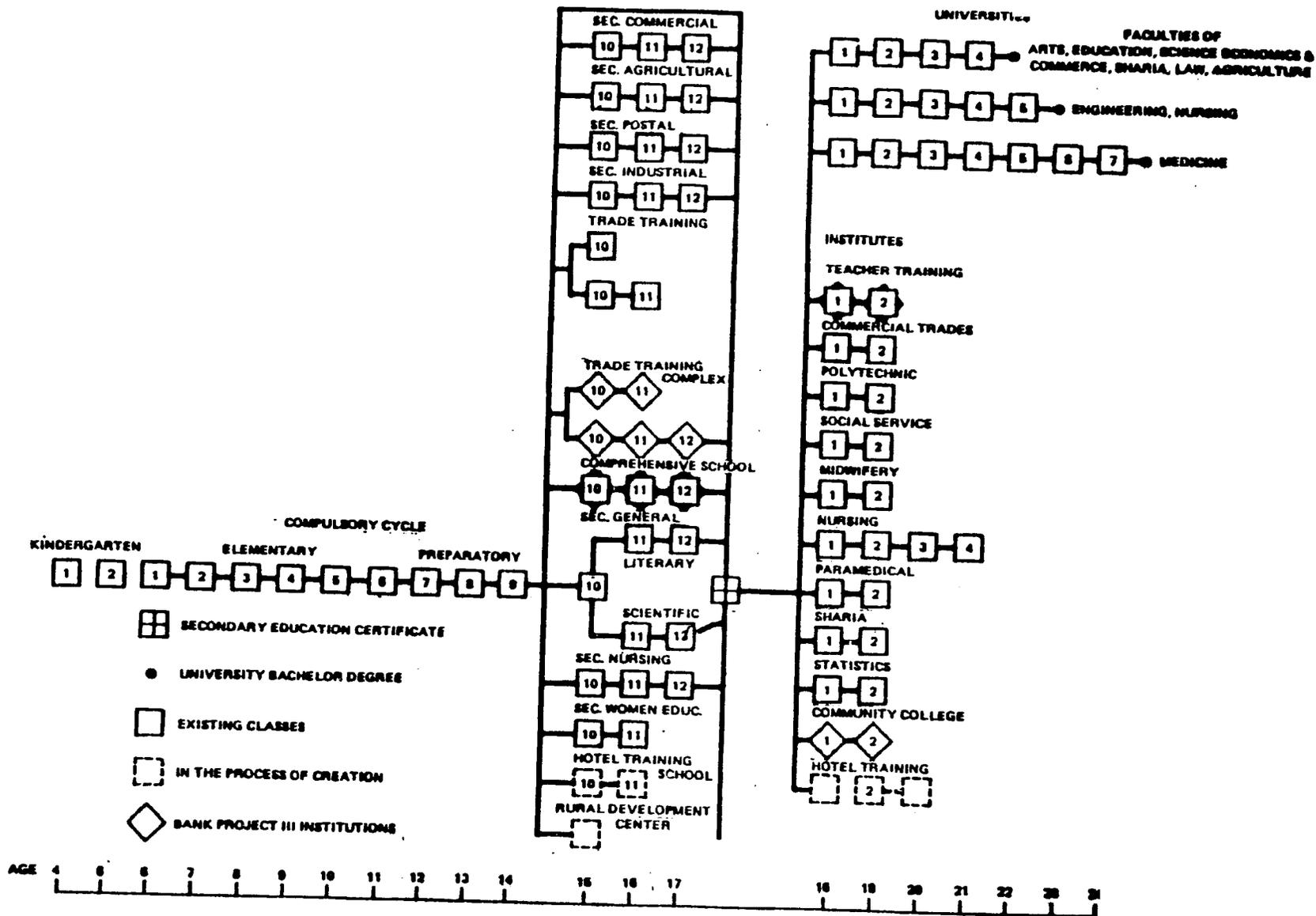
1/ As set out in Jordan's basic law on education, Law No. 16 of 1964.

This understanding should be directed in a way to develop a positive psychological attitude in the individual, enabling him to contribute to development within his capacity.

3. The development of the basic skills that enable the individual to meet his existing and future needs in life. These skills are:
 - a. Easy communication of thoughts with others by means of oral and written expressions in good Arabic.
 - b. The use of numbers easily (arithmetic).
 - c. Powers of concentration and listening to what others say, and accurate observation of what is happening in the environment.
 - d. The acceptance and the following of the scientific method of research, analysis, and assessment, and the ability of distinguishing between right and wrong information.
 - e. The adoption of an objective and constructive attitude in criticism.
 - f. The formation and continuous maintenance of good study and reading habits.
4. With due consideration to individual differences, providing assistance for the development of the creative powers of gifted students and educational opportunities for the retarded, so that all may grow within their given capacities.
5. Improving the health standards for living of individuals and the community and the circulation of good health habits.
6. Raising the recreational standards of the individuals and the community by developing both innocent recreational habits and Jordanian folklore.
7. Raising the living standards of the individual and the community and increasing the national income through the provision of educational opportunities and diversification of education, so that it serves the different individual interests and aptitudes on one hand, and the existing and future needs of the country on the other hand, within the comprehensive socio-economic plan.
8. Encouraging and organizing youth activities, including physical education, military training, camping and the formation of boy scout and girl guides units; combating illiteracy; and educational programmes for adults.

CHART 1

STRUCTURE OF EDUCATIONAL SYSTEM, 1979



According to Law No. 16, education in Jordan is free for all. It is compulsory in the first nine years of schooling; that is, in the primary and preparatory cycles, for the age group 6-16. Girls and boys have equal opportunities to learn, and there is no discrimination in education among people of different creeds or religions.

Children normally start the six years of primary education at the age of six. The primary cycle is followed by three years of the preparatory cycle (grades 7, 8, 9). These two cycles constitute the compulsory years of education.

At the end of the compulsory years of education, all students previously sat for the Public Preparatory Education Examination. According to the Education Act No. 10, 1975, this examination was cancelled. Now, all students who pass their school exams at the end of the third preparatory class (grade nine) are promoted to the secondary cycle.

The duration of the secondary cycle is three years (grades 10, 11 and 12). Education at this cycle is provided by secondary general schools, secondary comprehensive schools and secondary vocational schools. The latter include the commercial, postal, agricultural, industrial and nursing schools. Students of all types of secondary schools sit for the General Secondary Education Examination. Those who pass the examination are entitled to pursue their education in institutes of higher learning, both in Jordan and abroad. In addition to a three-year cycle of vocational secondary school education, there is two-year cycle of vocational training centers, where students do not sit for any general examinations and education in these centers is terminal for them.

Higher education in Jordan is provided either by Higher Institutes of two or three year duration (these include teacher training institutes, polytechnics and special courses for training in social service, statistics, shari'a, medical professional, nursing and midwifery) or by universities. Presently, there are two universities in Jordan, the University of Jordan and the University of Yarmouk.

VI. EDUCATIONAL ADMINISTRATION AND ORGANIZATION

The administration of the Ministry of Education (MOE) can be considered both centralized and decentralized. It is centralized in the sense that the MOE became the central authority on all major educational decisions. Curricula and textbooks are prescribed by the MOE to be used by all the schools in the country, both public and private. The MOE also recruits all teachers to be appointed in all the public schools through the Civil Service Commission. The MOE organizes and administers the public examinations at the end of the 12th grade, and prepares and distributes all textbooks.

But in another sense, the administration of education is considered decentralized. Jordan is now divided into 18 districts of education, called "directorates." At present the East Bank is divided into 13 educational districts and the West Bank into five. Each of the educational districts has a director who acts as the educational and the administrative head of the directorate. The Director of Education makes many decisions without reference to the MOE. Each district has its own technical supervisors (inspectors of education). A number of locally supervised and administered activities are planned through the local district education committee (this committee consists of the Director, acting as Chairman, the two assistants, two heads of the specialized sections, and two supervisors elected by the team of supervisors). Such activities include:

- Planning all school expansion projects in the district within the general educational plan prepared by the MOE.
- Transferring teachers and administrative personnel in the district.
- Planning the school budget for the district,
- Organizing the supervisory activities of the inspectors in the district and organizing local on-the-job training courses for teachers in the district.
- Selecting principals for schools in the district.

Chart No. 2 shows the decentralized organization structure.

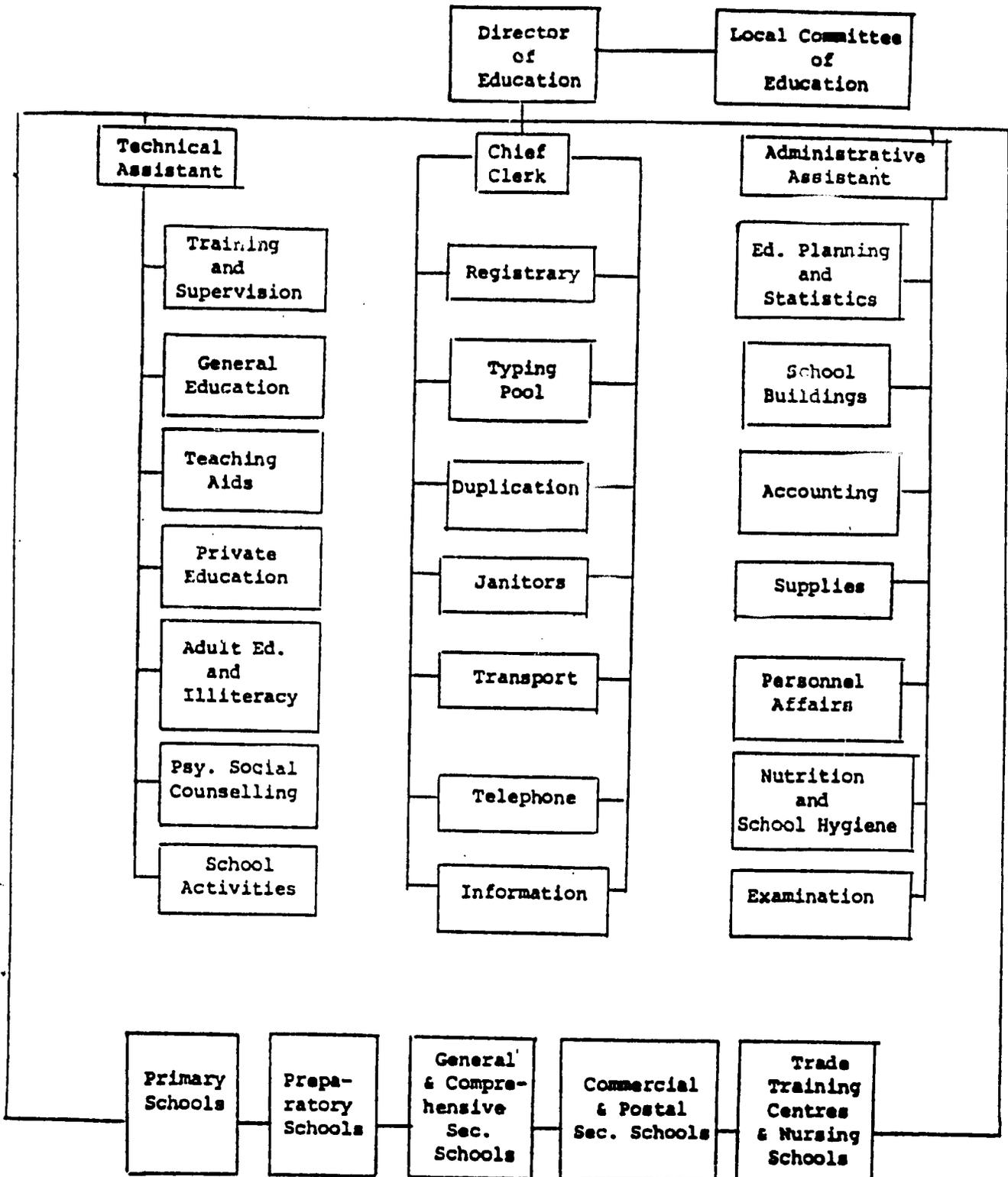
VII. AGENCIES OF EDUCATION

In Jordan, education is provided by both public and private sectors. Schools and institutes of all levels run by the MOE accommodate, according to the statistics of 1977/78, 69.3% of the total school enrollment. The enrollment in schools of the Ministries of Defence, Public Health, Social Affairs and Labor, and Religious Affairs (Awqaf) account for 0.6% of total enrollments, The University of Jordan and Yarmouk University offer education for 1.3%. UNRWA (the United Nations Relief and Works Agency) provides education for 19% while private schools educate 9.8% of the total school enrollment.

Private schools are run by secular and religious bodies. The UNRWA schools provide education for Palestinian refugee children in the first nine years of education. The refugee children who qualify for free secondary education attend the schools of the MOE. This has been arranged through an agreement between the Government of Jordan and UNRWA.

CHART 2

Administrative Structure of Education
in Governorates/Districts (local level)



Private schools are governed by articles 59-77 of the Law of Education of 1964. This legislation makes it clear that the MOE is the principal authority for education, regulating and controlling education provided by all agencies in all schools in the country, with the exception of university education (the two universities are autonomous).

The Central Office of the MOE consists of fourteen directorates (Educational Planning and Research, Curricula and Teaching Aids, Certification and Supervision, General Education, Vocational Education, Physical Education, General Examinations, Projects Implementation, Personnel Affairs, Financial Services, School Buildings, Cultural Relations, Public Relations, and Private Education). Each of the directorates consists of several specialized sections and is responsible for some centrally organized aspects of education in Jordan. The Undersecretary, under the supervision of the Minister of Education, is the person directly in charge of the organization of the MOE and the implementation of its policy.

Key roles in the MOE are played by both the National Higher Committee of Education and the Board of Education:

(a) The Higher Committee of Education:

This consists of the Minister of Education (acting as Chairman), the Undersecretary, and all the heads of the directorates in the Central Office. The Committee supervises all educational projects of the MOE; approves general policy to be followed by each directorate; plans the administrative organization of the MOE and the education district; prepares draft laws, regulations and directives that will govern the smooth functioning of all the activities of the Ministry; and supervises public examinations and all educational publications, including the Educational Journal (Risalt Al Miralem) published by the MOE.

(b) The Board of Education

This Board was established in 1969 to ensure the stability and continuity of the general educational policy and the smooth running of the educational system. The Board is composed of members who represent both the public and private sectors of society. The seventeen members of the Board are the following: the Minister of Education (as President of the Board), the two university presidents, the Head of the Civil Service Department, the Undersecretary of the Ministry of Education, three directors of education, a representative of the private schools, a representative of higher educational institutions, a representative of the National Planning Council, a representative of the Ministry of Culture and Youth Welfare and five persons from outside the MOE.

The Board offers recommendations regarding the implementation of the general education policy in the country, studies the annual budget of the MOE and presents its recommendation, and offers to the Ministry its advice on the establishment of new educational institutions. Its most important function is laying down the basic guidelines which are to be followed in the design of curriculum and textbooks.

The Board is also responsible for final approval of curricula, approving any suggested modifications and changes in it, prescribing the specifications required in the writing of textbooks, and approving any changes in the textbooks. Thus, it is clear that the Board has full authority in making decisions related to curriculum development and revision and production of textbooks.

Chart 3 shows the administrative structure of the MOE (central level).

VIII. EDUCATIONAL PLANNING

Since 1961, educational planning has been an integral part of the MOE in Jordan. The Directorate of Educational Planning and Research, consists of seven specialized sections (educational planning, educational statistics, educational research, budget of education, graduate studies and manpower, computer services and documentation). The director is a member of both the Higher Committee of Education and the Board of Education.

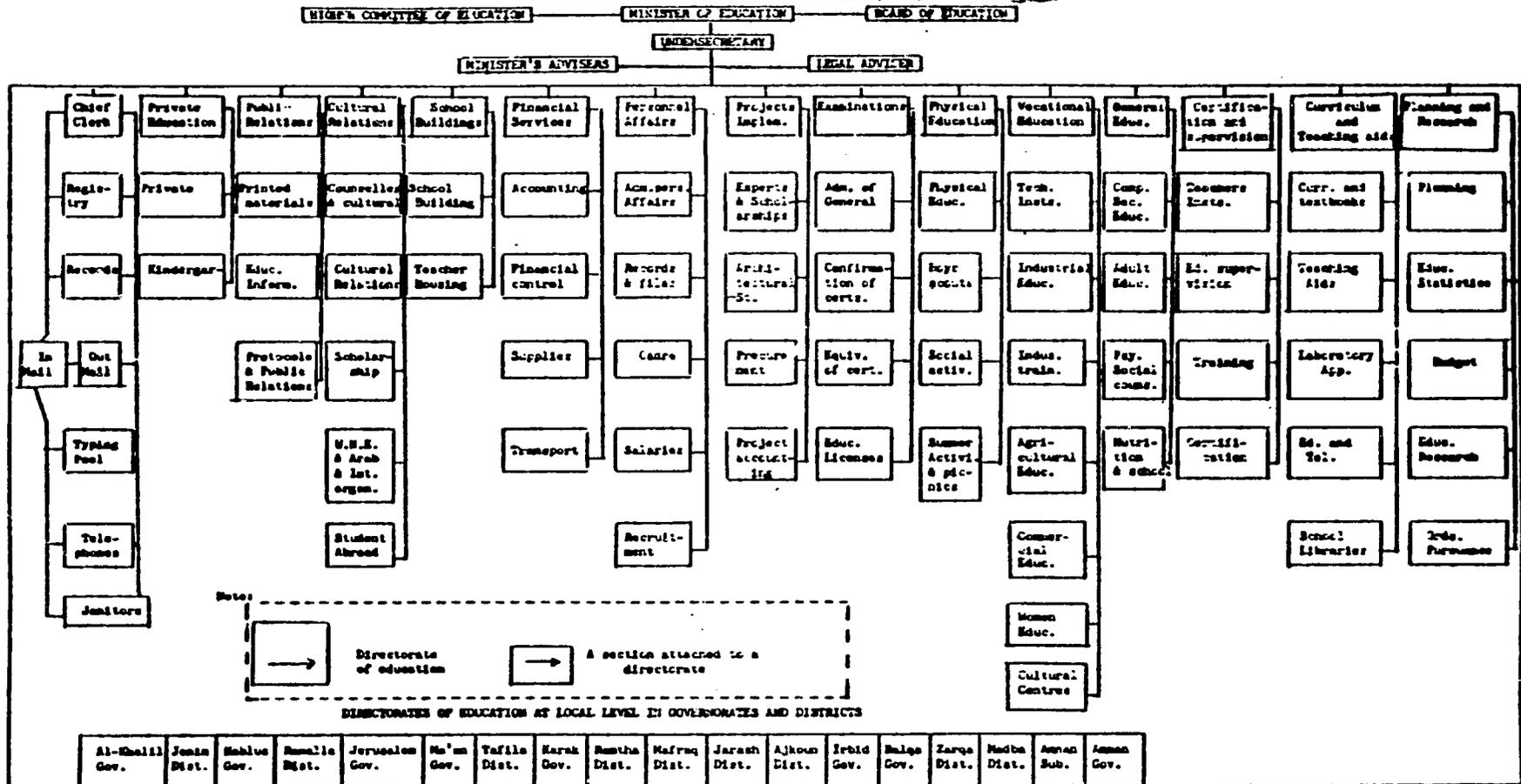
The section directly responsible for educational planning is the Educational Planning Section. The main function of this section is to prepare long and short-term educational plans at the national level within the framework of the educational policy and strategy, as recommended by the Higher Committee of Education and the Board of Education, and approved by the MOE. Through the Director of Educational Planning and Research, it co-operates with the various specialized sections in the different directorates of the MOE, the educational district, the National Planning Council, and all other public and private establishments concerned with education.

Financing of Education

Education in Jordan is free (and compulsory) in the first nine grades (the primary and preparatory cycles); and it is also free in all three types of secondary education - general, comprehensive and vocational.

CHART 3

ADMINISTRATIVE STRUCTURE OF THE MINISTRY OF EDUCATION



It is also free in all teacher training institutes and other various higher institutes. Furthermore, boarding students in secondary vocational schools and higher educational institutes do not pay any fees.

Textbooks are distributed to students in primary and preparatory schools free of charge and at a nominal price in secondary schools. Nevertheless, students are asked to pay a general fee to each school's funds which is a nominal sum of money, not exceeding about two U.S. Dollars. Students from poor families are exempted from this fee.

A study of the annual budget of the Ministry of Education in the last few years shows a steady increase in the expenditure on education as a result of growing consciousness of the importance of education and increasing public demand.

Chart 4 below shows the amounts of money allocated for education in past years.

CHART 4: Money Allocated for Education During Recent Five-Year Period.

Years	1973/74	1974/75	1975/76	1976/77	1977/78
Amounts of money in J.D.	7,859,865	12,842,000	14,873,000	19,381,000	22,392,800
Percentages of increase		63.4%	15.8%	30.3%	15.5%

Attachment D. Shows the local contribution in the expenditures of schools in the Ministry of Education for the year 1976-77 (in Jordan Dinars).

Attachment E. Shows the Ministry of Education expenditures of 1976/77 by type of item of expenditure in Jordan Dinars and the percentage of each.

IX. Characteristics of the National System of Education

The following are some basic statistics of the education system in the primary, preparatory, and secondary schools.

CHART 5

BASIC EDUCATION SYSTEM STATISTICS

(a) Pupil/Teacher Ratio (1977/78)

	<u>Primary</u>	<u>Preparatory</u>	<u>Secondary</u>
All schools	33	21	23
Ministry of Education schools	31	19	23

(b) Pupils per classroom (1977/78)

	<u>Primary</u>	<u>Preparatory</u>	<u>Secondary</u>
All schools	35	32	37
Ministry of Education schools	33	30	38

(c) Teacher's load (in periods/week)

Primary	26
Preparatory	24
Secondary	22

(d) Percentages of Promotion, Repetition and Drop-out for the year 1976 by cycle and sex:

	<u>Primary</u>			<u>Preparatory</u>			<u>Secondary</u>		
	T	M	F	T	M	F	T	M	F
Promotion	92.0	92.6	91.3	83.3	83.5	82.9	91.1	91.2	91.0
Repetition	5.0	4.8	5.1	7.7	8.0	7.3	4.0	4.5	3.2
Drop-out	3.0	2.6	3.6	9.0	8.5	9.8	4.9	4.3	5.8

	Level	Controlling Authority	Number of Schools				Students			Teachers		
			Total	M	F	Co-ed.	Total	Fem.	% of Fem.	Total	Fem.	% of Fem.
Primary	Pre-Primary	Private	153	3	1	149	14,045	5,931	42.1	440	439	100
		Public	919	302	306	311	291,210	136,956	47.0	9,508	5,168	54.4
		Private	95	3	2	90	33,694	14,198	42.1	1,139	1,022	89.7
		UNRWA	95	45	39	11	89,586	42,920	47.9	2,110	1,028	48.7
	Totals	1,109	350	347	412	414,490	194,074	46.8	12,757	7,218	56.6	
Preparatory		Public	810	358	315	137	99,475	42,407	42.6	5,257	2,334	44.4
		Private	20	1	3	16	5,777	2,709	46.9	245	114	46.5
		UNRWA	102	51	40	11	33,549	15,178	45.2	1,102	409	37.1
		Totals	932	410	358	164	138,801	60,294	43.4	6,604	2,857	43.3
Secondary		Public	253	152	101	-	62,359	25,403	40.4	2,309	1,010	43.0
		Private	35	18	9	8	7,436	2,558	34.4	255	255	100
		UNRWA	-	-	-	-	646	55	8.5	60	6	10.0
		Totals	288	170	110	8	70,441	28,016	39.5	3,124	1,074	34.4
Higher Educ and other Higher Inst.		Public	8	5	2	1	3,878	2,421	62.4	224	121	54.0
		Private	2	1	-	1	2,101	354	16.8	69	5	7.2
		UNRWA	3	2	1	-	564	245	43.4	44	18	40.9
		Totals	13	8	3	2	6,543	3,020	46.2	337	144	42.7
UNIVERSITIES and other Higher Inst.		Public	11	2	2	7	9,242	3,237	35.0	580	78	13.4
		Private	4	2	-	2	1,024	23	2.2	17	4	23.5
		UNRWA	3	2	1	-	327	83	25.4	26	6	23.1
		Totals	18	6	3	9	10,593	3,343	31.6	623	88	14.1

A. Pre-Primary Education

Pre-school education enrolled approximately 14,000 students in 1977-78. This was less than 1% of the estimated 3-5 year age population group. At this level, male students comprised 58%, females 42%. Pre-school education is offered by private agencies, both secular and religious. Some kindergartens are located in separate buildings; others are attached to primary schools. Children are accepted if they are over three years of age. The MOE, in efforts to organize and control pre-school education, has established a special directorate at the central level, the Directorate of Private Education, and in each educational district there is a special section called the Private Education Section. The MOE also has issued regulations concerning the administration of kindergartens. According to these regulations, attendance at Kindergartens is for two years preceding primary education.

B. Primary Education (Compulsory Cycle - Grades 1-6)

A child is admitted to the first grade of the primary school at the age of six. In 1979, approximately 399,000 children were enrolled or about 91% of the total age group. Of this total, 54% were male and 46% female. The duration of the primary school cycle is six years and it is free and compulsory. Curriculum includes Arabic, religion, arithmetic, civics, history, geography, science, art education (drawing-embroidery for girls - and music), physical education, and vocational activities. Starting from the first grade, all children learn English as a second language. However, in almost all private schools the study of English begins at grades lower than the fifth. French is taught in addition to English in some private schools.

CHART 7

The Primary School Weekly Course Periods

Subject	1	2	3	4	5	6
Religious Education	2	2	2	2	2	2
Arabic Language	10	10	10	10	7	7
English Language	5	5
Mathematics	4	4	4	4	4	4
Sciences	3	3	3	3	4	4
Social Studies	2	2	2	2	2	2
Art Education	2	2	2	2	1	1
Physical Education	1	1	1	1	1	1
Vocational Education	2	2	2	2	2	2
Total hours per week	26	26	26	26	28	28

One characteristic of primary education in Jordan is the system of modified, automatic promotion of pupils. A child is permitted to repeat a grade twice in the entire upper 4 years of the cycle (whereas in the first two years of the cycle, it is not allowed), after which he is automatically promoted to a higher grade.

C. Preparatory Schools (Compulsory Cycle - Grade 7-9)

Most of the students of the sixth grade are promoted to the seventh grade (in 1976/77 the promotion rate of grade six to grade seven was 93%). The seventh, eight and ninth grades make up what is known as the preparatory school (the junior high), and education at this level also is free and compulsory. In 1979, this level of education enrolled about 153,000 students of which 54 percent were male and 46% female.

The following chart shows the preparatory school weekly course periods.

CHART 8
The Preparatory School Weekly Course Periods

Subject	Grade	7	8	9
Religious Education		2	2	2
Arabic Language		8	8	8
English Language		6	6	6
Mathematics		4	4	4
Sciences		4	4	4
Social Studies		2	2	2
Art Education		1	1	1
Physical Education		1	1	1
Vocational Education		2	2	2
Total Periods per week		30	30	30

Every boys' preparatory school in Jordan contains as part of its general education curriculum one of the three vocational courses. Girls' preparatory schools offer courses in home economics. Generally speaking, boys' preparatory schools in rural and semi-urbanized areas offer agricultural courses, while in urban areas they offer either commercial or industrial courses. Only in rare cases does a school offer both the commercial and industrial courses.

According to the Law of education No. 16, compulsory education ends at the age of 16. All students in grade nine are promoted to the first secondary grade (the tenth) if they pass their regular school examinations.

D. Secondary Education (Grades 10-12)

In 1979, there were approximately 92,000 students enrolled at this level of which 57 percent were male and 43 percent female. The great social demand and social pressure at this level of education show the importance of the secondary school. According to the statistics of 1971/72, 35% of children in the age group 15-17 were attending secondary schools in the country. This net percentage rose in the year 1979 to 58 percent.

The MOE adopted the following educational policies, strategies and organization measures to achieve the objectives, which were approved by the Government in the Five-Year-Plan for economic and social development, 1976-1980. These policies were to:

- (i) Expand the diversification of secondary education to serve the needs of Jordanian society for technical and trained manpower, with priority given to the needs of the sectors of mining and industry, agriculture, tourism, and construction, on account of their direct involvement with production. This greater diversification was to expand vocational secondary education so as to raise enrollment in the first secondary vocational class (grade 10) to 30% of total enrollment by the year 1980; expand comprehensive secondary education in order to provide students with opportunities to receive vocational and trade training in addition to academic education; and to expand trade training centers of two years' duration to include apprenticeship schemes and upgrading courses for workers in various plants who have completed compulsory education.
- (ii) Upgrade the quality of secondary education.

The cycle of secondary education is composed of the tenth, eleventh and twelfth grades. A school is entitled "secondary" when its top grade is one of the above-mentioned. At present, there exist three types of secondary schools: the general, the comprehensive and the vocational.

All students who pass their school exams at the end of the third preparatory class (grade 9), are promoted to the secondary cycle. Distribution of students in three types of secondary schools, both public and private, is arranged according to an annual plan set up by the MOE based on the following factors:

- The desire of the student and his parents
- The available places in each type of school
- The achievement of the student in the school exams at the end of grade 9.
- The age of the student.

Statistics indicate that in 1971/72 the flow rate of students from the terminal grade of the preparatory school (ninth grade) to the initial grade of all types of secondary education (tenth grade) was 68.17%. It rose in the year 1976/77 to about 90% as a result of the great social demand on that level of education and cancelling of the public preparatory education examination.

The teachers in secondary schools are required to have full university education (B.A. or its equivalent) in addition to one year of professional educational courses, or the equivalent of in-service training in education and psychology.

A student to be promoted to a higher class in the cycle should pass the school exams at the end of each scholastic year. Students of all types of secondary schools sit at the end of the cycle for the General Secondary Education Examination. Those who pass are entitled to pursue their higher education, both in Jordan and abroad.

1. Secondary General Schools

The secondary general schools offer two options: (s) the literary option and (b) the scientific option.

All students of the first year of the general secondary cycle (tenth grade) study a common curriculum, consisting of Religious Education, Arabic, English, Modern Mathematics, General Sciences, Biology, History, Geography, Art Education, Physical Education and Vocational Education (for boys) or Home Economics (for girls).

At the beginning of the second year (eleventh grade) scientific and literary streaming starts. The division of students into the two options is determined by their academic achievements in the first secondary year. Usually, those students with high achievement records in science and mathematics are allowed to take the scientific option.

In the literary stream, students specialize in humanities and social studies, while in the scientific stream students specialize in mathematics and sciences (biology, physics and chemistry).

CHART 9

The General Secondary School Weekly Courses Periods

Grades Courses	1 10th General	2 11th		3 12th	
		Literary	Science	Literary	Science
Religious Education	2	2	2	2	2
Arabic Language	5	6	5	6	5
English Language	5	5	5	5	5
Mathematics .	4	3	5	3	5
General Science	4	3	-	3	-
Biology	2	-	2	-	2
History	2	3	-	3	-
Geography	2	2	-	2	-
Arab Society	-	-	-	1	1
Palestine Problem	-	-	-	1	1
Physics	-	-	4	-	4
Chemistry	-	-	3	-	3
Art Education	1	1	1	1	1
Physical Education	1	1	1	1	1
Economics	-	2	-	2	-
Vocational Education/ Home Economics	2	2	2	2	2
Total Periods per week	30	30	30	32	32

Note: Some private schools provide in addition French language
(5 periods/week)

Statistics indicate that of a total number of 278 general secondary schools in 1977/78, 5% are co-educational, 37% are for girls and 58% are for boys.

The following chart shows the distribution of those schools between urban and rural areas according to top grade, sex and controlling authority for the year 1977/78.

CHART 10

Summary Data Showing the Distribution of General Secondary Schools According to Top Grade, Sex and Controlling Authority

Controlling Authority	Sex	Total	Urban				Rural			
			Total	10th	11th	12th	Total	10th	11th	12th
Total	Total	278	144	11	12	121	134	52	27	55
	Male	161	74	5	3	66	87	38	16	33
	Female	103	62	6	7	49	41	9	10	22
	Co-ed	14	8	-	2	6	6	5	1	-
Public *	Total	243	109	11	10	38	134	52	27	55
	Male	143	56	5	3	43	87	38	16	33
	Female	94	35	6	7	40	41	9	10	22
	Co-ed	6	-	-	-	-	6	5	1	-
Private	Total	35	35	-	2	33	-	-	-	-
	Male	18	18	-	-	18	-	-	-	-
	Female	9	9	-	-	9	-	-	-	-
	Co-ed	8	8	-	2	6	-	-	-	-

* 5 of these are run by the Ministry of Defence, and the balance by the MCE

In regard to general secondary school buildings, 90.5% of them are government-owned and 9.5% are rented residential buildings.*

Statistics on teachers in secondary general schools, showed that in 1976/77 the total number was 2,097, out of which 36.3% were females. 72.2% of the total were university graduates, 20.5% were teacher training institute graduates, 2.6% have had some higher education of one to three years of study and the remaining 4.7% have had secondary education or education below secondary level.

* The percentages for rented schools were much higher at the primary and preparatory levels - 61% and 34% respectively. Similarly, the percentages of double-shift students in MOE schools were higher at the primary (29.7%) and preparatory (18.9%) than at the secondary (10.4%) levels.

CHART 11

The Weekly Course Period For Boys' Comprehensive Secondary School

Courses	Grades	2		3	
	10th	11th	11th	12th	12th
		Liter-ary	Scien-tific	Liter-ary	Scien-tific
Religious Education	2	2	2	2	2
Arabic Language	5	6	5	6	5
English Language	5	5	5	5	5
Mathematics	4	3	5	3	5
General Sciences	4	3	-	3	-
Biology	2	-	2	-	2
Physics	-	-	4	-	4
Chemistry	-	-	3	-	3
History	2	3	-	3	-
Geography	2	2	-	2	-
Arab Society and Palestine Problem	-	-	-	2	2
Economics	-	2	-	2	-
Art Education	1	1	1	1	1
Physical Education	1	1	1	1	1
*Vocational Education	8	8	8	8	8
Total	36	36	36	38	38

*Vocational Education includes 4 trades: carpentry, metals, electricity and automachine.

CHART 12

The Weekly Course Period For the Girls' Comprehensive Secondary School

Course	Grades 1 10th	2 11th		3 12th	
		Liter- ary	Scien- tific	Liter- ary	Scien- tific
Religious Education	3	3	3	3	3
Arabic Language	5	7	5	7	5
English Language	5	7	5	7	5
Social Studies	4	5	-	7	2
Mathematics	5	2	5	2	6
Sciences	7	2	11	2	10
Physical Education	1	1	1	1	1
Home Economics	1	2	2	2	2
*Vocational Education	4	4	4	3	3
Total	35	33	36	34	37

*Vocational education includes 4 trades: tailoring and dress design, child care, applied arts (pottery, ceramics, etc.) and beauty culture.

Enrolment in all types of Secondary Schools

In regard to enrolment the following two tables show:

CHART 13 Enrolment in Secondary Schools by Grade and Type of Education and the Percentage of Each Type

CHART 14 Enrolment in Secondary Schools by Grade, Type of Education and Sex and the Percentage of Females in Each Type (Scholastic Year 1977/78).

CHART 13

"East Bank"

Enrolment in Secondary Schools by Grade and Type of Education 1978

Type	Stream	Grade 10		Grade 11		Grade 12		Totals	
		Enrolment	%	Enrolment	%	Enrolment	%	Enrolment	%
Academic	Scientific	22 946	84.21	9 095	37.06	8 106	42.30	60 728	85.60
	General Literary			12 095	49.29	8 486	44.25		
Compre- hensive	Scientific	381	1.40	205	0.83	298	1.56	1 387	1.95
	General Literary			163	0.66	340	1.80		
Voca- tional	Commercial	1 360	4.99	1 136	4.63	1 218	6.35	3 714	5.23
	Postal	68	0.25	24	0.10	37	0.20	129	0.18
	Agricultural	191	0.70	172	0.72	189	1.00	552	0.78
	Nursing	325	1.19	105	0.43	48	0.25	478	0.68
	Industrial	784	2.88	684	2.78	435	2.29	1 903	2.68
	Trade Training	751	2.76	718	2.93	-	-	1 469	2.07
	Women's Crafts	441	1.62	140	0.57	-	-	581	0.83
	Total	3 920	14.39	2 979	12.16	1 927	10.09	8 826	12.45
	Total	27 247	100.00	24 537	100.00	19 157	100.00	70 941	100.00

"East Bank"

Enrollment in Secondary Schools by Grade, Type and Sex 1978

Type	Stream	Total	Grade 10		Grade 11			Grade 12			Total		
			Enrolment		Enrolment			Enrolment			Enrolment		
			Female	%	Total	Female	%	Total	Female	%	Total	Female	%
Academic	Scientific	22,946	9,331	40.67	9,095	2,776	30.55	8,106	2,196	27.09	60,728	24,559	40.44
	General Literary				12,095	6,069	50.18	8,187	4,187	49.34			
Compre- hensive	Scientific	381	160	41.99	205	49	23.90	298	124	41.61	1,387	626	45.13
	General Literary				163	102	62.58	340	191	56.18			
Voca- tional	Commericla	1,360	642	47.21	1,136	539	47.45	1,218	562	46.14	3,714	1,743	46.93
	Postal	68	29	42.65	24	-	-	37	-	-	129	29	22.48
	Agricultural	191	-	-	172	-	-	189	-	-	552	-	-
	Nursing	325	325	100.00	105	105	100.00	48	48	100.00	478	478	100.00
	Industrial	784	-	-	684	-	-	435	-	-	1,903	-	-
	Trade Training	751	-	-	718	-	-	-	-	-	1,469	-	-
	Women's Crafts	441	441	100.00	140	140	100.00	-	-	-	581	581	100.00
Total		27,247	10,928	40.11	24,537	9,780	39.86	19,157	7,308	38.11	70,941	28,016	39.50

2. Comprehensive Secondary Schools

In 1972, the Ministry of Education, with the help of the World Bank, proposed the experimental project of introducing comprehensive secondary education into the educational system. In 1975, the establishment of two secondary comprehensive schools, (one for boys and the other for girls with both located in Amman) was completed with instruction beginning in the scholastic year 1975/76. The second IDA credit established three additional comprehensive schools and the third project (IBRD) will add another five bringing the total in country to ten (10) upon completion of that project.

The objectives of this type of education are gearing the secondary education cycle towards the needs of Jordanian society for trained manpower and enhancing the students' general education, while at the same time developing their vocational capabilities, without prejudice to their chances of pursuing university education.

Presently, students are accepted at grade nine (top grade of compulsory education). During this year they are oriented to all vocational activities available in the school, after which a student chooses one trade specialization, starting from grade ten through the three years of the secondary cycle.

At the beginning of grade eleven, students are divided into scientific and literary streams, on the same basis as general secondary schools.

3. Vocational Secondary Schools

The most significant achievement in education in Jordan has been the shift towards vocational, comprehensive and technical education. In 1973, the MOE started to offer a variety of vocational education and training in order to meet the demand for more skilled workers and technicians.

The Ministry in recent years has placed increased emphasis on developing vocational education. On the budget side, of total MOE expenditures 3.1% was spent on vocational programs in 1969-70, 5.7% in 1973-74 and 7.4% in 1976-77. The MOE objective is to raise the percentage of students in vocational training from 20% to 30% for boys and from 12% to 20% for girls by 1980.

Vocational training is provided by both formal and non-formal institutions (or combinations of these). Formal institutions are those enrolling the full-time student whose age corresponds to his grade level and who is channeled upward through the regular educational system encountering along the way such hurdles as the final secondary examination. This includes, institutions operating under the MOE as well as those under UNRWA, the Ministry of Health and the Ministry of Defence.

Non-formal institutions handle the part-time or temporary full-time student. There is no set age requirement for the non-formal programs though a minimum prerequisite for many apprenticeship programs, for example, is the preparatory school certificate. Training is often of the short-term variety. Unlike the formal program where movement is vertical through the system with work the ultimate goal, the non-formal structure assumes lateral movement between training and job with additional training providing the immediate stimulus for upward mobility on the job. There are three types of programs in the non-formal category. First are those offered by various government agencies. A good example here is the Ministry of Public Works' apprenticeship course in the operation of earthmoving equipment. The MOE's Rural Development Center currently under construction in the Jordan Valley is designed to offer short courses for adults and is another example of the non-formal institution. The Department of Statistics and the Central Bank sponsor training institutions - the Statistics Training Center and the Institute of Banking Studies - which are non-formal yet not vocational, as the term is here defined to encompass training primarily in manual skills for agriculture, trade, industry or to assist in the professions.

A second type of non-formal institution is found in the private or semi-public sector. The phosphate company, petroleum refinery, and electric company sponsor training programs of this kind.

The third institution offering programs of non-formal vocational training is the Vocational Training Corporation. Established in 1976, the VTC has close ties to the Ministry of Labor yet exists as a semi-autonomous body. Its resources consist of funds from the general budget, monies earned from its own operations and foreign assistance. By design, it is to function independently of both the MOE's Vocational Education Directorate and such training programs as exist in industry, the better to draw upon the expertise of the former and to act in a supervisory capacity vis-a-vis the latter. The VTC focus is on developing in-plant apprenticeship and upgrading programs in response to requests from the private sector.

Both the MOE and the VTC in their vocational programs and policies evidence new directions designed to have an impact on Jordan's population as a whole. The MOE has as its target group the school age population enrolled in the regular educational system. Its efforts are devoted to injecting into this traditional, academically-oriented system a greater measure of vocational content so that by 1980 the proportion of male secondary students in vocational programs will be up from the present 20% to 30%. The VTC has as its target group a different segment of the population:

- 1) those preparatory school leavers who, as a result of their school performance, do not have the option of continuing at the secondary level and, therefore, must enter the work force and 2) workers of any age already established in the labor market but in need of skills upgrading. The MOE and VTC efforts, then, are not overlapping but complementary.

Moreover, both agencies in their vocational training efforts share a concern for 1) promoting coordination among various government agencies and the private sector in assessing where skills shortages lie and how training might overcome them and 2) thus providing youth, including women, with realistic practical preparation for the job market.

Presently, there are three levels of vocational education in Jordan:

(i) The intermediate level (pre vocational education) from the seventh grade to the ninth. It provides courses in agriculture, industry, commerce and home economics as part of the general education for all students and as a necessary pre-vocational preparation for terminal students. Home economics is also given for girls in the secondary level as part of their general education.

(ii) The secondary level from the tenth grade through the twelfth. It is given at separate high schools for agriculture, industry, commerce and women's crafts.

(iii) Post-secondary (Technical and Teacher Training Institutes) established to provide industrial technicians and qualified teachers in agriculture, industry, commerce and home economics.

a. Vocational Schools at the Secondary Level:

(1) Agricultural Secondary Schools. Agricultural vocational secondary education is provided for boys only. It is an essential educational program for maintaining efficiency in producing, processing, marketing and servicing Jordan's agriculture. Presently, there are two agricultural secondary schools in the East Bank of Jordan, located in the southern part of the country, the Showback and the Rabbah Secondary Agricultural Schools. In addition, there is an agricultural section attached to Ma'adi General Secondary School at the Green Valley (Ghor), for grade 10 only. The two schools are boarding establishments, supervised and controlled by the MOE. The duration of study is three years. Students do not pay fees. The capacity of each school is 200 students. Students are accepted from all over the country, after having successfully completed compulsory education, according to a "quota" for each governorate and district, prepared and arranged within the admission plan to the first higher secondary grade (tenth grade) by the MOE.

The subjects taught in agricultural secondary schools include the following: general education (10%), related agricultural and technical subjects (20%), scientific studies (20%), and practical training (50%). In regard to premises, the school buildings and the boarding houses of both schools are of high standards and well equipped and furnished. The farm areas of the two schools are 30 hectares at Showback and 25 hectares at Rabbah. In 1977/78 there were 45 teachers in both schools, of whom 25 were university graduates and 20 secondary/vocational, with a pupil/teacher ratio of 12:1.

(2) Industrial and Technical Schools. Industrial and technical education started in Jordan in 1924, but up to 1960 there was only one government secondary industrial school. Since 1960, great emphasis has been put on industrial and technical education. Priority was given to this type of education in both the Three Year Plan (1973-75) and the Five Year Plan (1976-80). The main objective of this type of education is to prepare trainees to enter into the craft level jobs, and to fulfil the industrial development needs in the country of various skill levels in the different specializations.

Industrial and technical education at the secondary level is the responsibility of all educational authorities in Jordan (the MOE, Ministry of Defence, the private sector and UNRWA). This type of education is provided through:

b. The Industrial Secondary Schools. Presently, there are four secondary industrial schools supervised and controlled by the MOE. These schools provide industrial education for boys only and are located in the cities of Amman, Irbid, Zarqa and Sweileh. The first two have boarding houses for students accepted from other districts of the country. The duration of study is three years. Boarding students do not pay fees. Students are accepted after having successfully completed compulsory education, according to a "quota" for each governorate and district, prepared by the MOE each year. The total intake capacity (grade 10) of these four schools is about 750 students. All students in the four schools spend the first year in general vocational orientation. In the second year each student is assigned to one trade.

The following chart shows for industrial secondary schools the percentage breakdown of courses and number of course periods.

CHART 15

Courses	Grades %	Grades		
		1 10th	2 11th	3 12th
Academic Subjects	14.8	7	6	7
Scientific basic Subjects	18.5	8	6	8
Related Vocational Subjects	17.8	8	8	8
Practical Training	46.7	21	21	21
Physical Education	2.2	1	1	1
Total	100	45	45	45

At the end of grade 12, students sit for the General Industrial Education Examination. Those who pass are entitled to join higher vocational institutes, but the majority of those who pass join the labor market (as do those who do not pass).

c. Boys' Trade Training Centers. Presently, there are 12 centers supervised and controlled by the MOE with a total intake (1st year) of about 750 students. There is also one trade training center controlled by UNRWA of an intake capacity of about 300 students. Another two sections provide such education under the responsibility of the private sector, and have an intake capacity of about 30 students each. In addition, the Ministry of Defense has a trade training center with an intake capacity estimated to be 1,000 students.

Students are accepted in these centers after having successfully completed compulsory education. The duration of study is two years. The courses taught in these centers include general education subjects for 7.5% of the weekly course periods, related technical subjects for 17.5% and practical training for 75%.

At the end of the second year the trainee is awarded the Center Certification in the specialized trade he has studied, which qualifies him to join the labor market. Such training is terminal.

Some of these centers are located at the premises of the industrial secondary schools and higher vocational institutes and others at the premises of some general secondary schools. They are distributed in 10 governorates and districts of the country.

d. Women's Trade Training Centers: Presently, there are 8 trade training centers for girls, with an intake capacity (1st year) of 350 students. They provide training in the following specializations: sewing and needlework, beautification and hairdressing, and decoration and other handicrafts. The duration of study is two years. Students are accepted after having successfully completed compulsory education.

Courses taught at these centers include general education subjects (37.5% of the weekly course periods) and practical training in specialized trades (62.5%). At the end of the second year graduates are awarded the Center Certificate. This type of training is terminal.

e. In-plant Training. Due to the high cost of institutional vocational education and training, a parallel system of training has been introduced by making use of existing training facilities in large industries. Apprenticeship schemes and upgrading courses for workers have been started in various plants, like the electric company, the phosphate company, the oil refinery and the Ministry of Public Works Mechanical Department. Presently, the intake capacity of this type of training is 250. Trainees are accepted after having successfully completed compulsory education. Trainees are awarded certificates equal to those of trade training centers.

f. Business and Post Office Secondary Schools. Business/commercial and post office education at the secondary level aims at providing students with the appropriate information, skills and experience to enable them to do administrative and secretarial work and perform postal office functions. This type of education is the responsibility of the MOE. Presently, there are eight business/commercial secondary schools located in the three major cities of Amman, Zarqa and Irbid. Four of them are for girls. The intake capacity of these schools (grade 10) is 1,280 students. In addition, there are seven business secondary divisions attached to general and comprehensive secondary schools in other governorates and districts of the country. The intake capacity of these divisions (grade 10) is 310 students. Two post office secondary divisions are attached to the two comprehensive secondary schools. One is for boys, the other for girls. The intake capacity (grade 10) is 80 students. The duration of study of this type of education is three years, at the end of which students sit for a general public examination in business/post office education. Those who pass are entitled to join a higher institution of education.

g. Nursing Schools. Since there has been a great need for nurses and assistant nurses, the MOE, in co-operation with the Ministry of Health, started a three-year course of education in nursing in secondary schools. The aim of this study is to train students to be efficient assistant nurses and to upgrade the nursing profession.

This type of education is provided for girls only. The period of study is three years. Students are accepted after having successfully completed compulsory education (grade 9). Presently, there are seven sections which offer this training, attached to secondary general and comprehensive schools. Two of these sections are located in Amman, the others are located in the cities of Irbid, Zarqa, Madaba, Salt and Karak. The intake capacity of these divisions (grade 10) is 330 students.

In addition to the general education courses, students are given theoretical courses in nursing and nursing practice, nutrition, physiology and anatomy. These students spend half of the second and third years of their training in practical work in hospitals and clinics under the supervision of their nursing teachers. At the end of the third year, students sit for the general exam in nursing education. Those who pass are entitled to join higher nursing education institutes.

4. Vocational Education for Women

Before 1966, vocational education for girls was poorly developed and the only course provided to them was home economics within their preparatory and secondary general education. Since then, the MOE has felt that there is a need for training schemes for the particular activities at which Jordanian women usually excel. At the beginning of the scholastic year 1966/67, the Ministry launched a program of business education for girls at the secondary level. Afterwards, the Ministry felt that there was a need to diversify vocational education for girls beyond commercial and business education. In year 1972, the first trade training center for sewing and needlework was established in Amman at the secondary level.

A review of vocational training opportunities for girls reveals a certain unevenness in MOE policy. On the one hand, the trade training centers focus almost exclusively on the home-oriented sewing and beauty culture fields. Yet, it may be unreasonable to expect a fully-blown program here, considering that the centers themselves are a new phenomenon, the first one being established as recently as 1972. At the secondary level, similarly, there is nothing for girls comparable to the various electives in industrial training offered to boys. Still, the secondary nursing program was set up in response to a perceived market need and the MOE here has shown itself unafraid of attempting to overcome traditional social reservations about the propriety of the occupation. In other areas, notably agricultural skills training, girls are not specifically excluded from present and proposed institutions though the provision of facilities as outlined does not invite their participation.

On the other hand, since the beginning of the Three Year Plan, the MOE through its admissions policies has worked expressly to increase the number of girls enrolled in vocational school programs. As a result the proportion of vocational to academic enrollments at the secondary level has risen from 9% in 1973 to 12% in 1978. A basic decision has been made that the primary means to achieve this goal and the vehicle for introduction of non-traditional courses for girls is the comprehensive school. The comprehensive concept makes vocational training for girls palatable to conservative families. Girls are allowed to sample vocational courses -- even such innovative ones as electronics -- at the same time as they are studying the more acceptable subjects from the literacy and scientific streams.

Significantly, two of the three comprehensive schools built under the second IBRD project are for girls as are three of the five planned for the third IBRD project.

E. Higher Education

1. Higher Institutes (Two/Three Years' Duration.)

a. Teacher Training Institutes. Entry requirements for teachers' education are established according to the Act No. 103 of 1975. In 1978 TTI's enrolled more than 6500 students of which 43 percent were female. They are operated by the MOE private agencies and UNRWA. To qualify for academic teacher training institutes, the teacher must have passed the General Secondary Education Examination or its equivalent, and earned an average of 50% as a minimum in the required subjects. Those who want to specialize in art education, physical education, or music, should also pass a special aptitude test set out by the MOE. Those students who want to join the vocational teacher training institutes should be among the ones who have graduated from the same line of specialization at the secondary school level.

The aim of these institutes is to train teachers to teach various academic subjects, art education, physical education, and vocational activities at the compulsory level (primary and preparatory cycles).

The duration of study in these institutes is two scholastic years. This training is pre-service training. There is also teachers' in-service training. This type of training is the responsibility of the Teachers Certification Institute, which is run by the MOE. This institute has a branch in each educational district in the country. It aims at improving the quality of education in Jordan in the following manner:

- Certifying unqualified teachers employed in the compulsory cycle, for both public and private schools, by raising their professional and academic level to equal that of graduates of pre-service teachers' education institutes.

- Training key education personnel and others working in the educational field, and offering opportunities for refresher training and professional growth for qualified teachers in the light of the results of educational research.

There is also another Teachers' Certification Institute, run by UNRWA. It has the same purpose and trains and qualifies teachers for UNRWA schools in the country.

b. Other Higher Institutes:

These enroll approximately 10,600 students of which 32 percent are women.

(1) The Shari'a Institute: The institute provides Islamic religion studies to prepare and qualify preachers, teachers, clerks, and administrators to meet the needs of the Mosques, the schools, and Moslem religious courts. Applicants with a General Secondary Education Certificate are admitted. The duration of study is of two scholastic years. It is run by the Ministry of Al-Alwaqa and Moslem Affairs.

(2) The Social Service Institute: The Institute was established in 1966 in Amman and is operated by the Ministry of Labour and Social Affairs. The duration is two years of post-secondary studies. Applicants for admission must have Public Secondary Examination Certificate, and must be at least 18 years old. It provides education and training to meet the need for social workers through pre-service and in service training. Graduates are employed in occupations related to general social work, community development, case work, institutional care, school social workers, rehabilitation work, etc.

(3) The Jordan Statistical Center: This center was established in 1964 to provide training in statistics for both government and private establishment employees. Each trainee must have a full secondary education as an academic pre-requisite for admission, and must be an employee of a statistical section or unit of a government department or a private establishment. The duration of study was one full year, but recently was expanded to two academic years. Trainees are released from their positions on the basis of a full-payment study leave. The Center is run by the Department of Census and Statistics which is attached to the Ministry of Commerce and Industry.

(4) The Technical Institute for Girls (Higher Commercial). Established in the academic year 1974/75, it aims to provide education in secretarial and office practice, as well as in catering and institutional management. The duration of study is two academic years. Applicants with the Commercial Secondary Education Examination Certificate are admitted. It is run by the MOE. The Institute is located in the building of the Comprehensive Secondary School for Girls in Amman.

(5) Engineering Trades Institutes: These include polytechnics and technical sections, aiming at providing education and training in the fields of mining, industry and construction. The duration of study is two years. Applicants with the Secondary Education Examination Certificate/ industrial or scientific stream admitted. These institutes are run by the MOE, the private sector, and UNRWA. The specializations taught at the MOE Polytechnic are electrical, mechanical, civil, architectural,

and chemical engineering; laboratory technician, and work-shop instructor. The subjects taught include humanities (15%) scientific subjects (20%), technical subjects (50%), and practical training (15%).

(6) Medical Professions, Nursing and Midwifery Institutes. These institutes teach and train students to be efficient assistants in the various professions of medicine, and prepare nurses and midwives to meet the need of hospitals in the country, and to upgrade the nursing profession. The duration of study is three years for the medical professions and nursing, and two years for midwifery. Applicants with the General Secondary Education Certificate (scientific stream) are admitted. These institutes are run by the Ministry of Public Health, the Ministry of Defense, and the private sector.

(7) Others: There are other types of higher education institutes which provide training in the form of short-duration seminars and conferences. Their main objective is to raise the professional level and efficiency of employees of government and private sector establishments. Illustrative of these institutes are: the Institute of Public Administration (which is autonomous and located in the buildings of the University of Jordan); the Co-operative Institute: the Workers' Education Institute (run by the Ministry of Labour and Social Affairs) and the Banking Studies Institute (which is run by the Central Bank of Jordan).

2. University Education:

There are now two universities in Jordan, the University of Jordan and Yarmouk University, established in 1962 and 1975 respectively. In the University of Jordan there are the following faculties: Arts, Sciences, Economics and Commerce, Shari'a, Medicine, Nursing, Agricultural Sciences, and Engineering.

In Yarmouk University, where teaching started in October 1976 on its temporary campus in the northern city of Irbid, there is now only one faculty, the Faculty of Science and Arts. When Yarmouk University's master-plan is fully realized in the near future on its 260 acre permanent site, it expects to be able to accommodate up to 20,000 students and to provide comprehensive educational facilities in four faculties: Science and Arts, Medical Science, Engineering and Agricultural and Veterinary Medicine.

Both universities are state universities, but are academically, administratively, and financially independent by law.

In both universities, the credit-hour system is used. There is co-operation between the MOE and both universities, especially in the fields of education and teacher training. According to the Act of Educational Certification, which was passed in 1972, the Faculty of Education at the University of Jordan has started to train teachers in the field professionally. This programme can lead to a Diploma or a Masters Degree in Education.

University Students Abroad

Despite the existence of the previously-mentioned institutes and universities of higher education, MOE statistics for the year 1977-78 indicate that there are about 42,000 Jordanian university students abroad. Reasons for such a phenomena are related to the strong feeling in Jordan that higher education is an important and valid economic investment for the development of both the individual and society. This has lead to a great social demand at this level of education among young Jordanians and the limited capacities of the existing institutions and universities in the country has forced many of them abroad for their higher education.

F. Special Educational Programs

1. Education for the Handicapped. This type of education is still in the development stage. The main Government agency responsible for such type of education is the Ministry of Labour and Social Affairs. Some institutes are run by the private sector. MOE statistics for the year 1977/78 indicate that there are 6 schools and orphanages providing education for the handicapped (people who are blind, deaf and dumb or paralysed). These accommodate 452 students and have 45 specialized teachers.

2. Illiteracy and Adult Education. With an estimated 30 percent of the total population over 12 years of age classified as illiterate, much needs to be done in this area. The more than 300,000 citizens in this category simply cannot be overlooked in national development. The MOE is encouraging adults and out-of-school youths to attend day and evening classes that cover in four years -- recently reduced from six years -- the content of the primary curriculum adapted to adult learning needs. Progress to date has been slow with only about 20,000 graduating from literacy classes over the past ten years from a target population estimated to have numbered 338,000 in 1976. A national plan of action, aimed at eradicating illiteracy and developing continuing education programs for adults, is at present under preparation in the MOE. In the meantime, the necessary legislation is being enacted to ensure coordination between the MOE and the various other ministries concerned (Agriculture, Labor, Health, and Islamic Culture) in the provision of adult education. The comprehensive secondary schools and proposed community colleges are expected to play a major role in the development of adult education and training programs and in providing such programs in the areas in which they are located.

To combat illiteracy, the Ministry of Education has had a program for teaching functional literacy since 1968. This provides basic skills in reading, writing, arithmetic and general education. Special program have been launched for workers and for youngsters and adults in the prisons.

In 1977-78 about 7800 persons were enrolled in all literacy and adult education classes. Of this number, 4600 passed. Progress in these areas has been slow but is expanding. The following comparisons indicate the progress in lowering illiteracy in the 15 years and above age groups.

PERCENTAGE OF ILLITERATE POPULATION -- AGE 15 AND HIGHER

<u>Years</u>	<u>Total</u>	<u>Males</u>	<u>Females</u>
1961	67.35%	49.9%	84.8%
1976	32.4%	19.1%	45.7%

The Five-Year-Plan (1976-80) gave adult education and literacy programs priority.

TABLE B-1
MOE BUDGET (1976)

	Elem, Prep & Sec. Education	Tech. Train- ing Insti- tutes	Vocational Education	Scholar- ships	Educational Athletic & Social Activities	Illiteracy	Teachers Certifica- tions Institutes	Curricula & School Textbooks	General Exams	ADMIN	TOTALS	Per- cent- ages
I. Recurring Expen- diture	13,512,000	531,600	510,000	404,700	203,400	23,400	72,700	488,400	150,400	980,400	16,877,000	86.6
a) Personnel	12,800,000	154,700	219,600	-	-	-	48,800	-	-	780,250	14,002,850	71.8
b) Others	712,000	377,400	296,400	90,200	25,000	2,900	21,450	465,400	150,400	150,150	2,285,300	11.8
- Transportation	(20,000)	(7,000)	(2,350)	(8,000)	(750)	(300)	(2,800)	(1,300)	(42,450)	(43,200)	(128,150)	(0.7)
- Rentals	(370,000)	-	(1,400)	-	(5,500)	-	(8,000)	(1,600)	-	(23,200)	(409,700)	(2.1)
- Utilities	(20,500)	(4,150)	(9,400)	-	(1,200)	-	(450)	-	-	(9,750)	(45,450)	(0.2)
- Other Services	(136,200)	(49,450)	(20,500)	(37,700)	(6,300)	(50)	(1,700)	(12,000)	(77,100)	(33,100)	(364,100)	(1.9)
- Supplies	(53,300)	(324,350)	(251,650)	(44,500)	(6,750)	(2,550)	(8,500)	(450,500)	(30,300)	(38,100)	1,210,500	(6.2)
- Furniture	-	(1,850)	(3,500)	-	(3,300)	-	-	-	-	(1,850)	10,500	(0.05)
- Equipment	-	(600)	(1,600)	-	(1,700)	-	-	-	(550)	(950)	4,900	(0.03)
- Sch. Bldg. Maint.	(92,000)	-	-	-	-	-	-	-	-	-	(92,000)	(0.5)
- Playgrds. Maint.	(20,000)	-	-	-	-	-	-	-	-	-	(20,000)	(0.1)
c) Transfer Expend.	-	-	-	314,500	178,400	20,500	2,450	23,000	-	50,000	588,850	3.0
- Grants	-	-	-	-	(107,500)	(20,500)	(2,450)	(23,000)	-	-	(153,450)	(0.8)
- Contributions	-	-	-	-	(70,000)	-	-	-	-	(50,000)	(120,900)	(0.6)
- Scholarships	-	-	-	(314,500)	-	-	-	-	-	-	(314,500)	(1.6)
II. Capital Outlays	1,315,500	207,500	916,000	-	33,500	-	5,000	-	-	138,500	2,616,000	13.4
a) Buildings	(942,000)	(160,000)	(301,000)	-	-	-	-	-	-	(80,000)	(1,483,000)	(7.6)
b) Equipment	(85,000)	(40,000)	(213,000)	-	(25,500)	-	-	-	-	(52,000)	(415,500)	(2.1)
c) Others	(288,500)	(7,500)	(402,000)	-	(8,000)	-	(5,000)	-	-	(6,500)	(717,500)	(3.7)
III TOTALS	14,827,500	739,100	1,426,000	404,700	236,900	23,400	77,700	488,400	150,400	1,118,900	19,493,000	
Percentages	76.1	3.8	7.3	2.1	1.2	0.1	0.4	2.5	0.8	5.7		100.0

TABLE B-2
MOE BUDGET (1977)

	Elem. Prep & Sec. Education	Tech. Train- ing Insti- tutes	Vocational Education	Scholar- ships	Educational Athletic & Social Activities	Illiteracy	Teachers Certifica- tion Institutes	Curricula & School Textbooks	General Exams	ADMIN	TOTALS	Per- Cent- ages
I: Recurring Expen- diture	17,055,000	758,500	863,900	884,000	248,000	57,800	99,600	1,147,500	188,500	1,260,000	22,562,800	91.6
a) Personnel	15,985,000	189,000	313,400	-	-	-	65,000	-	-	915,000	17,467,400	70.9
b) Others	1,070,000	569,500	550,500	249,000	51,000	7,800	31,600	1,119,000	188,500	296,000	4,126,900	16.8
- Transportation	(30,000)	(8,000)	(4,600)	(9,000)	(5,500)	(700)	(3,500)	(1,500)	(47,500)	(66,000)	(169,800)	(0.7)
- Rentals	(410,000)	-	(1,500)	-	(8,000)	-	(10,000)	(2,000)	-	(100,000)	(531,800)	(2.1)
- Utilities	(33,000)	(5,500)	(15,500)	-	(2,000)	-	(800)	(500)	-	(12,000)	(69,300)	(0.3)
- Other Services	(290,000)	(51,500)	(48,000)	(180,000)	(20,000)	(350)	(4,000)	(15,000)	(111,000)	(55,000)	(780,850)	(3.2)
- Supplies	(135,000)	(495,000)	(477,000)	(60,000)	(12,000)	(6,750)	(12,800)	(1,100,000)	30,000	(60,000)	(2,388,550)	(9.7)
- Furniture	(1,000)	(2,000)	(1,700)	(-)	(1,500)	-	(250)	-	-	(2,000)	(8,950)	(0.04)
- Equipment	(1,000)	(1,500)	(2,200)	-	-	-	(250)	-	(500)	1,000	(7,950)	(0.03)
- Sch. Bld. Maint.	(150,000)	-	-	-	-	-	-	-	-	-	(150,000)	(0.6)
- Playgrds. Maint.	(20,000)	-	-	-	-	-	-	-	-	-	(20,000)	(0.1)
c) Transfer Expend.	-	-	-	635,000	197,000	50,000	3,000	28,500	-	55,000	968,500	3.9
- Grants	-	-	-	-	(108,000)	(50,000)	(3,000)	(28,500)	-	-	(189,500)	(0.8)
- Contributions	-	-	-	-	(89,000)	-	-	-	-	(55,000)	(144,000)	(0.6)
- Scholarships	-	-	-	(635,000)	-	-	-	-	-	-	(635,000)	(2.5)
II. Capital Outlays	1,023,000	118,000	676,000	-	43,000	-	-	-	-	199,000	2,059,000	8.4
a) Buildings	(613,000)	(83,000)	(461,000)	-	-	-	-	-	-	(90,000)	(1,247,000)	(5.1)
b) Equipment	(90,000)	(29,000)	(177,000)	-	(33,000)	-	-	-	-	(49,000)	(364,000)	(1.5)
c) Others	(30,000)	(10,000)	(38,000)	-	(10,000)	-	-	-	-	(60,000)	(448,000)	(1.8)
III. TOTALS	18,078,000	876,500	1,539,900	884,000	291,000	57,800	99,600	1,147,500	188,500	1,459,000	24,621,800	
Percentages	73.4	3.6	6.2	3.6	1.2	0.2	0.4	4.7	0.8	5.9		100.0

TABLE B-3
MOE BUDGET (1978)

	Elem, Prep & Sec. Education	Tech. Train- ing Insti- tutes	Vocational Education	Scholar- ships	Educational Athletic & Social Activities	Illiteracy	Teachers Certifica- tion Institutes	Curricula & School Textbooks	General Exams	ADMIN	TOTALS	Per- cent- ages
I. Recurring Expen- diture	20,097,000	238,000	748,000	1,243,000	271,000	60,000	170,000	1,239,000	243,000	1,416,000	26,325,000	92.2
a) Personnel	19,000,000	189,000	287,000	-	-	-	54,000	-	-	984,000	20,514,000	71.9
b) Others	1,097,000	649,000	461,000	593,000	85,000	10,000	106,000	1,218,000	243,000	317,000	4,779,000	16.7
- Transportation	(35,000)	(9,000)	(3,500)	(13,000)	(4,000)	(1,000)	(3,500)	(1,500)	(53,000)	(75,000)	(198,500)	(0.7)
- Rentals	(420,000)	-	(1,000)	-	(16,500)	-	(10,000)	(2,000)	-	(80,000)	(529,500)	(1.8)
- Utilities	(40,000)	(7,000)	(13,500)	-	(2,500)	-	(1,000)	(500)	-	(15,000)	(79,500)	(0.3)
- Other Services	(275,000)	(60,000)	(40,000)	(500,000)	(22,000)	(400)	(40,000)	(14,000)	(150,000)	(70,000)	(1,171,400)	(4.1)
- Supplies	(140,000)	(570,000)	(400,000)	(80,000)	(15,000)	(8,600)	(50,000)	(1,200,000)	(40,000)	(75,000)	(2,578,600)	(9.0)
- Furniture	(1,000)	(2,000)	(2,000)	-	(1,000)	-	(500)	-	-	(1,000)	(7,500)	(0.02)
- Equipment	(1,000)	(1,000)	(1,000)	-	(24,000)	-	(1,000)	-	-	(1,000)	(29,000)	(0.1)
- Sch. Bldg. Maint.	(160,000)	-	-	-	-	-	-	-	-	-	(160,000)	(0.6)
- Playgrds. Maint.	(25,000)	-	-	-	-	-	-	-	-	-	(25,000)	(0.1)
c) Transfer Expend.	-	-	-	650,000	186,000	50,000	10,000	21,000	-	115,000	1,032,000	3.6
- Grants	-	-	-	-	(65,000)	(50,000)	(10,000)	(21,000)	-	-	(146,000)	(0.5)
- Contributions	-	-	-	-	(121,000)	-	-	-	-	(115,000)	(236,000)	(0.8)
- Scholarships	-	-	-	(650,000)	-	-	-	-	-	-	(650,000)	(2.3)
II. Capital Outlays	1,180,500	152,500	615,000	-	60,000	-	-	-	-	207,000	2,215,000	7.8
a) Buildings	(502,500)	(102,500)	(370,000)	-	-	-	-	-	-	(135,000)	(1,110,000)	(3.9)
b) Equipment	(75,000)	(35,000)	(181,000)	-	(45,000)	-	-	-	-	(57,000)	(393,000)	(1.4)
c) Others	(603,000)	(15,000)	(64,000)	-	(15,000)	-	-	-	-	(15,000)	(712,000)	(2.5)
II. TOTALS	21,277,500	990,500	1,363,000	1,243,000	331,000	60,000	170,000	1,239,000	243,000	1,623,000	28,540,000	
Percentages	74.5	3.5	4.8	4.4	1.2	6.2	0.6	4.3	0.8	5.7		100.0

TABLE B-4
MOE BUDGET (1979)

	Elem. Prep & Sec. Education	Tech. Train- ing Insti- tutes	Vocational Education	Scholar- ships	Educational Athletic & Social Activities	Illiteracy	Teachers Certifica- tions Institutes	Curricula & School Textbooks	General Exams	ADMIN	TOTALS	Per- cent- ages
I. Recurring Expenditure	25,736,000	984,000	826,000	1,613,000	316,000	112,000	176,000	1,335,000	335,000	1,648,000	33,081,000	91.8
a) Personnel	24,535,000	225,000	340,000	-	8,500	-	62,500	-	-	1,160,000	26,331,000	73.1
b) Others	1,201,000	759,000	486,000	813,000	277,500	12,000	101,500	1,320,000	335,000	349,000	5,454,000	15.1
- Transportation	(45,000)	(5,000)	(4,000)	(18,000)	(5,000)	(1,000)	(6,000)	(1,500)	(70,000)	(85,000)	(239,500)	(0.7)
- Rentals	(430,000)	-	(1,000)	-	(25,000)	-	(10,000)	(2,000)	-	(700,000)	(538,000)	(1.5)
- Utilities	(66,000)	(10,000)	(1,500)	-	(4,000)	-	(1,000)	(500)	-	20,000	(110,500)	(0.3)
- Other Services	(290,000)	(65,000)	(47,000)	(700,000)	(25,000)	-	(40,000)	(16,000)	(215,000)	(80,000)	(1,478,000)	(4.1)
- Supplies	(159,000)	(630,000)	(415,000)	(95,000)	(15,500)	(1,100)	(45,000)	(1,300,000)	(50,000)	(85,000)	(2,805,500)	(7.8)
- Furniture	(1,000)	(48,000)	(2,000)	-	(1,000)	-	-	-	-	(5,000)	(57,000)	(0.1)
- Equipment	(1,000)	(1,000)	(2,000)	-	(2,000)	-	(500)	-	-	(4,000)	(10,500)	(0.03)
- Sch. Bldg. Maint.	(19,000)	-	-	-	-	-	-	-	-	-	(190,000)	(0.5)
- Playgrds. Maint.	(25,000)	-	-	-	-	-	-	-	-	-	(25,000)	(0.1)
c) Transfer Expend.	-	-	-	800,000	230,000	100,000	12,000	15,000	-	139,000	1,296,000	3.6
- Grants	-	-	-	-	(70,000)	(100,000)	(12,000)	(15,000)	-	(4,000)	(241,000)	(0.7)
- Contributions	-	-	-	-	(160,000)	-	-	-	-	(135,000)	(295,000)	(0.8)
- Scholarships	-	-	-	(800,000)	-	-	-	-	-	-	(800,000)	(2.1)
ii. Capital Outlays	1,456,000	216,000	708,000	-	85,000	-	216,000	-	-	278,000	2,959,000	8.2
a) Buildings	(936,000)	(155,000)	(410,000)	-	-	-	(155,000)	-	-	(160,000)	(1,816,000)	(5.1)
b) Equipment	(100,000)	(39,000)	(223,000)	-	(60,000)	-	(39,000)	-	-	(78,000)	(539,000)	(1.5)
c) Others	(420,000)	(22,000)	(70,000)	-	(25,000)	-	(22,000)	-	-	(20,000)	(579,000)	(1.6)
III TOTALS	27,192,000	1,200,000	1,534,000	1,613,000	401,000	112,000	392,000	1,335,000	335,000	1,926,000	36,040,000	
Percentages	75.5	3.3	4.3	4.5	1.1	0.3	1.1	3.7	0.9	5.3		100.0

TABLE B-5
MOE BUDGET (1980)
(Indicative)

	Elem, Prep & Sec. Education	Tech. Train- ing Insti- tutes	Vocational Education	Scholar- ships	Educational Athletic & Social Activities	Illiteracy	Teachers Certifica- tion Institutes	Curricula & School Textbooks	General Exams	ADMIN	TOTALS	Per- cent- ages
I. Recurring Expenditure	28,747,000	1,064,000	939,000	1,936,000	388,000	114,000	1,064,000	1,039,000	370,000	1,787,000	37,448,000	92.2
a) Personnel	27,400,000	260,000	390,000	-	15,000	-	260,000	-	-	1,250,000	29,575,000	72.8
b) Others	1,347,000	804,000	549,000	985,000	213,000	14,000	804,000	1,024,000	370,000	393,000	6,503,000	16.0
- Transportation	(50,000)	(6,000)	(5,000)	(25,000)	(6,000)	(1,500)	(6,000)	(1,500)	(80,000)	(100,000)	(281,000)	(0.7)
- Rentals	(450,000)	(1,000)	(1,000)	-	(35,000)	-	(1,000)	(2,000)	-	(70,000)	(560,000)	(1.4)
- Utilities	(60,000)	(12,000)	(18,000)	-	(5,000)	-	(12,000)	(500)	-	(28,000)	(135,500)	(0.3)
- Other Services	(290,000)	(70,000)	(35,000)	(35,000)	(100,000)	(500)	(70,000)	(20,000)	(230,000)	(90,000)	(1,755,500)	(4.3)
- Supplies	(200,000)	(700,000)	(480,000)	(110,000)	(60,000)	(12,000)	(700,000)	(1,000,000)	(60,000)	(90,000)	(3,412,000)	(8.4)
- Furniture	(30,000)	(10,000)	(5,000)	-	(5,000)	-	(10,000)	-	-	(10,000)	(70,000)	(0.2)
- Equipment	(2,000)	(5,000)	(5,000)	-	(2,000)	-	(5,000)	-	-	(5,000)	(24,000)	(0.1)
- Sch. Bldg. Maint.	(230,000)	-	-	-	-	-	-	-	-	-	(230,000)	(0.5)
- Playgrds. Maint.	(35,000)	-	-	-	-	-	-	-	-	-	(35,000)	(0.1)
c) Transfer Expend.	-	-	-	951,000	160,000	100,000	-	15,000	-	144,000	1,370,000	3.4
- Grants	-	-	-	-	(60,000)	(100,000)	-	(15,000)	-	(4,000)	(179,000)	(0.4)
- Contributions	-	-	-	-	(100,000)	-	-	-	-	(140,000)	(240,000)	(0.6)
- Scholarships	-	-	-	(951,000)	-	-	-	-	-	-	(951,000)	(2.4)
II. Capital Outlays	1,710,000	215,000	682,000	-	142,000	-	215,000	-	-	207,000	3,171,000	7.8
a) Buildings	(1,080,000)	(160,000)	(420,000)	-	(60,000)	-	(160,000)	-	-	(120,000)	(2,000,000)	(4.9)
b) Equipment	(110,000)	(40,000)	(193,000)	-	(55,000)	-	(40,000)	-	-	(62,000)	(500,000)	(1.2)
c) Others	(520,000)	(15,000)	(62,000)	-	(27,000)	-	(15,000)	-	-	(20,000)	(659,000)	(1.7)
III. TOTALS	30,457,000	1,279,000	1,621,000	1,936,000	530,000	114,000	1,279,000	1,039,000	370,000	1,994,000	40,619,000	100.0
Percentages	75.0	3.1	4.0	4.0	1.3	0.3	3.1	2.6	0.9	4.9		

TABLE B-6

NET EDUCATION ENROLLMENT RATIO
(1978/79)

<u>Students/Population</u>	<u>Pre-School & Kindergarten (3-5 years)</u>	<u>Elementary (6-11 years)</u>	<u>Preparatory (12-14 years)</u>	<u>Compulsory (6-14 years)</u>	<u>Secondary (15-17 years)</u>	<u>Higher Education (18+years)</u>
Total Students	15,241	399,265	152,276	551,982	91,974	28,754
Total Population	244,367	439,244	186,501	625,745	158,748	206,005
Net Enrollment Ratio	6.2%	90.9%	81.9%	88.7%	57.8%	14.0%
Male Students	8,591	212,523	82,721	295,244	52,152	17,555
Male Population	127,280	229,184	96,981	326,165	80,606	102,107
Net Enrollment Ratio	6.7%	92.7%	85.5%	90.5%	64.7%	17.2%
Female Students	6,650	186,733	70,005	256,738	39,822	11,199
Female Population	117,087	216,060	89,520	299,580	78,142	103,899
Net Enrollment Ratio	5.7%	88.9%	78.2%	85.7%	51.0%	10.8%

TABLE B-7
MOE CONTROLLED CLASSROOMS

Year/Level	Rural Classrooms				Urban Classrooms				Total Classrooms			
	MOE	OTHER	TOTAL	% MOE	MOE	OTHER	TOTAL	% MOE	MOE	OTHER	TOTAL	% MOE
1979/80												
Elementary	5,346	832	6,178	86.5%	4,453	2,606	7,059	63.1%	9,799	3,438	13,237	74.0%
Preparatory	2,107	306	2,413	87.3%	1,811	852	2,663	68.0%	3,918	1,158	5,076	77.2%
Secondary	624	7	631	98.9%	1,639	321	1,960	83.6%	2,263	328	2,591	87.3%
Total	<u>8,077</u>	<u>1,145</u>	<u>9,222</u>	87.6%	<u>7,903</u>	<u>3,779</u>	<u>11,682</u>	67.7%	<u>15,980</u>	<u>4,924</u>	<u>20,904</u>	76.4%
1978/79												
Elementary	5,039	785	5,824	86.5%	4,197	2,456	6,653	63.1%	9,236	3,241	12,477	74.0%
Preparatory	1,974	287	2,261	87.3%	1,697	798	2,495	68.0%	3,671	1,085	4,756	77.2%
Secondary	554	6	560	98.9%	1,455	786	1,741	83.6%	2,009	292	2,301	87.3%
Total	<u>7,567</u>	<u>1,078</u>	<u>8,645</u>	87.2%	<u>7,349</u>	<u>3,540</u>	<u>10,889</u>	67.7%	<u>14,916</u>	<u>4,618</u>	<u>19,534</u>	76.4%
1977/78												
Elementary	4,718	743	5,461	86.4%	4,029	2,340	6,369	63.3%	8,747	3,083	11,830	73.9%
Preparatory	1,746	261	2,007	87.0%	1,551	787	2,338	66.3%	3,297	1,048	4,345	75.9%
Secondary	401	5	406	98.8%	1,175	359	1,534	76.6%	1,576	364	1,940	81.2%
Total	<u>6,865</u>	<u>1,009</u>	<u>7,874</u>	87.2%	<u>6,755</u>	<u>3,486</u>	<u>10,241</u>	66.6%	<u>13,620</u>	<u>4,495</u>	<u>18,115</u>	75.2%
1976/77												
Elementary	4,500	735	5,235	86.0%	3,722	2,281	6,003	62.0%	8,222	3,016	11,238	73.2%
Preparatory	1,580	242	1,822	86.7%	1,385	751	2,136	64.8%	2,965	993	3,958	74.9%
Secondary	327	4	331	98.8%	1,084	262	1,346	65.3%	1,411	266	1,677	84.1%
Total	<u>6,407</u>	<u>981</u>	<u>7,388</u>	86.7%	<u>6,191</u>	<u>3,294</u>	<u>9,485</u>	65.3%	<u>12,598</u>	<u>4,275</u>	<u>16,873</u>	74.7%
1975/76												
Elementary	4,173	691	4,864	85.8%	3,505	2,213	5,718	61.3%	7,678	2,904	10,582	72.6%
Preparatory	1,375	219	1,594	86.3%	1,264	702	1,966	64.3%	2,639	921	3,560	74.1%
Secondary	234	3	237	98.7%	725	194	919	78.9%	959	197	1,156	83.0%
Total	<u>5,782</u>	<u>913</u>	<u>6,695</u>	86.4%	<u>5,494</u>	<u>3,109</u>	<u>8,603</u>	63.9%	<u>11,276</u>	<u>4,022</u>	<u>15,298</u>	73.7%

TABLE B-8

MOE CLASSROOMS

DEGREE RENTED AND RURAL

Year and Level	Rural				Urban				All MOE Schools				Percent Rural
	Rented	Owned	Total	% Rented	Rented	Owned	Total	% Rented	Rented	Owned	Total	% Rented	
1979/80													
Elementary	2,052	3,294	5,346	38.4%	3,950	503	4,453	88.7%	6,002	3,797	9,799	61.3%	54.6%
Preparatory	341	1,766	2,107	16.2%	983	828	1,811	54.3%	1,324	2,594	3,918	33.8%	53.8%
Secondary	71	553	624	11.4%	74	1,565	1,639	4.5%	145	2,118	2,263	6.4%	27.6%
Total	2,462	5,613	8,077	30.5%	5,007	2,896	7,903	63.4%	7,471	8,509	15,980	46.8%	50.5%
1978/79													
Elementary	1,935	3,104	5,039	38.4%	3,722	475	4,197	88.7%	5,657	3,579	9,236	61.3%	54.6%
Preparatory	319	1,655	1,974	16.2%	921	776	1,697	54.3%	1,240	2,431	3,671	33.8%	53.8%
Secondary	63	491	554	11.4%	65	1,390	1,455	4.5%	128	1,881	2,009	6.4%	27.6%
Total	2,317	5,250	7,567	30.5%	4,708	2,641	7,349	63.4%	7,025	7,891	14,916	46.8%	50.5%
1977/78													
Elementary	1,885	2,833	4,718	40.0%	3,684	345	4,029	91.4%	5,569	3,178	8,747	63.7%	53.9%
Preparatory	305	1,441	1,746	17.5%	907	644	1,551	58.5%	1,212	2,085	3,297	36.8%	53.0%
Secondary	19	382	401	4.7%	166	1,009	1,175	14.1%	185	1,391	1,576	11.7%	25.4%
Total	2,209	4,656	6,865	32.2%	4,757	1,699	6,455	70.4%	6,966	6,654	13,620	51.1%	50.4%
1976/77													
Elementary	2,177	2,323	4,500	48.4%	3,473	249	3,722	93.3%	5,650	2,572	8,222	68.7%	54.7%
Preparatory	444	1,136	1,580	28.1%	828	557	1,385	59.8%	1,272	1,693	2,965	42.9%	53.3%
Secondary	70	257	327	21.4%	186	898	1,084	17.2%	256	1,155	1,411	18.1%	23.2%
Total	2,691	3,716	6,407	42.0%	4,487	1,704	6,191	72.5%	7,178	6,420	12,598	57.0%	50.9%
1975/76													
Elementary	1,826	2,347	4,173	43.8%	3,207	298	3,505	91.5%	5,033	2,645	7,678	65.6%	54.4%
Preparatory	295	1,080	1,375	21.5%	766	498	1,264	60.6%	1,061	1,578	2,639	40.2%	52.1%
Secondary	43	191	234	18.4%	182	543	725	25.1%	225	734	959	23.5%	24.4%
Total	2,164	3,618	5,782	37.4%	4,155	1,339	5,494	75.6%	6,319	4,957	11,276	56.0%	51.3%

TABLE B-9

RENTED MOE CLASSROOMS BY EDUCATION DISTRICT

(1979)

Education District	Primary Level			Preparatory Level			Secondary Level			MOE System		
	Total	Rented	% Rented	Total	Rented	% Rented	Total	Rented	% Rented	Total	Rented	% Rented
Amman city	1,559	1,395	89.5%	662	356	53.8%	491	33	6.7%	2,712	1,784	65.8%
Amman Suburbs	819	499	60.9%	293	76	25.9%	108	1	0.9%	1,220	576	42.2%
Zarqa	1,262	1,164	92.2%	528	401	75.9%	211	23	10.9%	2,001	1,488	74.4%
(Zarqa City)	(1,070)	(1,007)	94.1%	(424)	(272)	64.2%	(175)	(23)	13.1%	(1,669)	(1,302)	78.0%
(Rest of District)	(192)	(157)	81.8%	(104)	(29)	27.9%	(36)	(-)	-0-	(332)	(186)	56.0%
Irbid	1,752	736	42.0%	712	187	26.3%	342	1	0.3%	2,806	924	32.9%
(Irbid City)	(417)	(382)	91.6%	(183)	(142)	77.6%	(164)	(-)	-0-	(764)	(524)	68.6%
(Rest of District)	(1,335)	(354)	26.5%	(529)	(45)	8.5%	(178)	(1)	0.6%	(2,042)	(400)	19.6%
Madaba	425	274	64.5%	164	47	28.7%	54	-	-0-	643	321	49.9%
Halqa	589	257	43.6%	224	50	22.3%	133	59	44.4%	946	366	38.7%
Ajlun	308	179	58.1%	139	15	10.8%	64	2	3.1%	511	196	38.4%
Jarash	348	183	52.6%	137	23	16.8%	55	4	7.3%	540	210	38.9%
Ma'ruq	554	280	50.5%	207	50	24.2%	49	4	8.2%	810	334	41.2%
Hamtha	279	140	50.2%	108	41	38.0%	41	-	-0-	428	181	42.3%
Karak	658	254	38.6%	290	39	13.4%	91	-	-0-	1,039	293	28.2%
Tafila	248	111	44.8%	81	2	2.5%	29	-	-0-	358	113	31.6%
Ma'an	335	185	55.2%	136	17	12.5%	49	1	2.0%	520	203	39.0%
TOTAL	<u>9,136</u>	<u>5,657</u>	<u>61.9%</u>	<u>3,681</u>	<u>1,204</u>	<u>32.7%</u>	<u>1,717</u>	<u>128</u>	<u>7.5%</u>	<u>14,534</u>	<u>6,989</u>	<u>48.1%</u>

TABLE B-10
DOUBLE-SHIFTING IN MOE SCHOOLS

	R U R A L			U R B A N			T O T A L		
	Rented	Owned	Total	Rented	Owned	Total	Rented	Owned	Total
1979/80									
Elementary	216	398	614	1615	139	1754	1831	537	2368
Preparatory	13	109	122	191	204	395	204	313	517
Secondary	24	28	52	11	128	139	35	156	191
Total Double-Shift	<u>253</u>	<u>535</u>	<u>788</u>	<u>1817</u>	<u>471</u>	<u>2288</u>	<u>2070</u>	<u>1006</u>	<u>3076</u>
Total Classrooms	2464	5613	8077	5007	2896	7903	7471	8509	15980
(Percentages)	10.3%	9.5%	9.8%	36.3%	16.3%	29.0%	27.7%	11.8%	19.2%
1978/79									
Elementary	203	373	576	1519	127	1646	1722	500	2222
Preparatory	12	102	114	180	186	366	192	288	480
Secondary	23	26	49	10	117	127	33	143	176
Total Double-Shift	<u>238</u>	<u>501</u>	<u>739</u>	<u>1709</u>	<u>430</u>	<u>2139</u>	<u>1947</u>	<u>931</u>	<u>2878</u>
Total Classrooms	2317	5250	7567	4708	2642	7349	7025	7891	14916
(Percentages)	10.3%	9.5%	9.7%	36.3%	16.4%	29.9%	27.7%	11.8%	19.3%
1977/78									
Elementary	208	302	508	1588	133	1721	1794	435	2229
Preparatory	7	129	136	156	204	360	163	333	496
Secondary	-	35	35	70	71	91	20	106	126
Total Double-Shift	<u>215</u>	<u>466</u>	<u>679</u>	<u>1764</u>	<u>408</u>	<u>2172</u>	<u>1977</u>	<u>874</u>	<u>2851</u>
Total Classrooms	2309	4656	6865	4757	1998	6755	6966	6654	13620
(Percentages)	9.3%	10.0%	9.9%	37.1%	20.4%	32.2%	28.4%	13.1%	20.9%
1976/77									
Elementary	351	247	593	1447	70	1517	1798	312	2110
Preparatory	26	83	109	165	192	357	191	275	466
Secondary	9	9	18	22	47	69	31	56	87
Total Double-Shift	<u>386</u>	<u>339</u>	<u>720</u>	<u>1634</u>	<u>309</u>	<u>1943</u>	<u>2020</u>	<u>643</u>	<u>2663</u>
Total Classrooms	2691	3716	6407	4487	1704	6191	7178	6420	12598
(Percentages)	14.3%	9.0%	11.2%	36.4%	18.1%	31.4%	28.1%	10.0%	21.1%

DOUBLE-SHIFTING IN MOE SCHOOLS

	R U R A L			U R B A N			T O T A L		
	Rented	Owned	Total	Rented	Owned	Total	Rented	Owned	Total
1975/76									
Elementary	231	245	476	1304	100	1404	1545	335	1880
Preparatory	13	76	89	168	148	316	181	224	405
Secondary	2	7	9	23	40	63	25	47	72
Total Double-Shift	<u>246</u>	<u>328</u>	<u>574</u>	<u>1495</u>	<u>288</u>	<u>1783</u>	<u>1751</u>	<u>606</u>	<u>2357</u>
Total Classrooms	2164	3618	5782	4155	1339	5494	6319	4957	11276
(Percentages)	11.4%	9.1%	9.9%	36.0%	21.5%	32.5%	27.7%	12.2%	20.1%

SOURCE: MOE

Social Analysis - Annex

I. Commentary on School Sites Proposed under the Project	<u>Page</u>
A. Urban Sites	1
B. Urban-Rural Sites	5
C. Rural Sites	7
II. Home-School Distance and the Quality of Educational Facilities for Girls	9

I. Commentary on School Sites Proposed Under the Project

A. Urban Sites

Amman: In discussions with Mr. Ahmad Isis, Director of School Buildings in the Ministry of Education, it became clear that a prime criterion for selection of the list of schools proposed for AID funding was that each would serve a poor area of the country. In personal visits to the four proposed sites in Amman, D. Sharry and F. Salahi of the AID staff, in the company of A. al-Ghazawi, Director of School Buildings for Amman Municipality, confirmed visually and through conversation with teachers that the students to benefit from the proposed schools were generally from low-income families. Further confirmation is available in J. Dajani's A Social Soundness Analysis of Amman Water and Sewerage Systems, where the areas visited are reported to have medium to high concentrations of poor persons, based on:

- actual windshield surveys
- the use of statistics from IBRD's Amman Water and sewerage Project III, March, 1978
- average assessed annual rental on which taxes are based.¹

To be specific, three areas of Amman visited received the following ratings:

South Marka - Medium (concentration of poor persons)

Jabal al-Tadj - Medium

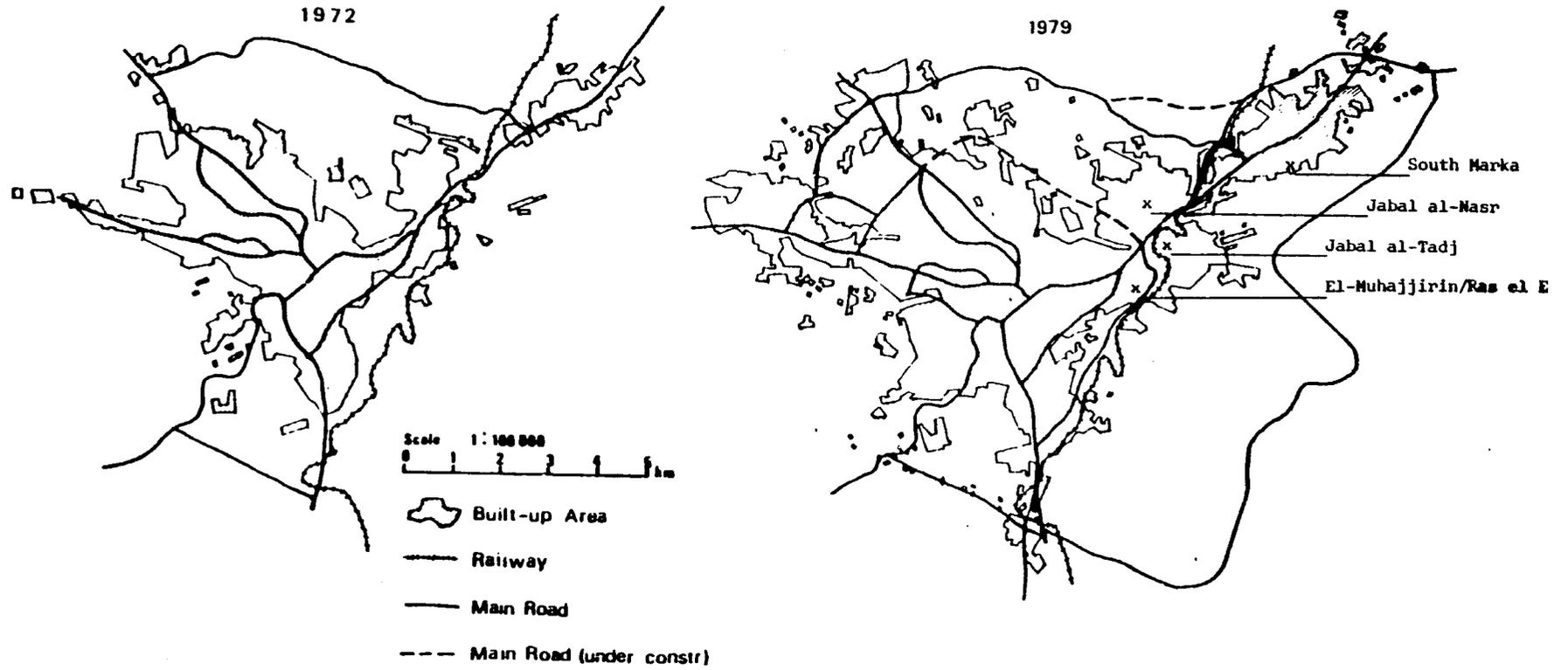
Jabal al-Nasr - High

Muhajjirin/Ras el-Ain-Amman, a site not included in the above-cited survey, is one of the oldest, poorest and most densely populated sections of the city.

As a result of a combination of the following: extreme scarcity of undeveloped land in densely inhabited urban areas; consequent sky rocketing land values; rapid inflation, rent control on occupied units and an uncontrolled rental market elsewhere; continuing rural-urban migration; and Jordan's very high rate of population growth, two things have happened:

¹ Jarir S. Dajani. A Social Soundness Analysis of Amman Water and Sewerage Systems. Contact No. AID/NE-C-1493 (Jordan) April 1978 p.14.

AMMAN MUNICIPALITY: HISTORICAL
DEVELOPMENT 1972 - 1979



1. crowding has increased in urban poor high density population areas, as well as the demand for educational facilities there; and
2. the Ministry of Education has found it increasingly difficult to obtain new facilities in lieu of inferior quality rented buildings, which were originally seen as a stopgap measure to accommodate rapid center-city growth.

Like the middle-income home seekers forced by speculation-fueled high land prices to purchase relatively remote sites, the Office of School Buildings in the the Ministry of Education often has been forced to purchase land, and plan construction of facilities, on the border of high density areas and lower density urban sprawl.

The following scheme presents center-city realities in Amman and Irbid (Column A) which have led the MOE to seek solutions in Column B to the problem of the provision of adequate school buildings for these areas.

<u>A.</u>	<u>B.</u>
High Density Population Areas.	Fringe area between high density areas and urban sprawl.
High Land Values.	Lower Land Values.
High Rent for New Housing (not rent-controlled)	Lower Rents.
High Population Rentention/Overcrowding/ Increase:	Rapid population growth (3.4%)
Reluctance to invoke eminent domain in densely populated areas	Eminent domain unnecessary
Preference for short home-school distance, especially for compulsory cycle females.	Beneficiaries within 2 km of proposed sites ¹
Acceptability of longer home-school distance for compulsory cycle-boys.	
Legal mandate: Students in age group 6-16 must be admitted to school	

¹ except for Kufor Khal, a central school which will serve three villages, each about 5 km from the proposed site.

Ratio of Government-owned:-rented
 urban primary schools
 M. 11: 156
 F. 1: 161

Accommodation of growth in high-density and fringe population areas and replacement of rented buildings by siting schools in B-Type area.

As a result of the selection procedure, described in the Social Analysis, p.III E, the following list of sites was approved by the Mission. A brief statement of eligibility accompanies the listing of each site.

(Continued)

1. Jabal al-Taj-Amman

A compulsory-level boys' school is proposed for this rapidly growing section of northeast Amman. For demonstration of growth, see map). Site visited 2 January, 1980. Inspection confirms school will serve low-income populace.

2. South Marka-Amman

Proposed compulsory level girls' school will accommodate increased school population and replace substandard rented buildings. The proposed compulsory-level girls' school will serve one of the oldest and most densely populated, poorest sections of Amman.

3. Al-Muhajirin/Ras el-Ain-Amman

A proposed girls' school at this site would serve the oldest and one of the poorest, most densely populated sections of Amman. MOE ownership of land in such an area is a rare and fortuitous occurrence, given prevailing real estate prices.

4. Irbid-al-Muajeh

The proposed al-Muajeh school, situated on the margin of the town is an example of a typical site in a rapidly growing area which will also serve an older area of increasingly dense population. The radius of service will be about 2 km.

5. Zarka - Dahrat Awajan

This 2 acre site is located in a densely populated, low-income, older section of Zarka Municipality. The proposed school will absorb surplus students in existing buildings by eliminating the second shift in schools in neighboring areas.

6. Madabah Municipality

This two-acre site is situated in the center of Madaba Municipality but land is available because it had been set aside by the Ministry of Education before the post-1975 real estate boom.

Visual inspection confirms that the student population will be drawn from low-income areas.

In addition to accommodating increased enrollment, this school will absorb some shifts from at least two schools visited. These two compulsory-level schools are located in buildings rented by the Ministry of Education since 1954. Classrooms lack ventilation and proper lighting. They are acutely overcrowded. 53 students occupied one 30-m² room, or 1 student per. 56 m² the accepted standard is 1 student per 1.2 m².

No playground areas exist.

Some of the buildings are structurally unsafe.

In sum, the proposed school will accommodate increased school-age population while eliminating some overcrowding, double shifting, and use of sub-standard rented structures.

B. Urban-Rural Sites

7. Jabal al-Nasr/South Almanara-Amman

The proposed compulsory-level girls' school in another rapidly growing section of northeast Amman will 1/accommodate growth 2/replace a substandard rented building 3/eliminate double-shifting (morning session, grades 3-6; afternoon session, grades 1-3) and 4/allow the return of preparatory classes 1 and 2 which were housed in the rented facility until 1978 and then forced by over-crowding to travel to another school site. Presently 8 rented classrooms accommodate 565 students in 2 shifts. Proposed building will accommodate 800 in 1.

8. East Site - Irbid

Inspection and interview with Superintendent of Schools for Irbid Governorate confirms that proposed compulsory-level girls' school at this site will serve a radius of 3 km

including low-income villages on the outskirts of the city as well as low-income densely-populated sections of the center-city. It is designed to allow larger enrollment and land area, permitting fewer schools per capita in planned, currently underdeveloped sites. Present means of home-school travel are buses and "services". The planned location of these schools on bus routes will decrease home-school travel time and cost for students.

9. Zarka-Ma'asoum

This low-income area was recently included within Zarka Municipality because of the rapidity of its expansion. Located on the Western side of the city, the 8.75-acre site is close enough to a double-shifted school to help in solving its problem. During the period 1961-79 the city of Zarka grew 224% (or 4.6% per annum) 96,080 - 215,687.

10. Salt-Housing Area

The 2-acre site is located on the outskirts of the city by within the municipality. The proposed school would be located adjacent to a low/middle-income Government housing project, but would also serve other low-income settlements on the periphery of the municipality.

Salt Municipality's economic base consists largely of salaried Government employment, small-scale farming and were handiging.

11. Al-Marj - Kerak Municipality

Al-Marj is a section of the city of Kerak which is expanding rapidly. The older section of the city, located on a mountain top, is divided between a castle dating to crusader times and the densely populated remainder. Consequently, no plot of land suitable for school construction exists.

The Al-Marj site is located on the main road connecting Kerak with most of the rest of the country. The school will serve female students from outside Kerak as well as "surplus" students in the city's overcrowded schools. The site will serve a radius of approximately 2 km. As student population of about 800 is available for enrollment in the school by 1981.

The economic base in Kerak consists of small-scale rainfed farming and low-salary government employment. In short, most potential beneficiaries of the proposed school fall in the low-income category.

12. Western Area - Ramtha

The proposed site is located on the outskirts of Ramtha's west side, but is included within the Municipality. The low-income neighborhood has no easily accessible school, the majority of its students having to travel 4 km to double-shifted schools in other neighborhoods.

C. Rural Sites

The archetype of the rural-agricultural area school is that proposed to serve three equidistant villages in a triangle 30 km north of Amman.

<u>Village</u>	<u>Population</u>
Kufor Khal	2290
Kafkafa	1170
Balila	1990

The construction of such central schools for small-village areas is a policy of the Ministry of Education which should be supported because quality is linked with scale in such cases.

Centralized and centralizing, larger-scale, better quality services for these small villages is a logical effort when their number is considered, dispersed and often with little institutional access to central-government funding. Of a total of 970 localities listed in the Jordanian Official Gazette's Official Town and Village Index (December, 1972), 530, or 55%, were localities with a population of under 1000. While the 1979 Census, when completely analyzed, doubtless will reveal relevant demographic changes, the small-village reality persists. That is not to say that GOJ wishes to attempt to provide centralized services to all such locales. Determination of the issue will rest on their future economic viability and so will most probably have a connection with the 1981-85 and future Plans.

Because of a scarcity of information, estimating the socioeconomic level of potential beneficiaries in non-Jordan-Valley rural areas is an activity which allows one to be generally correct, but hardly precise. Although they made use of surveys of the availability of social and physical infrastructure facilities, Dajani and Murdock were careful to point out that their sources, the Ministry of Interior, CARE, the Municipal and Village Loan Fund (MVLFF) and National Water Master Plan surveys do not describe actual conditions in the rural areas.

13. Ain Jenneh

Until recently a section of Ajlun Municipality, Ain Jenneh has separated to form its own village council, emerging from this separation without schools, since those it had been making use of were located in other sections of Ajlun and were, of course, retained by the Municipality.

The inhabitants of Ain Jenneh are largely farmers on an extremely small scale and landless agricultural laborers.

The proposed school will serve the student population of the village as well as those of small settlements clustered around it.

14. Kufor Khal

Kufor Khal, Kafkafa and Balila constitute a three-village cluster which a proposed central school would serve. The proposed site is located no more than 5 km from the center of each of three villages which the MOE considers an acceptable year-around walking distance for the compulsory level student population.

II. Home-School Distance and the Quality of Educational Facilities for Girls

The preference for short home-school distance at the compulsory level has been discussed in the Social Analysis (p.III E). This preference holds true, especially for girls from lower income areas whose families do not own cars, and for whose families the cost of transportation would be prohibitive¹. Since the Government is not involved in transporting students, most girls from high density population areas walk to school. The high real estate costs which forced the Government to purchase land and build schools on the fringes of the cities (cf. above, p.1-2) have effected a de facto differential in the quality of educational facilities available to boys and girls which the MOE has been moving to remedy. Rented Buildings, which are often converted homes, are universally considered inferior in terms of space per students, lighting, storage space, sanitary facilities, exercise grounds, office and library space. Such rented buildings originally viewed as a stop gap measure, have been difficult to replace for economic reasons, although during the past year over half of MOE construction of compulsory cycle schools has been to accommodate girls.² Figures presented in the GOJ's Statistical Education Yearbook 1977-78³ are slowly being turned around.

Table

Primary Cycle: Number of Urban and Rented Schools Urban and Rural By Sex and Controlling Authority

MOE	<u>Rural</u>			<u>Urban</u>			<u>Sex</u>
	<u>Rented</u>	<u>Owned</u>	<u>Total</u>	<u>Rented</u>	<u>Owned</u>	<u>Total</u>	
283	250	533	272	13	385	T	
55	80	135	156	11	167	M	
94	49	143	161	1	162	F	
134	121	255	54	1	55	Co-ed	

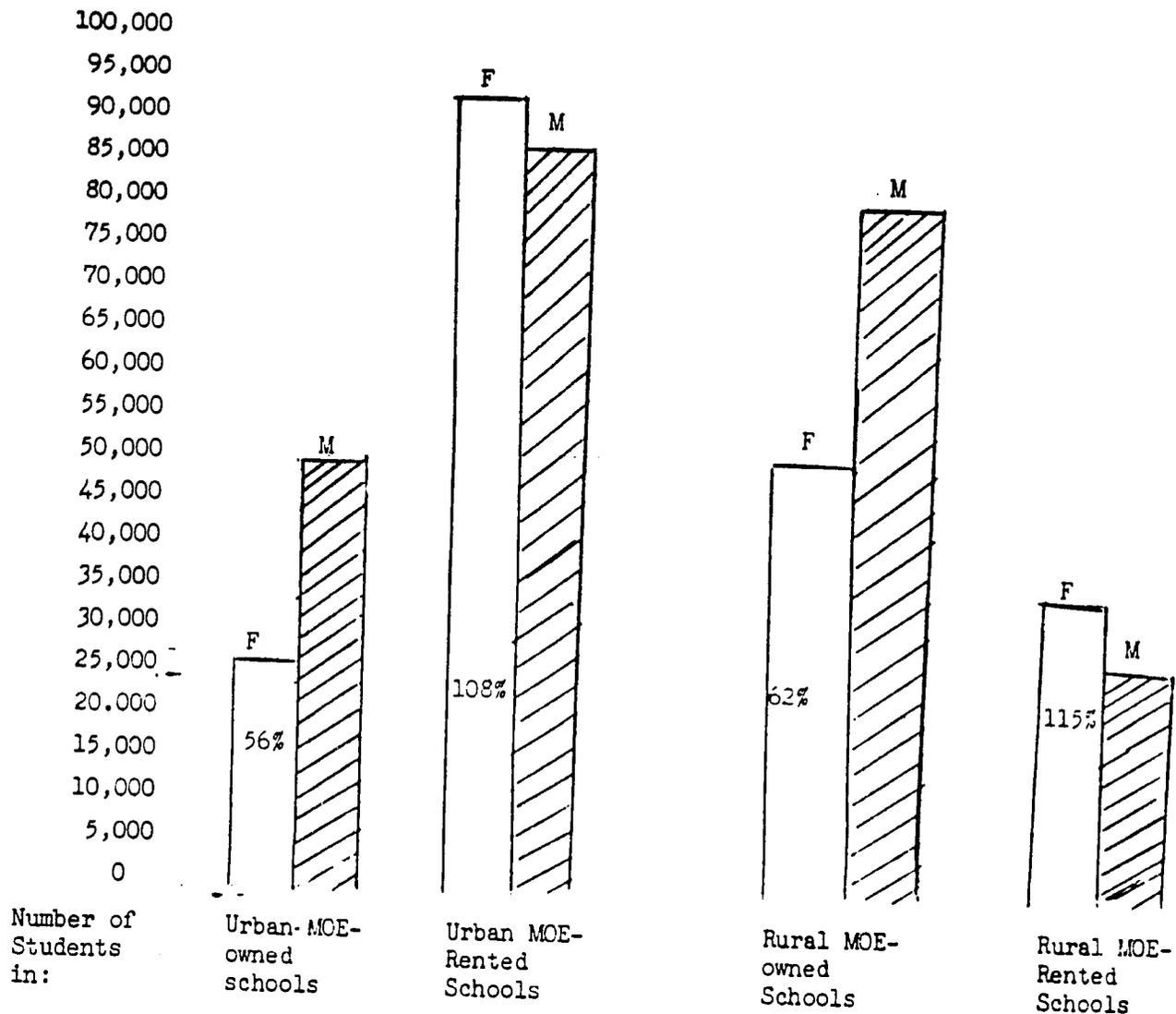
Conclusion: As of 1977-78, in all of Jordan's urban areas there was apparently only one Government-owned primary school for girls. This figure is mitigated, however, by the fact that primary classes may be held in Government-owned buildings which accommodate other

1 A common transportation fee for students of "high-fee" private schools in Amman is JD 40 (\$135 per year).
2 Source: Mr. Ahmad Isis, Director of School Buildings, MOE.
3 cf. Table p. 11.

levels as well and thus would not be listed as primary schools.

In rural areas, the Government owned 34% of girls' primary schools as against 59% of boys'. The following figure graphically represents the situation in 1977-78.

Conclusions from the information presented in this section and in criterion-section, are that, 1) despite socio-cultural-economic constraints which do not admit of facile solutions, the MOE is moving to remedy differentials in educational quality by sex. 2) The MOE's desire to improve educational facilities for girls is reflected in the inclusion of 7 girls schools in the proposed list of 14.



Based on Statistics from the
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 Ministry of Education, Government of
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Persons Contacted

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Amman Municipality.
- Isis, Mr. Ahmad, director, Directorate of School Buildings,
Ministry of Education, GOJ
- Sha'ban, Mr. Isa. Directorate of Educational Planning and Research,
Ministry of Education, GOJ.
- al-Tell, Ibrahim. Superintendent of Schools, Irbid Governorate.

PROJECT EVALUATION SUMMARY

1. Mission or AID/W Office Name USAID/Jordan			2. Project Number -278-0190		
3. Project Title School Construction (AID Loan 278-K-016)					
4. Key project dates: (Fiscal Years)			5. Total U.S. Funding (Life of Project):		
a. Project Agreement Signed: TQ 76 (7/22/76)	b. Final Obligation: TQ-76	c. Final Input Delivered: FY 80	\$ 7,000,000		
6. Evaluation Number as Listed in Evaluation Schedule: 80-1 (Interim)		7. Period covered by this Evaluation: From 3/78 to 9/79		8. Date of this Evaluation Review: October 1979	
9. Action Decisions Reached at Evaluation Review Including Items Needing Change: Correction of minor construction faults		10. Officer or Unit Responsible for Follow-up MOE and USAID		11. Date Action to be Completed 6/80	
12. Signatures:					
Project Officer			Mission Director		
Signature: <i>Joseph S. Chimento</i>			Signature: <i>Edgar C. Harrell</i>		
Typed Name: Joseph S. Chimento			Typed Name: Edgar C. Harrell		
Date: 20 FEBRUARY 1980			Date: 23 Feb. 1980		

- 2 -

13. SUMMARY

Project outputs are the construction, equipping and staffing of 18 school buildings in 11 cities and villages of Jordan. Total inputs are about \$13.2 million equivalent, comprised of a \$7 million loan from AID and about \$6.2 million equivalent provided by the Government of Jordan (GOJ) through the Ministry of Education (MOE). All of the schools were or are being built by private contractors with construction supervision provided by a private engineering firm engaged by the MOE. The evaluation revealed that completion of schools was behind the schedule established by the earlier evaluation (April 1978), which foresaw completion of all schools by June 30, 1979. At the time of this evaluation (October 1979), of the 18 project schools, nine were completed and in operation, seven were to be completed and occupied by May 1980 and the remaining two by the end of August 1980. Thus, all Project schools are expected to be fully operational by the 1980/81 school year. *

The evaluation concluded that the Project goal and purpose are being achieved. The goal is to "directly contribute to the provision of adequate school buildings." The purpose is "more effective and economic education conditions in the 18 schools constructed under the Project." The Project schools permit more economic education by allowing the MOE to reduce the number of buildings it must rent to use as schools and, in certain cases, to increase the student/teacher ratios. The Project fosters more effective education by replacing overcrowded, poorly lighted and inappropriate classrooms -- often in crowded areas -- with buildings and classrooms designed specifically for teaching and usually sited in relatively spacious surroundings. Based on discussions with headmasters, teachers and students during site visits to the nine operating schools, the Evaluation Committee has concluded that there is a definite correlation between the improved environment provided by the Project schools and more effective education as reflected in better morale, greater interest in learning and greater dedication to teaching. It was established that the new schools have caused desired improvements in the two most important purpose indicators: the space/student and student/teacher ratios. In addition, it is the opinion of the staff operating Project schools that more children are attending school in the areas with Project constructed facilities than otherwise would have without the project. The Project schools have fostered improved community spirit and cooperation as indicated by the fact that more than half of the operating schools are being utilized by various community groups after school hours, largely for adult education.

*As of February 15, 1980 the situation is as follows: 14 of the schools are completed and in operation; 2 more are being furnished and will be in operation by March 1; 1 of the remaining two will be in operation by the end of May and the other by the end of August, 1980.

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Evaluation visits revealed that Project schools are sited in virtually every case to serve poorer, more congested areas. The schools are overwhelmingly in urban or semi-urban areas, but this is to be expected because of the fact that, in Jordan, such areas are growing much faster -- and have proportionally younger populations -- than rural areas. Girls are sharing fully in Project benefits through the allotment of exactly half of the new schools to them.

When the Project began, it was anticipated that all of the schools to be constructed were to be used for teaching elementary and preparatory students only, i.e., those in the first nine years of formal education ("the compulsory cycle"). The evaluation established, however, that fully 60% of the students in the nine operating schools are secondary (high school) students. This has resulted from the faster growth of the secondary school population and the fact that most of the new schools have had to be sited relatively far outside of built-up areas, making it more difficult for younger children to reach them. The use of the schools for secondary students has released other schools for elementary and preparatory students, however.

Finally, the evaluation established that most of the schools have been well built -- only two minor instances of construction deficiencies were discovered. The schools could have been better designed -- they are overdesigned with regard to structural strength, but lack easily incorporated features which would have made them even more effective at very little additional cost (see Section 21 below).

14. EVALUATION METHODOLOGY

This is an interim evaluation because at the time it was conducted not all of the Project's school buildings were completed and some of those which were completed were not yet occupied. This evaluation follows a previous regular evaluation completed in April 1978 for the period August 1976 to March 1978; the resulting evaluation report was forwarded via Airgram AIDTO A-23, dated May 3, 1978.

The current evaluation was undertaken jointly by the Ministry of Education's (MOE) Planning Division and USAID/Jordan's Project Committee, who formed a seven-person Evaluation Committee with members from both organizations (see Attachment 1). Prior to conducting the evaluation, the Evaluation Committee prepared questionnaires for use in interviewing headmasters of project schools (see Attachment 2). The questionnaires were designed to supplement visual observation and conversations with other

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administrators, teachers and students in those schools (nine) which were actually in operation at the time of the evaluation. These were reviewed and then prepared in both English and Arabic. The Evaluation Committee split up into two teams and visited all project sites (including those where schools were still under construction) during the period October 24 to 29, 1979 (Attachment 1 has schedule). Following completion of all of the visits, the Evaluation Committee met to compare notes on the information obtained and to come to agreement on the main results of the evaluation. The evaluation was then drafted and reviewed by all members of the Evaluation Committee.

15. PROPOSED DOCUMENT REVISIONS

None.

16. EXTERNAL FACTORS

The only observed impact on this project from external factors during the time period under evaluation was a somewhat slower-than-anticipated rate of building completions primarily caused by the recent "boom" in the construction industry in Jordan which has led to over-extension by many contractors and consequent inability to meet contract schedules.

17. PROJECT BACKGROUND AND DESCRIPTION

a. Project Background:

A relatively highly educated populace is one of the major reasons for Jordan's recent economic success. Many Jordanians have the skills and knowledge required to start and manage successful enterprises and development programs. Large numbers of skilled Jordanians have migrated to the high salaries available in the oil states and their repatriated earnings constitute Jordan's single largest source of foreign exchange apart from official transfers. Those who have remained have formed the basis for the success of the domestic development programs. Thus, a well-educated and trained labor force can be considered Jordan's most important asset, particularly considering the relative dearth of other resources in the country. As a result, improvement in both the quantity and quality of educational opportunities continues to be a fundamental goal of Jordan's development strategy. Jordan needs to expand and improve its educational system not only to be able to continue taking advantage of external employment opportunities for its citizens, but also to provide sufficient educated and trained manpower for its own rapidly developing economy.

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On the whole, the Jordanian educational system is a good one, particularly as measured by results. Enrollments at the various educational levels are high-in 1979, 97% of the age cohorts for elementary level (grades 1-6); 76% of preparatory (grades 7-9) and 44%, secondary (grades 10-12). (Grades 1-9 are compulsory by law.) Approximately 11%, or 20,000 out of 182,000, of the university-aged population are enrolled in higher educational institutions (universities, teacher training institutes and technical institutes) while another 45,000 or so are enrolled in universities abroad. Overall, about one out of every four Jordanians is a student. The literacy rate, 62%, is correspondingly high. Educational opportunities in general and opportunities for education for women in particular are the best in the Middle East; for example, enrollments of girls in primary schools nearly equal those of boys in number and as a percentage of the age group.

Despite the relatively good record to date, however, improvements in both quality and quantity must be achieved if the educational system, broadly defined, is to meet the country's need for trained manpower in the future and the populace's expectations for future economic well-being. Major quality improvements required are courses better designed to meet the actual needs of the Jordanian economy, particularly for more skilled workers (vocational education); more and increasingly better qualified teachers to upgrade the effectiveness of the course material offered and better planning and administration to ensure that increasingly pressed resources are utilized as effectively as possible. Quantitative increase - the need for more places for students - is dictated by the high rate of population growth (over half of Jordan's population is under age 15) and rising expectations, with concomitant increases in demand for education, particularly at the secondary and university levels, which until recently have only been attended by relatively small proportions of the relevant age cohorts.

The MOE has been making concerted efforts to improve the quality of the education it offers. Efforts at quality improvement have largely revolved around upgrading teacher training, improving administrative skills and providing more relevant instruction, particularly in vocational training and allied areas requiring high skill levels. The MOE has devoted large amounts of funds to these areas from its own and donor-provided resources, particularly two IDA credits granted in 1972 (\$5.4 million) and 1974 (\$6.0 million) and AID participant training funds (over 100 participants funded in the field of education since 1970) and multi-donor (including AID) efforts in vocational education.

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The MOE plans to continue this effort with the recently signed (January 1980) IBRD third education loan of about \$19 million and is currently working with Bank staff to plan a fourth Bank-funded project in the future.

Providing for an increasing number of students primarily requires increases in the number of teachers and classrooms. Because the MOE is attempting to improve the quality of the education it offers while simultaneously increasing the number of students undergoing education, it is faced with a large "across-the-board" effort. The MOE's efforts to increase the number of teachers available can be considered successful on the whole. By 1979 the MOE had been able to bring supply and demand for teachers into rough balance (although some deficiencies in quality remain). The MOE has had less success in increasing the number of available classrooms to meet demand. Because of the enormous financial costs involved, providing an adequate number of classrooms is the most difficult problem currently facing the MOE and the biggest potential stumbling block to success of its overall program.

Increasing the number of classrooms is necessary both to provide space for a rapidly increasing student population and to improve the quality of education by reducing the proportion of students who must study in overcrowded and poorly-lighted space or under unattractive double-shift conditions. It is widely recognized by educators that both of these conditions, i.e., overcrowded and inappropriate instruction areas and double-shift teaching, cause marked decreases in the quality of education provided.* Thus, the MOE estimates that it will require a total of 10,648 new classrooms over the period 1980-85, of which 6,668 will be required for increases in the student population, 2,540 for replacing inadequate (and expensive) rented classrooms and 1,440 to eliminate double-shift instruction.

The situation facing the MOE in 1980/81 gives an idea of the magnitude of the task involved in increasing the number of classrooms in Jordan. The MOE estimates it will need 2,055 new classrooms built during that year. To construct and equip only one classroom in today's construction market in Jordan costs about JD 6,700 (\$22,000 at 1 JD = \$3.33; note that this figure does not include land costs). Taking into account inflation, the required 2,055 classrooms will cost about JD 16 million in 1980/81. The MOE's estimated 1980 budget is about JD 39.7 million; thus, the cost of the classrooms required in 1980/81 is over 40% of the 1980 MOE budget. (In past years, the MOE has expended on the average less than 20% of its budgets for capital improvements.)

* Students in double-shift schools attend classes for only four hours per day, i.e. from 7:30-11:30 or from 11:30-3:30, while those in single-shift schools have six hours of classes daily from 7:30-1:30.

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b. Project Description

The Project was designed to help the MOE meet the critical need to increase the number of classrooms in Jordan by constructing and equipping 18 school buildings in 11 cities and villages of the country. These school buildings will provide about 370 classrooms plus associated libraries, workshops, laboratories, arts and crafts rooms, administrative rooms, etc. Ten of the schools are three-story buildings with about 24 classrooms each; the remaining eight are two-story buildings with about 16 classrooms each (see Attachment 3). All the buildings to be provided with detached lavatory facilities for students and with both running water and electricity.

Funding for the project is about \$13,200,000, about \$6.2 million equivalent provided by the GOJ through the MOE and \$7 million provided by AID Loan No. 278-K-016, signed on July 22, 1976. AID Loan funds are disbursed by the Fixed Amount Reimbursement (FAR) method, in three approximately equal payments. The final payment for any school is not made until construction is entirely and satisfactorily completed and the school has been fully furnished, equipped and supplied with utilities. In addition, final payment is dependent upon receipt of an "implementation plan" from the MOE under which it details plans for use of the school and provides assurances on the number of teachers and other staff to be provided (see Attachment 5).

18. EVALUATION RESULTS INCLUDING GOAL AND PURPOSE ACHIEVEMENT

As revised after the previous evaluation, the Project has the two following goals:

-- Country Goal (GOJ): Upgrade the quality of education by remedying all situations which adversely affect the efficiency of the educational process with regard to students, teachers, headmasters, school buildings, curricula, furniture and equipment.

-- Sector Goal (MOE): Directly contribute to the provision of adequate school buildings.

The Project purpose is as follows:

-- More effective and economic education conditions in the 18 schools constructed under the Project.

The school buildings being constructed under the Project are meant to replace or supplement overcrowded, rented classroom space which is often utilized on a double-shift basis. The rented buildings being used as schools have been in every case built for another purpose -- usually as residences. Because they were mostly built

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as houses, the MOE rented facilities are totally inadequate for use as schools because their rooms do not have sufficient space or light to serve as classrooms. They are also extremely expensive, the cost per given amount of space ranging up to five or six times that for MOE-owned buildings (on an annualized basis). While the rental arrangements are intended to be temporary only, their high cost reduces significantly the amount of the MOE's budget which can be utilized for new building to replace them and, thus, eliminate the need to rent. Therefore, if the Project's buildings are completed and put into operation as planned the Project purpose will be achieved by providing classrooms specifically designed for teaching (more effective conditions) and by reducing the need to rent space for schooling (more economic conditions).

i. Sector Goal Achievement: The evaluation established that the sector goal of providing additional classrooms has been met. There are three measures of goal achievement in the logical framework: (i) increased classroom construction by the GOJ and (ii and iii) increases in both student and teacher populations. MOE statistics confirm that since project preparation all three indicators have increased at least as fast as projected. It was the opinion of headmasters and teaching staff interviewed during the evaluation that in each case the number of students attending school in the areas with Project schools is higher now than it would have been without the new schools. The primary reasons given for the increased numbers were (i) some students who normally would not attend school do so now because they find the new facilities attractive and (ii) some parents allow their children to attend school now because of the new facilities (the latter is particularly applicable to females in the upper grade levels). These observations jibe in general with MOE research showing that new schools experience 50% to 75% fewer dropouts and have higher elementary and preparatory enrollment rates.

Goal achievement has been slower than anticipated. At the time of this evaluation (October 1979), only nine out of a total of 18 project schools were in operation. As noted in the previous evaluation, delay up to that time (March 1978) had been due largely to inadequate construction supervision by the Ministry of Public Works which had led to construction of sub-standard buildings. As a result of this finding, AID insisted that the MOE hire outside consultants to supervise construction and a new group of schools was selected to be financed from the Project in lieu of the group found to be substandard. Delay in the rate of completion of schools

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since the last evaluation has been due largely to the fact that many -- if not most -- contractors in Jordan have become over-extended as a result of the current construction boom. Under these conditions, virtually all projects undertaken by Jordanian contractors are completed behind schedule. Under present schedules, of the nine schools not occupied at the time of this evaluation, seven are expected to be occupied between January and May 1980 and the remaining two by the end of August 1980. Thus, all of the Project schools are expected to be fully operational by the 1980/81 school year.

ii. Project Purpose Achievement: The Project purpose is to achieve "more effective and economic education conditions in the 18 schools constructed under the Project". From its visits to the nine operating Project schools, the Evaluation Committee is convinced that this purpose has been achieved, even though its determination is based to a large degree on subjective judgments of administrators, teachers and students and could not be rigorously proved, at least with regard to more "effective" education conditions.

With regard to achieving "more economic education conditions," the evidence is clear. Because of the high cost of renting teaching space, the primary measure is how many rented buildings could be eliminated as a result of project construction. Students in the nine operating schools came from 11 rented buildings. The MOE has been able to quit renting only four of these 11 buildings because the continuing rapid increases in students has required continued occupation of the other seven rentals despite the use of the nine new schools. But it can safely be said that use of the new schools has eliminated the need for renting at least as many other buildings. The cost of renting school space is much more expensive than the cost of using MOE-owned schools, so the savings in operating costs provided by the new schools are significant.

With regard to "more effective education conditions," the Evaluation Committee found a significant correlation between improved facilities provided in the project schools and improved quality of instruction as reflected by comments from direct Project beneficiaries, i.e., the staff and students actually utilizing the new schools. In other words, the Project Committee is convinced that the provision of well designed and constructed schools under this Project has led to actual, if not discretely measurable, increases in the quality of education in Jordan. Discussions with headmasters, teachers and students during the evaluation visits

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revealed that all are extremely happy with the facilities and general layout of the new schools -- the concensus was that the new classrooms promoted better morale, greater interest in learning and greater dedication to teaching. Virtually every teacher and student interviewed had an immediate illustration of how the new schools had improved the learning environment, usually involving more space, better light or lack of distractions from neighbors.

The logical framework indicators of project purpose achievement are four: (i) improved space/student ratios, (ii) improved student/teacher ratios, (iii) decreased repeater students and dropouts and (iv) increased vocational students. Given the time and data constraints involved, it was not possible for the Evaluation Committee to make any assessment of the last two indicators vis-a-vis the nine project schools now in operation, but the situation with regard to the space/student and student/teacher ratios was analyzed and the results are positive. At the time of the previous evaluation, the overall national space/student ratio was estimated at less than one metre per student. One of the conditions expected at project completion was an improvement in the space/student ratio approaching the international standard of 1.2 square metres of classroom space per student. The nine operating Project schools have a space/student ratio which averages more than 1.1 square metres per student. This is higher than the national average, but not yet as high as the international standard. That the latter has not yet been achieved in Project schools is a measure of how rapidly the school age population and the demand for education are growing and a vivid illustration of how badly new classrooms are needed (another result of the on-going pressure of high demand on the school system is the continued practice of double-shift instruction in Project schools -- see below).

The national goals for student/teacher ratios are as follows: elementary level, 30:1; preparatory level, 25:1 and secondary level, 20:1. Despite the establishment of these national goals, and the fact that the ratios now exceed the national goals in virtually all preparatory and secondary schools, the MOE has recognized the need to maintain the flexibility necessary to obtain optimum use of available resources after all factors are considered. Thus, the MCE strategy in areas served by Project schools is to increase the student/teacher ratio at the preparatory and secondary levels. The Ministry is convinced that this can be done safely without significant sacrifices of quality because of the better facilities provided by the new Project schools. An

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increase in the student/teacher ratios at these levels will permit, of course, the use of fewer teachers, thus easing the overall teacher shortage.

Since the previous evaluation in early 1978, at the national level the elementary student population has increased by 7%, while the elementary teacher population has increased by 15%. This has resulted in a decrease in the national elementary student/teacher ratio from 32.5:1 to 32.3:1. The ratio in the Project's four operating elementary schools is 29.3 to 1, below the national goal. The Project also is contributing to the success of the MOE strategy for student/teacher ratios at the preparatory and secondary levels in areas served by Project schools, as discussed above. Since the previous evaluation, the number of students at the preparatory level increased by 18.6% nationally while the number of preparatory level teachers increased by 20.6% for a national student/teacher ratio of 20.4:1. Project schools are significantly higher with a ratio of 29.1:1, well on the way to the overall goal for the Project of 35:1. At the secondary level in Project schools, the student/teacher ratio is 27.9:1 (again, the goal is 35:1). To illustrate how the MOE strategy is working, the eight Project schools offering secondary education represent only 2.5% of the operating secondary schools in Jordan yet they provide instruction to 5.6% of the secondary school population with only 4.5% of the secondary school teachers.

iii. Other Evaluation Findings: Although one of the specific objectives of the Project is to foster more effective education by eliminating double shifting, overcrowding has forced double shifting in three of the nine operating Project schools. The MOE has instituted double shifting in the new schools most reluctantly and only when it was apparent that there was no alternative. They are planning to eliminate double shifting in all Project schools within the next two school years, mostly through further construction. Although not desirable, continued double-shifting is further evidence of the great need for more classroom space in Jordan, evidence which is additional to the failure of not achieving the international space/student ratio (see above).

Jordanian national policy calls for separate education for boys and girls. Thus, when completed the Project's 18 schools will be evenly divided, nine for girls and nine for boys. Again due to overcrowding at the present one of the nine operating schools currently has coeducational classes in elementary grades 1 through 3. The MOE plans to make arrangements for separate education for these students by the 1980/81 school year.

A significant change from original project plans is the large proportion of secondary (Grades 10-12) students in the nine

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operating schools. As planned, the project would provide classrooms for elementary and preparatory levels only. The evaluation revealed that in the nine operating project schools, the overall secondary school population is 60% (5154 students - see Attachment 4). Secondary education is offered in eight of the nine schools -- exclusively in two, with preparatory classes in three and with both preparatory and elementary levels in the remaining three. This phenomenon has three main causes. The first is simply that the student population has been growing fastest at the secondary level -- growth rates for the past two years having been 7.1%, elementary; 10.0%, preparatory, and 38.2%, secondary. The second is that the previously low enrollment rate at the secondary level has been increasing rapidly in step with escalating demand for education. The third is that the costs of land have escalated quickly and the MOE has great difficulty finding sites easily accessible to school-age children in built-up areas. As a result, new schools have had to be built farther out, often at the edge of developed areas. The MOE has adopted a general policy of having older, instead of younger, children attend schools which are sited relatively far from residential areas because older children are better able to cope with problems of longer travel. After the evaluation, discussions with the MOE staff revealed that although project school buildings were being used for secondary level students, most of the vacated facilities had been retained. These facilities were all located in heavily populated areas often in the middle of cities and towns, and they had been converted to house elementary and preparatory level students. This continued utilization of facilities provides additional - albeit substandard - educational opportunities to all age levels of students. The MOE is obviously not particularly happy with the current grade patterns in the new schools and will undoubtedly work to change it in the future. They are particularly unhappy with having all three levels of instruction in any one school and have stressed that when this occurs, it is strictly the result of the need to use all available space to meet urgent demands.

The Evaluation Committee was pleased to note the degree to which the new schools are providing enhanced pride and a spirit of cooperation and involvement in the communities they serve. This factor was brought up voluntarily at every site visited. In addition, questioning revealed that the buildings are being used after hours at five of the nine sites - largely for adult education. Thus increased adult literacy and training and enhanced community fellowship are important side benefits of the project.

The Evaluation Committee found that the sites selected for school construction under the project by the MOE (and approved by AID) would fit very closely a possible set of "ideal" criteria with regard to ensuring that the benefits are aimed at the "poor majority," areas of greatest educational need and other special target groups (i.e., women) to the maximum extent possible, even though such criteria were not formally incorporated into the project.

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As the result of such a hypothetical process, disparities in the relative availability of high quality classroom space would be reduced and, ultimately, eliminated (taking into account for all areas such factors as current student population and age structure, the percentage of school attendance, expected increase of school-age children and incidence of double-shift instruction). In other words, at the end of such a process, students ideally would have equal access to high quality classroom space (and instruction) regardless of family income level, sex or whether they live in urban or rural areas. At the same time, to the maximum extent possible, the proportion of rented (as opposed to MOE-owned) schools would decline.

The evaluation visits revealed that when selecting school sites, the MOE in practice utilizes criteria very close to those which would be applied in the idealized procedure outlined above. That is, the Evaluation Committee found project schools to be without exception in areas with greatly overcrowded educational facilities and with poor to moderate income earners. (The Committee also found in operation a generally effective system of informal "scholarships" for students from poor families, with provision usually being made by the MOE, the school or the community to waive or offset fees and other costs of education for disadvantaged but deserving students.)

It is true that only two of the 18 school sites are in what can be described as rural -- as opposed to urban or semi-urban -- areas (see Attachment 3), but this accords with the fact revealed by the November 1979 census that the urban areas of Jordan are growing at a markedly faster rate than rural areas. (Over 65% of Jordan's population is urban and the largest concentrations and numbers of poor people are in urban areas - see FY 1982 CDSS.) Four of the nine operating schools have been slated exclusively for female students; the ratio overall of females in the Project schools (42%) is virtually the same as the overall national average at all grade levels (45%), and it is markedly higher than the national average at the secondary level (50% compared to 29% nationally) (see Attachment 4). The above discussion represents only the Evaluation Committee's impressions of how the schools being constructed under the current Project might be seen to fit a set of idealized criteria fairly well. USAID is considering proposing a further project for schools construction; if this is done, the project analysis should include a careful review of how potential schools to be supported by Project funds match with a set of criteria developed by AID specifically to ensure maximum possible achievement of actual AID objectives in Jordan.

Finally the evaluation teams found the operating schools to be in good condition, indicating that adequate maintenance is being performed. Obviously, however, none of the schools has been operating long enough to have encountered major maintenance problems yet.

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19. OUTPUTS

As indicated earlier, the pace of completion of Project outputs -- completed, equipped and staffed schools -- has been behind schedule for two successive evaluations. At the time of the first evaluation, the primary problem had been ineffective contractor supervision while for the period of this evaluation the problem has been mostly the result of general overcommitment by local contractors in the current construction boom in Jordan. Neither cause could easily have been foreseen, and very little could have been done about overcommitment by contractors even if it had been foreseen. While undesirable, the resulting delays will, overall, have very little negative impact on the project.

At two of the operating schools, minor construction deficiencies had been noted and reported to the Ministry of Education. Although the construction contracts had specified that the Contractors were to be held responsible for correcting deficiencies for one year following completion, MOE had not taken any corrective action. The members of the Evaluation Committee from the Ministry of Education have reported the noted deficiencies to their headquarters and have assured USAID that they will be corrected. In turn, USAID monitoring personnel will re-inspect all schools to assure that proper corrective action is carried out in accordance with a covenant included in the Loan Agreement.

20. INPUTS

All inputs, both GOJ and AID, have been made in a full and timely manner. Both GOJ and AID financial inputs for school construction have been completed and on time. The MOE has provided the required staff and equipment for each school in a timely manner after completion of construction. Based on past performance, the Evaluation Committee does not anticipate any problems in securing the appropriate staff and equipment for the remaining school buildings.

21. LESSONS LEARNED

The present evaluation revealed two significant "lessons learned" during Project implementation, one concerning the levels of education offered in Project schools and the other the design of Project-financed school buildings. The first lesson is that despite the declared intentions of the MOE, it is very difficult as a practical matter to restrict instruction in Project schools

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to just one or two levels (i.e., elementary or elementary and preparatory) given the education environment in Jordan. In particular, administrators are almost forced to offer preparatory and secondary education in Project-financed schools by three major factors: (i) the great demand for education at all levels; (ii) the progressively lower enrollment percentages at the preparatory and secondary levels, which mean that demand is growing fastest and is strongest at these levels; and (iii) the high cost of land in built-up areas causing most new schools, including Project schools, to be built at the fringes of high-density development, generally beyond the desirable travel limits of smaller children. Simply put, the realities dictate that there will be a high proportion of secondary students in new schools sited at the fringes of development, as are most newly constructed schools, including most Project schools. It must be emphasized that school space is "fungible" and that the use of Project schools for secondary level instruction has not meant the loss of equivalent space for lower-level instruction. Instead, it has merely meant the release for lower-level instruction of the space in built-up areas which otherwise would have been used by secondary students. Thus, the chief result of this process has been to allow younger children to go to schools which are closer to their homes than Project-financed schools, even if the facilities of these other schools are not so good as those built under the Project.

The other lesson concerns the design of Project schools. As is usually the case with any sort of construction, as the Project progressed it became clear that the standard design being used for Project schools could be improved somewhat.

On the one hand, it is the general opinion of engineers familiar with the Project buildings that they are somewhat overdesigned structurally and consequently are more complicated and expensive to construct than is necessary. Also, interviews during the site visits with teachers and headmasters produced the following list of relatively minor changes which could be made in the present design - and constructed - for little additional cost and which would make the schools much more responsive to the needs of both teachers and students:

a. Add a covered walkway from the school to the lavatory facilities for students.

b. Provide space for large meetings (perhaps moveable partitions in three or four of the classrooms).

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c. Provide more storage space for books, materials and recreation equipment.

d. Provide more space for teacher preparation and relaxation.

e. Provide potable water for students in the main building as well as the lavatory.

In an effort to ensure that the MOE gets the best possible value for any future construction expenditures, USAID has agreed to finance a review of the standard MCE design used in the Project by a qualified architectural/engineering firm. During its review, the firm will consider these recommendations and produce an overall list of proposed design changes to be made prior to any construction of similar buildings in the future.

Attachment 1

SCHOOLS CONSTRUCTION I
INTERIM PROJECT EVALUATION
EVALUATION TEAMS AND SCHEDULES

TEAM NO. 1

Members

MOE: Mohammad Nasser, Planning Officer
USAID: J. Chimento, Loan Officer
Aied Sweis, Engineer

Schedule:

10/24/79 Nazzal, Um Heran, Ashrafiya, Marka and Nuzha
10/28/79 Shamiyeh, Tafileh and Karak
10/29/79 Qusour and Batrawi

TEAM NO. 2

Members:

MOE: Mohammad Fallah, Planning Officer
USAID: J. Turman, Human Resources Officer
A. Ahmad, Engineer
W. Awad, Accountant

Schedule:

10/27/79 Mafraq, Ramtha, Irbid, Kufor Asad and
Dier Abu Sa'eed
10/28/79 Anjara, Buhaire and Azeirieh

13. How are your students doing on national tests?
14. What is the passing level for your students? (percentage)
 Elementary _____ Preparatory _____ Secondary _____
15. Drop-out level? (percentage)
 Elementary _____ Preparatory _____ Secondary _____
16. What are some of the reasons for dropping out?
17. What do the students do after graduation? Higher Education?
 Vocational? Army? Marriage? etc...
18. Is there a student feeding program? How many students are fed daily?
19. Have there been any changes in enrollment figures due to
 construction of this school?
20. What has been the impact of the new school itself to the quality
 of education you and your teachers now provide to your students?
21. Does your school have a student counseling program?
22. Does your school have health services available for students?
23. Where do the teachers live?
 In the community _____ Commute _____ from where _____?
24. Does the school own/provide staff housing?
25. What are the average hours in a school day?
26. How many hours of instruction per student per week?
27. Are teachers assigned extra duties outside of the classroom?
 What kind?
28. Are teachers evaluated as for teaching effectiveness? If so, How?

SCHOOLS CONSTRUCTION I
INTERIM PROJECT EVALUATION
BASIC INFORMATION ON PROJECT SCHOOLS

	<u>Status</u> ^{1/}	<u>Floors</u>	<u>Classrooms</u>	<u>Students</u> ^{2/}	<u>Levels</u> ^{2/}	<u>Rural/ Urban</u>	<u>Double Shift</u>	<u>Building Used after Hours</u>
1. Anjara	0	2	17	G	EPS	R		X
2. Ashrafiya (Amman)	0	3	24	B	-PS	U		X
3. Nazzal (Amman)	0	3	24	G	-PS	U	X	X
4. Marka (Amman)	0	3	24	B	-PS	U		
5. Qusour (Amman)	0	3	25	B	EPS	U	X	
6. Nuzha (Amman)	0	3	24	B	EPS	U	X	
7. Um Heran (Amman)	0	2	13	G/B*	EP-	U		X
8. Mafraq	0	2	18	B	--S	U		
9. Irbid	0	3	26	G	--S	U		X
10. Kufur Asad	5/30/80	2	16	B	-PS	R		
11. Ramtha	9/23/79	2	16	G	E-S	U		
12. Dier Abu Said	9/23/79	2	16	B	EP-	U		
13. Buhaira (Salt)	10/01/79	3	24	B	EP-	U		
14. Azeria (Salt)	10/15/79	3	24	G	EP-	U		
15. Ma'ayta (Kerak)	6/31/80	3	24	B	EP-	U		
16. Shameyya (Ma'an)	1/28/80	2	16	G	E--	U		
17. Tafilah	1/05/80	2	16	G	EP-	U		
18. Batrawi (Zarqa)	11/10/79	3	24	G	--S	U		
			371					

1/ 0 = Operating, G=9; otherwise, expected completion date
2/ Actual where operating; other, planned

G=9
B=9
E=11
P=13
S=11

U=16
R=2

N=3

N=5

* Boys temporary

ANNEX D
Attachment 3

SCHOOLS CONSTRUCTION I
INTERIM PROJECT EVALUATION

STUDENTS
(Operating Schools Only)

	<u>TOTALS</u>		<u>ELEMENTARY</u>			<u>PREPARATORY</u>			<u>SECONDARY</u>		
	<u>Girls</u>	<u>Boys</u>	<u>Grades</u>	<u>Girls</u>	<u>Boys</u>	<u>Grades</u>	<u>Girls</u>	<u>Boys</u>	<u>Grades</u>	<u>Girls</u>	<u>Boy</u>
1. Anjara	647	----	-----6	108	----	123	344	----	123	195	----
2. Ashrafiya (Amman)	---	1325	-----	---	----	--3	---	225	123	---	1100
3. Nazzal (Amman)	1525	----	-----	---	----	--3	325	---	123	1200	----
4. Marka (Amman)	---	1008	-----	---	----	-23	---	525	123	---	483
5. Qusour (Amman)	---	1085	--3456	---	563	123	---	411	12-	---	111
6. Nuzha (Amman)	---	855	-----6	---	170	123	---	403	1--	---	282
7. Um Heran (Amman)	180	120	123---	120	120	123	60	---	---	---	----
8. Mafraq	---	583	-----	---	---	---	---	---	---	---	----
9. Irbid	1200	----	-----	---	---	---	---	---	123	1200	----
TOTALS	<u>3552</u>	<u>4976</u>		<u>228</u>	<u>853</u>		<u>729</u>	<u>1564</u>		<u>2595</u>	<u>2559</u>
	=====	=====		====	=====		---	=====		=====	----

CAPITULATION

	<u>Girls</u>	<u>Boys</u>	<u>Totals</u>	<u>Percent</u>
Elementary	228	853	1081	12.7%
Preparatory	729	1564	2293	26.9%
Secondary	<u>2595</u>	<u>2559</u>	<u>5154</u>	<u>60.4%</u>
Totals	3552	4976	8528	
Percent	41.7%	58.3%		100.0%

SCHOOLS CONSTRUCTION I
INTERIM PROJECT EVALUATION
FINANCE - FAR PAYMENTS APPROVED

Dollars (\$000)
(1 JD = \$3.33)

Loan Amount: \$7,000,000

December 31, 1979

School Name	Total possible Reimbursement (JD 0000)	Initial 30%	Interim 35% (JD 000)	Final 35%	Estimated Completion Date
1. Anjara	100.3	30.1	35.1	35.1	Completed
2. Ashrafiya (Amman)	150.6	45.1	52.8	52.8	Completed ^{1/}
3. Bazzal (Amman)	150.7	45.1	52.8	52.8	Completed
4. Marka (Amman)	150.7	45.1	52.8	52.8	Completed
5. Qusour (Amman)	150.7	45.1	52.8	52.8	Completed
6. Nuzha (Amman)	150.6	45.1	52.8	52.8	Completed
7. Um Heran (Amman)	100.3	30.1	35.1	35.1	Completed
8. Ma'fraj	100.3	30.1	35.1	20.1 ^{1/}	Completed
9. Irbid	150.7	45.1	52.8	52.8	Completed
10. Kufur Asad	100.3	30.1	35.1	-	5/30/80
11. Ramtha	100.3	30.1	35.1	-	9/23/79
12. Dier Abu Said	100.3	30.1	35.1	20.1 ^{1/}	9/26/78
13. Buhaira (Salt)	150.7	45.1	52.8	30.2 ^{1/}	10/1/79 ^{1/}
14. Azeria (Salt)	45.1	45.1	-	-	10/15/79
15. Ma'ayta (Kerak)	46.9	45.1	-	-	6/31/80
16. Shameyya (Ma'an)	100.3	30.1	35.1	-	1/28/80
17. Tafilah	150.7	45.1	52.8	30.2 ^{1/}	11/10/79
TOTAL	2,100.0				
Payments to Date	1,882.6	691.8	703.2	487.6	
^{1/} First part of fina	(89.6%)				

Attachment 5

ANNEX D

LOGICAL FRAMEWORK MATRIX

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program on Sector Goal: The broader objective to which this project contributes:</p> <p>To effect universal compulsory cycle education in Jordan.</p>	<p>Measures of Goal Achievement</p> <p>Enrollment of all compulsory cycle school age children.</p>	<p>Comparison of census and enrollment data.</p>	<p>Assumptions for achieving goal targets:</p> <p>GOJ enforces law that all students age 6-14, particularly females, attend school.</p> <p>Sufficient funds become available to construct facilities needed to accommodate increasing school age population.</p>
<p>Project Purpose:</p> <p>To help satisfy demand for school classroom space with modern, efficient teaching facilities.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <p>All 14 Project schools being fully utilized by compulsory cycle students in their respective areas.</p>	<p>Ministries of Public Works and Education reports and physical AID inspection.</p>	<p>Assumptions for achieving purpose:</p> <p>a) Continued demand for school facilities at established standards.</p> <p>b) MOE continues to support and operate facilities to meet such standards.</p>
<p>Outputs:</p> <p>New school facilities furnished</p>	<p>Magnitude of Outputs:</p> <p>14 compulsory cycle schools completed.</p>	<p>Certification of completion of construction by consulting engineer and GOJ/AID field inspections.</p>	<p>Assumptions for achieving outputs:</p> <p>a) Timely availability of all inputs.</p> <p>b) Considerable care taken in selection of construction contractors to ensure compliance with specifications and timely completion of the buildings</p>
<p>Inputs:</p> <p>a) School Construction Funding b) Commodities c) Land d) Staff</p>	<p>Implementation Target (Type and Quantity)</p> <p>a) \$6.7 million 4/80-1/82 from AID funds b) 4.8 to \$6.5 million 4/80-1/82 from GOJ budget c) Furnishings and equipment for 14 schools provided.</p>	<p>a) Funding: signed grant agreement b) Commodities, land, staff: on site inspection and GOJ records.</p>	<p>Assumptions for providing inputs</p> <p>Parties will execute and comply with terms and conditions of grant agreement.</p>

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

THE HASHEMITE KINGDOM
OF JORDAN
NATIONAL PLANNING COUNCIL
AMMAN

Tel. 44466 - 44470
P. O. B. 555
Teleg. NPC - Amman



المملكة الأردنية الهاشمية
المجلس القومي للتخطيط
عمان
الهاتف: ٤٤٤٦٦ - ٤٤٤٧٠
ص.ب ٥٥٥

No. 58/1/1559
Date 31/3/1980
Ref.

الرقم
التاريخ
الموافق

Dr. Edgar C. Harrell
Director
USAID/J
American Embassy
Amman

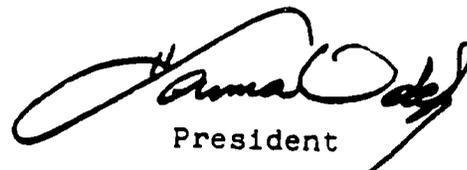
Dear Dr. Harrell,

Subject: Request for USAID Assistance
for Constructing and Equipping
14 Schools.

I refer to discussions we had regarding USAID assistance for constructing and equipping 14 schools at a total cost of US \$ 11,718,107 excluding land. You are kindly requested to assist with the sum of US \$ 6.7 million for this project.

I shall be obliged if you consider this letter as constituting the application of the Government of Jordan for USAID grant assistance of US \$ 6.7 million towards financing this project.

Sincerely yours,


President

CC: H.E. Minister of Education

UNCLASSIFIED

ACTION AIR-6 INFO AMB ICM CHRON

VV AMO727

RR RUEHAM

EE RUEHC #7127 2100735

ZNR UUUUU ZZH

R 290437Z JUL 79

FM SECSTATE WASHDC

TO AMEMBASSY AMMAN 0326

BT

UNCLAS STATE 197127

JUL 30 1979

ACTION TAKEN	
DATE	INITIAL
8/5	JC
RETURN TO USAID	

AIDAC

E.O. 12065: N/A

TAGS:

SUBJECT: SCHOOL CONSTRUCTION II, PID PROJECT 278-0232

REF: (A) AMMAN 4467; (B) STATE 178570

THE NEAC REVIEWED AND APPROVED THE SUBJECT PID ON JULY 17 WITH THE FOLLOWING COMMENTS AND RECOMMENDATIONS:

A. THE PROJECT PAPER SHOULD DISCUSS THE AID PROJECT IN THE CONTEXT OF THE ACTUAL AND EXPECTED GOJ BUDGET AND EXPENDITURES FOR SCHOOL CONSTRUCTION DURING 1977-81 INSTEAD OF RELATING IT TO THE TOTAL SCHOOL CONSTRUCTION FUNDING REQUIREMENTS. INCLUDED SHOULD BE THE LEVELS OF EDUCATION BEING FUNDED, URBAN/RURAL MIX AND ANY AREAS BEING UNDER FUNDED IN THE USAID'S VIEW. WE THINK THIS WILL PROVIDE A MORE MEANINGFUL VIEW OF AID'S CONTRIBUTION.

B. TO THE EXTENT POSSIBLE, THE NEAC BELIEVES AID INVOLVEMENT SHOULD BE CONCENTRATED ON PRIMARY EDUCATION CONSISTENT WITH AGENCY WORLDWIDE POLICY. OUR EFFORT SHOULD BE COORDINATED WITH THE ISRD'S SECONDARY SCHOOL PROGRAM. THE PP SHOULD DISCUSS THE ISRD PROGRAM.

C. TO THE EXTENT POSSIBLE, GIVEN THE SMALL SIZE OF THE PROJECT RELATIVE TO TOTAL NEEDS, THE AID PROJECT SHOULD FOCUS ON FIRST PRIORITY SCHOOLS ONLY AND LEAVE 2ND PRIORITY SCHOOLS (I.E. REPLACEMENT OF RENTED SCHOOLS) TO THE GOJ. A.I.D. SHOULD BE INCREASING THE ACCESSIBILITY OF EDUCATIONAL OPPORTUNITIES. CRITERIA USED BY GOJ AND USAID TO COMPILE LIST SHOULD ALSO BE DISCUSSED AND COMMENTED UPON IN PP.

D. WE UNDERSTAND THAT A FULL SCALE DEMOGRAPHIC OVERVIEW SHOWING POPULATION TRENDS IS NOT FEASIBLE. OUR CONCERN, HOWEVER, IS THAT AID NOT BUILD SCHOOLS WHICH WILL BE UNDERUTILIZED BECAUSE OF PREDICTABLE POPULATION SHIFTS. THE SCHOOL SELECTION CRITERIA SHOULD ADDRESS THIS QUESTION. WE WOULD APPRECIATE USAID COMMENTS ON EXTENT AND ACCURACY OF DATA AVAILABLE TO MOE ON THIS SUBJECT.

E. THE INITIAL SCHOOL CONSTRUCTION PROJECT (278-K-016) CONTAINED A COVENANT (SECTION 5.41 OF THE AGREEMENT) REQUIRING AN IMPLEMENTATION PLAN FOR STAFFING AND EQUIPPING EACH SCHOOL PRIOR TO FINAL DISBURSEMENT. THE PP SHOULD

DISCUSS THE OPERATIONAL RESULTS OF THAT COVENANT

F. THE PP SHOULD DISCUSS USAID'S GENERAL EXPERIENCE UNDER THE INITIAL SCHOOL CONSTRUCTION PROJECT INCLUDING AREAS WHERE IMPROVEMENTS WILL BE MADE IN THE FOLLOW-ON PROJECT. WE WOULD LIKE TO SEE THE USAID FOLLOW THIS PATTERN IN BOTH PID'S AND PP'S WHENEVER FOLLOW-ON PROJECTS ARE PROPOSED.

G. THE PP SHOULD DISCUSS THE ECONOMIC AND SOCIAL TRADE-OFFS INVOLVED IN BUS TRANSPORT OF SCHOOL CHILDREN TO LARGER, CONSOLIDATED SCHOOLS SERVING A WIDER AREA. THE PP SHOULD DISCUSS MOE POLICY IN THIS AREA AND THE BASIS FOR THAT POLICY.

H. THE TERM QUOTE CONFIGURATION UNQUOTE MENTIONED REFELS RELATES TO THE LOCATION AND SIZE OF THE SCHOOLS CHOSEN FOR AID FUNDING. WE ARE MORE CONCERNED HERE WITH THE OVERALL RATIONALE FOR THE PATTERN OF PLAN OF CONSTRUCTION ADOPTED THAN IN THE COMPARATIVE ECONOMICS OF INDIVIDUAL SCHOOLS (ALTHOUGH THE SCHOOL SELECTION CRITERIA SHOULD OF COURSE INCLUDE ECONOMIC FACTORS).

I. OUR CONCERN WITH DROPOUTS IS PRIMARILY AT THE ELEMENTARY LEVEL WHERE A STUDENT LEAVES BEFORE THE EDUCATION EXPERIENCED PROVIDES A LASTING BENEFIT. (NORMALLY, LESS THAN FOUR YEARS OF EDUCATION.)

J. THE PP SHOULD DISCUSS THE RESULTS OF THE PLANNED REVIEW OF GOJ SCHOOL DESIGNS. THIS SHOULD BE RELATED TO PROJECTED COSTS PER STUDENT.

K. NEAC REVIEW RAISED THE QUESTION OF WHETHER OR NOT WE SHOULD BE DOING SCHOOL CONSTRUCTION. IT WAS CONCLUDED THAT THIS WAS A PROPER ROLE FOR USAID IF IT RESULTED IN REACHING HIGH PRIORITY TARGET GROUPS THAT WOULD OTHERWISE NOT BE REACHED. IT WAS POINTED OUT THAT THE CDSS CABLE CALLED ATTENTION TO IMPORTANCE OF ASSURING ACCESS OF POOR TO EDUCATIONAL OPPORTUNITIES. SPECIAL ATTENTION WAS CALLED TO PROBLEM OF EDUCATION FOR GIRLS. IN VIEW OF ABOVE, PROJECT SHOULD FOCUS ON SCHOOLS FOR THE POOR AND FOR GIRLS IN PARTICULAR. PP SHOULD IDENTIFY THE SOCIO-ECONOMIC CHARACTERISTICS OF STUDENTS FOR EACH SCHOOL TO BE CONSTRUCTED. SELECTION OF APPROPRIATE SCHOOLS MAY REQUIRE GOING BEYOND THOSE LISTED IN PII.

L. PROJECT PAPER SHOULD IDENTIFY COST AND NUMBER OF STUDENTS SERVED FOR EACH SCHOOL TO BE CONSTRUCTED.

2. THE NEAC DECIDED THAT THIS PROJECT SHOULD BE AUTHORIZED BY AID/ VANCE

BT

#7127

NNNN

UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT
 AMERICAN EMBASSY
 AMMAN - JORDAN

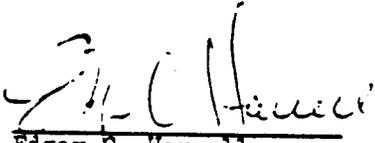
وكالة الولايات المتحدة للانماء القومي
 السفارة الاميركية
 عمان - الاردن
 ==

OFFICE OF THE DIRECTOR

مكتب المدير

CERTIFICATION PURSUANT TO SECTION 611(e)
 OF THE FOREIGN ASSISTANCE ACT OF 1961
 AS AMENDED

I, Edgar C. Harrell, the principal officer of the Agency for International Development in Jordan, having taken into account, among other things, the maintenance and utilization of projects in Jordan previously financed or assisted by the United States, do hereby certify that in my judgment Jordan has both the financial capability and the human resources capability to effectively maintain and utilize the capital assistance project, School Construction II (Project No. 278-0232).


 Edgar C. Harrell
 AID Director

2, 1980

Date

2

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY ANNEX I
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

ASSISTANT
ADMINISTRATOR

PROJECT AUTHORIZATION

Name of Country: Jordan

Name of Project: School Construction II

Number of Project: 278-0232

1. Pursuant to Section 531 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the School Construction II Project for Jordan (the "Grantee") involving planned obligations of not to exceed \$6,700,000 in grant funds over a one-year period from date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing local currency costs for the Project.

2. The project consists of constructing, furnishing and equipping 14 schools for boys and girls in 9 cities, towns, and villages of Jordan.

3. The Project Agreement which may be negotiated and executed by the officer(s) to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

a. Source and Origin of Goods and Services

Goods and services financed by A.I.D. under the project shall have their source and origin in Jordan, except as A.I.D. may otherwise agree in writing.

b. Initial Disbursement

Prior to any disbursement under the Grant or to the issuance of any commitment documents under the Project Agreement for such disbursement, the Grantee shall furnish in form and substance satisfactory to A.I.D. a contract for providing construction supervision.

c. Disbursements for Each School

Prior to disbursement for each school or the issuance of any commitment documents under the Project Agreement for such disbursement, the Grantee shall furnish in form and substance satisfactory to A.I.D.:

1. Assurance that sufficient land designated for each school is owned and available for construction; and

2. Final plans and executed construction contracts for each school.

d. Covenants

1. The Grantee shall covenant that budgetary support will be provided for teacher salaries, other operating costs and school maintenance for all project schools.

2. The Grantee shall further covenant that prior to final disbursement for any given school the Ministry of Education will have an implementation plan for staffing and materials and equipment distribution for such school covering the academic year following completion of such school.

Alfred D. White
Alfred D. White
Acting Assistant Administrator
Bureau for Near East

4-29-80
Date

Clearances:

NE/DP: Bradshaw Langmaid	<u>RL</u>	Date
NE/PD: Selig A. Taubenblatt	<u>SA</u>	Date <u>4/23/80</u>
NE/TECH: Elizabeth K. MacManus	<u>EM</u>	Date <u>4/23</u>
NE/JLS: Blaine C. Richards	<u>BCR</u>	Date <u>7/25</u>
GC/NE: John E. Mullen	<u>JEM</u>	Date <u>4/23</u>

SEL
Drafter: GC/NE: SE Carlson: paj: 4/22/80

ANNEX J

A.I.D. Project Number 278-0232

PROJECT
GRANT AGREEMENT
BETWEEN
THE HASHEMITE KINGDOM OF JORDAN
AND THE
UNITED STATES OF AMERICA
FOR
SCHOOL CONSTRUCTION II

Dated:

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A.I.D. Project No. 278-0232

Project Grant Agreement

Dated

19

Between

The Hashemite Kingdom of Jordan ("Grantee")

And

The United States of America, acting through the Agency for International Development ("A.I.D.").

Article 1: The Agreement

The purpose of this Agreement is to set out the understandings of the parties named above ("Parties") with respect to the undertaking by the Grantee of the Project described below, and with respect to the financing of the Project by the Parties.

Article 2: The Project

SECTION 2.1. Definition of Project. The Project, which is further described in Annex 1, will consist of constructing, furnishing and equipping 14 schools for boys and girls in 9 cities, towns and villages of Jordan. Annex 1, attached, amplifies the above definition of the Project. Within the limits of the above definition of the Project, elements of the amplified description stated in Annex 1 may be changed by written agreement of the authorized representatives of the Parties named in Section 8.2, without formal amendment of this Agreement.

Article 3: Financing

SECTION 3.1. The Grant. To assist the Grantee to meet the costs of carrying out the Project, A.I.D., pursuant to the Foreign Assistance Act of 1961, as amended, agrees to grant the Grantee under the terms of this Agreement not to exceed Six Million Seven Hundred Thousand United States ("U.S.") Dollars (\$6,700,000) ("Grant").

- 2 -

Article 3: Financing (Continued)

The Grant may be used to finance local currency costs, as defined in Section 6.1, of goods and services required for the Project.

SECTION 3.2. Grantee Resources for the Project

(a) The Grantee agrees to provide or cause to be provided for the Project all funds, in addition to the Grant, and all other resources required to carry out the Project effectively and in a timely manner.

(b) The resources provided by Grantee for the Project will be not less than the equivalent of U.S. \$4,800,00, including costs borne on an "in-kind" basis.

SECTION 3.3. Project Assistance Completion Date

(a) The "Project Assistance Completion Date" (PACD), which is September 30, 1983, or such other date as the Parties may agree to in writing, is the date by which the Parties estimate that all services contemplated in this Agreement and financed jointly by them on a Fixed Amount Reimbursement (FAR) basis will have been completed.

(b) Except as A.I.D. may otherwise agree in writing, A.I.D. will not issue or approve documentation which would authorize disbursement of the Grant for FAR portions of the Project completed subsequent to the PACD.

(c) Requests for disbursement, accompanied by necessary supporting documentation prescribed in Project Implementation Letters are to be received by A.I.D. no later than nine (9) months following the PACD, or such other period as A.I.D. agrees to in writing. After such period, A.I.D., giving notice in writing to the Grantee, may at any time or times reduce the amount of the Grant by all or any part thereof for which requests for disbursement, accompanied by necessary supporting documentation prescribed in Project Implementation Letters, were not received before the expiration of said period.

Article 4: Conditions Precedent to Disbursement

SECTION 4.1. First Disbursement. Prior to the first disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to

SECTION 4.1. First Disbursement (Continued)

A.I.D.:

(a) An opinion of counsel acceptable to A.I.D. that this Agreement has been duly authorized and/or ratified by, and executed on behalf of, the Grantee, and that it constitutes a valid and legally binding obligation of the Grantee in accordance with all of its terms;

(b) A statement of the name of the person holding or acting in the office of the Grantee specified in Section 8.2., and of any additional representatives, together with a specimen signature of each person specified in such statement;

(c) A contract for providing construction supervision for the Project.

SECTION 4.2. Additional Disbursement. Prior to disbursement under the Grant or to issuance by A.I.D. of documentation pursuant to which disbursement will be made for each individual school, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) Assurance that sufficient land designated for such school is owned and available for construction;

(b) Final plans and an executed construction contract, and evidence that a notice to proceed with construction of the school has been issued to the contractor.

SECTION 4.3. Notification. When A.I.D. has determined that the conditions precedent specified in Section 4.1 and 4.2 have been met, it will promptly notify the Grantee.

SECTION 4.4. Terminal Dates for Conditions Precedent.

(a) If all of the conditions specified in Section 4.1 have not been met within 90 days from the date of this Agreement, or such later date as A.I.D. may agree to in writing, A.I.D., at its option, may terminate this Agreement by written notice to Grantee.

(b) If all of the conditions specified in Section 4.2 have not been met within 200 days from the date of this Agreement, or such later date as A.I.D. may agree to in writing, A.I.D., at its option, may cancel the then undisbursed balance of the Grant, to the extent not irrevocably committed to third parties, and may terminate this Agreement by written notice to the Grantee.

Article 5: Special Covenants

SECTION 5.1. Project Evaluation. The Parties agree to establish an evaluation program as part of the Project. Except as the Parties otherwise agree in writing, the program will include, during the implementation of the Project and at one or more points thereafter:

- (a) evaluation of progress toward attainment of the objectives of the Project;
- (b) identification and evaluation of problem areas or constraints which may inhibit such attainment;
- (c) assessment of how such information may be used to help overcome such problems; and
- (d) evaluation, to the degree feasible, of the overall development impact of the Project.

SECTION 5.2. Budgetary Support. Grantee covenants that sufficient budgetary support will be provided for teacher salaries, other operating costs, and school maintenance for all project schools.

SECTION 5.3. Staffing and Furnishing. Grantee covenants that prior to final disbursement for any given school, the Ministry of Education will have an implementation plan covering staffing, furnishing and equipping of such school.

Article 6: Procurement Source.

SECTION 6.1. Local Currency Costs. Disbursements pursuant to Section 7.1 will be used exclusively to finance the costs of goods and services required for the Project having their source and, except as A.I.D. may otherwise agree in writing, their origin in the Hashemite Kingdom of Jordan ("Local Currency Costs").

Article 7: Disbursement

SECTION 7.1. Disbursement for Local Currency Costs. Upon satisfaction by Grantee of the conditions precedent set forth in Article 4, the Grantee, from time to time, may request disbursement by A.I.D. in accordance with procedures to be set forth in Implementation Letters. Such disbursement shall be made to reimburse Grantee for local currency costs of the Project in accordance with the terms and conditions of this Agreement, upon submission to A.I.D. of such supporting documentation as A.I.D. may prescribe in Implementation Letters.

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SECTION 7.2. Other Forms of Disbursement. Disbursements of the Grant may also be made through such other means as the Parties may agree to in writing.

SECTION 7.3. Rate of Exchange. Except as may be more specifically provided under Section 7.1., if funds provided under the Grant are introduced into The Hashemite Kingdom of Jordan by A.I.D. or any public or private agency for purposes of carrying out obligations of A.I.D. hereunder, the Grantee will make such arrangements as may be necessary so that such funds may be converted into currency of the Hashemite Kingdom of Jordan at the highest rate of exchange which, at the time the conversion is made, is not unlawful in the Hashemite Kingdom of Jordan.

Article 8: Miscellaneous

SECTION 8.1. Communications. Any notice, request, document, or other communication submitted by either Party to the other under this Agreement will be in writing or by telegram or cable, and will be deemed duly given or sent when delivered to such party at the following addresses:

To the Grantee:

Mail Address: National Planning Council
Amman, Jordan

Alternate address for cables:

Same

To A.I.D.:

Mail Address: USAID
c/o U.S. Embassy
Amman, Jordan

Alternate address for cables:

Same

All such communications will be in English, unless the Parties otherwise agree in writing. Other addresses may be substituted for the above upon the giving of notice.

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Article 8: Miscellaneous (Continued)

SECTION 8.2. Representatives. For all purposes relevant to this Agreement, the Grantee will be represented by the individual holding or acting in the office of President, National Planning Council and A.I.D. will be represented by the individual holding or acting in the office of the Mission Director, USAID/Jordan, each of whom, by written notice, may designate additional representatives for all purposes other than exercising the power under Section 2.1 to revise elements of the amplified description in Annex 1. The names of the representatives of the Grantee, with specimen signatures, will be provided to A.I.D., which may accept as duly authorized any instrument signed by such representatives in implementation of this Agreement, until receipt of written notice of revocation of their authority.

SECTION 8.3. Standard Provisions Annex. A "Project Grant Standard Provisions Annex" (Annex 2) is attached to and forms part of this Agreement.

SECTION 8.4. Language of Agreement. This Agreement is prepared in English.

IN WITNESS WHEREOF, the Grantee and the United States of America, each acting through its duly authorized representative, have caused this Agreement to be signed in their names and delivered as of the day and year first above written.

THE HASHEMITE KINGDOM OF JORDAN

By: _____

Title: _____

UNITED STATES OF AMERICA

By: _____

Title: _____

5C(2) - PROJECT CHECKLIST

Listed below are statutory criteria applicable generally to projects with FAA funds and project criteria applicable to individual fund sources: Development Assistance (with a subcategory for criteria applicable only to loans); and Economic Support Fund.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? IDENTIFY. HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 79 App. Act Unnumbered; FAA Sec. 653(b); Sec. 634A.

(a) Describe how Committees on Appropriations of Senate and House have been or will be notified concerning the project; (b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that figure)?

The project was included in AID's Congressional Presentation for FY 1980 and is within the OYB for Jordan so reported.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,000, will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonable firm estimate of the cost to the U.S. of assistance?

a) Yes

b) Yes

3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?

No further legislative action is required.

4. FAA Sec. 611(b); FY 79 App. Act Sec. 101. If for water or water-related land resource construction, has project met the standards and criteria as per the Principles and Standards for Planning Water and Related Land Resources dated October 25, 1972

Not applicable.

5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?
- Yes. Certification included among annexes of Project Paper.
6. FAA Sec. 209. Is project susceptible of execution as part of regional or multilateral project? If so why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.
- The project is not so susceptible; assistance will not encourage regional development programs.
7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.
- Project will encourage efforts under "B" since project will be constructed by private sector. By providing increased educational facilities, the work force's efficiency should improve, the project will enhance the technical efficiency of industry and commerce.
8. FAA Sec. 601(b). Information and conclusion on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).
- The project will not directly contribute to these goals.
9. FAA Sec. 612(b); Sec. 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized to meet the cost of contractual and other services.
- Jordan is not an excess currency country. The project agreement will stipulate the GOJ contribution of local currencies to meet the costs of contractual and other services.

A.

10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? Jordan is not an excess currency country.
11. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? Yes
12. FY 79 App. Act Sec. 608. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity? Not applicable.

B. Funding Criteria for Project

1. Development Assistance Project Criteria Not applicable.
2. Development Assistance Project Criteria (Loans Only) Not applicable.
3. Project Criteria Solely for Economic Support Fund
- a. FAA Sec. 531(a). Will this assistance promote economic or political stability? To the extent possible, does it reflect the policy directions of Section 102? Yes
- b. FAA Sec. 531(c). Will assistance under this chapter be used for military or paramilitary activities? Yes

Jordan - FY 1980 COUNTRY CHECKLIST

GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. FAA Sec. 116. Can it be demonstrated that contemplated assistance will directly benefit the needy? If not, has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights?
2. FAA Sec. 481. Has it been determined that the government of the recipient country has failed to take adequate steps to prevent narcotics drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully? No.
3. FAA Sec. 620(b). If assistance is to a government has the Secretary of State determined that it is not dominated or controlled by the international Communist movement? the Secretary of State has so determined.
4. FAA Sec. 620(c). If assistance is to the government is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) the debt is not denied or contested by such government? No.
5. FAA Sec. 620(e)(1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? No.
6. FAA Sec. 620(a), 620(f), 620D; FY 80 App. Act. Sec. (511, 512, and 513.) Is recipient country a Communist country? Will assistance be provided to Angola, Cambodia, Cuba, Laos or Vietnam? Will assistance be provided to Afghanistan or Mozambique? No.

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7. FAA Sec. 620(i). Is recipient country in any way involved in (a) subversion of, or military aggression against, the United States or any country receiving U.S. assistance, or (b) the planning of such subversion or aggression? No.
8. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent the damage or destruction, by mob action, of U.S. property? No.
9. FAA Sec. 620(l). If the country has failed to institute the investment guaranty program for the specific risks of expropriation, inconvertibility or confiscation, has the AID Administrator within the past year considered denying assistance to such government for this reason? No such failure.
10. FAA Sec. 620(o); Fishermen's Protective Act of 1957, as amended, Sec. 5. If country has seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters, No such seizure, et..
- a. has any deduction required by the Fishermen's Protective Act been made?
- b. has complete denial of assistance been considered by AID Administrator?
11. FAA Sec. 620; FY 80 App. Act Sec. (518.)
- (a) Is the government of the recipient country in default for more than six months on interest or principal of any AID loan to the country?
- (b) Is country in default exceeding one year on interest or principal on U.S. loan under program for which App. Act appropriates funds?
12. FAA Sec. 620(s). If contemplated assistance is development loan or from Economic Support Fund, has the Administrator taken into account the percentage of the country's budget which is for military expenditures, the amount of foreign exchange spent on military equipment and the amount spent for the purchase of sophisticated weapons systems? (An affirmative answer may refer to the record of the annual "Taking Into Consideration" memo: "Yes, taken into account by the Administrator at time of approval of Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes
- Yes, taken into account by Administrator pursuant to July 1979 report to Congress

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13. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?
14. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget?
15. FAA Sec. 620A, FY 80 App. Act, Sec. (521.) Has the country granted sanctuary from prosecution to any individual or group which has committed an act of international terrorism? Has the country granted sanctuary from prosecution to any individual or group which has committed a war crime?
6. FAA Sec. 666. Does the country object, on basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. there to carry out economic development program under FAA?
7. FAA Sec. 669, 670. Has the country, after August 3, 1977, delivered or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards? Has it detonated a nuclear device after August 3, 1977, although not a "nuclear-weapon State" under the nonproliferation treaty?

As of 9/17/79 Jordan was about \$43,000 in arrears due to chronic late payment, however this situation was taken into account by the Administrator in determining last year's OYB. No OYB has yet been prepared for FY 1980 due to the failure of Congress to enact an appropriations act.

No.

No.

No.

FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

Development Assistance Country Criteria.

Not Applicable.

Economic Support Fund Country Criteria.

- a. FAA Sec. 502B. Has the country (a) engaged in a consistent pattern of gross violations of internationally recognized human rights or (b) made such significant improvements in its human rights record that furnishing such assistance is in the national interest?

No.

Not Applicable.

- Sec. 533(b). Will assistance under the Southern Africa program be provided to Angola, Mozambique, Tanzania, or Zambia? If so, has President waived prohibition against the assistance by determining that such assistance will further U.S. foreign policy interests?

Not Applicable.

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- c. FMA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? Not Applicable.
- d. FY 80 App. Act Sec. (510.). Will assistance be provided for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? No.
- e. FMA Sec. 620B, P.L. 94-329 Sec. 406. Will ESP be furnished to Argentina or Chile? No.

STANDARD ITEM CHECKLIST

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed? No. This project is being carried out on a FAR basis
2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him? Yes, but only procurement financed will be Jordanian origin.
3. FAA Sec. 604(d). If the cooperating country discriminates against U.S. marine insurance companies, will commodities be insured in the United States against marine risk with a company or companies authorized to do a marine insurance business in the U.S.? Not applicable.
4. FAA Sec. 604(e). If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? Not applicable.
5. FAA Sec. 608(a). Compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S.-flag commercial vessels to the extent that such vessels are available at fair and reasonable rates. Not applicable.
No imports financed.
6. FAA Sec. 621. If technical assistance is financed, to the fullest extent practicable will such assistance, goods and professional and other services from private enterprise, be furnished on a contract basis? If the facilities of other Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs? Not applicable.

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7. International Air Transport. Fair Competitive Practices Act, 1974. Not financed.
If air transportation of persons or property is financed on grant basis, will provision be made that U.S.-flag carriers will be utilized to the extent such service is available?
8. FY 79 App. Act Sec. 1057. Does the contract for procurement contain a provision authorizing the termination of such contract for the convenience of the United States? Yes.
- B. Construction
1. FAA Sec. 601(d). If a capital (e.g., construction) project, are engineering and professional services of U.S. firms and their affiliates to be used to the maximum extent consistent with the national interest? Yes, but as this project will be carried out on a FAR basis, U.S. firms may not be used.
2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable? Yes.
3. FAA Sec. 620(k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million? Not applicable.
- C. Other Restrictions
1. FAA Sec. 122(b). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter? Not applicable.
2. FAA Sec. 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? Not applicable.
3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interest of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? Yes.

4. FAA Sec. 636(i). Is financing not permitted to be used, without waiver, for purchase, sale, longterm lease, exchange or guaranty of motor vehicles manufactured outside the U.S.? Yes.
5. Will arrangements preclude use of financing? Yes.
- a. FAA Sec. 104(f). To pay for performance of abortions as a method of family planning or to motivate or coerce persons to practice abortions; to pay for performance of involuntary sterilization as a method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization? Yes.
- b. FAA Sec. 620(g). To compensate owners for expropriated nationalized property? Yes.
- c. FAA Sec. 660. To provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes.
- d. FAA Sec. 662. For CIA activities? Yes.
- e. FY 79 App. Act Sec. / 104 /. To pay pensions, etc., for military personnel? Yes.
- f. FY 79 App. Act Sec. / 106 /. To pay U.N. assessments? Yes.
- g. FY 79 App. Act Sec. / 107 /. To carry out provisions of FAA section 209(d) (Transfer of FAA funds to multilateral organizations for lending.) Yes.
- h. FY 79 App. Act Sec. / 112 /. To finance the export of nuclear equipment, fuel, or technology or to train foreign nationals in nuclear fields? Yes.
- i. FY 79 App. Act. Sec. / 601 /. To be used for publicity or propaganda purposes within U.S. not authorized by Congress? Yes.