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PERFORMANCE AUDIT REPORT

JORDAN

**HUMAN RESOURCES DEVELOPMENT SECTOR INVESTMENT LOAN
(LOAN 3106)**

AND

**SEVENTH EDUCATION PROJECT
(LOAN 2890-JO)**

June 29, 1999

*Sector and Thematic Evaluations Group
Operations Evaluation Department*

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Currency Equivalents (annual averages)

Currency Unit = Jordanian Dinar (JD)

May 1990: US\$1 = JD0.540

May 1997: US\$1 = JD 0.700

Abbreviations and Acronyms

DfID	Department for International Development
EMIS	Education Management Information System
EU	European Union
HRDSIL	Human Resources Development Sector Investment Loan
ICR	Implementation Completion Report
LRC	Learning Resource Center
EMIS	Education management information system
MIS	Management information system
MOE	Ministry of Education
NCERD	National Center for Educational Research (Now National Center for Human Resource Development)
NCHRD	National Center for Human Resources Development
OECF	Overseas Economic Cooperation Fund
OED	Operations Evaluation Department
PHRD	Program for Human Resource Development
TA	Technical assistance
UNDP	United Nations Development Program
USAID	United States Agency for International Development

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Office of the Director-General
Operations Evaluation

June 29, 1999

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

**SUBJECT: Performance Audit Report on Jordan
Seventh Education Project (Loan 2890-JO)
Human Resources Development Sector Investment Loan (Loan 3106-JO)**

The two projects supported Jordan in implementing the first stage of its innovative education sector development program begun in 1985 and still underway. Education VII was approved in FY88 with a Bank loan of US\$40 million and a European Union grant of US\$2.5 million. The loan closed in FY95 after an 11-month delay. HRDSIL I was approved with a Bank loan of US\$73 million in FY89. Japan and the UK provided cofinancing while Japan's PHRD fund and the USA provided supplementary grants for TA, fellowships, studies, and computer technology. Over US\$11 million in uncommitted funds from Education VI and VII were also used for additional construction. To complete the school building program, Loan 3106 was extended and the last disbursement occurred in FY98. OECF and OED conducted parallel audit missions and shared data and findings.

The program's ultimate aim is to achieve high levels of teacher and student performance consistent with modern economic and social needs. The focus is on implementing a modernized curriculum for grades 1–12 within a new grade structure and education law. The two projects planned to promote sustainable strategies, effective institutions, and cost-efficient investments. They were expected to shift the focus of Bank assistance from physical investments to qualitative improvement. Education VII was supported by a traditional investment instrument and included experimental components designed to advance policy in key areas. HRDSIL I was a programmatic loan providing purpose-built facilities to replace rented and double-shift schools, as well as textbooks, instructional materials, and teacher training. Within the program framework, the operation disbursed for 7 special programs divided into 34 subprojects to be prepared by the implementing agencies and appraised and monitored by the National Center for Human Resource Development (NCHRD).

Implementation

The projects were implemented concurrently in the wake of severe economic recession. Budgetary constraints, the Gulf War, frequent changes of Jordanian and Bank staff and a reorganization of the MOE disrupted implementation. Despite these difficulties and the projects' complexity, the borrower sustained high commitment and the MOE implemented all subprojects, making great strides in textbook publishing and piloting innovations in in-service teacher training. In three areas, however, OED found shortcomings. The presentation of cost and financing data was not fully transparent, and inconsistencies in the records of facilities provided under the projects could not be reconciled. These deficiencies prevent OED from validating the integrity of the financial processes applied to the projects, or the extent to which the projects achieved their cost-efficiency objectives. A related shortcoming was the government's failure to

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proceed with a computerized management information system (MIS) through investments in computer technology, software, and staff training. Connectivity could not be established between databases maintained by different agencies and units and this weakness affected financial controls and quality assurance. Finally, TA proved less effective than anticipated—a lesson of previous experience in Jordan that the Bank should have taken into account. Opportunities for capacity-building, skill development, and policy development were not fully used because project managers were not engaged and did not directly bear the cost of the services provided under grant aid. In these areas, the Bank was less assertive during supervision than it should have been. This does not detract from the Bank's strenuous support at the projects' design stages and its success in ensuring disbursements progressed during supervision.

Donor partnership

The donors said that the Bank's presence in the education sector and its support for policy development was crucial to their own willingness to provide assistance. They were positive about the Bank's efforts overall. But several questioned the consistency of its attention to partnership once the projects reached the implementation stage. They noted that supervision missions appeared rushed, overloaded, short on technical expertise, and preoccupied with disbursement, procurement, and administrative issues. More contact with the Bank would have been helpful, donors said, especially to troubleshoot when implementation bottlenecks arose. Several commented on the problems arising from differing procedures for procurement. However, they acknowledged that they too sometimes proceeded in isolation. The Bank observed that it has limited influence over other donors, especially in tailoring grants to the needs of projects. Nevertheless, these factors meant that donor contributions were not well understood by all the stakeholders and were not integrated in the interest of beneficiaries. Donors should have agreed on outcomes to be achieved and shared accountability for achieving results.

Borrower and Bank Contributions to the Program and the Projects

The project agencies, especially the MOE, deserve high commendation for achieving many targets. After the completion of HRDSIL II (Loan 3864), the follow-up project, the government plans to measure program impact. Meanwhile, observers say that the program has made substantial differences to the school system which has developed considerably since 1985. The critical success factors appear to be the government's leadership in passing the new law and introducing the new grade structure and curriculum. Observers say that without the Bank's presence, the program would have proceeded but at a much slower pace. The Bank provided critical resources to ensure that the reforms were implemented and sustained for the life of the projects.

Outcomes

As may be anticipated for such ambitious operations, outcomes have been mixed.

- *Quality Improvements.* Though Jordan's enrollment statistics are among the best in the Middle East region, the quality of school management, teaching and learning remain below standard for a modern country. The project investments are slow to produce improvements in teacher effectiveness and student achievement. The projects provided much teacher training and textbooks, but most teachers are not yet motivated and equipped to deliver better instruction. This slow pace is in part to be expected since it takes at least a decade for teachers and students to adapt to change and become familiar with the new curriculum. The government and the public is becoming concerned and impatient for results. In the short term, more could be done to solicit public understanding of the challenges and disseminate information about progress. In the long term, efforts must be sustained,

especially at local levels, to ensure that all schools become effective. For lasting improvements, the government must continue to address with courage and determination the systemic issues of school management and of teacher training, recruitment, deployment, pay, incentives and control.

- *Institutional Development Impact.* The projects developed important institutional capacities in some areas but failed in others. Positive outcomes included the development in the MOE of a supervisory and in-service training capacity, a book publishing and distribution capacity, and quality assurance and research and evaluation capacities in NCHRD. These agencies also learned from the experience of managing and implementing the projects. But they must continue to drive for results through a commitment to service delivery as the reform program matures.
- The numerous studies financed under the projects produced only modest effects on policy and operations. The planned impact evaluation study under NCHRD was slow to begin but its findings will be extremely important to guide future policy and program. If NCHRD increases its responsibilities for executing donor-assisted projects, the government must safeguard the strong capacity and independence being developed in monitoring and evaluation.
- The most serious institutional outcome is that the MOE still lacks a modern MIS. This has severely affected the capacity of decision-makers to formulate sound strategies, monitor progress, and be accountable. This could become even more serious now that the program efforts must shift to the local level.
- *Investments in Physical Infrastructure.* The planned improvements to the physical environment of the schools were achieved, but questions arise about the rate of expansion, cost-efficiency, and sustainability. Moreover, the projects' emphasis on meeting and exceeding construction targets may have distracted attention from less-costly, but equally critical, qualitative components. OECF's preliminary findings show that approximately two-thirds of the unsuitable facilities targeted were actually replaced by new schools under HRDSIL I while one-third remained in use. The government plans for more school construction because of high population growth. Cost-efficiency and cost-effectiveness are less than optimal in other areas also, especially in the use of MOE staff skills, school libraries and learning resource centers where few reference materials needed to support the new curriculum are available.
- The establishment of a school maintenance service as recommended by a project study is commendable. But the serious shortfall in budgets for maintenance is likely to reduce the useful life of the schools and any gains in cost-efficiency achieved through the introduction of more modest building design standards. In its evaluation of its school facilities, OECF found evidence of costly underutilization. Meanwhile, the Bank has recently begun discussions on a review of the policy that eliminates double-shift schools by building new facilities and of the length of the school day in single-shift schools.

OED Assessments

Because of the many successful achievements in complex areas, **OED rates outcome as satisfactory**, noting that the full impact cannot be assessed until the wider program is completed. Because the projects achieved only partial and uneven institutional strengthening at central level and have not yet effected institutional change in most schools, **OED rates institutional development impact as modest**. Because the risks facing the projects are currently higher than at project completion when sustainability was considered likely, **OED rates sustainability as uncertain**. As well as the cost-

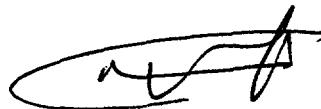
efficiency issue, external factors influencing sustainability include pressing concerns about the fiscal and budgetary situation and donor assistance, the possibility of new priorities under the new government and evidence of some loss of focus on service delivery in the MOR and a general "reform fatigue." This could put at risk the need to complete the unfinished business in basic and secondary education. Apart from the shortcomings noted, Borrower and Bank performance are rated as satisfactory.

Lessons of Broad Applicability

Apart from the many lessons for the projects identified in Chapter 3 of OED's report, several stand out as worthy of consideration by other countries embarking on ambitious and innovative sector-wide programs with Bank support.

- The device of limiting disbursements to approved subprojects probably minimized the risks to the financial integrity of the operation. An operation that disbursed against a sector-wide expenditure program would probably not have been efficient given the weaknesses in financial accounting.
- The subproject device also proved effective because it allowed experience to grow through limited interventions that could be sequenced and adapted to the pace of implementation. The experience developed skills at central government level in project design, appraisal, and implementation was especially deep because the subproject mechanism demanded fully justified proposals with precise objectives, progress indicators, targets, action plans, and costs. This helped strengthen ownership, realism, the focus on targets, and accountability for meeting targets.
- The subproject approach also showed some limitations. It had little effect in creating broad and lasting teamwork between different units and, indeed, may have increased competition in nonfunctional ways.
- Also, it showed that when administrative and financial procedures are not shared between project and non-project activities, tensions might arise between project and non-project staff, especially if senior managers do not continually emphasize that they all serve the same clients.

Attachment

A handwritten signature in black ink, consisting of a series of loops and a final vertical stroke, enclosed within a horizontal oval shape.

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This report was prepared by Linda A. Dove , who audited the project in September 1998. William Hurlburt edited the report. Pilar Barquero provided administrative support.

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Principal Ratings

Human Resources Development Sector Investment Loan (Loan 3106–JO)

	<i>ICR</i>	<i>PAR</i>
Outcome	Satisfactory	Satisfactory
Sustainability	Likely	Uncertain
Institutional Development	Substantial	Modest
Borrower Performance	Satisfactory	Satisfactory
Bank Performance	Satisfactory	Satisfactory

Seventh Education Project (Loan 2890–JO)

	<i>ICR</i>	<i>PAR</i>
Outcome	Satisfactory	Satisfactory
Sustainability	Likely	Uncertain
Institutional Development	Substantial	Modest
Borrower Performance	Satisfactory	Satisfactory
Bank Performance	Satisfactory	Satisfactory

Key Staff Responsible

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Seventh Education Project (Loan 2890–JO)

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Preface

This Operations Evaluation Department (OED) audit report reviews two projects supporting the first stage of an education sector reform and development program launched by the Hashemite Kingdom of Jordan in 1985. The Seventh Education Project (Loan 2890-JO) was approved in FY89 for US\$40 million and closed in FY95 after an 11-month delay. The European Union (EU) provided a grant of US\$2.5 million. The first Human Resources Development Sector Investment Loan (HRDSIL I) (Loan 3106-JO) was approved in FY90 for US\$73 million and closed in FY98 after a three-year delay. As cofinanciers, Japan's Overseas Economic Cooperation Fund (OECF) approved a loan of US\$73 million, and the United Kingdom's (UK) Overseas Development Agency, now the Department for International Development (DfID), approved a grant of US\$1.4 million, later revised to US\$2.2 million. The Japan-financed Program for Human Resource Development (PHRD) and the United States Agency for International Development (USAID) provided supplementary grants to support the program. Ongoing language training through the United Nations Development Program (UNDP) also assisted. Grants totaled US\$4.0 million.

The projects were appraised when Jordan was suffering the impact of the economic recession of the 1980s. OED's audit mission took place just as the country faced new fiscal problems and coincided with a transition in government leadership and a midterm review of HRDSIL II (Loan 3864-JO), which supports the second stage of the program.

The audit reviews Bank performance as perceived by the borrower and by the other donors. OED and OECF, the largest financiers, conducted parallel missions in September 1998, during which the OECF audited its school construction subprojects for HRDSIL I. While OECF conducted visits to schools, OED focused on exploring the broader outcomes.¹ The mission interviewed a wide range of officials, donor representatives, technical consultants, and Bank staff and examined files, studies, and donors' reports. Where possible, triangulation was used to validate findings to compensate for lack of access to information.

OED thanks the borrower and the donors for their attention and courtesy to the mission. Following customary procedures, OED sent copies of its draft report to the borrower, to OECF and other partners for review and comment. Those comments are included in the report as Annex D. OECF's main findings and comments from the other partners are included in the report.

1. OED did not examine vocational and teacher training aspects because the projects' broad scope imposed resource constraints. They merit examination when these efforts mature.

1. The Projects in Context

1.1 Jordan's experience with its visionary and innovative education sector reform, prepared and implemented over 13 years so far, deserves the attention of other countries engaged in similar efforts. The first stage of the reform program sought to establish the institutional and physical infrastructure to support a more modern school system. The government's aspiration was to provide opportunities for future primary and secondary level graduates to match the best international standards of educational attainment.

1.2 OED's review examines how far two concurrent donor-assisted operations, launched a decade ago, helped the government progress toward these goals. In reviewing the Seventh Education Project and the first Human Resources Development Sector Investment Loan (HRDSIL I), OED addresses the issues in basic and secondary education relevant to the ongoing stage of the program that the Bank and other donors still support (HRDSIL II [Loan 3864]).

Challenges for the School System

1.3 In the late-1980s, Jordan's school system compared favorably with those of other Middle East countries. Most children were enrolled in school and qualified university graduates easily found lucrative work abroad. The Ministry of Education's (MOE) priority over many years had been to provide access to school for all school-aged children. But the need to improve the quality of education had recently become an important need driven by the lack of productive resources in the country other than human capital. Prolonged economic recession, reduced aid from richer Arab neighbors, and reduced revenues from emigrant workers had led the government to emphasize investments in knowledge-based industries. This put a premium on investing in education and training to build skills in science and technology.

1.4 In this context, the government took several bold initiatives: preparation of a new education law; a restructuring of the school system that abolished middle schools and reduced the secondary school cycle from three to two years; wholesale modernization of the curriculum; and a requirement of higher minimum teaching qualifications, including degrees for secondary teachers. The new school system provided 10 years of compulsory basic education, with two years of secondary education for students who qualified in the grade 10 public examination, and vocational course options for others. These were fundamental reforms affecting many stakeholders and beneficiaries.

1.5 Meanwhile, pressures to build more schools remained high, underpinned by the country's strong commitment to free public education and equal opportunities for children of all tribes and socioeconomic groups. Expansionary pressures stemmed from very high birth rates and increases in the school-aged population; internal migration to overcrowded urban areas; and the need to provide schools at high cost for small, isolated communities. In preparation for Education VII, the Bank and the MOE made plans to replace unsuitable rented school facilities with purpose-built facilities that would be more cost-efficient in design and less costly to run.

Bank-Borrower Partnership Renewed

1.6 The partnership between Jordan and the Bank was important for both. From the Bank's perspective, Jordan was a valued client—a reliable borrower in a volatile region, and a partner of 15 years in education and training (Annex A). From the borrower's perspective, the partnership with the Bank remained important because of severe constraints on the development and recurrent budgets. As the largest financier in education, the Bank had the capacity to attract loans and grants from other donors as well. Senior policy makers also valued the Bank's international experience, despite differences of view from time to time. The partnership was, nevertheless, marked discontinuities caused by frequent changes in responsibility for projects within the country and the Bank, as the Region emphasizes. It comments that during the projects reviewed, Ministers of Education changed 13 times and project officers multiple times.

1.7 Despite the long-standing partnership, the proposed development program and the Bank assistance for it provoked intense debate in the Bank and in Jordan. The Bank asked questions about the quality of the education portfolio. Why, after 15 years of Bank assistance, had the need for physical infrastructure for schools not been met? Was the government doing enough to address the serious fiscal consequences expansionary pressure on the school system from population growth? Was it willing to consider reducing and sharing costs in public education? Was it willing to commit its own resources to improve the quality of education in schools over the long term? Finally, was it appropriate for the Bank to continue its support for investments in vocational education when emerging evidence showed it was excessively costly and often ineffective in producing skilled workers?¹ In Jordan, the school system reforms had raised high expectations among parents that their children's educational and occupational opportunities would improve. But it also raised anxiety among more conservative members of the public and the education establishment that Jordanian values and cultures might be compromised by the introduction into the curriculum of western elements and scientific modes of enquiry.

Bank Assistance for the Program

1.8 Education VII and HRDSIL I were turning points for the partnership in the education sector between Jordan and the Bank. As described in official documents, the projects were expected to shift the focus of the Bank's assistance from investments in infrastructure to improvements in educational quality at basic and secondary levels, through sustainable strategies and effective institutions (Annex B). Preparation of Education VII began the transition from the well-trying to the experimental.

Objectives and Components of Education VII

1.9 The objectives of Education VII were to improve the quality and cost-efficiency, the institutional capacities, and the responsiveness of education and training to labor market demand for skills. As approved in December 1987, the project included one large school construction component and several qualitative and institutional components to benefit schools, community colleges, and project management (Annex C).

1. World Bank, *Vocational and Technical Education and Training*. A World Bank Policy Paper. Washington D.C., 1991.

Objectives and Components of HRDSIL I

1.10 In June 1989 after a long preparation period, the Board approved HRDSIL I as a full-fledged programmatic operation, signaling the Bank's commitment to support the reform underway and the progressive steps in the implementation program through its first four years. The project put top priority on qualitative improvements in basic and secondary education, while also aiming at cost efficiencies in school construction and the strengthening of sector institutions. It comprised seven programs of which five included investments that required physical investments in buildings, equipment, furniture, books, and other materials. The school construction program was intended to replace rented and double-shift facilities, and provide libraries, laboratories, and workshops (Annex C).

1.11 The programmatic design was a forerunner of the Bank's Adaptable Program Loan. It consisted of 34 subprojects, each a mini-investment project with objectives, targets, action plans, and costs. The subprojects were to be developed and approved as the overall program took shape and experience increased. Only the ongoing curriculum development was to be financed without division into subprojects. The main difference from a fully programmatic approach was that approved investment expenditures were to be reimbursed retrospectively, not in advance against a sector expenditure plan. As soon as implementation was underway, preparation of HRDSIL II began. This operation was approved in FY95 to support the program into its mature stage.

Multi-donor Support

1.12 Under Education VII, the Bank agreed to finance school construction while it expected the EU's sizeable technical assistance and fellowship program to cover the majority of the qualitative and institutional components. This large TA support was similar to the plans for previous education projects. HRDSIL I attracted a great deal of donor support. Japan's OECF offered loan financing in equal shares with the Bank for school construction and hardware, including about US\$331,000 in consultant support to the National Center for Educational Research (NCERD) as the executing agency for its loan. The Bank financed about one-third of the construction for schools as well as teacher training campuses in three universities. The UK's DfID (previously ODA) provided funds for TA, fellowships and studies to advance qualitative improvements in curriculum, textbooks, and in-service teacher training. Additionally, at the request of the government, the Japanese PHRD fund provided a substantial grant for studies and fellowships. It was successful in attracting other grants related to the program but not closely integrated with the Bank operation. USAID continued its ongoing assistance with supplementary funds for computer technology and education studies. UNDP continued its role in language training for overseas study candidates.

2. Key Factors in Implementation

Challenges to Implementation

2.1 The Region's implementation completion reports (ICRs) commented that the successful accomplishment of activities and targets by the borrower's agencies was outstanding. OED agrees. The implementation shortcomings identified here are not intended to detract from these very real accomplishments but point to the key constraining factors that may still have relevance for the sector program and the follow-up project. The projects' accomplishments are doubly impressive because of the many challenges that arose:

- Inward migration during the Gulf War caused a surge in student numbers, currency pressures, increased budgetary constraints, and delayed construction, TA, and delivery of supplies.
- Leadership and organizational changes in the MOE seriously disrupted administration.
- Inefficiencies in government administration caused delays in tendering, accounting, and auditing.
- The new curriculum required education officials and teachers to adopt new values and behavior with which they were unfamiliar.
- Delays in the timing of various donors' inputs upset the sequencing of subprojects.
- MOE managers and staff among whom turnover was rapid were burdened with concurrent responsibilities for several Bank-assisted projects and other donor interventions.
- The frequent changes in Bank teams were somewhat disruptive from the borrower's perspective.
- Complexity was compounded because both projects had components under different ministries or agencies, including the Ministry of Higher Education, the Vocational Training Corporation, and MOE.

2.2 Except for the first two unexpected events, the constraints could have been identified at appraisal for both projects. Many of them had surfaced in previous Bank operations in Jordan. In retrospect, the four-year implementation plan for such risky and complex operations was over-ambitious. Yet Bank and government staff say that a fast pace was essential to maintain momentum and disburse the funds after a lengthy preparation period. The ICRs might have been expected to more fully examine whether simpler operations might have reduced the costs to the borrower and the burden on project managers and donors in trying to resolve problems.

Quality Assurance and Financial Monitoring

2.3 The NCERD, now the National Center for Human Resource Development, was a unique body designed to assist the Intermediary² in monitoring progress and evaluating impact. The establishment of NCHRD was a far-sighted and significant contribution to the design of the sector reform program at a time when building capacity for monitoring and evaluation were not high priorities for the Bank. Under HRDSIL I, NCHRD was to provide quality assurance and financial oversight by appraising and monitoring subprojects, a role that necessitated the establishment of a technical unit as the secretariat for the Intermediary. The unit's work in assembling supervision data and reporting for the Bank came to be much appreciated by Bank staff, and NCHRD staff are seen as rigorous in their scrutiny of project accounts as presented by the project implementing agencies. NCHRD was also to conduct several studies of student achievement and the factors contributing to school effectiveness, critical activities that were slow to get started but are now underway. It was also the implementing agency for the OECF school facilities subprojects under HRDSIL I. OECF said that NCHRD provided a helpful point of contact for resolving problems. During implementation, when MOE research and the management of TA under Education VII did not entirely meet the Intermediary's expectations, NCHRD took over responsibility from the MOE under HRDSIL I. It was also a beneficiary of both projects, acquiring technical advisory services and computer technology to develop its database for the Education Management Information System (EMIS) and to manage studies. Overall, NCHRD has expanded its institutional capacities. However, while staffing has deliberately been kept modest in the technical unit, the current staff appear over-stretched.

Project Management

2.4 In the central MOE, discontinuities in top political and managerial leadership were partly offset by the support of its senior Boards. Without that help, the projects' complexities might have overwhelmed the MOE's capacity to identify implementation bottlenecks, especially because Education VII (and two earlier investment loans still underway) required different administrative procedures from the sector operation. The early years were marked by the high priority placed on the timely preparation, processing, and funding of subprojects and efforts to improve project administration capacities. All this helped to engage staff and build a sense of shared endeavor. Since 1995, momentum has slowed. Competition for and access to scarce project funds has diminished the earlier focus on the ultimate goals of the sector reform and a unified sense of purpose across different MOE units. Staff have experienced many frustrations. Routine tasks have become more difficult as operational budgets have dwindled and staff do not see results from extra effort on the reform program. Decisions on budgetary allocations are not understood. Delays in internal clearances for subprojects submitted are seen as arbitrary. Unexpected demands driven by the availability of donor funds appear to distort the program's priorities. Few countries have yet guided a reform program through 13 years of effort, but Jordan's experience does seem to show that special efforts are needed in the mature stage to maintain the momentum. Experienced officials commented that motivational support is particularly important because the subproject approach encourages fragmentation of effort. They said that MOE managers need to help staff gain a clear vision of how their work contributes to the overall program objectives and keep them informed about how they themselves are contributing to interim results and ultimate outcomes.

2. The Intermediary, a newly established lead agency on human resource development, provided the policy coordination between the various implementing agencies. The Bank ICRs justly recognize the exceptionally dynamic leadership of this body.

2.5 Until the MOE reorganization in 1995, the Directorate of Projects was effective in implementing the large school construction components under both projects. In recent years, however, some MOE staff have questioned whether some quality-improvement subprojects have received less preferential treatment in the clearance process than others for no transparent and objective reasons. The Director was pivotal because he was responsible for clearing subproject proposals for senior management approval, dedicating project funds to them, paying contractors, preparing disbursement applications, and ensuring that financial audits were timely. He was also highly experienced in the engineering aspects of school construction and in the procurement of school equipment and furniture under Bank projects. The directorate's accomplishments are doubly impressive because it was also managing school construction and rehabilitation under the Sixth Education Project, and additional schools being built with funds left over from the Fifth Education Project, as well as a small construction project financed by the Saudi Fund. A complication was that OECF's large contribution to construction, equipment, and furniture under the sector program was managed by NCHRD under different rules, though implemented by the directorate. The directorate put high priority on meeting targets for the school facilities, in part because it prided itself on its professional expertise in this area, and in part because these were the costliest subprojects and could satisfy disbursement targets.

Project Accounts and Records

2.6 OED found gaps, inconsistencies, and obscurities in MOE and Bank files for both projects. This applies to the presentation of cost and financing data and on the facilities built, refurbished, and equipped. Data on physical investments financed by the Bank appear incomplete or inconsistent with other records. The details of the projects' final financial audits and of some specialized construction and rehabilitation contracts were not accessible in the Directorate of International Projects. Current standards of accountability are stricter than during the early project implementation periods. The Bank's attempt to strengthen and apply its own accounting and financial standards (which have long been standard covenants in loan agreements) started in 1992 and is still underway. However, the Bank's tolerance during appraisal, supervision and the completion processes of all too familiar shortcomings in Jordan's education projects appears to have reduced the impetus on the part of the borrower to address serious accountability issues.

2.7 The Directorate of International Projects provided a list of 55 schools constructed under Education VII. But the ICR said that the Bank financed construction and equipment for 58 schools and used unspent funds to build an additional 4 schools originally planned for financing under HRDSIL I. Furthermore, it stated that the extension to the original closing date was approved to allow for completion of construction and rehabilitation programs and the purchase of additional equipment and furniture; but it does not supply details of how many schools were rehabilitated, nor does it clarify whether the OECF or the Bank financed the additional facilities and the equipment. It implies that the physical investments, including construction of four textbook warehouses and the equipment for three (rented) training centers, were completed during the extended implementation period; but it does not show how costs and financing were distributed between schools and other facilities. It also compounds the problem by not clarifying cost data shown in Table 8A (Annex A). It shows no actual costs under the rehabilitation category. It does not explain why actual construction costs were more than US\$13 million over estimate, nor why the actual cost of furniture, equipment, software, and materials was US\$6.6 million under estimate. OED was unable to identify from Bank records or with the help provided by current Bank staff the records for expenditures on investments in warehouses and training centers. The Directorate indicated that these facilities had not been entirely within its own jurisdiction.

2.8 Reports on the three educational facility improvement subprojects under HRDSIL were similarly lacking in transparency. Neither the ICR nor the ministry's databases were transparent or consistent on the numbers and types of schools built by the Bank and the OECF or on the actual cost of various types of facility. According to OECF's audit findings, out of 181 schools,³ Japan financed 107 schools and the Bank 74 schools (including 6 extensions). OECF reports that 120 schools at basic level, 46 at secondary, and 15 combined basic and secondary were built, furnished, and equipped using its funds. The directorate supplied data on the first subproject showing that the Bank financed only 50 schools, all at the elementary level.⁴ OECF comments that 30 schools were added to the original 151 planned⁵ and that it financed these with funds made available due to favorable exchange rates against the yen. The figures in the Bank's ICR (Table 5) on schools financed through the Bank and the OECF cannot be reconciled with this information.⁶ Furthermore, the ICR is incorrect (Table 8) in showing the actual loan amount by OECF to be US\$80 million, instead of the US\$73 million in fact disbursed. The government officials interviewed were unable to explain the discrepancies adequately, blaming the poor quality of the databases or the shortcomings of other units. NCHRD said it was unable to help because new staff were unfamiliar with the files, which were no longer available. On the Bank side, Table 4A in the ICR, showing allocation of the Bank loan by category of expenditure, is garbled, presumably due to inadequate proofreading, current Bank staff suggest. This was a minor oversight in itself but it adds to the impression of perfunctory self-evaluation by the Bank?

2.9 Unless Bank supervision missions had access to documents that are now lost, these weaknesses must have been serious impediments. The weaknesses in files and records in the ministry may explain the attention paid by Bank staff to contractual and disbursement matters. They may also explain—though not excuse—the obscurities in the ICRs. At the least, the ICRs should have raised the issues that had a bearing on the projects' financial and cost-efficiency. The Bank itself omitted the table on project costs in the appraisal report for Education VII.⁸ Bank staff could not explain the gap, but thought that staff turnover during a recent Bank reorganization may have led to the oversight. Without the details the cost table would have provided, OED was unable to check the consistency of planned and actual expenditures. The inaccessibility of consolidated project cost and expenditure data across various components handled by various project agencies also calls into question whether NCHRD is well-positioned to handle its financial monitoring responsibilities fully for funds provided by the government, as well as for the donors.

2.10 At best, all this points to careless accounting and record-keeping and low standards of transparency. At worst, it represents potential for waste and irregularities in the use of funds. More investigation by a specialized financial audit would be needed to generate firm conclusions. According to Bank and ministry officials familiar with the situation 15 years ago, much improvement in accounting and audit reporting occurred as a result of capacity-building under the

3. Preliminary Summary, OECF Post-Evaluation Report for OECF Loan JO-P8.

4. Consistent with the 50 schools in subproject 1 in the ICR, Table 5.

5. The Bank's ICR, Table 5 says 152 schools.

6. The ICR for HRSDSIL I also failed to provide complete cost and financing data for facilities for three university teacher training campuses developed under the Ministry of Higher Education when the pre-service teacher training components were redesigned. Bank files did not provide clarification. A million dollars per campus was one figure reported to the mission.

7. The Region points out that the Bank's attention to audit and financial reporting standards has been more rigorous since 1992 and that it is highly probable that supervision missions did not include experts in these fields to check on details.

8. Project Costs by Table of Expenditure, Staff Appraisal Report, Table 3.2, p. 22.

projects. Indeed, the government auditor affirmed in a passing comment that the situation is currently much better under the projects than for other parts of the ministry. However, because of these deficiencies, OED cannot provide assurance on the extent and nature of the costs incurred, the integrity of the financial processes applied to the projects, or the extent to which the projects achieved their cost-efficiency objectives.

Borrower Views on Bank Performance During Supervision

2.11 OED confirms the ICRs' positive account of Bank relations with senior government officials and MOE staff. The 21 managers interviewed commended the Bank's contribution during supervision as very important in supporting implementation and ensuring the projects remained in harmony with the broader program. The Bank's role in facilitating constructive communication between senior policymakers, the Intermediary and the line ministry was especially appreciated in the early days. MOE officials found the Bank responsive to their concerns. The very different styles and skills of mission leaders were appreciated. Collegiality and fairness, combined with toughness, willingness to listen and learn, and familiarity with Jordanian culture and language, were the characteristics identified as especially useful when difficult issues needed resolution. Both MOE and NCHRD staff say they benefited from the exposure the Bank staff gave them to international norms and practice in administration. Criticisms related to difficulties posed by the differences between the Bank's own standards and the local and OECF procurement procedures, especially when goods financed by different financiers were bundled together in the interests of economy.

Donor Views on Partnership with the Bank

2.12 How well did the Bank conduct its relations with the other partners? All six donors were pleased—and surprised—to be asked this question.¹⁰ One agency asked if the question signaled a new approach to collaborative evaluation in the Bank. Another commented that it would welcome being invited to participate fully in joint evaluation in future. One local office, however, was unaccustomed to sharing its files without authority from senior management at the head office and provided no information directly. Another could not locate pertinent records.

2.13 The donors said that the Bank's presence was important to their own willingness to support the education sector. Staff of one bilateral agency affirmed that it was a "passive partner" in policy development because the Bank's presence provided assurance that the borrower was on the right track and was well supported by Bank finance. They said that the Bank's global experience gave it the comparative advantage and the agency chose to dedicate its relatively modest resources to technical support. Donors differed in their perception of the degree of effort the Bank applied to partnership. One representative commented that the Bank seemed to devote considerable resources to getting the projects launched and to helping the government identify potential financiers. But several questioned the consistency of the Bank's attention to partnership once the projects reached the implementation stage. A respondent remarked that the Bank needed to do more to solve implementation problems and to ensure the various donor inputs were well-

9. The Region has recently launched an assessment of financial control systems and is monitoring progress in Jordan. Over the next three years, the Region plans to support a Public Sector Reform Initiative to strengthen Jordan's capacities in financial management.

10. The OED mission contacted all the donors. Two to three officials were interviewed for each of three donor agencies available in country. Others communicated by phone and email. Because of staff turnover among donors, OED's interviews were in most cases conducted with current staff not personally familiar with the projects. The main exception was DfID and its local manager, the British Council, which had a presence from before the program launch.

sequenced and to use its influence with senior government officials to encourage quick remedial action. Other donors' experience was similar. They commented that Bank staff were not aggressive during supervision in keeping abreast of related efforts by other partners. In one case, OED interviewed the contractor who had managed a specialized TA assignment financed by one of the donors. He said that staff on Bank missions appeared to be interested in administrative and disbursement issues but not in the technical components, possibly because they lacked the specialist expertise in education to supervise effectively. With some sympathy, nevertheless, several donors remarked that Bank staff on supervision appeared rushed and overloaded. Bank records confirm that missions usually supervised several projects in one visit.¹¹

Donor Coordination

2.14 Donor contributions to the projects were not well understood by all parties, were not well integrated, and led to high transaction costs and implementation delays. The protracted effort to build computer systems for various specialized purposes was a serious case of fragmentation.

2.15 Computerization involved many complex, interrelated components: the technical design of computerized systems themselves; the provision of appropriate hardware, software, and related services such as electricity and insurance; and training in systems design, programming and computer applications, and maintenance. Development processes were also complex, calling for sophisticated expertise in technical and cost analysis in the preparation of specifications and contracts, and in procurement and supervision of contractors. The complexity appears initially to have been underestimated by the Bank, but during implementation, staff engaged a specialist to help. The government's own agencies were also initially unclear about the different specifications required for a management information system (MIS) and an EMIS. One goal for the MOE was to establish a modern MIS to provide data for planning and management purposes on school facilities, teachers, students, payroll, and so on. Another goal—and a priority for the Intermediary—was to establish an EMIS to develop baseline indicators on the education system for use in research and evaluation.

2.16 Under Education VII, the MOE's computerization plans were long delayed. The Bank pushed hard for the ministry to put forward a high-quality proposal showing the purpose for which the hardware and software would be used, properly insisting on this before the contract and procurement stages were begun. Other donors were also providing equipment, software, and training, but because no integrated plan existed, the ministry found itself dealing, piecemeal, with small and different investments that did not add up to an efficient MIS. In the final months of Education VII, the EU provided 12 desktop computers and related training to various MOE units. But the computers' use was limited by insufficient memory and lack of connectivity, while the training was not well tailored to staff needs, in part because the overall system design was not yet developed. USAID provided equipment for NCHRD though details could not be found in the agency's files. DfID-financed consultants helped design the specifications for the hardware and software to build an in-house publishing capacity and a computerized system to coordinate textbook supply, storage, and delivery. The Bank was to finance the hardware, but a three-year delay because of difficulties over contracts and suppliers had some adverse consequences. Some of the equipment was unsuitable, and DfID's capacity to follow-through with assistance under HRDSIL II was also delayed. In mid-1998, the MOE still lacks a modern MIS system, though NCHRD has had full use of the EMIS for several years and is currently upgrading it.

11. In its comments, the Region pointed out that management responsibility changed frequently on the part of the Bank as well as the borrower. There were five Bank managers and multiple project officers.

Reliance on External Assistance for Institutional Development

2.17 The projects relied heavily, possibly too heavily, on consultants provided through donors' grants to develop institutional capacities and they appear to have paid little attention to follow-up and job-placement of the many beneficiaries of fellowships and training. Under Education VII, critical capacity-building activities for the MOE (and the community colleges) depended on the EU grant-aid for technical specialist services and overseas fellowships from which 70 Jordanians benefited. A more than three-year delay in start-up delayed the work of foreign specialists until only shortly before the original project completion date.¹² The ICR acknowledged this problem but did not say how the severe reduction in the size of the TA package and the much shortened implementation period affected results. The contractor's monitoring reports, however, expressed considerable frustration that the specialists were unable to be fully effective, because the project managers did not provide sufficient guidance and support or counterpart staff with whom they could work. The final report expressed disappointment that the specialists had been unable to tailor training and other services to beneficiaries' needs and had not achieved the hoped-for transfer of skills to Jordanians. Despite this, feedback to the contractor from participants in the overseas fellowship programs was positive, though the contractor commented that poor motivation and the absence of prerequisite skills among a few of the beneficiaries marred this overall satisfactory performance. Asked about their own experience, the MOE staff interviewed were satisfied with the specialists' efforts. Those who received computer training were especially enthusiastic.

2.18 Besides regularly supervising the work of technical specialists, contractors needed to be able to work closely with managers. The Bank has commented that some agencies performed very well when grant-processing was done in parallel and in conjunction with the Bank's project processing, but others did not. The contractor hired through DfID to assist the textbook publishing and distribution system was fortunate because, in this case, the beneficiary units provided a supportive environment. Mutual trust and respect born of lengthy collaboration were the qualities considered critical to success. In practical terms, this meant consulting intensively to get understanding and consensus on goals and action plans; following up monitoring reports with the beneficiary managers; regularly evaluating the performance of specialists; applying remedies when specialists were not compatible culturally; and communicating with counterpart staff at all levels of hierarchy to foster a sense of shared endeavor. Regular supervision could not, however, obviate problems beyond the direct control of the contractor or the beneficiary units. One case in point was the protracted process of approving bids, which led to a four-year lag between the design and installation stages of the computerized publishing system for which staff were being trained. When the tender committee unilaterally downgraded the size of the memory of computers and the size of monitor screens, new software could not be used, and the productivity of staff involved in book designing, typesetting, and evaluation was diminished, which in turn affected the book production process.

2.19 OED asked donors and government officials whether Jordanian specialists could be used more effectively to spearhead sustainable institutional development. This would be possible, they said, but assertive, resourceful management, and a willingness to identify staff with untapped talent, would be required. MOE staffing levels are considered generous enough to allow qualified staff to be assigned special institutional development tasks, and incentives could be devised to make the work attractive and to reward results. Beneficiaries of overseas scholarships form a deep pool of untapped expertise. To support institutional development efforts, Jordanians

12. The initial delay in start-up was due to difficulties in selecting consultants acceptable to the Jordanians, according to the ICR. But poor communication between the Bank and the EU was also a factor, which, Bank staff say, is no longer a problem under HRDSIL II.

respected for their seniority, qualifications and experience could be recruited as mentors and coaches for staff. The operational costs of these activities would likely be far lower than the long-term costs to the country of failing to reap the benefits of the investments made in local talents.

2.20 Overall, the Bank's performance in supporting the institutional strengthening was modestly satisfactory. Though prior institutional analysis would have been useful, it was not typically done at the time the projects were prepared. The original designs for the assistance were detailed and fairly responsive, especially for Education VII, while the TA was developed more gradually during HRDSIL I. The Bank did not, however, make appropriate provision in the design and implementation plans of either project to reduce the implementation risks identified in previous supervision and completion reports. These clearly indicate that the sheer amount of TA as appraised would prove too much for the projects to absorb effectively. Subsequent experience confirms this. The Region has observed that the Jordanian authorities are extremely reluctant to use loan funds for TA. The fact remains, nevertheless, that although the computer technology issues were unfamiliar, other TA problems were very similar to those experienced under previous education projects. Neither the Bank nor the government seemed to have learned from this. TA contracts need to be sufficiently flexible to adjust to changing situations with guidance from experienced managers. Clear accountability for achieving measurable results from TA would also have improved efficiency and effectiveness. But because the TA was financed by grants and was thus a "free" add-on to the budget for the beneficiary units, managers were not sensitive to the need to ensure cost-effectiveness or produce tangible program benefits in a timely manner. Moreover, as the Region points out, the Bank has limited influence in ensuring grants are administered and used effectively. The results, nevertheless, were low productivity, heavy transaction costs and modest institutional capacity-building.

3. Outcomes, Lessons and Next Steps

3.1 Despite the challenges of implementation, meeting the physical and quantitative targets set was an enormous achievement for the projects. The launch stage of the sector reform program was expected to develop the institutional and physical environment within which improvements in teaching, learning, and student attainment levels could take root and be sustained. Asked whether the reform would have progressed if the Bank had not agreed to support it, officials said that it would have progressed because of the government's high level of commitment and the energy of the leadership, but the pace would have been much slower without the Bank's financial resources and the other donor resources it attracted. Pressed on whether the Bank's value-added was mainly as a financier, they said the Bank had provided good technical inputs and had facilitated constructive stakeholder participation at the design stages, but the government was already well ahead in preparation of the school curriculum and the education law. They said that the Bank's presence helped maintain the drive and discipline needed to meet targets at the operational level and to maintain a focus on broad strategy and long-term goals at the policy level. Senior officials emphasized that reform is not a once-off process and that progress must be perceived incrementally. They pointed out that the school system had progressed structurally and institutionally within a decade from a level comparable to that of a low-income country to one comparable to middle-income countries much richer than Jordan. Nevertheless, they conceded, a nationwide positive impact on student achievement was not yet in sight.

Impact on Students

3.2 The ICR for HRDSIL I suggested that deep impact on student achievement through all 12 years of schooling could not yet be realistically expected. It reported mixed results for student performance in assessments and examinations in 1995. More recent results in core subjects continue to be disappointing—for the same reasons, experts say. They point out that teachers and students began to use the new curriculum only 10 years ago, beginning with the early grades; that students currently in the upper grades have suffered the most from the changes in the schools over the years; and that teachers and students alike are still inexperienced in new approaches to teaching, testing and learning. Because of the heavy investments over a decade, the lack of discernible impact on student learning has been a concern. This slow progress has been attributed to many factors: poor teacher management, supervision, and professionalism; slow adoption of the behavior and values called for by the new approaches to education; complexity and technical deficiencies in textbooks and in the design, administration and marking of tests and examinations; absence of a culture dedicated to service-delivery; inadequate administrative and technical support for the schools; and, recently, acute shortages of operational funds. In an effort to provide more insight, the NCHRD is now focusing on the research studies on school effectiveness and HRDSIL II is continuing to address these issues.

The experience of the launch years has been fed into the design of HRDSIL II. Probably the most important effort still to be made is for the project to ensure that direct support to schools is provided, tailored to local conditions and with strategies to enhance local participation, ownership, and accountability.

Communication with the Public

3.3 An outcome of the high expectations raised during the program launch has been impatience on the part of the public for visible signs that the schools are improving. The grade 10 examination is the gateway to the future for students. Parents want reassurance that their children's opportunities to gain good qualifications are not at risk because of all the changes. The media attention to education is one indicator of public concern and the new openness and democratic spirit in the country has encouraged widespread discussion and comment. But the public does not have access to sufficient information on student performance levels and what it is realistic to expect. Increased demand for places in private schools, even by families of modest means, is reportedly a sign of growing disillusion with the slow pace in achieving positive results. "Reform fatigue" was a phrase used by several official and laypersons in commenting on education reports in the press and in reference to parents, MOE staff and school managers and teachers. The process begun in the mid-1980s had created many disruptions in schools for teachers and students and the MOE—with so far only modest impact of a positive nature on students.

To maintain and strengthen public participation in the reform efforts, a renewed effort at information sharing appears to be an urgent need. This would include the design, implementation, and monitoring of a strategy to share accurate information with the public and invite parents to engage in partnership with the schools.

Textbooks

3.4 Over 560 locally authored and locally published textbooks and teachers' guides now support the new curriculum in all subjects in all grades. They have provided a major injection of

updated material into schools that were largely without access to modern knowledge in the 1980s. This is a solid achievement resulting from the establishment of an MOE publishing capacity. Book design is attractive, and physical quality is high. The content, while modern, is also relevant to local cultures. Revisions are underway on the basis of field tests of the first editions that have identified errors. Several socially important themes, such as population, democracy, and human rights, are currently being introduced. Publishing activity for the second editions has begun. But pace and productivity is apparently impeded because of delays in upgrading some critical, but inexpensive, design and production equipment and delays in the bidding process for book printing.

3.5 Critics question whether the plan to go ahead with new editions is premature. They fear that the frantic pace of curriculum and textbook development might lead to similar shortfalls in quality for the future if efforts to simplify the content and remedy weaknesses are rushed. (On the other hand, the project did much to create a publishing unit interested in revision and upgrading unlike in the past). Other critics raise even more challenging questions about whether the very success of the publishing efforts has created undue “textbook-dependency.” Empirical findings from monitoring studies show, however, that the new textbooks are valued highly by teachers because they provide structure, content, and guidance for users. Managers say that this is especially important for less skilled teachers and for neo-literate communities. The absence of library resources also makes textbooks important. Most important, though, in OED’s view, is sustainability, an issue not raised by any of the commentators interviewed, though it was frequently raised in monitoring reports. Given the budgetary constraints, the key question calling for answers is how to ensure that the investments already made—in specialized facilities and equipment, in building expertise in publishing, and in the books themselves—can be maintained without permanent dependency on external funds. In this light, the immediate need for revised editions is not urgent because large numbers of first editions are stockpiled. The new central textbook warehouse—said by an expert to be the largest and finest in the Arab world—was reportedly overstocked by 50 percent in 1998.¹³

To ease budgetary problems, the estimated book-life of about three years could easily be extended to four years, thus reducing the rate at which replacements will be needed and the annual recurrent cost. A textbook rental scheme, piloted under Education VII but rejected because it proved difficult to administer, would be worth reconsidering. Countries with free public education like Jordan, but with much less administrative capacity, have made such schemes work.¹⁴

3.6 A modern textbook distribution system is now finally in place at the national level but the full system is not yet in place. Plans to provide connectivity to local levels have suffered delays during HRDSIL II. Schools’ needs for books are still being estimated from previous years’ projections in the absence of real-time data from the local level.

Establishing technological capacity at the local level through investments in computer systems and training and providing central-local connectivity through computerized links are pressing priorities. Without this capability, schools cannot be sure of receiving the books they need in an efficient and fair manner, especially those in remote areas.

13. Stockpiling is not a deliberate policy. Design defects and inadequate supervision of construction for two of the three regional warehouses prevented their use until mid-1998; the absence of accurate inventory reporting at regional and district levels led to excessive annual printings; and vocational titles with small print runs are too costly to print annually.

14. Ghana, for example.

Reference and Reading Materials

3.7 Though most of the school libraries were built as planned, many are wasted because the MOE has been unable to stock them with modern materials. Currently, school budgets allow only one or two books to be bought each year. On a visit to a double-shift school, OED found two school libraries under separate management in the same building. One school's library was well stocked, though many titles were obsolescent. But the second library was empty—except for piles of old exercise books and other trash that, school managers asserted, the regulations did not allow them to destroy without permission from the central MOE.

3.8 Professional educators insist that the curriculum reform may be at risk for want of funds for reference and reading materials. The new curriculum is intended to promote rational thinking and enquiry. Students need to search for information, analyze data, and undertake project work. Students from poor communities are especially vulnerable if they have no reading materials, but even those from more affluent communities need encouragement to read and think, especially because television tends to undermine such activities. While the MOE plans eventually to link all schools to the Internet, students still require printed reference and reading materials as a foundation to build investigative skills. Budgetary shortages are seen as the main cause of this neglect, but one commentator hypothesized that senior officials, themselves educated in the traditional way, may not fully appreciate the critical importance of supplementary materials in ensuring that the new curriculum is implemented as planned, or are even reluctant to encourage the dissemination of what may be culturally alien material.

For the future, Jordanian children need to develop their cognitive skills through a variety of technologies. Promoting reading is one well-tried, low-cost, and effective strategy. In deciding whether or not the country can afford investments in reading and reference materials, decision-makers need to consider the risks to Jordan's global competitiveness if its future workforce can read only the simplest texts.

3.9 An innovation that could help resolve the problem in the long term has been proposed as a subproject for HRDSIL II, but has recently been dropped from consideration because of the potential risks. The proposal argues for the establishment of a private sector publishing capacity to increase the availability of books and provide competition on quality and price while reducing funding pressures on the ministry. In time, the private publishers could conceivably earn revenue from exports to Arabic-language countries. Despite these attractive prospects, many issues would need to be resolved, including whether sufficient reader demand could be stimulated to make an attractive market for entrepreneurs; how the MOE, as a monopoly publisher, could continue to build its capacities and relate constructively to the private sector; and how the private sector would be supported in the early years as a fledgling industry.

Despite the risks and challenges, the proposal to expand publishing capacity in the private sector would be well worth empirical research and serious consideration as a policy option. Recent international experience has rich lessons to offer in this regard.

In-service Training for Teachers and Supervisors

3.10 Information is only patchily available on the projects' impact on the schools. Studies and monitoring reports of variable quality give some idea of the impact on the behavior and practices of teachers, managers, and professional leaders. Models for in-service teacher development were at the pilot stage during the projects and the impact was inevitably on a small scale. Monitoring

reports suggest that the training led most teachers in the pilots to become enthusiastic adopters of curriculum innovation and that supervisors appreciated having exposure to new concepts of teamwork and performance evaluation. For all serving teachers nationwide, the MOE's Education Training Center provided orientation training, but the impact was superficial because of the brevity and uneven quality of the training and rapid teacher turnover. In the second stage, this investment is being built on. Thursdays are now dedicated to professional development workshops, trading off a half-day of teaching to accommodate the activity. Unfortunately, this innovation has backfired so far because teachers have lost the half-day traditionally used to attend to their own affairs and parents are unhappy that a shorter school week reduces time for lessons. Bold steps have recently been taken to move forward by devolving responsibility for delivering training to regional and district levels. But critics claim that the decentralization is premature because local institutional capacities and funding mechanisms are not yet in place. Proponents say that, as long as the funding is available, the local authorities will best "learn by doing."

In the long-term, the decentralization of responsibilities for delivery of training to teachers offers prospects of high-quality technical support to meet local needs. Decentralization demands a strong central capacity. The Center's leadership appreciates that the agency will need to change its role and ways of operating, focusing less on providing training directly and more on professional leadership, guidance, and quality assurance to support the regional and district authorities.

3.11 To their credit, the two projects under review were among the earliest Bank-assisted operations to recognize that all technical and physical inputs provided for schools need to be integrated in the daily practice of teaching and learning. They recognized that teachers must model the proper use of books, materials, and equipment to ensure that students acquire the skills, knowledge, and values that the curriculum intends. The plans for in-service training, as they developed at the pilot stage, fully recognized this. They provided opportunities for teamwork among local teachers based on problem-solving and practical activities. But in the national training, teachers also find that the workshops do not provide them with practical skills of relevant to their needs.

Experience from Bank projects elsewhere indicates that participatory models for localized teacher development are sound, but that quality and sustainability are often serious issues.¹⁵ Teachers cannot indefinitely develop themselves through workshops without guidance and inputs of new material and ideas from elsewhere. Thus, high-quality technical and managerial support from supervisors and trainers, and operational funds to support the activities in the long-term, are essential.

3.12 The extra efforts required to prepare lessons and to persevere with new teaching technologies are burdensome for all but the most talented and committed teachers. Project studies have already shown that training is not enough and that stronger institutional incentives to encourage more effective performance are required. Decision-makers appreciate that this is an extremely complex issue relating to pay, governance, and the structure and composition of the teaching force, and that it demands courageous action.

15. For example, Malaysia, the Philippines and Sri Lanka have extensive experience.

A DfiD-sponsored pilot to enhance management effectiveness through participatory strategies at local level will identify the critical incentives, rules, regulations, and behavior that can encourage teachers to achieve results in Jordanian classrooms. The findings are likely to be of immense importance for institutional transformation.

Expanding and Improving School Facilities

3.13 Improved access to education through the construction of new and rehabilitated schools over 20 years has helped maintain high enrollment ratios despite a school-age population growth rate estimated at 3–4 percent a year. While population growth continues, more schools will be needed to understand in areas to avoid an increase in the numbers of out-of-school children. The projects framed their objectives in terms of better teaching-learning environments, not in terms of expanding the stock of school facilities. Nevertheless, the large school building programs did in fact increase the stock of school facilities, added capacity (workshops, libraries and laboratories) in existing facilities, and replaced rented and double-shift facilities with purpose-built schools.

3.14 The real facts about the expansion and upgrading of school facilities are not easily gathered. The ICR for Education VII did not offer information on the numbers of rented schools actually replaced, while reporting that 65,000 places in new schools were made available. In 1994/95, enrollments in the 62 project schools totaled 56,550 (86 percent of the target), and the schools were expected to reach full capacity before long. The ICR said that the reason for a large shortfall in the enrollment of girls was unknown. OED tried to verify and update this information, but central ministry staff were unable to link the individual project schools with the most recent enrollment data. Likewise, HRDSIL I commented that as many as 400,000 new school places were originally planned for the ten years, but this was later revised to include additions to existing schools—a more cost-effective option identified through a needs-based analysis under the covenanted study on finance and costs. The ICR states that the targeted 181 schools financed by the project created 151,000 new seats of which 70,000 (46 percent) replaced seats in rented facilities, 25,000 (17 percent) replaced seats in double-shift schools, and 56,000 (37 percent) were built to accommodate enrollment growth. The report added that the growth rate outpaced the provision of schools. Specialized additions to schools totaled 412 (target 603), but the ICR did not say by how much these schools' enrollment capacity increased.

In deciding whether to invest in more school facilities, the government should require rigorous field research, including up-to-date information on population trends at local levels, existing school capacity, and rates of use; relative need for upgraded and new facilities; the accessibility of proposed new school sites; and the relative cost-benefits of providing specialized plants. The government should consider inviting major donors to participate in this research and planning in order to encourage the most efficient and effective use of costly loan funds.

3.15 Whether or not the needs for school expansion and upgrading were appropriately estimated under the two projects was a question raised by senior government officials who are concerned primarily about the cost and efficiency of education. Their concern cannot be met, however, because the available data do not currently yield reliable answers.¹⁶ Bank staff

16. The size and natural growth rate of the school-age population has been difficult to estimate accurately over the years, in part because of problems with counting dispersed population for the census. Population pressures were exacerbated by the surge of inward migration during the Gulf War in 1991. MOE officials interviewed placed great emphasis on this as a reason for the overwhelming enrollment pressure, but one official said that many migrants have since left the country. The Bank data bases show a growth of the school-age population from 1995 to 2015 of about 30 percent.

volunteered that plans for school construction under Bank projects have always made fairly generous assumptions about needs for school facilities based on expectations of continued high population growth rates and high rates of internal mobility. Box 3.1 summarizes some of OECF's findings that are relevant to this issue.

Box 3.1: OECF's Preliminary Findings on the Utilization of Schools

Student enrollment ratios (actual number of students to school capacity) vary greatly from school to school. Ratios were available for 103 schools out of 181, and ranged from 18 to 174 percent, with an average of 75 percent. In 32 schools, the ratio was lower than 60 percent while in 11 it was higher than 110 percent. According to MOE, the capacity of each school is designed for future population growth. Seven new schools visited were all well furnished and maintained but three were filled to only 70 percent of capacity and student in each school were declining. *OECF recommends that the MOE should reassess the needed size of schools for future school construction projects.*

OECF estimates that the cost per student in project schools becomes lower than the cost of rented facilities after 24 years assuming capacity is fully used. But if use is only 75 percent, the costs would equalize only after 33 years.

3.16 The OECF review reports, "With regard to the maintenance of schools, the Government is seriously short of budget. For routine maintenance, the annual budget is available for only 400 of the 2,700 schools. For structural maintenance, the government does not have any budget." Since school buildings require structural repair after 20 years and every 10 years thereafter, and since the OECF loan repayment period is 25 years with a 7-year grace period, the under-use of these investments has serious cost implications.

Over-building and under-utilization of schools on the grounds that the local population growth will eventually fill them with students is no longer a justifiable policy. The scarce funds could be used more effectively if they were used to benefit the students currently in school. Current budgets cannot provide the funds needed to maintain the investments and their value will therefore decline.

Learning Resource Centers

3.17 The three Learning Resource Centers (LRCs) established in improvised facilities under Education VII acquired new equipment and technical advisory services. As an alternative to creating a large, central in-service training facility, they were envisaged as venues for teachers' use in more local settings—for professional development activities and for work with equipment, materials, and laboratories unavailable in schools. Seven more centers were subsequently founded and more regional authorities have requested them. The findings of a 1995 evaluation were sobering, however. The study showed that teachers' use of the centers was modest at best and that the facilities were costly to operate and maintain. The new equipment did enable more teaching materials to be produced, but only 15–20 percent of the teachers actually visited the centers to borrow resources or use the laboratories. Many teachers found the facilities were remote or inaccessible because they were open only during school hours—despite heavy over-staffing in some cases. The study stopped short of recommending that the centers should be closed down but did make many practical recommendations for improvement, some of which were implemented.

Plans for expansion were temporarily put on hold. OECF is currently equipping three centers. HRDSIL II has reduced expansion because of implementation delays but local pressure is reportedly strong for a center to be established in every district.

Learning resource centers in countries similar to Jordan have rarely been successful unless the incentives for teachers to use them were right and constraints of distance, time, and expense were removed. When these conditions were absent, LRCs usually became costly white elephants. If, as some administrators say, they are useful as storage and distribution points, then purpose-built storage facilities are needed, not sophisticated LRCs.

Institutional Achievements and Weaknesses

3.18 The projects' achievements in strengthening institutional capacities at the central level in policy, planning, and management have been remarkable in some areas and impaired in others.

Education Sector Policy Development

3.19 The projects put much weight on research studies to inform policymaking. A few of the studies have had substantial impact on sector policy and strategy across all levels of education, while some have been less relevant or otherwise lack credibility. In the long term, the school buildings maintenance study has led to the establishment of a maintenance scheme, albeit on a modest scale. The national assessments of student achievement are useful diagnostic tools for policy evaluation. Now that the government has taken the courageous decision to participate in international assessments, it will be able to measure the country's progress in improving human capital in comparison with others. The school effectiveness studies have so far provided some useful insights but need to be fully developed and disseminated in ways useful to schools.

Critics say that key studies should be chosen with great care and that greater selectivity would allow for more efficient management and quality control. More emphasis should be given to dissemination among education professionals and the public.

Sector Coordination, Monitoring, and Evaluation Capacity

3.20 As the technical secretariat to the Intermediary, NCHRD's enhanced institutional status in supporting human resource development policy and strategy is symbolized by its exceptionally fine new facilities. The institution has begun to provide valuable services in the management of the education system through policy analysis, operational coordination, monitoring of implementation, and research. It also provides valued support to donor-assisted projects in appraisal and supervision reporting. On the negative side, questions about the ability of NCHRD to be effective in assuring financial accountability must be raised in light of the problems with financial data and reporting in the MOE. Also, the design and execution of the impact evaluation for the sector program remains a problem. NCHRD must put effort into this as a matter of urgency in order to ground future policy and strategy in basic and secondary education on empirical data and objective analysis.

As a beneficiary of donor assistance, NCHRD must increase its care and vigilance to ensure its new activities do not compromise the credibility of its monitoring and evaluation functions.¹⁷ This is a risk as it expands its responsibilities in the preparation and execution of projects. Measures that might be considered to reduce the risk include permanently separating staff and management functions in project execution from those in monitoring and evaluation, and the appointment of international panels of experts to support the integrity of operations, funding arrangements, and evaluation findings.

Building Management Capacity in the MOE

3.21 The projects aimed to strengthen management capacity in the MOE. Changing bureaucratic values and behavior so that the agency focuses on services and support to schools and not on internal processes is a major challenge still ahead. In one successful example of enhanced attention to service, managers of a technical staff adapted work practices to dissolve rigid divisions between staff based on job-titles and encouraged efficient and effective teamwork to enhance quality and productivity.

3.22 Book publishing and distribution depends on many technical specialists and tight coordination of tasks and outputs. Before the reorganization, the broad responsibilities of the General Directorate of Technology, Curriculum, and Supplies allowed managers to reorganize work processes, tightly sequencing activities from textbook authorship and design to production and distribution. They replaced formal staff training with “learning by doing” to reinforce skills and teamwork. They introduced modest incentives for overtime to motivate technical staff, such as designers, to meet tight production schedules. They established weekly production meetings for all technical staff regardless of rank, encouraging team commitment to high standards of efficiency and quality. They ensured that the foreign specialists were involved as members of the team. According to the TA contractor, these changes in the culture of the workplace have made a substantial difference, though the work is by no means completed. From the perspective of the staff involved, the main problem is in maintaining professional standards when staff are exposed to the pressures of the wider ministry bureaucracy.

To enhance its delivery of management and support services to the schools, the central MOE might consider undertaking detailed institutional analysis to identify efficient and effective behaviors appropriate to the specialized functions of various organizational units. This would provide guidance for management and staff training. The approach would need to place emphasis on changing behavior, processes, and incentives, and not on structural reorganization and rules and regulations.

Flawed Planning Processes

3.23 The long delay in putting in place a modern, integrated MIS is discussed last because, though this weakness has had very serious negative outcomes for the MOE’s strategic planning capacity, it should not detract from the substantial progress elsewhere. The problem is that MOE

17. In this respect, OED’s experience in balancing the needs of various clients while maintaining its independence stimulated discussion during the review mission. OED’s mission is to enhance the Bank’s development effectiveness through excellence and independence in evaluation. It is responsible to the Executive Directors of the Board which represents the Bank’s member governments and not to Bank management. OED shares evaluation findings with borrower governments, Bank staff, and development partners.

managers and staff can provide information about the individual subprojects they administer but cannot provide senior officials with accurate and complete status reports on the school system to guide decision-making. At the cultural level, the problem is that the bureaucracy has not fully adapted to the need for transparency and sharing of information that is essential in a service-oriented organization. At the technical level, the problem is that separate databases in different parts of the ministry, at central and local levels, use incompatible programs and software and cannot “talk” to one another. The data are derived from different sources, are often irreconcilable, and cannot be integrated to provide reliable information about the education system. This means that the ministry’s planning process is fundamentally flawed and decision-makers cannot make rational decisions based on objective information.

3.24 An especially serious case in point has been described in the context of concerns about school facilities. According to OECF’s preliminary findings, few firm answers can be found from ministry databases on how many rented schools have actually been closed down as a direct result of new schools being constructed nearby. The lists of schools in various databases are inconsistent: the Directorate of International Projects retains comprehensive lists of schools for monitoring construction contracts; the Directorate of Planning maintains lists of schools from which the numbers of school supplies and books are estimated, and which underpin the information in the annual yearbook. The planners’ lists are based on replies to annual questionnaires from the regions and districts. Though the databases are rigorously checked for internal consistency with the previous years’ data, the absence of systematic verification at school level means the information is questionable. MOE staff explained that these problems arise because the numbers, names and grade-levels of schools change frequently, student catchment areas within and between districts are fluid, and the information becomes dated in the time between sending out questionnaires and receiving replies from the districts. All these constraints reduce the accuracy of student enrollment data and in turn the estimation of needs for school construction. Control of unit costs and containment of expenditures is clearly problematic in these circumstances, and the weaknesses have partly undermined the important breakthrough of Education VII in establishing more cost-efficient design standards for school buildings. If quantitative data on physical facilities is so unreliable, the problem of estimating the status of schools with regard to qualitative dimensions is even more difficult. Lacking a reliable MIS, planning staff are not equipped to provide sound facts and analysis and senior officials are not adequately equipped to make decisions on policy, strategy, and spending.

The establishment of an efficient and reliable monitoring capacity, with full technological connectivity, is probably the most important investment the ministry can currently make to better serve the school system and its beneficiaries.

4. Findings, Issues and Lessons of Broad Applicability

4.1 OED’s main finding is that Jordan took a far-sighted step in launching the sector reform program at the base of the school system on which the country’s human capital and socioeconomic development depend. *The main concern is that other priorities may distract the country’s leaders from continuing the efforts still needed to achieve high levels of school effectiveness and student achievement.* The borrower has recently begun discussions about the future and how to ensure long-term impact with the support of the Bank and other partners.

OED Assessments

4.2 Several factors complicate OED's overall assessment of the two projects. First, the outcomes at project completion were only interim indicators of progress; subsequent activities during the second stage of the reform will continue to influence long-term outcomes. Second, the projects did not include a wide range of measurable indicators on qualitative and institutional aspects from which to assess progress. Third, the review examined only the MOE components in basic and secondary education.¹⁸

Outcomes

4.3 Outcomes are uneven across the various MOE programs supported by the projects, and thus makes the assignment of a single rating a difficult act of judgment. On balance, OED assesses the outcomes as satisfactory but cautions that this assessment needs to be revisited when HRDSIL II is completed. On the positive side, OED notes physical improvements in school infrastructure; curriculum, and student assessment; textbook publishing; capacity-building in project administration; and quality assurance. Progress made in evaluation capacity-building and in-service teacher training was also commendable, though results are still modest. On the negative side, the prolonged failure to establish a modern MIS in the MOE has serious effects on the ministry's capacity to monitor progress, contain costs, manage strategically, and hold itself accountable for results and expenditures. Because research and analysis is needed to verify the OECF's preliminary findings on school facilities, OED has little basis on which to judge whether the projects have met their aims of increasing cost-efficiency and building sustainable school infrastructure, though these are probably areas of weakness.

Institutional Development Impact

4.4 Because the projects were designed before the Bank paid attention to assessing institutional capacities, no baseline exists from which to measure progress in capacity-building. But the audit rates institutional development as modest. The limited information available shows that the projects have had variable impact across the range of sector institutions. They certainly supported the strengthening of policy development in the human resources sectors—a contribution that should have positive impact in the coming decade. At the MOE level, impact has been much more modest—a result to be expected given the large size, the complexity and the established culture of the bureaucracy. At local level, impact on districts and schools involved in pilot work was considerable, but perseverance is needed to ensure impact on teaching and learning in all the schools.

Sustainability

4.5 Sustainability is less likely than at the projects' completion. The audit rates it as uncertain. The macro environment is now more risky because the school system is so heavily dependent on the budget and donor assistance. Shifting government priorities, "reform fatigue," and public impatience may also be risk factors. The Bank's recent discussions on overall budgetary support in support of a comprehensive development program for the country could mean that its willingness to finance loans tied to investments in school quality would diminish—with unknown effects on other donors. A proposed higher education development project,

18. The ICRs pointed out serious shortcomings in pre-service teacher training and community colleges that are currently being addressed through other operations.

prepared with assistance from the Bank and possibly to be financed by the Arab Fund, promises to be a complementary intervention, and a natural follow-up in the sector reform. It is to be hoped, however, that the new initiative will not compete with the school program for priority and counterpart funds.¹⁹

Bank Performance

4.6 OED assesses the Bank's performance as satisfactory, though the weaknesses noted in supervision and reporting detract from this otherwise sound record. The Bank appears to have been particularly far-sighted and effective at the design and implementation stages in working with senior officials on policy and strategy development. In retrospect, because of the weak financial accounting environment for the projects, the Bank was correct to move only slowly from an investment project approach to a programmatic approach, and to reduce the risks of a fully programmatic approach by introducing the subproject device to introduce more controls on sector expenditures. But the Bank was less effective during supervision, in part because of lack of realism about the institutional constraints at operational levels. Given the degree of complexity and innovation, supervision might have been improved if more resources and technical expertise had been committed. OED concurs with the ICR comment that the Bank should have tried harder to resolve the MIS problems. The question arises, nevertheless, whether the Bank was too cautious in not pursuing the issues vigorously at the highest levels of government. Even though the issues were highly sensitive and could have created some friction in otherwise good relations, the long-term effects of *not finding remedies have been serious*. In view of the importance of establishing a sound MIS, the Bank might have been more effective if it had invoked legal sanctions when delays became intolerable.

Borrower Performance

4.7 The borrower was far-sighted in aligning project objectives with broader goals for human resource development and in establishing new institutions to guide and support the sector program. The MOE's perseverance in implementing the projects despite the challenges they posed was commendable. Again, several shortcomings marred the overall satisfactory performance. Much more should have been done to resolve the MIS problem; to ensure that records were kept accurately and information was shared; and to manage and use donor-assisted TA effectively and efficiently for institutional capacity-building. Efficient administration, institutional teamwork, and commitment to service-delivery is essential to ensure the long-term benefits promised reach the schools and students within the next few years during the follow-up stage of the reform program.

Issues and Agenda for the Future

4.8 Several important issues arise from this review that require resolution by Jordan's leadership if the investments made so far are to be sustained and the benefits reaped for students and the country.

4.9 *Are trade-offs necessary between expanding the physical infrastructure of the schools and more intensive qualitative investments? Can the need to focus on learning*

19. The Region does not consider the threat of competition to be strong. Government resources to higher education have declined in recent years and are much needed.

outcomes be reconciled with the continuing need to ensure access to basic education for all?

The critical goal of the sector program is effective teaching and learning. To accomplish this requires concentrating the resources—financial, managerial, and technical—on qualitative and institutional developments. This is more challenging than expanding physical infrastructure because of the absence of blueprints, and it requires long-term, intensive effort, as well as budget, to effect changes that are less visible than physical infrastructure but no less important. In the past, when qualitative components progressed slowly, and managers felt pressure to spend available loan funds, priorities became skewed toward spending on large physical items. The readiness of the major donors to provide financing for large physical infrastructure programs may have inadvertently reduced incentives to contain costs, allocate resources appropriately, and pay attention to sustainability. In the current economic situation, do decision-makers need to trade-off more physical investments in order to maintain and sustain the qualitative improvements underway?

4.10 Can more be done to maintain high public support for the program?

In retrospect, an information, education, and communication component in the projects might have better sustained the momentum of the reform program during the critical middle years. At the program's launch, the government showed that it can successfully harness public support. Can it now repeat that success by systematically informing the public about progress made, challenges faced, and ways in which the people can help to achieve the program's goals? Such efforts would also go far to demonstrate the country's commitment to transparency, inclusion, and democracy.

4.11 Can more be done to strengthen policy, planning, and management in basic and secondary education?

Access to reliable information for decision-makers is essential for guiding the program toward its ultimate goals. The challenges ahead at the school level are even more challenging than those experienced at the central level. Senior government policymakers are highly dependent on their staff for sound facts about progress, constraints, and results. So how can they ensure information is accurate and thus if they are to allocate scarce resources efficiently and effectively? This applies also to the Intermediary and the NCHRD, whose policy advice and evaluations rely heavily on school system statistics generated by the MOE.

4.12 Can partnerships be managed better to ensure that grants for TA and training do not overwhelm local management capacity; that TA managers remain attentive to the costs and benefits for which they are responsible; and that the TA services provided can be used effectively to strengthen sector institutions?

In the twenty-first century, no country can develop without exposure to global best practice and expertise. Thus, partnership is essential. But Jordanians are the best judges of what is relevant for the country's education system and whether it is worth paying the price. The challenge for beneficiary institutions is to extract the highest value from TA, in terms of institutional impact, by providing a supportive enabling environment for technical experts and trainees. The challenge for the donors is to collaborate closely with program managers to resolve implementation problems in a cost-efficient manner and to maintain the drive toward results. The challenge for the Bank is

to ensure that it successfully develops a strategy for TA that will minimize the well-documented risks.

Lessons of Broad Applicability

4.13 Apart from the many lessons of experience identified in this OED review, several stand out as worthy of consideration by other countries embarking on ambitious and innovative sector-wide programs with Bank support. The unique design of HRDSIL I proved useful in supporting a development program in its early stage when the strategic framework and institutional capabilities were still evolving.

- The device of limiting disbursements to approved subprojects probably minimized the risks to the financial integrity of the operation. An operation that disbursed against a sector-wide expenditure program would probably not have been efficient given the weaknesses in financial accounting.
- The subproject device also proved effective because it allowed experience to grow through limited interventions that could be sequenced and adapted to the pace of implementation. The experience developed skills at central government level in project design, appraisal, and implementation was especially deep because the subproject mechanism demanded fully justified proposals with precise objectives, progress indicators, targets, action plans, and costs. This helped strengthen ownership, realism, the focus on targets, and accountability for meeting targets.
- The subproject approach also showed some limitations. It had little effect in creating broad and lasting teamwork between different units and, indeed, may have increased competition in nonfunctional ways.
- Also, it showed that when administrative and financial procedures are not shared between project and non-project activities, tensions might arise between project and non-project staff, especially if senior managers do not continually emphasize that they all serve the same clients.

4.14 Now that the focus has turned to district and school-based initiatives, the subproject device needs to be tailored to local capacities. Based on the earlier experience, vigilance is needed in several areas.

- MOE Units “owning” subprojects need to perceive themselves not as beneficiaries of subprojects but as providers of direct services to the schools.
- The process for subproject approval, monitoring, and accounting must be made efficient.
- And senior managers must ensure that all the stakeholders appreciate how the subprojects contribute to the broader sector policy and strategy and the outcomes expected. Otherwise, spending the subproject budget allocated may become more important than achieving immediate results and ultimate impact in the schools.

Basic Data

SEVENTH EDUCATION PROJECT (LOAN 2890-JO)

Key Project Data (amounts in US\$ million)

	<i>Appraisal estimate</i>	<i>Actual or current estimate</i>	<i>Actual as % of appraisal estimate</i>
Total project costs	108.3	81.0	74.8
Loan amount	40.0	35.3	88.3
Cancellation		4.7	
Date physical components completed: November 1995			

Cumulative Estimated and Actual Disbursements

<i>Fiscal Year</i>	<i>Appraisal Estimate</i>	<i>Actual</i>	<i>Actual % of Estimate</i>
1988	2.00	–	–
1989	5.00	3.36	67
1990	13.50	11.56	86
1991	24.00	23.52	98
1992	32.50	30.73	95
1993	38.00	33.05	87
1994	40.00	33.63	84
1995	–	34.46	–
1996	–	–	–

Project Dates

<i>Steps in project cycle</i>	<i>Original</i>	<i>Actual</i>
Identification	–	January 1985
Preparation	–	November 1986
Appraisal	June 1987	March 1987
Negotiations	–	October 1987
Board presentation	January 1988	December 10, 1987
Signing	–	February 10, 1988
Effectiveness	May 1988	April 20, 1988
Project completion	June 30, 1994	November 30, 1995
Loan closing	December 31, 1994	November 30, 1995

Staff Inputs

Stage of project cycle	Actual Staff Weeks	US\$ Thousands
Through Appraisal		102.4
Appraisal-Board	45.0	91.8
Board-Effectiveness	-	-
Supervision	45.6	131.4
Completion	3.1	9.4
Total	142.7	335.0

Mission Data

Stage of project cycle	Date (month/year)	No. of staff in field	Duration of mission (# of days)	Specializations represented ^a	Performance ratings		Types of problems ^c
					Implement. Status	Develop. Objectives	
Through Appraisal	11/86	3	23	EC, GE, TE	-	-	
Appraisal through Board Approval	3/87	5	25	EC, A, TE, GE, ES	-	-	
Board Approval	9/87	3	13	OO, EC, TE, OA	-	-	
Through Effectiveness							
Supervision	6/88	1	10	GE	1	-	
	2/89	2	10	A, IA	1	-	
	9/89	1	10	smn	1	-	
	6/90	1	9	ge	1	-	
	6/91	2	16	GE, TE	1	-	
	11/91	5	21	A, TE, OA, OO, EP	1	-	
	6/92	3	17	A, OO, TE	2	-	TA, M, TR
	1/93	1	15	TE	2	-	TA, M, TR
	9/93	6	20	GE, TE, A, EC, OA	2	-	TA, M, TR
	3/94	2	10	OA, PS	2	-	TA, TR
	4/95	2	5	OO, EC	S	S	-
Completion	12/95	3	8	OO, GE, ES	S	S	-

Note: Preparation missions were fielded in December 1985 and July 1986 but information on actual days in field and staff utilization is not available.

- A = Architect; EC = Economist; ES = Education Specialist; EN = Engineer; EP = Education Planner; GE = General Educator; OA = Operations Analyst; OO = Operations Officer; IS = Implementation Specialist; PS = Procurement Specialist; TE = Technical Educator; IA = Information Analyst; SM = School Maintenance Specialist.
- M = Managerial; TA = Technical Assistance; TR = Training; CP = Civil Works Procurement
- 1 = Problem free; 2 = Moderate problems; S = Satisfactory

Borrower/Executing Agency: The Hashemite Kingdom of Jordan/Ministry of Education, Ministry of Higher Education, Vocational Training Corporation

RELATED OPERATIONS			
	<i>Credit no.</i>	<i>Amount (US\$ million)</i>	<i>Board date</i>
<i>Preceding Operations</i>			
Education I	Cr. 285-JO	5.37	1972
Education II	Cr. 534-JO	6.00	1975
Education III	Ln. 1781-JO	15.93	1979
Education IV	Ln. 2068-JO	18.12	1981
<i>Concurrent Operations</i>			
Education V	Ln. 2246-JO	13.25	1983
Education VI	Ln. 2368-JO	37.37	1984
Manpower Development Project	Ln. 2633-JO	10.20	1985
<i>Following Operations</i>			
Human Resources Development Sector Investment Loan	Ln. 3106-JO	72.89	1989
HRDSIL II	Ln. 3864-JO	60.00	1995

HUMAN RESOURCES DEVELOPMENT SECTOR INVESTMENT LOAN PROJECT (LOAN 3106-JO)

Key Project Data (amounts in US\$ million)

	Appraisal estimate	Actual or current estimate	Actual as % of appraisal estimate
Total project costs	252.4	227.8	90.2
Loan amount	73.0	72.89	99.8
Cancellation		0.1	
Date physical components completed: June 1997			

Cumulative Estimated and Actual Disbursements

Fiscal Year	Appraisal Estimate	Actual	Actual % of Estimate
1990	12.00	---	---
1991	24.50	6.65	27
1992	38.50	13.71	36
1993	55.00	31.73	58
1994	73.00	50.71	69
1995	---	64.53	---
1996	---	69.47	---
1997	---	73.00	---
Date of last disbursement: December 31, 1997			

Allocation of Loan Proceeds^a

Category	Original allocation	Revised allocation*	Disbursed	Undisbursed
Civil works	59.6	55.8	56.56	-0.35
Equipment and furniture	-	10.4	9.46	0.94
Printing supplies	3.2	6.8	6.64	0.24
Consultant services and fellowships	4.7	0	-	-
Special account	-	-	0.34	-0.34
Unallocated	5.5	0	-	-
Total	73.0	73.0	73.0	0.00

Note: *Last revision made on November 7, 1995 at Government's request. Consultant Services and Fellowships were fully funded by a Japanese Grant in the amount of \$2.5 million equivalent.

a. Slightly revised from Table 4A in the ICR which is misleading.

Project Financing

Financing	Local	PLAN		Local	ACTUAL	
		Foreign	Total		Foreign	Total
Government	105.1	-	105.1	28.5	29.34	55.64
Bank	25.1	47.9	73.0	26.0	47.00	73.00
OECD	17.8	55.2	73.0	-	-	73.00
USAID	-	-	-	-	0.74	0.74
Japanese Grant	-	-	-	-	2.89	2.89
ODA	0.4	1.0	1.4	0.60	1.60	2.20
Uncommitted Funds from Ed. VII	-	-	-	1.80	1.30	3.10
Uncommitted Funds from Ed. VI	-	-	-	3.20	4.83	8.03
Total Project Costs	148.4	104.1	252.5	102.1	125.70	225.60

Source: Staff Appraisal Report Plan and NCHRD financial status reporting during the May 1997 completion mission.

* Estimated Costs at project closing (06/97).

Project Dates

Steps in project cycle	Original	Revised	Actual
Identification	November 1987		April 1988
Preparation	July 1988		August 1988
Appraisal	October 1988		December 1988
Negotiations			March 1989
Board presentation			June 1989
Signing			August 1989
Effectiveness	September 1989		May 1990
Project completion	December 1992	December 1993	May 1996
Loan closing	June 1994		September 1998

Staff Inputs

Stage of project cycle	Actual Staff Weeks	US\$ Thousands
Through Appraisal	130.8	311.1
Appraisal-Board	45.4	107.1
Board-Effectiveness	---	---
Supervision	76.4	235.8
Completion	9.3	22.5
Total	261.9	676.5

Mission Data

Stage of project cycle	Date (month/year)	No. of staff in field	Duration of mission (# of days)	Specializations represented ^a	Performance rating ^b		Types of problems ^c
					Implement. Status	Develop. Objectives	
Through Appraisal	12/87	4	21	EC, IS/E, TE	---	---	---
	02/88	2	14	EC, IS/E			
	04/88	4	14	EC, E, TEX			
	08/88	7	18	EC, E, A, TEX, FA			
Appraisal through Board Approval	12/88	8	12	EC, E, A, TEX, EP, OO	---	---	---
Board Approval through Effectiveness	---	---	---	---	---	---	---
Supervision 1		4	17	TV, E, A	1	1	-
2		5	22	E, A, OO, OA, DO	1	1	-
3		3	16	E, A, OO	1	1	-
4		3	21	E, A, OA	1	1	-
5		4	18	E, A, OA	1	1	-
6		4	8	E, A, EC, OA	1	1	CP
7		2	10	IS, OO	1	1	CP
8		1	6	OO	1	1	CP
9		2	13	TVE, OO	1	1	CP
10		3	9	E, OO	1	1	EP
11		1	10	OO	1	1	EP
12		2	10	E, OO	1	1	EP
Completion 13		2	9	E, OO	1	1	1

Note: Supervision of the project was carried with other education projects.

a. A = Architect; EC = Economist; ES = Education Specialist; EN = Engineer; EP = Education Planner; GE = General Educator; OA = Operations Analyst; OO = Operations Officer; IS = Implementation Specialist; PS = Procurement Specialist; TVE = Technical Vocational Educator; IA = Information Analyst; TEX = Textbook Specialist.

b. 1 = Problem free.

c. CP = Civil Works Procurement; EP = Equipment Procurement.

Borrower/Executing Agency: The Hashemite Kingdom of Jordan/Ministry of Education, Ministry of Higher Education, Vocational Training Corporation, National Center for Human Resources Development

RELATED OPERATIONS			
	<i>Credit/Loan no.</i>	<i>Amount (US\$ million)</i>	<i>Board date</i>
<i>Preceding Operations</i>			
Education I	Cr. 285-JO	5.37	1972
Education II	Cr. 534-JO	6.00	1975
Education III	Ln. 1781-JO	15.93	1979
Education IV	Ln. 2068-JO	18.12	1981
<i>Concurrent Operations</i>			
Education V	Ln. 2246-JO	13.25	1983
Education VI	Ln. 2368-JO	37.37	1984
Manpower Development Project	Ln. 2633-JO	10.20	1985
<i>Following Operations</i>			
Education VII	Ln. 2890-JO	35.34	1987
HRDSIL II	Ln. 3864-JO	60.00	1995

Box 1. Reform Program: Policy and Institutional Measures

1. Policy Framework

The fundamental reform objective: to enhance student achievement levels.

Restructuring the school system.

- Extending basic (compulsory) education from nine to ten years.
- Redeveloping the two-year secondary cycle with a unified core curriculum and three subject-base streams (math/science, arts/humanities and technology) to provide diversity and specialization.
- Establishing a specialized technological secondary stream and transferring responsibility for industrial skill training to the Vocational Training Corporation.
- Implementing a new promotion and examination system by basing secondary schooling entry on grade point averages, eliminating the grade 9 exit examination and introducing specialized stream-specific examinations at the end of the secondary cycle.

Improving the quality of teaching and learning.

- redefining curriculum objectives in terms of higher cognitive skills and abilities, modernizing content, introducing flexibility to meet individual learning abilities and interest and
- establishing stronger integration between basic and secondary curricula;
- providing a full range of new and revised textbooks that are instructionally effective and based on curricular objectives;
- raising teacher qualification requirements for basic education teachers from two to four years' post-secondary education, and for secondary teachers from four to five years' post-secondary work; and setting up an expanded and revised system of university-based pre-service teacher training;
- upgrading community college graduate teachers' academic knowledge to a BA equivalency through a certification program, and providing ongoing in-served training to enable teachers to effectively use new materials and diversified instructional methods;
- upgrading the academic qualifications of supervisors and school principals through a certification program;
- improving the quality of school facilities by providing libraries, laboratories and audio-visual equipment and gradually eliminating rented classrooms.

Using sector resources efficiently.

- conducting an education finance study that would identify and implement further measures for cost reduction and cost recovery.
- implementing the study's recommendations through an action program agreed between the government and the Bank.

2. Institutional Framework

Enhancing the capacity to sustain sectoral reform.

- strengthening the ability of the Technical Unit established within the Higher Council of Science and Technology, to appraise and allocate funds for subprojects and monitor and coordinate their implementation.
- establishing a national Center for Educational Research and Development to help maintain the momentum of the reform through policy and sectoral research, to identify useful and cost-effective innovations; and to conduct a longitudinal evaluation of the reform program.
- institutionalizing the curriculum reform by strengthening the capacity of the MOE to manage curriculum preparation and revision based on feedback from teachers, experts and student achievement levels.

Project Components

Seventh Education Project

- Fifty-eight basic schools built to cost-effective design norms and space standards, replacing unsuitable rented buildings
- Cost-effective teacher upgrading programs for basic and secondary teachers
- Instructional materials development and related teacher training
- A study of how to strengthen the system of maintaining school facilities
- Pilot vocational programs for girls in areas of rapid job growth
- Programs of training in office technology and computer maintenance
- Changes to community college curricula and programs
- Expansion of the use of the MOE's management information system (MIS)
- Establishment of an integrated system for measuring student and teacher performance and the effects of different combinations of educational inputs on education quality and cost
- Improvements to project implementation capacity

Human Resources Development Sector Investment Loan

- Educational facilities
- Curriculum development
- Textbook development
- Teacher and supervisory staff training
- Vocational education and training
- Educational technology
- Education research and development

Comments from the Ministry of Education

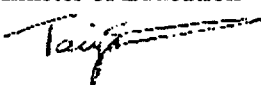
Mr. Gregory K. Ingram, Manager
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Operations Evaluation Department
Fax (202) 522-3123

**Re. Draft Performance Audit Report
Jordan : Human Resources Development Investment Loan (Loan 3106-JO)
and Seventh Education Project (Loan 2890-JO)**

I enclose herewith the comments of the Ministry of Education concerning the above mentioned audit report.

Taking the opportunity to express my appreciation of the effort made, and to inform you of our willingness to address the issues and lessons identified, and to continue our partnership with the World Bank.

Best Regards

/ Minister of Education


cc: Ministry of Planning
cc: NCHRD

Comments of the Ministry of Education on the World Bank Audit Report Concerning the Implementation of the Seventh and HRDSIL/Phase 1 Projects

1. *Preface:* The World Bank report reviewed in a comprehensive manner the above mentioned two projects, and evaluated the extent to which objectives were achieved, the educational development plan achievements, the partnership between the MOE and WB, the performance of the donor and borrower, the difficulties faced during the implementation period, and lessons to be learned for the future partnership.

2. *Comments of the MOE*

Projects Accounts and Record:
Despite the difficulties faced by the concerned department and staff at the commence of the Educational Sector project, due to the continuous administrative changes in the MOE, the accountancy records and files were well kept and documented. The MOE will upgrade the performance through computerizing the Accountancy Department, and the International Projects follow-up Directorate, and create a new mechanism for continuous auditing of its records with the related and compatible records at the NCHRD.

3. *Learning Resources Centers*
 - a) LRC's procurement:

All six LRC's procurement tenders were being launched and tenderers offers are under study now.

 - b) The new equipment will enable the staff to produce advanced learning materials.

 - c) Evening centers working hours will be extended, as soon as the buildings are received This is part of the Ministry's policy to offer service to all users, during and after the official working hours.

 - d) The staff of LRC's centers is adequate compared to the quantity and the quality of their work

 - e) Teachers and students are urged to benefit from these centers. Regular visits, meetings, mass media are means of spreading awareness of the importance of using these centers.

4. *School libraries*
 - a) The situation of the double-shift school libraries is only temporary. Most libraries are used by both shifts.

 - b) Old exercise books can be destroyed in line with official procedures.

 - c) School libraries are provided with books and learning materials suitable for the size and student numbers, although some of these schools don't have library facility. Fund shortages remain basic problem.

- d) School library share of school donations remains as before i.e. (10%–20%) which is a sensible percentage. The principals interest and school priorities play an important role in purchasing books and instructional material.

5. *School Textbooks*

- a) The number of books that was accomplished (including relevant educational materials) summed up to 705 divided as such;
- * 69 curriculum documents and broadlines
 - * 396 textbooks
 - * 178 teachers guides
 - * 62 educational materials
- b) The books that were produced in line with the educational development plan didn't replace foreign titles.
- c) The audit report indicates the existence of huge reserve supply in the warehouses, which is not the case.
- d) The MOE will study and deal with the production obstacles that are embedded in delay in upgrading design and production equipment and delay in Textbook's tendering.
- e) The MOE will activate the computer systems and will establish a network between the directorates and the centre to facilitate the use of data and to ensure its accuracy with regard to textbooks printing, budgeting and distribution.

6. Database and computerization of work of the MOE.

A sum of (350) thousand USD was allocated to EMIS, of which 280 thousand were used by the NCHRD. The remaining 70 thousand will be used to provide the General Directorate of Planning and the Directorate of International Projects with the necessary equipment and programs. Likewise, international bids were announced to the effect of computerizing the works of the MOE and its field directorates.

7. *In-service training:*

- a) Schools close on Thursdays so that teachers attend training courses. The MOE is considering conducting in-service training after school hours.
- b) Feasibility of decentralization in training need longer time to be properly assessed. The MOE is actually supporting this approach through strategic and procedural planning both in the MOE and the directorates consecutively.
- c) The MOE has formulated well trained local training teams in four directorates, as an experiment to lead field training courses within the capacity building program financed by DFID.

- d) The MOE is applying the educational technologies to prepare applied models with the aim to bring about innovative ideas. It is also working on establishing positive trends towards linking theories with applications.
8. *Educational Planning:*
- a) The GDP is the direct source of data, information and statistics.
- b) Information is accessible to all inside and outside the Ministry
- c) The DG depends on the comprehensive annual statistical survey that starts from schools. The figures may slightly change due to transfer to students, and teacher or the establishment of new schools. However, these statistics continue to be reliable and valid to decision-makers.
- d) The DGP set out a comprehensive school—building plan for the period 1998-2007 in accordance with the needs and priorities, which constitutes the reference to any new school construction.
- e) The DGP will implement EMIS through providing all facilities and capabilities and through pinpointing and solving any obstacle. The GDP will prepare a sub-project to be submitted to the WB expert who will visit Jordan to assist in developing the IT proposals to be submitted for appraisal as part of the quality enhancing sub-components

Agenda for the future and lessons from past experience

The Ministry of Education has vigilantly considered the WB's notes particularly what concerns management capacity, technical assistance, public support, focus on the qualitative aspects of the educational process, the conduct of studies and researches relevant to qualitative development in Education and its effect on students' performance, efficiency and ability to confront the future challenges.