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STAFF APPRAISAL REPORT

SIXTH EDUCATION PROJECT

HASHEMITE KINGDOM OF JORDAN

December 12, 1983

Education and Manpower Development Division
Europe, Middle East and North Africa Region

PRINCIPAL ABBREVIATIONS AND ACRONYMS USED

GVSS	General Vocational Secondary School
ICB	International Competitive Bidding
MOE	Ministry of Education
NPC	National Planning Council
DOP	Directorate of Projects
TA	Technical Assistance
UNDP	United Nations Development Programme
VTC	Vocational Training Corporation

CURRENCY EQUIVALENTS

US$1.00	Jordanian Dinar (JD) 0.375
JD 1.000	US$2.67

FISCAL YEAR

January 1 - December 31

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HASHEMITE KINGDOM OF JORDAN

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This report is based on the findings of an appraisal mission to Jordan in March/April 1983. Mission members were Messrs. Abdelwahed Zhiri (general educator, mission leader), Michael Mertaugh (economist) and Sverrir Sigurdsson (architect).

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HASHEMITE KINGDOM OF JORDAN

Basic Data

Population (1981)

Jordan (East Bank), total	2.4 million
Annual rate of growth	3.4%
Proportion less than 15 years old	51%

GNP per-capita (1982) US$1,692

School Enrollments 1981/82 1/

Level and Age Group	Grade	Enrollment as % of Age Group 2/	Girls as % of Enrollment
Primary (6-11)	1-6	108	48
Preparatory (12-14)	7-9	91	46
Secondary (15-17)	10-12	66	45
Higher (18-23)	13-16+	19	48

Public Expenditures on Education (1982)

Central government expenditures on education as a percentage of total central government expenditures 3/	8.8%
Central government expenditures on education as a percentage of GNP 3/	4.2%

Adult Literacy Rate (as % of population over 12 years) 70.0%

1/ See Annex 6 for comparative education indicators.
2/ Gross enrollment ratios, including overaged students.
3/ Ministry of Education only.

I. THE EDUCATION SECTOR

Socio-Economic and Sector Background

1.01 In view of its sparse endowment of water and mineral resources, Jordan rightly considers its labor force to be its most important productive asset. Population and labor force in Jordan are growing at an extremely rapid rate despite heavy labor emigration. The total East Bank labor force grew at about 3.5% per year during the 1960s and early 1970s, but has grown at about 6% per year since 1975. This very rapid growth of the labor force results partly from the rise of male participation rates which occurred during the 1970s, and from the continuing movement of working-age Palestinians from the West Bank to the East Bank. Most of it, however, arises from the high rate of natural population increase in the East Bank since the 1960s and the consequent youthfulness of the Jordanian resident population--more than half of which is less than 15 years old. Rapid growth of population, particularly in the youngest age groups, has strained and will continue to strain the Government's capacity to provide school places to the expanding school-age population.

1.02 The Ministry of Education (MOE), under the guidance of the National Board of Education, is responsible for formal education and training which includes primary, preparatory, general and vocational secondary and post-secondary polytechnics and community colleges. School attendance by boys and girls is compulsory through the 9th grade. The universities are governed by their own boards which are responsible for establishing general policy guidelines and determining each year the number of students to be admitted to the different faculties. A number of other ministries, in particular the Ministry of Health and the Vocational Training Corporation (VTC), an autonomous government agency affiliated with the Ministry of Labor, are active in training related to their special fields. The VTC is responsible for the in-plant apprentice program conducted with the cooperation of employers and for a skill upgrading program. In addition, there is a vigorous effort in job-oriented vocational training in the private sector. There are, for example, 20 private community colleges which offer post-secondary courses principally in commercial specializations, under the coordination of the Higher Education Council.

1.03 The Government has a strong commitment to human resource development, as is evident in the striking progress achieved by MOE programs in improving access to education since 1975. Enrollments have increased by about 30% at the primary level (grades 1-6), 88% at the preparatory level (grades 7-9), and 178% at the secondary level (grades 10-12). Female school enrollment was already high in 1974/75 by comparison with other Middle East countries and rose further in the subsequent years. Since 1975, female enrollments as a percentage of total enrollments have risen from 46% to 48% at the primary level, from 43% to 46% at the preparatory level, and from 37% to 46% at the secondary level.

1.04 These gains were achieved through a significant expansion of educational infrastructure, both in permanent facilities and in temporary facilities. During the previous Plan period (1976-1980), the MOE opened nearly 300 schools comprising about 5,000 classrooms in the compulsory, secondary and post-secondary education cycles. Half of these are rented facilities which do not meet the Government's standards for permanent schools (para. 1.09).

1.05 The Ministry also continued its efforts to diversify education and link it with the needs of socio-economic development during this period through two important measures: the establishment of general vocational secondary schools, and the development of prevocational instruction courses for students pursuing general studies in preparatory and secondary schools. With support from the Fourth and Fifth Bank Education Projects, the Government is establishing a network of general vocational secondary schools (GVSSs) which will combine in a single institution the vocational courses formerly offered in specialized vocational secondary schools and in the vocational streams of comprehensive secondary schools. Job relevance of training provided in the general vocational secondary schools is to be assured through a supervised job experience program, career guidance counseling, and continuous modification of specialization offerings based on a tracer study follow up of graduates.

1.06 The Government also acted decisively during the previous plan period to provide an employment orientation for students in academic programs, most of whom would not receive actual vocational instruction during or after their formal studies. In 1979, the National Board of Education ruled that students in grades 5 through 12 were to receive at least 2 hours per week of prevocational instruction, and students in grades 1 through 4 were to receive 2 hours per week of practical activities instruction. Suitable curricula for the prevocational instruction and practical activities courses have now been prepared, but implementation is being hampered by lack of suitable facilities for the programs (paras. 1.10, 1.11).

1.07 The Government's education and training policy as presented in the 1981-85 Development Plan aims to continue and extend these achievements of the previous Plan period. The objectives of the current Plan are: (a) to improve the quality of education, particularly in science, through upgraded teacher qualifications, improved curricula and teaching materials, replacement of rented schools, and elimination of double shifting; (b) to expand compulsory schooling (grades 1-9) from 91% of the relevant age group in 1980 to 94% in 1985; (c) to generalize the pilot program of prevocational instruction in grades 5 through 12 (paras. 1.11, 2.01a); (d) to channel more secondary level students into vocational specializations in order to achieve 30% vocational secondary enrollments by 1985; (e) to reduce by more than 20% by 1985 the proportion of illiterates among the population less than 60 years old; and (f) to provide the necessary trained manpower to meet the evolving demands of the Jordanian economy and of other Arab countries. A closely related goal is to expand labor-force participation, particularly by Jordanian women - a goal provided by institutions financed under previous Bank projects, as well as under the present project (paras. 1.10, 1.19). These are reasonable and feasible educational goals which address the principal education and training issues (para.1.08).

Education and Training Issues

1.08 Although the Government's strategy for educational development has been pursued with significant success in increasing educational opportunities, improving quality and correcting an earlier under-emphasis on vocational/ technical education, further steps are being taken to address the key issues relating to: (a) improving the quality of and expanding school buildings, (b) increasing the relevance (external efficiency) of general education, and (c) improving the quality of science instruction through the provision of more and better equipped science laboratories.

Quality of School Buildings

1.09 The problem of providing suitable school buildings necessary to accommodate the increasing number of students in the compulsory and secondary cycles is still acute. The unprecedented growth in the number of students has not been matched by a similar growth in suitable school facilities, particularly in urban areas. The MOE has had to resort to the extensive use of rented buildings which lack the appropriate facilities for use as schools. In particular, these temporary school facilities are usually seriously overcrowded, have no space for science or workshop equipment, and lack adequate sanitary facilities and playgrounds. The MOE has also been compelled to reduce the daily hours of instruction (from 5 1/2 hours to 4 1/2 hours) to apply a two-shift system in about 41% of compulsory and secondary schools in order to provide the necessary number of school places with the limited facilities available. In the academic year 1979/80, rented classrooms constituted about 55% of total compulsory and secondary classrooms, and the number of classrooms used on the basis of a two-shift system was 2,974. The acute need to replace improvised, rented school facilities with suitable, permanent facilities tends to be supplanted by the need to accommodate a rapidly growing school-age population. The need arising from this source alone for the period 1981-1985 is estimated at 46 additional compulsory schools (grades 1-9) with a total capacity of about 24,000 students and 11 general secondary schools with a total capacity of about 6,700 students, in addition to the expansion of existing secondary schools. The extent of the need for new and upgraded school buildings is such that the very significant school construction program of the 1981/85 Five-Year Plan (about JD80 million for compulsory and secondary school construction) would meet only half the estimated need to replace all unsuitable rented facilities and accommodate projected enrollment increases.

Relevance (External Efficiency) of General Education.

1.10 To provide an employment orientation for the bulk of compulsory and secondary level students who would not receive vocational instruction, the National Board of Education in 1979 ruled that two periods per week of practical activities were to be introduced into grades 1 through 4 of primary school and a new integrated program of prevocational instruction (also two periods per week) was to be offered to students pursuing academic studies in grades 5 through 12. The objectives of the new prevocational instruction program are: (a) to provide a positive orientation towards productive employment, (b) to guide the choice of subsequent work or studies based on student aptitudes, (c) to provide a basis for eventual on-the-job training,

and (d) to equip students with basic mechanical skills to solve daily problems. The combination of subjects to be offered in the program varies between schools according to availability of staff and facilities. Prevocational subjects are introduced into a single stream (or nonvocationally-based multiple streams) as one component of a general curriculum with no direct occupational aims. In selecting courses for the two periods per week of prevocational instruction, students may take the same practical subjects or choose several among them, depending upon their availability.

1.11 In response to the Board of Education ruling, the MOE has developed suitable courses both for students and for teachers who are to teach the new courses. The MOE is now in the process of progressively implementing the new program in MOE schools. A pilot program offering 2 hours a week of prevocational instruction was introduced in 100 preparatory schools in 1981. After its first successful year, the program was extended to an additional 90 preparatory schools in 1982. Prevocational instruction courses of 2 hours a week were also introduced in 100 general secondary schools during the 1982/83 school year. Adequate numbers of teachers for the prevocational instruction program are being trained at the Shaubak Teacher Training Institute, supported under the Third Education Project. The main constraint to fuller implementation of the prevocational instruction and practical activities programs is lack of suitable workshops and equipment, an issue which the proposed project would address by providing facilities for implementing the program in both new and existing schools (for 47 new schools and 49 existing ones) (paras. 2.03, 2.06, 2.10).

Improving the Quality of Science Teaching

1.12 The problem of unsuitable facilities in rented schools is compounded by the absence of needed science and workshop spaces in permanent MOE schools. Science instruction in secondary schools suffers from overcrowded classrooms, virtually no science laboratories and equipment, and from a reduction in hours of science instruction (from an average of 6 hours to 3 hours) to accommodate double shifting. Provision of improved science facilities in the form of suitable laboratories and science equipment is a basic prerequisite to the planned reinforcement of science instruction at the secondary level. The MOE recognizes this, and accordingly plans to construct and equip during the 1981-85 Plan period 140 new laboratories in 70 general secondary schools, (including the 51 laboratories in the proposed project), and to provide laboratory kits to over one thousand compulsory schools. In addition, it plans to strengthen the one hundred existing secondary school laboratories through the provision of additional science instruments and equipment. The proposed project would play an important role in contributing to this effort (para 2.10). There is a sufficient supply of university science graduates to provide the necessary science teachers for the proposed project laboratories. The effectiveness of science teaching in the project institutions would be closely monitored by the on-going system of science inspectors.

MOE Implementation Capability

1.13 The proposed expansion of general education and prevocational instruction will require a modest further strengthening of MOE capabilities to execute effectively the Government's program for expanded compulsory and secondary education. The proposed project would provide technical assistance (TA) for this purpose (para 2.11). It would also support other priority areas for institution building in the Directorates of Education, in-service Teacher Training (especially vocational, science and mathematics teachers), Planning and Research, Examinations, Education Technology, Community Colleges, and the MOE Computer Center.

Education Finance

1.14 The Government has adopted an ambitious program of investment to expand education and training capacity at all levels. The Plan allocates about $700 million to implement priority projects in education and training, including university education. This expansion implies an increase in the recurrent costs of the education system. Between 1975 and 1979, the recurrent cost of public education under the Ministry of Education (MOE) increased at the rate of 11.6 percent per annum in real terms, compared to a 7.5 percent yearly increase in enrollment. The share of educational expenditure stabilized at around 11 percent of total public recurrent expenditure during 1975-79. Based on projected enrollment increases, recurrent expenditures in education in 1980-85 are estimated to increase by about 6 percent per annum to a total of about $157 million or about 9 percent of total public recurrent expenditure in 1985. Total recurrent and capital expenditures for education would amount to about $185 million in 1985 (in 1979 prices), which represents about 5 percent of the projected GNP and about 10 percent of the Government budget. The Government can be expected to sustain this expanded level of expenditure, in view of the high priority attached to education.

Bank Strategy and Lending for Education

1.15 The Bank endorses the Government's education strategy and has supported it through its lending program. Bank Group lending in the education sector has focussed particularly on teacher training and the vocationalization of secondary and post-secondary education, because of the visible need to expand productive employment opportunities for the rapidly increasing labor force.

1.16 The first IDA-assisted education project (Credit 285-JO, approved in 1972 for US$5.4 million and completed in 1979) 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 in order to improve their employment potential. The project was innovative and assisted in providing two comprehensive secondary schools, a polytechnic and teacher training center, a co-educational teacher training institute, training of agricultural teachers and TA for institutional support, curricula

development and teacher training. A system to trace the placement of graduates from the project institutions was also developed and is presently operational. The Project Performance Audit Report (PPAR, No.2494) for the First Education Project in Jordan 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." The recommendations in the project completion report, have been adopted, in particular, the introduction of improved equipment procurement procedures, better coordination of TA, more effective scheduling of required inputs and timing of implementation, and arrangements for training in management and administration of the Project Unit and project institutional staff.

1.17 Continuing this strategy, the Second IDA Education Project (Credit 534-JO, approved in 1975 for US$6.0 million) has assisted in providing a polytechnic, three comprehensive secondary schools, extensions (workshops and laboratories) to 16 preparatory and secondary schools, a trade training center, a hotel training school and a rural development center, and includes appropriate TA for each component. Implementation of this project was completed satisfactorily in 1982. The Project Completion Report (PCR No.4261) observes that the project is contributing to the expansion of vocational and technical education in Jordan at a time when demand for skilled labor is increasing. It also notes that the physical components of the project were well executed, that the quality of construction and equipment was very good and that all major technical assistance components were fully implemented. However, delays and cost overruns were encountered during implementation--a problem which institutional development measures included in subsequent projects, as well as in the proposed project, are designed to overcome.

1.18 The Third Education Project (Loan 1781-JO, approved in 1979 for US$19.0 million) includes five comprehensive secondary schools, one pre-vocational teacher training institute, an extension to one secondary agricultural school, one community college, one teacher training center, and eight mobile building maintenance units. The project also provides support to strengthen the planning and management capability of the MOE by providing a research and evaluation mechanism and a computerized management information system to be used as tools for planning and management. TA related to the project institutions and for project management support is being funded by the UNDP and executed by the Bank. Implementation of the project is proceeding satisfactorily.

1.19 The Fourth Education Project (Loan 2068-JO, approved in 1981 for US$25 million) provides for the construction and equipping of four GVSSs (two for girls and two for boys), a trade training center, a nursing/paramedical institute, a second polytechnic institute, and a technical teacher training center attached to one of the existing IDA-supported polytechnics. In addition, the project provides for the conversion of two teacher training institutes into community colleges, and includes technical assistance for these project components as well as for further curriculum refinement for the comprehensive secondary schools and polytechnics financed under the first three projects. The project is being implemented satisfactorily.

1.20 The Fifth Education Project (Loan 2246-JO, approved in 1983 for US$18.8 million) continues the thrust of the first four Bank Group education projects upon increasing the supply of well-trained skilled workers to meet manpower needs both within and outside Jordan. Continuing the support provided under the Fourth Project, it includes 15 of the 23 new GVSSs programmed in the 1981-85 Development Plan. In addition, it promotes regional equity by supporting the extension of preparatory and secondary schooling for students from the more remote areas, areas with very limited school resources beyond the primary level. The fifth project also provides technical assistance to reinforce the implementation capability of the Directorate of Projects and to develop the mechanism necessary to assure the continuing job relevance of MOE's expanding program of secondary vocational education.

1.21 The proposed project, a Bank loan of US$40.0 million, would provide for the construction and equipping of 31 compulsory schools (25 for girls, 6 for boys) and 16 general upper secondary schools (7 for girls, 9 for boys), and for the provision of 48 science laboratories, 50 multi-purpose workshops and 49 libraries for existing secondary schools. Support would also be provided to continue the institution building program, already begun under earlier Bank Group education projects and now being extended under the fifth project. Technical assistance to be provided under the proposed project would complete the strengthening of the MOE directorates for future independent sector and project actions.

II. THE PROJECT

Project Objectives and Scope

2.01 The proposed project is designed to support key Five-Year Plan objectives--in particular, improving conditions in compulsory and general secondary schools whilst simultaneously increasing the vocational content of the curricula, as well as completing the program begun under earlier projects for strengthening MOE capacity in the area of project preparation and implementation. Accordingly, the project would:

(a) support the extension of the prevocational instruction program for grades 5 through 12, which has been satisfactorily implemented on a pilot basis, and the implementation of the practical activities program for grades 1 through 4 through the construction of new schools and the provision of adequate workshop facilities for 50 existing schools (paras. 1.10, 1.11);

(b) initiate the upgrading of compulsory schools, particularly for girls, by the construction of 31 new schools to replace unsuitable rented facilities;

(c) improve the quality of compulsory and secondary instruction through a reduction of about 30% in the number of classrooms operating on a double shifts and through the provision of 48 additional science labs and 49 additional libraries in existing secondary schools;

(d) widen the opportunities for secondary schooling in all the governorates, with special consideration for female students in rural areas, by constructing 16 new schools with additional student places;

(e) continue the MOE institution-building program, notably in the sectors of pre-service and in-service training of teachers, planning and research, examinations, and educational technology, thereby strengthening the MOE directorates for better project preparation and implementation; and

(f) prepare for possible future lending by supporting pre-investment studies.

2.02 To help achieve the above objectives, the proposed project would provide civil works, equipment, furniture and technical assistance for the following:

(a) Construction, Equipment and Furniture for the improvement and expansion of:

Institution	Grades	Enrollment Capacity	Estimated Annual Output
(i) 31 new compulsory schools;	1-9	28,670	2,700
(24 for girls)		(22,200)	
(7 for boys)		(6,470)	
(ii) 16 new general secondary schools and	10-12	15,860	4,300
(7 for girls)		(6,450)	
(9 for boys)		(9,410)	
(iii) 48 additional laboratories, 50 additional multi-purpose workshops and 49 additional libraries in existing general secondary schools	10-12	29,500	
(24 for girls)		(14,800)	
(29 for boys)		(14,700)	

(b) TA related to training of instructors for the above project institutions (183 man-months for fellowships and study visits);

(c) TA related to: (i) strengthening the MOE Directorates of Education, Teacher Training and Certification, Planning and Research, Examinations, Community Colleges and Educational Technology (57 man-months of fellowships and study visits plus 21 man-months of specialist services); (ii) strengthening the MOE Directorate of Projects in project preparation and implementation (16 man-months of fellowships and study visits); and (iii) strengthening of MOE Computer Center (12 man-months of fellowships and study visits); and

(d) preinvestment work for a possible follow-up project (48 man-months of specialist services).

Compulsory Schools (grades 1-9)

2.03 This component would help expand and improve educational opportunities through the financing of construction, equipment and furniture, including multi-purpose workshops for practical activities and prevocational instruction, for 31 new compulsory schools (25 for girls and 6 for boys) in the governorates of Amman, Irbid, Balqa, Ma'an and Karak. The proposed schools would help: (a) replace unsatisfactory facilities (about 150 classrooms) (para. 1.09); (b) provide for increased enrollments (about 30,000 students by 1989/90); (c) replace about 270 rented primary and preparatory classrooms with consequent cost savings of JD 52,000 per year; (d) reduce the number of students per classroom (from currently 60-70 students per room in some existing schools to 40-50 students); and (e) cater to on-going population expansion, particularly in areas experiencing rapid growth of mining and industrial capacity; and (f) support the extension of the new practical activities program in grades 1 through 4 and the prevocational instruction program in grades 5 through 9 (paras. 1.10, 1.11).

2.04 Total enrollments in the proposed compulsory schools would be 28,670 (22,200 girls and 6,470 boys) with an average utilization rate of 88 percent. The enrollment represents 4% of the total compulsory school population. These schools would provide improved access to education and would better prepare students, particularly girls in rural areas/small towns, for entry into vocational and general secondary schools. About 90% of the students completing compulsory schooling in these schools (a total of about 2,900 students) would enter the first year of secondary education.

2.05 About 60% of the required teachers for the new schools would come from the classes to be relocated from inadequate and rented facilities. The remaining teachers required for general subjects and for most of the pre-vocational instruction courses would be available from the community colleges and from the Pre-Vocational Teacher Training Institute at Shaubak, supported under the Bank Third Education Project. In addition, graduates of the vocational secondary schools would continue to be recruited to teach prevocational courses at the preparatory level (grades 7-9).

New General Secondary Schools (grades 10-12)

2.06 This proposed component would help expand and improve educational opportunities through the financing of construction, equipment, and furniture, including multi-purpose workshops, for 16 new general secondary schools in the governorates of Amman, Balqa, Irbid, Karak and Ma'an. Seven would be for girls and nine for boys. The proposed schools would assist in: (a) replacing a number of improvised and educationally inadequate general secondary classrooms currently housed in rented buildings (about 110 classrooms) (para. 1.09); (b) improving the quality of instruction, particularly in sciences, by cancelling the second shift in about twelve rented secondary schools (para. 1.12); (c) improving access to secondary education by establishing nine secondary general schools in areas where none currently exists; (d) reducing the pressure upon existing secondary schools (50% of the project institutions are expected to help reduce this pressure); and (e) improving the relevance of secondary education by extending the prevocational instruction program (paras. 1.10, 1.11).

2.07 The curriculum for the proposed schools would include two hours per week of prevocational instruction--consisting of general prevocational instruction in grade 10 and a single vocational option in grades 11 and 12. Each of the project schools would provide four vocational options chosen from electricity, woodwork, metalwork, agriculture, home economics and commercial specializations, on the basis of qualifications of available teachers.

2.08 The size of each proposed school has been determined by the MOE's Planning and Research Directorate on the basis of detailed mapping of projected preparatory school outputs and secondary school intake capacity in each region. Total enrollments in the 18 general secondary schools would be 15,860 (6,450 girls and 9,410 boys), with an average utilization of 73 percent (including workshops and laboratories). About half of the vacated rented facilities would be used to accommodate an expansion of primary enrollments by about 4,600 places.

2.09 The schools would require a total staff of 780, about one-third of whom would come from the classes to be relocated from inadequate facilities. Most of the remaining two-thirds would be recruited from the community colleges and universities, the outputs of which are fully adequate to meet the need for general subjects teachers arising from the new schools in the proposed project. Teachers for the prevocational instruction courses in most specializations in the project secondary schools would be drawn from the graduates of Marka Polytechnic and the vocational specializations of the Community Colleges. For other prevocational instruction specializations to be offered in the project secondary schools, an adequate supply of instructors is to be assured through the 183 months of instructor fellowships included in the project.

Extensions to Existing General Secondary Schools

2.10 This component would help improve the quality of instruction, particularly of science instruction (para. 1.12), and would support the expansion of the prevocational instruction program at the secondary level (paras. 1.10, 1.11) through the financing of construction, equipment and furniture for 48 additional science laboratories, 49 additional libraries, and 50 multi-purpose workshops for 53 existing upper general secondary schools (24 for girls and 29 for boys--representing about 15% of the total and the least equipped). Twenty-three laboratories of physics, 20 of chemistry, 4 of biology and one of general science, including appropriate science equipment, would be added to schools that currently do not have such a facility. In addition, a total of 49 libraries and 50 multi-purpose workshops would be added to those schools among the 53 secondary schools which currently lack these facilities.

Technical Assistance

2.11 The proposed project would provide 183 months of fellowship training for instructors in the project secondary school prevocational instruction courses, and 48 months of specialist services for feasibility studies and engineering designs for a possible follow-up project. In addition, it would complete the reinforcement of MOE implementation capability (para. 1.13) by providing TA in seven priority areas:

(a) In-Service Teacher Training. The Directorates of Education and In-Service Training and Certification are planning a substantial strengthening of their in-service teacher training programs, including the establishment of pilot Teacher Development Centers which would provide a variety of learning resources to teachers for their own development and training. The success of these efforts would depend on the appropriate support and strengthening of supervisory and in-service training services. To ensure the success of these programs, the proposed project would provide 21 man-months of specialist services.

(b) Education and Planning. In the interest of improved efficiency, the five Regional Directorates of Education, under the Ministry's new policy of devolving educational planning responsibilities to the governorates, are preparing to progressively assume planning responsibilities formerly held by the MOE central administration. The TA to be provided to the Directorates of Education and Planning under the proposed project would contribute to this effort through the provision of 27 man-months of suitable training and study visits for planners and trainers in the MOE and regional directorates.

(c) Examinations. The proposed development by MOE of standardized student aptitude and performance tests for preparatory-level students (grades 7-9) would be an important adjunct to the student guidance program supported by the previous project. This component in the proposed project would help extend the development of career and occupational guidance services initiated under the Fifth Education Project through the provision of appropriate fellowships (6 man-months) for training of senior staff of the MOE Directorate of Examinations and Student Guidance.

(d) Educational Technology. The newly created Directorate of Educational Technology is developing a program to integrate the use of media and materials into the teaching-learning process. Training and study visits (12 man-months) for staff of the Directorate would be provided under the proposed project to acquaint staff with production techniques for educational television programs, animation and scientific photography techniques, and utilization and maintenance of precision science laboratory equipment.

(e) Community Colleges. The Government's network of community colleges, supported in part under the third and fourth education projects, require additional staff training inputs to enable them to fulfill their role as a resource for the particular needs of surrounding communities. To provide such training, the proposed project includes 12 months of fellowships and study visits.

(f) Computer Center. The MOE Management Information System (MIS), created under the third education project, requires additional support for manpower training in order to make fuller use of MIS facilities. For this purpose, the proposed project includes 12 man-months of fellowships and study visits.

(g) Project Implementation. The proposed project would complete the strengthening of the MOE's Directorate of Projects (DOP) by providing support for fellowships and study visits (16 man-months) for upgrading staff in procurement procedures and technical assistance management.

2.12 During negotiations, the Government confirmed its intention to assign responsibility for implementation of the the TA program to the MOE's DOP. The Government agreed that the MOE would assure staffing of the DOP Division in charge of TA implementation with the number and qualifications of staff necessary to effectively implement the TA program. The TA program is to be implemented according to a plan to be provided to the Bank for review and comment by June 15, 1984 (paras. 3.18, 5.01(b), and 5.01(c)).

III. PROJECT COSTS, FINANCING, MANAGEMENT AND IMPLEMENTATION

Project Costs

3.01 Cost Summary. The total cost of the project is estimated at JD 45.8 million or US$122.0 million equivalent, of which US$61.2 is foreign exchange. In addition to this, a Front-End Fee of US$1.0 million in foreign exchange would be paid directly by the Government before loan effectiveness. The breakdown by groups of project items is summarized in Table 3.1 below:

Table 3.1 PROJECT COST BY ITEM

Item	JD Millions			US$ Millions			% of Base Cost
	Local	Foreign	Total	Local	Foreign	Total	
Compulsory Schools							
New Girls' Schools (24)	7.28	6.10	13.38	19.42	16.28	35.70	39.2
New Boys' Schools (7)	2.00	1.68	3.68	5.33	4.47	9.80	10.8
Sub-total	9.28	7.78	17.06	24.75	20.75	45.50	50.0
General Secondary Schools a/							
New Girls' Schools (7)	2.50	2.36	4.86	6.67	6.30	12.97	14.2
New Boys' Schools (9)	3.20	3.02	6.22	8.53	8.05	16.58	18.2
Expanded Girls' Schools(24)	0.97	1.56	2.53	2.59	4.15	6.74	7.4
Expanded Boys' Schools (29)	1.24	1.96	3.20	3.30	5.23	8.53	9.3
Sub-total	7.91	8.90	16.81	21.09	23.73	44.82	49.1
Support to MOE							
Teacher Training	-	.04	.04	.01	.10	.11	0.1
Education Planning	.01	.07	.08	.02	.19	.21	0.2
Educational Technology	-	.01	.01	. -	.04	.04	-
Examinations	-	.02	.02	.01	.06	.07	0.1
Project Implementation	.	.01	.01	. -	.04	.04	-
Preinvestment Studies	.02	.14	.16	.05	.35	.40	0.5
Sub-total	.03	.29	.32	.09	.78	.87	0.9
Base Costs (Oct. 1983 prices)	17.22	16.97	34.19	45.93	45.26	91.19	100.0
Contingencies							
Physical	1.29	1.28	2.57	3.44	3.39	6.83	7.5
Price	4.28	4.72	9.00	11.41	12.59	24.00	26.3
Sub-total	5.57	6.00	11.57	14.85	15.98	30.83	33.8
Total Estimated Project Cost	22.79	22.97	45.76	60.78	61.24	122.02	

a/ Includes instructor training fellowships for this item, valued at US$0.44 million.

3.02 A summary of estimated project costs by type of expenditure is given in Table 3.2.

Table 3.2 PROJECT COST BY CATEGORY OF EXPENDITURE

Item	JD Millions			US$ Millions			% of Base Cost
	Local	Foreign	Total	Local	Foreign	Total	
Construction							
Site Development	1.37	0.58	1.95	3.65	1.55	5.20	5.7
Academic & communal facilities	12.32	10.08	22.40	32.86	26.88	59.74	65.5
Sub-total	13.69	10.66	24.35	36.51	28.43	64.94	71.2
Professional Services	2.19	0.24	2.43	5.85	0.64	6.49	7.1
Furniture & Equipment							
Furniture	0.82	1.35	2.17	2.19	3.60	5.79	6.4
Equipment	0.47	4.29	4.76	1.25	11.44	12.69	13.9
Sub-total	1.29	5.64	6.93	3.44	15.04	18.48	20.3
Technical Assistance							
Fellowships	0.02	0.23	0.25	0.05	0.62	0.67	0.7
Specialists	0.03	0.20	0.23	0.08	0.53	0.61	0.7
Sub-total	0.05	0.43	0.48	0.13	1.15	1.28	1.4
Base Costs (Oct.1983) prices)	17.22	16.97	34.19	45.93	45.26	91.19	100.0
Contingencies							
Physical	1.29	1.28	2.57	3.44	3.39	6.83	7.5
Price	4.28	4.72	9.00	11.41	12.59	24.00	26.3
Sub-total	5.57	6.00	11.57	14.85	15.98	30.83	33.8
Total Estimated Project Cost	22.79	22.97	45.76	60.78	61.24	122.02	

3.03 Basis of Cost Estimates. Construction costs were estimated on the basis of: (a) schedules of accommodation for extensions to be provided under the project; (b) final sketch plans for typical project institutions; and (c) unit costs of other recently constructed comparable buildings. The areas per student place allowed for in the project schools are similar to the median unit areas in Bank-assisted school construction in other countries (Table 3.3). The estimated costs per square meter of gross construction area, which average US$255 equivalent, are reasonable for the utilitarian standards of construction allowed for. Furniture costs were estimated as a proportion (10%) of construction costs, and equipment costs were derived from master equipment lists prepared for comparable institutions. These were reviewed during appraisal and found appropriate in scope and cost. Technical assistance costs (about 1.5% of total project base cost) are estimated at an average of US$10,300 per man-month for specialist services and US$3,100 per man-month of fellowship training. The man-month costs for specialists include housing and other benefits as well as recruitment and relocation costs. Fees for design and supervision (10% of estimated construction costs) were estimated on the basis of a draft consultancy contract and typical supervision fee scales of Jordanian consulting architects.

3.04 Customs Duties and Taxes. Estimated project costs do not include direct taxes and custom duties, from which the project is exempt, but they include about US$10 million in indirect taxes on locally purchased project items.

3.05 Area and Cost per Place. The following table shows unit areas and costs for new project institutions, net of contingency allowances and professional fees:

Table 3.3 AREA AND COST PER STUDENT PLACE
(New project facilities)

	Gross area (m2)		Cost Per Student Place (US$)				
	Project institutions	Bank median (78-80) for comparable facilities	Site development	Buildings	Furniture	Equipment	Total
Compulsory schools	4.5	3.6	112	1,128	109	115	1,464
Secondary Schools	4.9	5.8	123	1,235	120	221	1,699

3.06 Contingency Allowances. A physical contingency of 7.5% of base cost (US$6.8 million) was added to the cost of all project items to allow for unforeseen events. A price contingency allowance of 26.3% (US$24.0 million) was added to the base cost plus physical contingencies. This figure is based on the implementation schedule shown in Annex 2 and the following local and foreign annual price escalation rates, starting from October 1983:

Table 3.4 PROJECTED ANNUAL PRICE ESCALATION
(Local and foreign costs)

Cost Category	Annual Price Escalation (in percent)			
	1983	1984	1985	1986-1990
Civil works	8.0	7.5	7.0	6.0
Furniture/equipment	8.0	8.0	7.0	7.0
Technical assistance	7.0	7.0	6.0	6.0

3.07 Foreign Exchange Component. The foreign exchange component of US$61.2, representing 50% of estimated total project costs, was estimated on the basis of the following estimated foreign exchange proportions for individual categories of project expenditures: (a) site development, 30%; (b) construction, 45%; (c) furniture, 62%; (d) equipment, 90%; (e) professional services, 10%; and (f) technical assistance, 90%. These percentages have been derived by: (a) determining the proportions of civil works and furniture costs attributable to material, local and foreign labor, overhead and profit; (b) reviewing awards for equipment and civil works made under earlier loans; and (c) estimating the composition of the technical assistance program.1/

Recurrent Cost

3.08 When fully operational in 1989, the project schools are estimated to generate about JD 1.9 million in incremental recurrent costs (evaluated in 1983 prices). This amount would constitute a modest 2.0% addition to projected recurrent costs of education, which is expected to be fully within the Government's fiscal capability.

Financial Plan

3.09 The proposed Bank Loan of US$40.0 million would finance 65% of the foreign exchange component of the project. As shown in Table 3.5 below, the Bank Loan would finance all of the foreign costs of civil works and equipment for the 31 new compulsory schools and for the extensions of the 53 existing secondary schools, as well as all of the costs of technical assistance.

1/ It is estimated that 60% of civil works and furniture contracts would be awarded to local firms and all equipment to overseas suppliers.

The remaining 35% of foreign costs not covered under the Bank Loan would be covered by Government funding and possible suppliers' and export credits.

Table 3.5 PROPOSED FINANCIAL PLAN a/
(US$ Million)

Category of Expenditures	Local Costs a/ Govt.	Local Costs a/ Bank	Foreign Costs a/ Govt.b/	Foreign Costs a/ Suppliers' & Export Credits	Foreign Costs a/ Bank	Total Costs a/	Bank Share of Total
Civil Works:							
--31 new compulsory schools, extensions to 53 existing schools	33.3	-	-	-	27.1	60.4	45%
--16 new secondary schools	15.0	-	10.2	-	-	25.2	-
Professional services (all schools)	7.5	-	0.8	-	-	8.3	-
Furniture (all schools)	2.9	-	4.7	-	-	7.6	-
Equipment:							
--31 new compulsory schools, extensions to 53 existing secondary schools	1.3	-	-	-	11.2	12.5	90%
--16 new secondary schools	0.6	-	-	5.7	-	6.3	-
Technical Assistance	-	0.2	-	-	1.5	1.7	100%
Total	60.6	0.2	15.7	5.7	39.8	122.0	33%

a/ Including physical and price contingencies.
b/ Cofinancing may be sought for items under this heading.

Disbursements

3.10 The proposed loan would be disbursed over a period of six years, as shown in Annex 4. Although this disbursement period is one year shorter than the actual implementation periods for the first and second projects, which closed in 1979 and 1982, respectively, it is consistent with the more recent implementation experience of subsequent education projects in Jordan.

3.11 Disbursements would be made against:

(a) 45% of the total cost of civil works;

(b) 100% of foreign expenditures on directly imported equipment; 100% of local expenditures ex-factory for locally manufactured equipment; 90% of local expenditures for off-the-shelf equipment expenditures; and

(c) 100% of the total cost of fellowships and specialist services.

Disbursements are expected to be completed by December 31, 1989.

Accounting and Auditing

3.12 The Directorate of the Projects (DOP) maintains project-related accounts in accordance with sound and generally recognized accounting principles and practices satisfactory to the Bank. The Directorate would submit to the Bank annual financial statements reflecting the financial performance and position of the project. Such financial statements would be the basis of annual auditing of expenditures by independent auditors acceptable to the Bank. The Government's Bureau of Audit is such an auditor. Beginning with the first year of disbursements, annual audits would be submitted to the Bank within eight months of the end of each fiscal year of the Government. These audits would provide adequate and timely information of the supervision of loan disbursements and of the project in general. During negotiations, the Government provided assurances that audited project accounts would be submitted to the Bank annually (para. 5.01(e)).

Management

3.13 The project would be managed by existing organizational units in the MOE. Principal implementation responsibility would rest with the DOP, which is in charge of preparing and implementing all externally financed projects. The DOP is organized into five sections: civil works, procurement, technical assistance, accounts and a clerical support section. Functions of the DOP sections can be summarized as follows:

(a) Civil Works. Selection of consultants and preparation of architects' briefs; review of designs and bid documents and calling of tenders; general supervision of construction; and monitoring of implementation schedules.

(b) Procurement. Formation of technical committees to prepare equipment lists and specifications; preparation of bidding documents, organization of bidding, deliveries and installation; and monitoring of implementation schedules.

(c) Technical Assistance. Organization of programs for training experts and recruiting fellows.

(d) Accounts. Keeping project accounts; dealing with the World Bank, the Central Bank and commercial banks in respect of project finances; arranging payments to suppliers and contractors and preparing quarterly financial statements.

Other Government agencies with important implementation responsibilities include MOE's Directorate of School Buildings which is, inter alia, responsible for site acquisition. A tender committee organized by the Public Works Department is responsible for the award of all civil works contracts.

3.14 The DOP staffing is being strengthened through staffing provisions that were introduced under the Fifth Education Project (Loan 2246-JO): Two procurement officers, two accountants, two quantity surveyors, an experienced architect, and an experienced engineer have been added under the provisions of that loan. To expedite equipment procurement, further strengthening and streamlining of the procurement division would be required as follows: (a) study tours of procurement staff to acquaint them with computer-assisted procurement; (b) acquisition of word processing/microcomputer equipment (including training); and (c) contracts with commercial freight forwarders to assist in clearing project financed goods through Aqaba port. The Government has prepared a plan satisfactory to the Bank to improve the efficiency of the Procurement Unit through use of the MOE's Management Information System. The MOE is expected to start implementing this plan by September 30, 1984.

Status of Preparation

3.15 Sites. Suitable sites for all project institutions have been identified. Currently, 33 of the 47 sites have been acquired. During negotiations, the Government provided assurances that all remaining sites would be acquired by June 1984, and no problems are foreseen in acquisition of these sites (para. 5.01(a)).

3.16 Designs and Supervision. To augment the design capacity of its Public Works Department, the Government has established an independent design office at Yarmouk University. This office has a complete array of architects and engineers engaged as full time senior staff, capable of conducting research, preparing designs, drafting tender and contract documents and supervising construction. This design office has prepared prototype designs for the project, based on educational and architectural research work conducted by the office. Prototype designs were reviewed by the Bank in August 1983 and found satistactory. Adaption of these approved prototype designs to individual sites is in progress and is expected to be completed by mid 1984. Substantial economies in construction costs will be realized when the new prototypes are put into use: earlier standard designs in Jordan provided about 7.1 m2 (gross area) per enrolled secondary school student, whereas the new designs are expected to provide only about 4.9 m^2 (gross area) per secondary school student--a reduction of 31%.

3.17 Equipment and Furniture Needs. Preliminary equipment lists for the project institutions have been prepared by MOE technical committees and approved by the Bank. Final lists are under preparation by the DOP and are expected to be completed by March 1984.

3.18 Technical Assistance. Terms of reference and an implementation schedule for technical assistance were prepared by the MOE, reviewed by the Bank during appraisal and found satisfactory. The proposed schedule for fellowship training and expert assignments is shown in Annex 3. The Government plans to execute the technical assistance program through the Technical Assistance section of the DOP. During negotiations, the Government provided assurances that, for that purpose, the MOE would assure staffing of the DOP Division in charge of TA implementation with the number and qualifications of staff necessary to effectively implement the TA program. The TA program is to be implemented according to a plan to be provided to the Bank for review and comment by June 15, 1984 (paras. 2.12 and 5.01(c)).

Implementation

3.19 To distribute the large implementation workload, the project would be implemented in two phases. Phase I would incorporate the 21 new schools for which sites were acquired as of appraisal (about 37% of total) and about 50% of the extensions to existing facilities. Phase II would comprise the other 26 new schools and the remaining extensions. Tender documents for Phase I and Phase II schools are scheduled to be completed by July 1984 and January 1985, respectively. Equipment and furniture procurement would be coordinated to follow the pace of construction. Recruitment of technical assistance would start in July 1984.

3.20 The Project is expected to be completed by June 30, 1989; the proposed Closing Date is December 31, 1989.

3.21 ICB Procurement. Civil works contracts for most of the 31 new compulsory schools to be financed under the loan (averaging US$1.9 million each, including contingencies) would be awarded on the basis of international competitive bidding (ICB) in accordance with Bank guidelines. The aggregate amount of civil works contracts to be awarded under ICB is estimated at US$45.3 million equivalent. Equipment to be financed under the loan would be grouped to the extent possible in large packages for bulk procurement. All equipment to be financed under the proposed loan would be procured under the following procedures: Contracts for bid packages exceeding US$100,000 equivalent estimated value would be awarded on the basis of ICB. Items which cannot practicably be grouped in bid packages of more than US$100,000 equivalent estimated value, or items of a specialized nature for which ICB would not be appropriate, would be procured under government procedures to be satisfactory to the Bank and to include, to the extent posible, quotations from at least three manufacturers or suppliers. Such procurement of equipment items by means other than ICB would be subject to an aggregate value limit of US$1.0 million equivalent (corresponding to about 9% of the total estimated value of equipment to be financed under the loan, including contingency allowances). In the comparision of bids obtained on the basis of ICB, local manufacturers would be allowed a margin of preference equal to the existing rate of customs duties applicable to competing imports or 15% of the CIF price, whichever is lower. Prior Bank review of procurement documentation and contract award recommendations would be required for all equipment and civil works contracts awarded on the basis of ICB.

3.22 Other Procurement Procedures. Civil works contracts for the small, dispersed extensions to existing institutions (averaging about US$0.23 million equivalent and aggregating US$12.3 million) and for the two most remote compulsory schools (up to a total contract value of US$3.0 million) would be unlikely to interest international contractors and could therefore be awarded in accordance with local bidding procedures to be acceptable to the Bank. Expert services would be acquired in accordance with the Bank's Guidelines for the Use of Consultants.

3.23 Maintenance. Earlier Bank-assisted school facilities have, with few exceptions, been acceptably maintained. Maintenance facilities have recently been strengthened through the introduction of eight mobile maintenance units, financed under the Third Education Project (Loan 1781-JO).

IV. BENEFITS AND RISKS

Benefits

4.01 The proposed project would make an important contribution to achieving the Government's plan to upgrade school facilities and to increase the vocational orientation of general instruction at the primary, preparatory and secondary levels. The project responds to a specific Government request that future Bank involvement in the education sector go beyond its past support of teacher training, vocational education and institutional development, to directly assist in improving the quality of primary school facilities and to provide an employment orientation for the majority of students who will never pursue actual vocational training.

4.02 Substantial economies in secondary school construction costs will be realized when recently developed prototypes are put into country-wide use. These new designs are expected to provide only about $4.9m^2$(gross area) per secondary school student--a reduction of 31% from earlier standard designs in Jordan.

Risks

4.03 There are no undue risks anticipated with the proposed project. The components are identical or similar to those already being implemented satisfactorily under the Government's own program. However, due to frequent spacing of education projects at the Government's request, the current project might tax the current implementation capacity of the MOE. For that reason, the project provides for sufficient strengthening of MOE implementation capacity in vital areas (paras. 2.11, 2.12, 3.18 and 5.01).

4.04 The timely availability of the substantial Government contribution (about US$76 million) would be essential for smooth project implementation. This matter was discussed with the Government who confirmed that in view of high priority given to this project, all necessary measures would be taken. The expenditures for the first two implementation years have been budgeted and those for future years programmed.

V. AGREEMENTS REACHED AND RECOMMENDATION

5.01 During negotiations, the Government provided assurances that:

(a) The remaining sites would be acquired by June 1984;

(b) The MOE's DOP would implement the technical assistance program in the proposed project (paras. 2.12 and 3.18);

(c) For that purpose, the MOE would assure staffing of the DOP Division in charge of TA implementation with the number and qualifications of staff necessary to effectively implement the TA program. The TA program is to be implemented according to a plan to be provided to the Bank for review and comment by June 15, 1984 (paras. 2.12 and 3.18).

(d) The TA program would be carried out in accordance with a time schedule satisfactory to the Bank (paras. 2.12 and 3.18); and

(e) Project accounts would be audited annually by the Government's Audit Bureau and the audited accounts submitted to the Bank within eight months of the end of each fiscal year, beginning with the first year of project disbursement (para 3.12).

5.02 Subject to the above conditions, the project provides a suitable basis for a Bank Loan of US$40.0 million equivalent to the Hashemite Kingdom of Jordan for a term of 17 years, including a grace period of four years.

HASHEMITE KINGDOM OF JORDAN
SIXTH EDUCATION PROJECT
Summary Account by Project Component
(J DINAR '000)

	COMPULSORY SCHOOLS		UPPER SECONDARY SCHOOLS				INSTITUTION BUILDING					STUDIES		Physical Contingencies	
	GIRLS SCHOOLS	BOYS SCHOOLS	NEW GIRLS SCHOOLS	NEW BOYS SCHOOLS	EXTEND GIRLS SCHOOLS	EXTEND BOYS SCHOOLS	INSERV ANS PRE SERV TRG	EDUC AND PLANNG	EDUC TECHN-OLOGY	EXAMS AND COMPUTR	PROJECT IMPLEMEN TATION	STUDIES AND FUTURE PROJECTS	Total	%	Amount
I. INVESTMENT COSTS															
A. CIVIL WORKS															
ACADEMIC AND COMMUNAL BLDG	9,506.4	2,612.4	3,225.2	4,123.7	1,288.2	1,642.7	-	-	-	-	-	-	22,398.5	7.5	1,679.9
SITE WORKS	950.6	261.2	322.5	412.4	-	-	-	-	-	-	-	-	1,946.8	7.5	146.0
Sub-Total CIVIL WORKS	10,457.0	2,873.6	3,547.7	4,536.0	1,288.2	1,642.7	-	-	-	-	-	-	24,345.3	7.5	1,825.9
B. PROFESSIONAL SERVICES	1,045.7	287.4	354.8	453.6	128.8	164.3	-	-	-	-	-	-	2,434.5	7.5	182.6
C. FURNITURE AND EQUIPMENT															
FURNITURE	919.0	252.7	311.5	398.3	128.8	164.3	-	-	-	-	-	-	2,174.5	7.5	163.1
EQUIPMENT	964.0	264.0	579.6	744.2	981.0	1,225.0	-	-	-	-	5.0	-	4,762.8	7.5	357.2
Sub-Total FURNITURE AND EQUIPMENT	1,883.0	516.7	891.1	1,142.5	1,109.8	1,389.3	-	-	-	-	5.0	-	6,937.3	7.5	520.3
D. TECHNICAL ASSISTANCE															
FELLOWSHIPS	-	-	62.7	79.2	-	-	-	39.6	13.2	22.0	-	-	216.7	7.5	16.3
SPECIALISTS	-	-	-	-	-	-	43.2	32.4	-	-	-	150.0	225.6	7.5	16.9
STUDY TOURS	-	-	-	-	-	-	-	-	-	-	10.5	-	10.5	7.5	0.8
AIRFARES	-	-	8.6	7.2	-	-	-	5.4	1.8	2.7	-	-	25.6	7.5	1.9
Sub-Total TECHNICAL ASSISTANCE	-	-	71.3	86.4	-	-	43.2	77.4	15.0	24.7	10.5	150.0	478.4	7.5	35.9
Total INVESTMENT COSTS	13,385.7	3,677.7	4,864.8	6,218.5	2,526.9	3,196.2	43.2	77.4	15.0	24.7	15.5	150.0	34,195.6	7.5	2,564.7
Total BASELINE COSTS	13,385.7	3,677.7	4,864.8	6,218.5	2,526.9	3,196.2	43.2	77.4	15.0	24.7	15.5	150.0	34,195.6	7.5	2,564.7
Physical Contingencies	1,003.9	275.8	364.9	466.4	189.5	239.7	3.2	5.8	1.1	1.9	1.2	11.2	2,564.7	0.0	0.0
Price Contingencies	3,308.8	908.7	1,257.7	1,609.7	808.2	1,021.7	6.5	18.1	2.6	5.2	3.2	47.6	8,998.1	7.0	627.8
Total PROJECT COSTS	17,698.4	4,862.3	6,487.3	8,294.6	3,524.6	4,457.6	53.0	101.4	18.7	31.8	19.9	208.8	45,758.4	7.0	3,192.4
Taxes	1,621.7	445.7	550.1	703.4	213.4	272.1	-	-	-	-	-	-	3,806.4	7.0	265.6
Foreign Exchange	8,137.3	2,234.9	3,194.9	4,084.9	2,178.2	2,744.5	47.6	91.1	16.8	28.6	19.2	187.7	22,965.8	7.0	1,602.3

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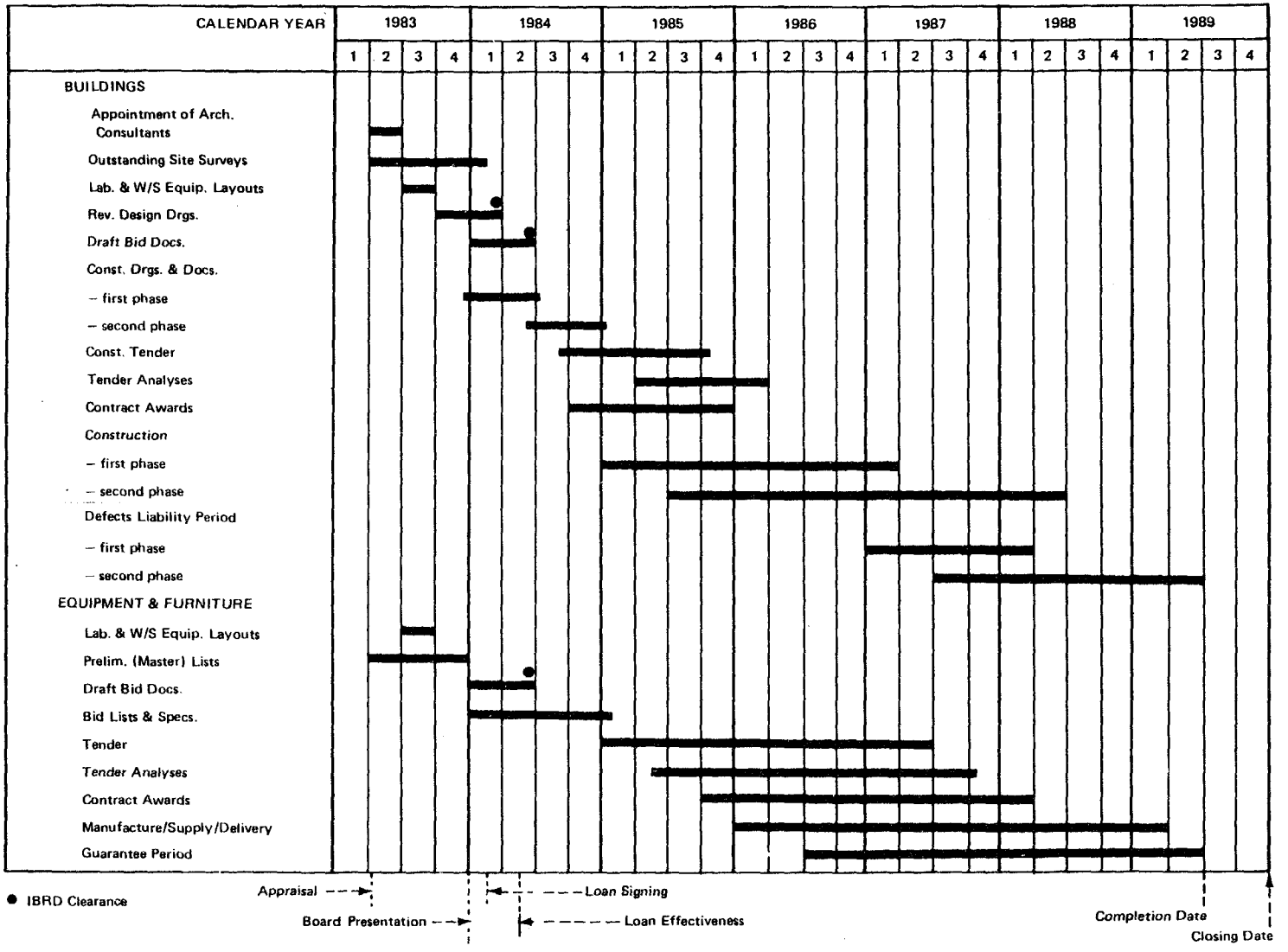
Annex 1

HASHEMITE KINDOM OF JORDAN
PROPOSED SIXTH EDUCATION PROJECT
Implementation Schedule



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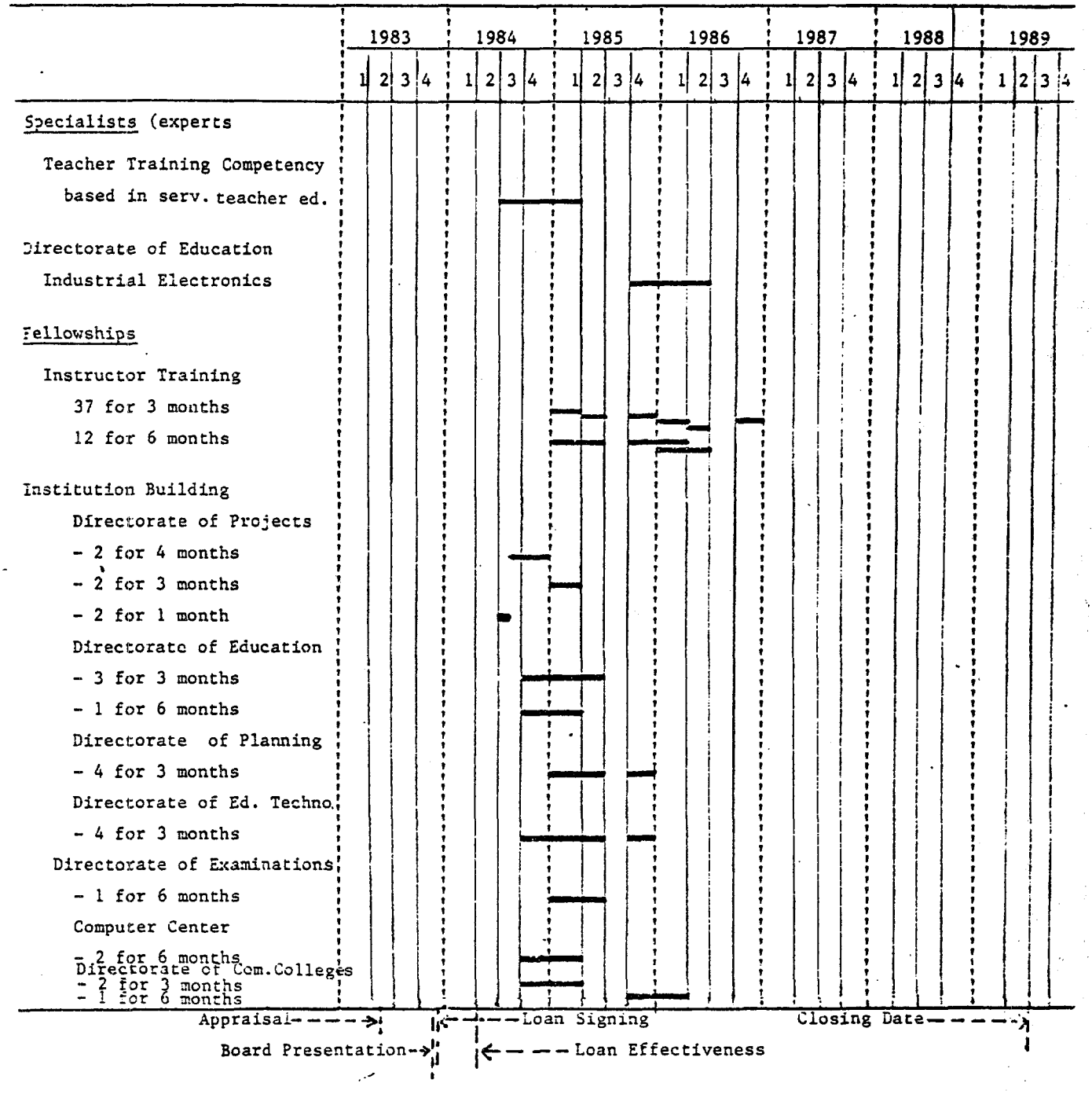
HASHEMITE KINGDOM OF JORDAN
SIXTH EDUCATION PROJECT
Implementation Schedule
Technical Assistance



SCHEDULE OF DISBURSEMENTS

IBRD fiscal year and semester	Disbursements		Disbursement profile a/	
	Semester	Cumulative	This project	Regional average in education b/
	-----(US$ million)-----		----------(%)----------	
1984				
	-	-	-	0.1
2nd	0.2	0.2	0.1	0.7
1985				
1st	0.2	0.4	1.0	1.9
2nd	0.7	1.1	2.3	3.8
1986				
1st	1.6	2.7	6.8	6.8
2nd	2.1	4.8	12.0	10.8
1987				
1st	6.2	11.0	27.5	16.0
2nd	6.2	17.2	43.0	22.3
1988				
1st	6.3	23.5	58.8	29.5
2nd	6.3	29.8	74.5	37.3
1989				
1st	6.2	36.0	90.0	45.4
2nd	2.0	38.0	95.0	53.6
1990				
1st	2.0	40.0	100.0	61.5

a/ The profile shows cumulative percentages disbursed.

b/ The regional profile includes all EMENA education projects during FY71-81, accelerated by about 5% to eliminate long tails. This project is expected to disburse faster than the regional average because of advanced preparation and the Borrower's increased familiarity with Bank procedures.

JORDAN

SIXTH EDUCATION PROJECT

TECHNICAL ASSISTANCE

Category and Purpose	Number	Man/ Months Each	Total Man/ Months	Beginning Date
Fellowships				
a) Instructor training				
i) Boys' Gen. Secondary Schools				
Arts & Ceramics	4	3	12	Jan. 1985
Electricity	3	6	18	Jan. 1985
Carpentry	3	6	18	Oct. 1985
Metal	3	6	18	Jan. 1986
Audio-Visual Aids	4	3	12	Oct. 1986
Plumbing	3	6	18	Jan. 1986
Flower Making	3	3	9	Oct. 1986
ii)Girls'Gen. Secondary Schools				
Dressmaking	3	3	9	Jan. 1985
Art & Weaving	4	3	12	Apr. 1985
Ceramics	4	3	12	Oct. 1985
Nursery & Child care	4	3	12	Oct. 1985
Photography	4	3	12	Jan. 1986
Millinery & Flower Making	3	3	9	Apr. 1986
Home Economics	4	3	12	Oct. 1986
b) Institutional Building				
i)Directorate of Projects				
Management Construction	2	4	8	Sept. 1984
Management Supplies	2	3	6	Jan. 1985
Management of TA	2	1	2	Jul. 1984
ii) Directorate of Education				
Woman Educ. Advisor	2	3	6	Oct. 1984
Vocat.Teacher Advisor	1	3	3	Jan. 1985
Secret.Teacher Training	1	6	6	Oct. 1984
iii) Directorate of Planning				
Educ.planning & Administration	2	3	6	Jan. 1985
Education Cost	1	3	3	Apr. 1985
Education statistics analysis	1	3	3	Oct. 1985
iv) Directorate of Educ.Technology				
Production techniques of education TV programs (advanced)	1	3	3	Oct. 1984
Animation & scientific photographic techniques	1	3	3	Jan. 1985
Utilization & Maintenance of test & precision science laboratory equipment	1	3	3	Apr. 1985
Photo-chemical silk-screen printing techniques	1	3	3	Oct. 1985
v) Directorate of Community Colleges				
Industrial materials	1	3	3	Jan. 1985
Educational guidance	1	3	3	Oct. 1984
Micro-teaching	1	6	6	Oct. 1985
vi) Directorate of Examinations				
Testing and Measurement	1	6	6	Jan. 1985
vii) Computer Center				
Programmer	1	6	6	Oct. 1984
Analyst	1	6	6	Oct. 1984
Experts				
a) Directorate of In-Service T.T. and Certification Competency-based in-service teacher education	1	12	12	Jul. 1984
b) Directorate of Education Industrial Electronics	1	9	9	Oct. 1985
c) Preinvestment Study	-	-	48	Oct. 1984

COMPARATIVE EDUCATION INDICATORS

NOVEMBER 23, 1983

	BASE YEAR	POP. MILLS. (1979) (1)	GNP PER CAPITA (US$) (1979) (2)	PERCENT GNP DEVOTED TO EDUCATION (3)	CENTRAL GOVERNMENT EXPENDITURE ON EDUCATION AS PERCENT TOTAL CENTRAL GOVERNMENT EXPENDITURE (4)	EDUCATION RECURRENT EXPENDITURES ALLOCATED TO: PRI (%) (5)	SEC (%) (5)	HI (%) (5)	ADULT LITERACY RATE (%) (1976) (6)	PRIMARY ENROLL. RATIO (%) (7)	COMPLETION RATE FOR PRIMARY SCHOOL CYCLE (%) (8)	PRIMARY STUDENTS PER TEACHER (9)	RECURRENT UNIT COST PRIMARY EDUCATION AS PERCENT GNP/CAPITA (10)	PROGRESSION RATE FROM PRIMARY TO SECONDARY (%) (11)	SECONDARY ENROLL. RATIO (%) (12)	SECONDARY STUDENTS PER TEACHER (13)	HIGHER ENROLL. RATIO (%) (14)
DEVELOPED COUNTRIES																	
AUSTRALIA	80	14.6[b]	8,870	6.3[a]	14.6	---	---	---	---	103[x]	100	21	---	99	73	13	20.90
CANADA	81	23.7[b]	9,650[b]	7.7[a]	18.5[ay]	30[a]?	34[a]?	23[a]?	99[b]	106[x]	100	21	19.9[a]?	100	92[x]	18	22.60[x]
GERMANY F.R.	79	61.2	12,200	4.6	9.9[a]	---	---	---	99[b]	89[a]	100[a]	---	---	100[a]	94[a]	---	12.10[a]
NETHERLANDS	79	14.0	10,490	7.9	5.1	20	35	25	99[b]?	96	95	18	15.3	99	82	13	12.40
NEW ZEALAND	80	3.2[b]	6,081[b]	5.5[w]	13.4	37	31	28	99[b]	100	100	24	11.6	100	82	15	25.80[xa]
SWEDEN	79	8.3	12,250	9.0	18.2	31	10	10	99[b]	99[x]	100	18[a]	19.9	100	79[x]	10[ay]	36.50[ay]
EASTERN AFRICA																	
BOTSWANA	80	0.8[b]	720[b]	6.3[p]	19.3	48	28	15	35[b]	94	74	32	22.0	33**	20	18	1.50
BURUNDI	81	4.2	235	2.8[bw]	19.0	43	28	27	25	29[x]	35	37	20.2	12	3[x]	17	1.00
COMOROS	80	0.4[b]	260	6.5[w]	25.4	40	28[b]	14	---	99[x]	65	45	16.0	58	21[x]	30	1.40
DJIBOUTI	81	0.3	460	5.4	10.8	60	40	...	10	32	---	41	---	60	8	19	0.50
ETHIOPIA	80	31.0[b]	130[b]	2.2[p]	11.1[a]	52	32	14[a]	15	38	---	59	18.0	---	9	41[a]	5.10
KENYA	79	15.3	390	5.9[w]	18.0[b]	71	15	14	45	92	74	40	15.8	41	19	28	1.00
LESOTHO	82	1.4[b]	435[b]	5.5	16.9	38	32	26	53[b]	116[x]	41	48	9.6	46	21	21	1.30
MADAGASCAR	77	8.5	330	4.0[w]	24.0	53	28	19	50	94[bx]	33	55[b]	8.0	38	14	23	3.10[by]
MALAWI	81	6.1[b]	230[b]	3.5	11.4	38	14	25	25[b]	62	23	65	5.8	12	4	21	0.40
MAURITIUS	80	0.9[b]	1,080[b]	6.0	11.5	39	40	7	80	87	78	22[b]	17.1	79	45[x]	21	0.40
RWANDA	80	5.0[b]	200[b]	3.2	21.3	62	17	11	23[b]	57[x]	62	40	14.0	6	4[x]	13	0.40
SEYCHELLES	79	0.6	1,770	5.9	22.4[a]	34[a]	33[a]	10[a]	---	---	---	25	---	---	---	---	---
SOMALIA	81	4.5	280	1.5	10.5	50[b]	44[b]	6[b]	50[b]	22[b]	80[b]	29[b]	9.0[b]	80[b]	12[b]	22	1.00
SUDAN	80	19.2[b]	380[b]	3.0	---	66	39	...	32	51[ax]	68	34	1.4	44	16	16	...
SWAZILAND	80	0.6	760	7.9	18.8	41	34	15	65[b]	79	50	34	11.2	98	37[b]	18	2.50
TANZANIA	80	18.5	260	5.9	17.7	47	10	16	79[b]	98[b]	87	43	11.0	19[b]	3	20[a]	0.30
UGANDA	80	12.6[b]	300[b]	---	16.1[w]	23[b]	37[b]	20[b]	48	54[x]	61	34	---	17	5	23	0.60
ZAIRE	78	27.5	210[a]	6.0[w]	22.0	49	26	25	15	84[y]	44	42[x]	---	41	13[x]	27	1.10[by]
ZAMBIA	80	5.7[b]	566[b]	4.5[p]	11.1	48	23	22	44[b]	95	80	48	12.9	19	16	22	1.50
ZIMBABWE	81	7.7[b]	700[b]	5.1	19.5	62	32	6	44[b]	90	55	39	20.0	85	15	23	0.50
WESTERN AFRICA																	
BENIN	79	3.4[b]	320[b]	6.5[w]	35.0	43	21	5	11[b]	42	30	46	14.0	30	11	43	1.00[y]
CAMEROON	78	8.2	590	2.9[y]	16.0[y]	33[a]	43[a]	20[a]	---	74[y]	45[a]	50[y]	11.8[a]	20[a]	14[y]	26	1.30[y]
C.A.R.	79	2.2	280	3.8[ay]	20.6[ay]	---	---	---	---	---	---	65[ay]	---	---	---	---	0.70[ay]
CHAD	76	4.4	120	2.4[bwy]	21.7[b]	---	---	---	15	25[y]	---	77	---	---	3[xy]	21	0.20[y]
CONGO	78	1.5	670	9.0[awy]	27.7[ay]	---	---	---	---	---	---	56[by]	---	30	---	43[by]	4.00[ay]
GABON	77	0.6	3,420	3.7[by]	8.4[y]	---	---	---	---	---	---	46[by]	---	---	---	19[by]	2.80[ay]
GAMBIA	77	0.6	220	3.3[aw]	6.5[b]	46	25[a]	6[a]	10[b]	40[by]	90[a]	27[by]	44.7[a]	40	12[bxy]	17	---
GHANA	76	11.3	400	4.0[y]	15.5[b]	---	---	---	---	71[bxy]	---	27[by]	---	---	36[bxy]	21	---
GUINEA	79	5.3	290[p]	4.6[ap]	---	25[a]	28[a]	28[a]	20	34	36	38	20.0[ap]	85	16	29	7.00[a]
IVORY COAST	81	8.2[b]	1,070[b]	10.0	45.0	33	46	13	30[b]	60	86	43	26.0	47	15[axy]	26	1.90[ay]
LIBERIA	80	1.9	520	4.6	19.6	43	23	24	30	52	32	35	20.0	76	22	20	2.90
MALI	81	7.0[b]	190	4.2[a]	21.7[a]	38	21	11	10	20	60	44	15.7	66	1	11	0.90[ay]
MAURITANIA	78	1.6[b]	320[b]	5.5	16.9	33	43	25	17[b]	32	60	44	52.0	30	9	25	0.37
NIGER	78	5.2	300	4.3[ay]	16.6[ay]	52[a]	43[a]	5[a]	8	17	56[a]	41[a]	38.7[a]	40	2	24[b]	0.20[y]
NIGERIA	77	82.6	910	4.1[y]	9.6	---	---	---	---	---	---	---	---	---	10[xy]	25	0.17[y]
SENEGAL	77	5.5	450	5.0	23.0	46	34	20	10	34[bxy]	---	43[by]	---	20	10	21	2.20[by]
SIERRA LEONE	77	3.4	250	4.0[b]	16.0[b]	---	---	---	15[b]	37[x]	---	35	25.0[b]	84	15[x]	22	0.60[by]
TOGO	78	2.4	400	6.5[qw]	26.5[q]	30[a]	28[a]	21[a]	18	74	40	54[by]	38.0	52	32[bxy]	48[b]	1.60[by]
UPPER VOLTA	78	5.6	180	3.0[aw]	19.3[ay]	31	16	32	---	15[by]	23	53[by]	52.5?	19	3[bxy]	25	0.02[y]
LATIN AMERICA AND THE CARIBBEAN																	
ARGENTINA	78	27.3	2,210	2.7	10.9	43[a]	31[a]	18[a]	93[b]	89	52	17	---	87	31	8	23.00
BAHAMAS	79	0.2	2,770	5.7	19.1	36	36	11	93[b]	99	97	24	---	97	75	19	---
BARBADOS	78	0.2	2,680	8.5[awy]	22.1[a]	43[a]	31[a]	16[a]	99[b]	100[y]	99[a]	27[y]	19.9[a]	99[a]	78[y]	20[y]	---
BOLIVIA	80	5.4	550	4.1[ay]	30.5[a]	---	---	---	63	74[y]	---	20[y]	---	---	15[y]	---	12.60[y]
BRAZIL	79	116.5	1,770	3.8	6.2	51	---	14	76	73[ay]	---	23[ay]	4.5[b]	61*	15[ay]	14[ay]	12.62[b]
CHILE	76	10.9	1,890	3.2[by]	13.0[b]	---	---	---	---	119[bxy]	---	34[by]	---	---	55[bxy]	20[by]	11.90[by]
COLOMBIA	80	26.7[b]	1,180[b]	3.3	25.0	35	20	20	81[b]	78	36	32	6.6	---	47	20	10.02[ay]
COSTA RICA	80	2.2[b]	1,810[b]	8.4	31.1	40	27	33	90	93	77	33	5.5	77	40	27	14.00
CUBA	78	9.8	---	8.0	11.0	---	---	---	96	112[bxy]	98	18[by]	---	98	71[bxy]	15	19.02[by]
DOMINICAN REP.	80	5.3	1,030	2.9	13.0	39	21	22	68[b]	80	31	59	3.2	94	30	33	16.00
ECUADOR	80	8.4[b]	1,110	6.0[p]	36.7	45	31	16	81	105	---	36	12.6	86	47	16	29.00
EL SALVADOR	77	4.4	640	3.4[by]	23.1[by]	64	8	27	62	82[bxy]	32	39	---	41	26[bxy]	27[by]	7.90[by]
GUATEMALA	78	6.8	1,010	1.7[ay]	12.6[b]	---	---	---	---	69[bxy]	---	35[by]	---	69	15[bxy]	19[by]	5.50[y]
GUYANA	76	0.8	630	8.1[by]	13.8[by]	---	---	---	---	99[bxy]	---	32[by]	---	---	59[bxy]	---	3.00[by]
HAITI	80	5.0[b]	230	3.4[w]	7.9[ay]	65	9	6	23[b]	50	20	41	19.0	62[a]	4[a]	27	0.80
HONDURAS	78	3.6	520	3.5[by]	14.3[by]	62[a]	15[a]	19[a]	60	89[bxy]	30[a]	41[by]	12.8[a]	68[a]	21[xy]	19	8.00[y]
JAMAICA	80	2.1	1,110	6.5	13.7	37	43	20	90	98	98	40	2.3	95	81	22	8.00
MEXICO	80	65.5	1,880	4.7	17.0[a]	46	39	15	92	98	53	44	9.5	86	56	17	10.30
NICARAGUA	78	2.6[b]	610[b]	3.0[bw]	14.0[b]	---	---	---	90[b]	85[bx]	24	37[b]	---	---	26[bx]	30[b]	---
PANAMA	78	1.8[b]	1,550[b]	5.5[bwy]	21.8[by]	42[a]	13[a]	13	82[b]	95[by]	---	25[by]	11.6	85[a]	50[by]	27[by]	20.40[by]
PARAGUAY	79	3.0	1,140	1.4[w]	14.2	42	17	20	84	83	32	28	3.1[r]	76	22	12	0.70
PERU	80	16.6	1,000	3.6	14.3	53	15	19	80	83	56	39	9.8	89	39	22	14.40[y]
TRINIDAD & TOB.	77	1.1	3,910	4.8[by]	8.8[by]	48	32	20	95	98	91	30	10.5?	49	62	24	---
URUGUAY	78	2.9	2,500	2.5	9.4[b]	---	---	---	94	105[bx]	---	24[b]	---	---	64[bx]	---	17.80[ay]
VENEZUELA	78	14.4	3,440	5.1[y]	18.9[b]	---	---	---	82	106[bx]	---	28	---	---	38[bx]	17	21.10[y]

COMPARATIVE EDUCATION INDICATORS

NOVEMBER 23, 1983

	BASE YEAR	POP. MILLS. (1979) (1)	GNP PER CAPITA (US$) (1979) (2)	PERCENT GNP DEVOTED TO EDUCATION (3)	CENTRAL GOVERNMENT EXPENDITURE ON EDUCATION AS PERCENT TOTAL CENTRAL GOVERNMENT EXPENDITURE (4)	EDUCATION RECURRENT EXPENDITURES ALLOCATED TO: PRI (%) (5)	SEC (%) (5)	HI (%) (5)	ADULT LITERACY RATE (%) (1976) (6)	PRIMARY ENROLL. RATIO (%) (7)	COMPLETION RATE FOR PRIMARY SCHOOL CYCLE (%) (8)	PRIMARY STUDENTS PER TEACHER (9)	RECURRENT UNIT COST PRIMARY EDUCATION AS PERCENT GNP/CAPITA (10)	PROGRESSION RATE FROM PRIMARY TO SECONDARY (%) (11)	SECONDARY ENROLL. RATIO (%) (12)	SECONDARY STUDENTS PER TEACHER (13)	HIGHER ENROLL. RATIO (%) (14)
EAST ASIA AND THE PACIFIC																	
CHINA	81	996.0[b]	300[b]	3.6	8.3	34	39	27	69[b]	80	63	23	7.0	72	38	17	3.70
INDONESIA	81	150.5[b]	520	2.1	9.3	70	24	6	32[b]	98	61	37	11.0	74	27	26	3.70
KOREA	82	39.3[b]	1,636[b]	7.7[w]	20.8	34	34	31	96	99	98	43	19.0	98	84	38	21.80
MALAYSIA	81	14.2[b]	1,788[b]	5.2	22.0	32[w]	37[w]	15[w]	60[b]	96[xz]	97	22	12.2[w]	87	65[a]	19	3.70[p]
PAPUA N.G.	79	2.9	760	5.4[w]	16.4[w]	—	—	—	—	62[bz]	73	31	1.1	—	12[bz]	23	—
PHILIPPINES	79	48.3[b]	690[b]	2.8[w]	14.0	64	36[xxx]	—	75[b]	84	65	31	7.1	89	55	36	21.00
SINGAPORE	80	2.4	4,420	2.7	6.7	39	40	16	83	92	82	31	8.8	96	55	22	8.00
SOLOMON ISL.	80	0.2	460	4.2[pw]	10.0[a]	41	34	20	—	60	80	26	—	35	18	—	—
THAILAND	80	47.3[b]	723[b]	3.4	20.9	59	15	13	86[b]	96	—	17	9.3	59	29	22	4.00
SOUTH ASIA																	
BANGLADESH	79	92.3[b]	90	1.1[p]	10.1[ay]	51	17	20	22[b]	63[y]	—	53	5.6	—	14	23	1.43
INDIA	77	659.6	210	2.9[y]	9.9[wy]	—	—	—	36	79[x]	—	41	—	—	28[x]	—	8.30[xy]
NEPAL	80	14.3[b]	140[b]	2.4	9.9	27	18	36	19	88[x]	30	38[a]	—	64	14[ax]	70[a]	2.00[xy]
PAKISTAN	79	79.7	270	2.0[xy]	5.1[y]	39	26	27	24	56[x]	80[a]	48	6.5	51	20[x]	17	6.00
EUROPE, MIDDLE EAST AND NORTH AFRICA																	
AFGHANISTAN	77	15.5	—	1.7	3.7	47	19	15	12	31[by]	69	37[b]	—	62	8	22[by]	1.00[y]
ALGERIA	79	18.3	1,770	3.8[w]	12.3	34[a]	26[a]	21[a]	35	83[y]	45[a]	37	7.0[t]	95[a]	29[y]	26	3.70[y]
EGYPT	81	43.0[b]	580[b]	3.1[aw]	4.3	31[a]	35[a]	26[a]	44	84[x]	80[a]	34	9.8[a]	83[a]	43	19	19.[xx]
GREECE	76	9.3	4,140	2.6[w]	10.6[b]	37	26	21	—	97[by]	—	29[b]	6.2[t]	—	79[bz]	27[by]	17.80[by]
IRAN	79	36.9	—	5.7[ay]	14.1[ay]	—	—	—	50	101[xz]	—	32[a]	—	—	44[xz]	26[a]	4.90[ay]
IRAQ	79	12.6	2,710	4.3[ay]	6.9[ay]	—	—	—	—	100[y]	—	28	—	—	45[ay]	29[a]	9.30[ay]
IRELAND	81	3.4[b]	4,480	6.3[ay]	11.8[ay]	—	—	—	98	93	94	29	—	98	81	14	11.00
JORDAN	81	2.2[b]	1,420[b]	4.9[w]	10.2	19	44	18	70[b]	108[x]	85	32	7.2	91	82[x]	25	19.00
LEBANON	79	2.3	—	—	18.6[ay]	—	—	—	—	96[x]	—	19	—	—	46[x]	—	27.80[y]
MOROCCO	80	19.5	740	6.3[aw]	17.5[a]	36	44	20	28	56[ay]	35	39	19.7	40	25[x]	21	4.50
OMAN	79	0.9	3,530	3.7[ay]	4.9[ay]	—	—	—	—	45[ay]	—	23[a]	—	—	7[x]	9	—
PORTUGAL	79	9.8[b]	2,060	3.6	22.2	50	28	11	78	97	20	19[a]	12.8	88[a]	45[x]	17[a]	8.30[x]
ROMANIA	78	22.1	2,100	3.9[by]	6.2[y]	—	—	—	98	106[bz]	—	23[b]	—	98	84[bz]	22[b]	10.40[by]
SPAIN	76	37.0	4,920	2.1[y]	16.8[y]	—	—	—	—	98[by]	—	29[b]	—	—	67[by]	—	24.10[by]
SYRIA	78	8.6	1,170	4.4[p]	10.3	39	25	26	58	87[by]	80	35[b]	—	68	41[by]	21[b]	12.60
TUNISIA	79	6.4	1,130	7.0[p]	19.0	42	39	18	62[b]	100[x]	80	39[b]	12.8	30	30[x]	38	6.00
TURKEY	81	4.7[b]	1,460[b]	3.1	26.2	—	—	—	73[b]	118[x]	90[a]	28	7.9	51	38	20	6.70
YEMEN A.R.	80	6.8	420	5.0[pw]	12.0	94	7	7	21[b]	37	12[a]	38[y]	67.0	85	3	20	1.10
YEMEN P.D.R.	82	2.0[b]	420[b]	7.6	9.7	63[a]	14[a]	8[a]	53	61	34	25	22.0[a]	46	17	20	2.50
SUMMARY FOR DEVELOPING COUNTRIES:																	
Number of Countries:				84	94	70	69	67	76	88	64	94	62	72	91	86	85
Range:				(1.4-10.0)	3.7-45.0)	(19-94)	(7-46)	(5-36)	(8-99)	(15-119)	(12-99)	(17-77)	(1.1-67.0)	(6-99)	(2-84)	(8-48)	(0.01-29.0)
Quartiles: Upper:				5.6	20.8	52	35	21	80	96	79	42	20	85	45	25	18.6
Median:				4.0	15.5	43	27	18	52	83	60	35	12	61	25	21	3.7
Lower:				3.0	10.5	37	18	13	24	56	35	27	7	40	13	18	1.0
Quartile Deviation:				1.1	5.1	7.5	9.0	4.0	23.0	20.5	22.5	7.5	6.4	22.5	15.5	8.5	4.8
Mean:				4.5	16.1	46	28	18	53	75	60	36	16	60	31	21	6.9
Standard Deviation:				1.9	7.4	13	10	7	30	26	25	11	13	27	23	7	7.4
Median:				4.0	15.5	43	28	19	53	83	61	35	12	61	25	22	3.7

SYMBOLS:

— DATUM UNAVAILABLE
... MAGNITUDE NIL OR NEGLIGIBLE
? DATUM QUESTIONABLE
* INCLUDES PART-TIME STUDENTS

FOOTNOTES:

A = DATUM PRIOR TO BASE YEAR
B = DATUM MORE RECENT THAN BASE YEAR
N = CURRENT PRICES
P = GDP

S = MINISTRY OF EDUCATION (MOE) ONLY
T = MOE AND STATE GOVERNMENT ONLY
W = PUBLIC EXPENDITURE ONLY
X = INCLUDES OVER-AGE STUDENTS
Y = UNESCO SOURCES

SOURCES:

Columns 1 and 2: World Bank Atlas or IBRD missions.
Columns 3 to 14: IBRD missions, Government sources and/or Unesco Statistical Yearbook.

Comparative Education Data are useful in the evaluation of various education systems and analysis of relative stages of educational development between various countries. However, on the basis of the present data, cross-national comparison should be approached with great caution. Data presented in the above table have been collected largely by Bank missions from government sources; the remainder are staff estimates or data from Unesco. Efforts have been made to standardize definitions and, within limits, to check the accuracy of the data. Nevertheless, such data are still imperfect in several respects and the Bank is working to improve them progressively on the occasion of its operational work. In the use of these data, the following qualifications should be kept in mind:

(1) "Education" as defined in the table includes all education and training, both formal and non-formal.

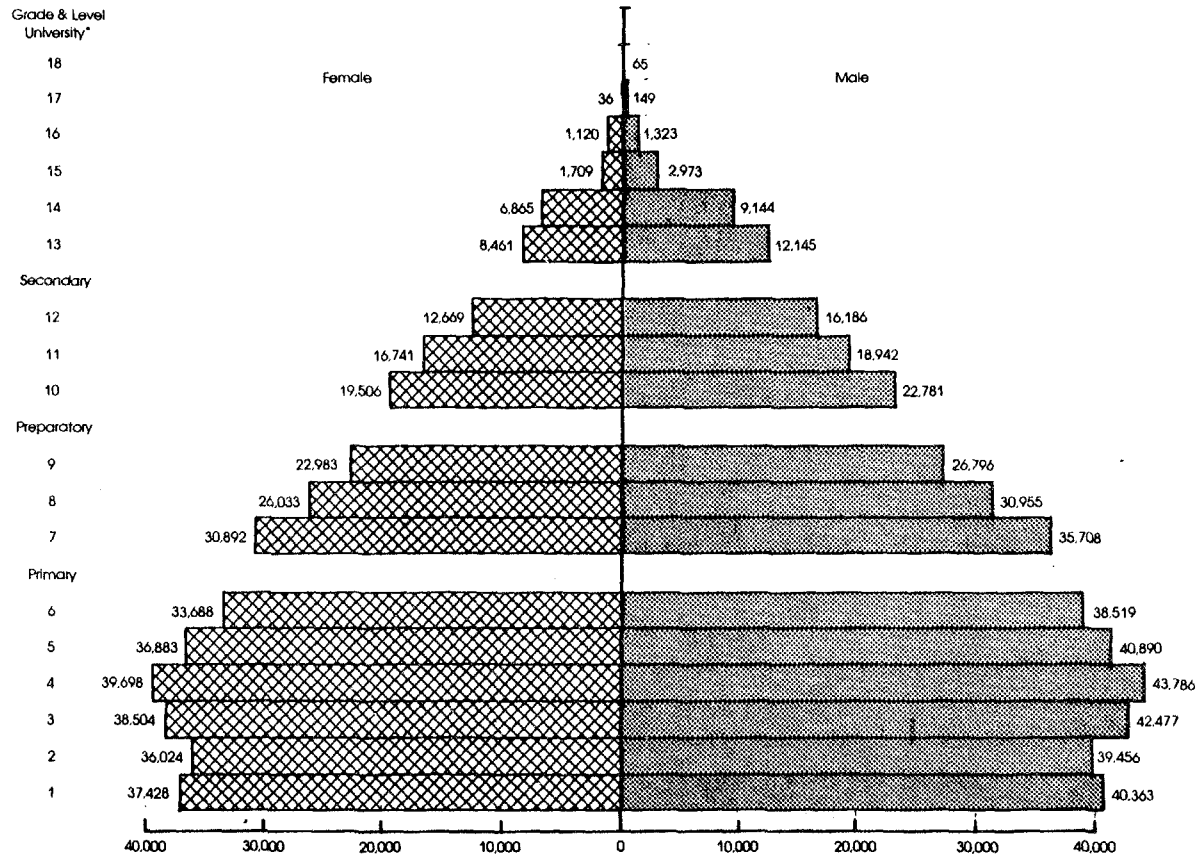
(2) "Primary" education refers to education at the first level and "secondary" education refers to all education at the secondary level regardless of type (e.g., general, technical, agricultural).

(3) "Literacy rates" (col. 6) are often obtained from country censuses. In many countries they are only approximations and it is doubtful that any uniform definition of "literate" has been followed consistently.

(4) "Public expenditure in education" (cols. 4 and 5) refers to all capital and recurrent expenditures devoted to education by public and quasi-public agencies.

(5) "Enrollment ratios" (cols. 7, 12 and 14) refer to school year and are the percentage of eligible children enrolled full-time in the appropriate school, public and private by level. They are often subject to a wide margin of error in the developing countries owing to variations in the accuracy of basic data (i.e., age-specific population and enrollments). Enrollment figures frequently are higher than the number of students actually in school. Over-aged students whose inclusion is indicated by footnotes also can inflate the ratios.

JORDAN VI
EDUCATION PROJECT
Hashemite Kindgom of Jordan
Education Pyramid 1981/82



	As % of Total Enrollment	As % of Age Group	Female Enrollment as % of Total Enrollment at Each Level
University	6	19	41
Secondary	22	68	46
Preparatory	14	98	46
Primary	60	108	48

*Enrollment Excluding 61,200 Students Overseas.

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Annex 8

HASHEMITE KINGDOM OF JORDAN

Sixth Education Project

Selected Documents and Data Available in Project File

A. Reports and Studies Relating to Education

1. "The Statistical Education Yearbook, 1981-1982", MOE Directorate of Educational Planning.

2. "The Future of Secondary Education in Jordan - Proposed Plan" Dr. Shafik et al, July 1981.

3. "Survey Study on Training and Job Opportunities for Women in Jordan", M. Masri, December 1981.

4. "The Hashemite Kingdom of Jordan: Education and Training for Manpower Development", Unesco, July 1980.

5. "A Report on Educational Technology", MOE, March 1982.

6. "Hashemite Kingdom of Jordan, World Bank Education Projects, A Case Study of Effects on Women", J. Kobes, October 1981.

7. "Hashemite Kingdom of Jordan, Education Sector Memorandum", World Bank, January 1981.

B. Documents Relating to the Project

1. "Five-Year Plan for Economic and Social Development, 1981-1985" National Planning Council, n.d.

2. "Standard Bid and Contract Terms and Conditions", General Suppliers Department, n.d.

C. Documents on Economic and Manpower Situation

1. "Special Economic Report, Jordan Review of the Five-Year Plan (1981-1985)", Yellow-Cover World Bank Report; September 1982.

2. "Main Findings of Advance Tabulations, Housing and Population Census of 1979", Department of Statistics, March 1981.

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