

The Hashemite Kingdom of Jordan



National Center for Human Resources Development  
(NCHRD)

National Center for Education  
Research and Development  
(NCERD) :  
**An Introduction**

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**NATIONAL CENTER FOR EDUCATIONAL  
RESEARCH AND DEVELOPMENT  
(NCERD)**

**AN INTRODUCTION**

Under the guidance of His Majesty King Hussein and close supervision and keen interest of his Royal Highness Crown Prince Al Hassan, the Government of Jordan (GOJ) has embarked upon a comprehensive ten-year-long (1989-98 ) Education Reform Plan (ERP).

Cognizant of lack of natural material resources in the country, successive Jordanian Governments, over the years, have capitalized upon the policy of Human Resource Development through appropriate education and manpower training. Jordan's manpower-based economy, in the past, has thrived upon the country's capacity to supply skilled workforce to the expanding local and regional (Gulf) labor markets. Rapid technological development and modernization of industry and commerce in recent years, and changing political climate, nonetheless, have altered the demand characteristics of the current and future labor markets in the region.

Realizing the fact that job-related knowledge and technical skills of new entrants to labor market are lagging behind and will soon be

rendered obsolete, all sectors of Jordanian economy coordinated their efforts in organizing a national conference entrusted to suggest ways and means for meeting the pressing need of the country to keeping abreast with the march of progress.

The National Conference on Educational Reform (NCER) was held in September 1987. The paramount goal of the conference was two-fold. First, to scrutinize the national system of compulsory and secondary education with intent to pinpoint its weaknesses and deficiencies and identify their causes. Second, to suggest ways and means to improve the education system and raise its standards to up-to-date modern levels. An embodiment of political will and national cooperation, the NCER strongly recommended a complete overhaul of the education system and thus laid a solid foundation for fundamental reconstruction of the preuniversity education system, in Jordan.

### **Education Reform Plan (ERP)**

Acting upon the recommendations of the NCER, the Government of Jordan (GOJ) assisted by international expertise has aptly designed a ten-year long comprehensive Education Reform Plan (ERP).

The main goal of the ERP is to improve the quality and raise the standards of basic and secondary education which is necessary to produce competent graduates. Jordan needs to build the knowledge-intensive, technically-skilled manpower base to develop its domestic technological capacity and maintain its relative advantage in the region's labor markets.

To implement the plan, the GOJ has translated this goal into a set of Policy Measures and Institutional Developments carefully designed to:

- a) Enhance student achievement levels by (i) restructuring the school system, (ii) improving the quality of teaching and learning, and (iii) using sector resources more efficiently;
- b) Develop an institutional structure that will be responsive to system's qualitative and quantitative needs over the long term.

The ERP is being implemented with GOJ financing supplemented by loans from the World Bank and Overseas Economic Cooperation Fund (OECF) of Japan, and grants:

from donor agencies like USAID, Overseas Development Authority (ODA) of the UK, and the Government of Japan.

For tactical reasons the GOJ has adopted the strategy to implement the whole ERP through a series of action plans sequentially carried out over ten years in three phases:

Phase I ( 1989-92 ) : Start-up and foundation .

Phase II ( 1993-95 ) : Implementation of core programs .

Phase III (1996-98) : Implementation of innovative programs.

The action plans are defined in terms of seven interdependent but distinctly individual National Programs, each to be executed through a number of subprojects. The seven National Programs are :

1. Curriculum Development,
2. Textbooks Development,
3. Teacher and Supervisory Staff Training,
4. Educational Technology,

5. Educational Facility Improvement,
6. Vocational Training Expansion, and
7. Educational Research and Development .

Institutional Development entails the institutionalization of the vital functions and activities, perennially needed to sustain the sectoral reform and keep on continuing the march of progress.

### **National Center for Educational Research and Development (NCERD)**

Establishment of the "National Center for Educational Research and Development" (NCERD) as an independent entity and one of the affiliate Centers of the Higher Council for Science and Technology is perhaps the most significant accomplishment in the field of institutional development. Created by resolution No. 27/89 of the Higher Council for Science and Technology the NCERD started performing all its functions in the early months of 1990.

### **Modus Operandi and Functions of NCERD**

**Modus Operandi.** The *raison d'etre* for

the "Center" was to institutionalize the capacity to sustain the sectoral reform and become a perennial source of support and inspiration to carrying on innovative practices and positive changes in the system needed to maintain its vigour and health, way beyond the period of reform.

This makes it incumbent on the Center to work in close cooperation with and to coordinate among various ministries and other public and private national as well as international agencies and institutions.

## **Functions**

NCERD's operations and activities are designed to discharge the following major functions:

1. **Impact Evaluation** : To design, develop and carry out a comprehensive evaluation program to evaluate the impact of each national program and each subproject within programs and provide policy-oriented feedback to the Intermediary, the executing agencies, and the financing agencies.
2. **Database and Education Management Information System (EMIS)**: To establish and maintain (in close cooperation



with the MOE) a comprehensive Educational Database and to undertake consultancy assignments from national, regional, and international agencies and institutions.

3. **Center of Excellence:** To become a center of excellence and to act as a medium for documentation and dissemination of information and state-of -the-art thinking on current educational issues.
4. **Innovative Research and Development:** To research, test validate, and evaluate the innovations in educational methodology (including curricula, materials, technology, teaching techniques, and teacher training ).
5. **Education Management and Administration Evaluation:** To research, validate, and evaluate the appropriateness and efficiency of current and alternative approaches to education management and administration, and teacher and administrator career development in Jordan.
6. **Talent Search:** To search for and locate outstanding individuals in the Jordani an education system and to provide for them the

opportunity to enrich their experience, broaden their skills and enhance special abilities.

### **Institutional Status of NCERD**

Headed by a **president**, the Center is an independent body and one of the two entities affiliated to the Higher Council for Science and Technology (HCST). The Royal Scientific Society is another entity affiliated to HCST.

### **Policy Council of HCST:**

The Center's policy is set and guided by the HCST which is chaired by HRH the Crown Prince and has membership of the following:

- Commander-in-Chief of the Armed Forces
- Minister of planning
- Minister of Trade and Industry
- Minister of Finance
- Minister of Higher Education
- Minister of Energy and Mineral Resources
- Minister of Agriculture
- President of the Royal Scientific Society
- Chairman of the Amman Chamber of Industry
- Secretary General of HCS T

- Three qualified and experienced persons selected by the HRH the Chairman for four years.

**Executive Committee:**

- The Center has an Executive Committee to govern its activities. This committee is formed as follows:
  - The President of the NCERD (Ex-officio chairman)
  - Secretary General of the Ministry of Education
  - Secretary General of the Ministry of Higher Education
  - Director General of the Vocational Training Corporation
  - Two representatives from Universities Selected by the Minister of Higher Education in Consultation with the Universities
  - Representative from the Ministry of Planning
  - Representative from HCST
  - Representative from the NCERD

## **Dual Role of the Center**

The Center plays a double role. Besides discharging its own functions, the NCERD subsumes the role of the Technical Unit of the Intermediary and carries out all the responsibilities of that Unit.

## **Structure of the Center**

The NCERD is comprised of two units: **Research Unit** and **Development Unit**. The Research Unit is mainly concerned with conducting policy-oriented research directed toward the improvement of quality of education and efficiency of the educational system. On the other hand, the Educational Development Unit is responsible for appraising subprojects prepared under National Programs by beneficiaries, monitoring the implementation of subprojects, supervising the program's overall finance, and allocating funds for approved subprojects.

## **Objectives**

NCERD, being a permanent institution for Educational Research and Development, seeks to improve the educational system through:

- Systematic analysis and formative evaluation of the education administration and management system.

- Coordination and cooperation among all entities concerned with and having stakes in the educational system.
- Setting priorities in financing and implementation of subprojects according to educational policies.
- Enhancing the management and planning capability of the system through establishment and operationlization of the Education Management Information System (EMIS), and training personnel from the MOE and its different Directorates of Education in the fields of information processing, data analysis, rational policy planning , and impact assessment.
- Enhancing the potential of educational research.
- Developing evaluation capacity by institutionalizing the process , increasing officials' technical know-how, and enhancing their awareness of the importance of evaluation for educational improvement.
- Enhancing the capacity of the Intermediary by supporting its Technical Unit.

### **The Intermediary**

The Itermediary is a special entity established

by a decree from the office of the Prime Minister to provide centralized direction and coordination for implementing the national programs and individual subprojects. The Intermediary consists of a Policy Council and a Technical Unit.

In the body of the policy council, the high-level broad representation, from all the institutions participating in the Sector Investment Loan (SIL) Program, the Ministry of Planning and expert educators and economists, helps integrate educational policies with national planning and macroeconomic goals .

**Responsibilities of the Policy Council** include:

- (a) Approving subprojects appraised by the Technical Unit.
- (b) Keeping itself apprised of the progress of subprojects and the program in general through regular reports of the Technical Unit .
- (c) Making policy decisions about SIL implementation in accordance with the loan agreements with the World Bank and the Overseas Economic Cooperation Fund (OECF) of Japan .
- (d) Formulating and recommending sector policies on the basis of experience gained

through implementation of the SIL program and information obtained through policy based research and evaluation.

- (e) Carrying out mid-term and annual review of the program implementation with the World Bank and OECF.
- (f) Acting as the governing body of the Intermediary .

### **Composition of the Policy Council**

- Secretary General (HCST)
- Secretary General (Ministry of Planning)
- Secretary General (Ministry of Education)
- Secretary General ( Ministry of Higher Education)
- President (NCERD)
- Director General (Vocational Training Corporation)
- Director General (Directorate of Curriculum in the Ministry of Education)
- Director General (Research and Education Planning, MOE)
- Representative of the Ministry of Planning

## **Versatility and Efficiency**

The NCERD, started in 1990, is only a fledgling institution. So the staff are recruited, gradually, as necessitated by the expanding responsibilities and activities of its two units (Research, and Development). **Quality and Efficiency** is the hallmark of the Center's activities. Diversity of the Center's multiple operations demands matching versatility of skills and ability from its handful of staff. High priority, therefore, is attached to staff development by selecting right persons with right expertise and providing on- the-job training and apt guidance. Technical assistance and collaboration from specialized international educational institutions is called upon as and when required . Technical assistance that NCERD obtained from "Harvard Institut for International Development" to establish Education Management Information System (EMIS) at the Center is an instance of such cooperation .

## **NCERD and the Education Reform (ERP)**

NCERD plays a central role in the implementation of the ERP. It acts as nexus for all the entities participating in the SIL Program and coordinates among all the institutions on one hand, and between various National Programs and subprojects within programs of the ERP, on



the other. Above all, it is the Center's responsibility to monitor every aspect of the ERP and evaluate its impact. The policy research conducted at the Center and the institutionalizing of vital functions are essential for continued development of the Educational Reform Process.

### **Work Accomplished**

Despite its initial developmental problems and financial hardships, even during its short span of infancy (less than two years), the Center's accomplishments surpass all expectations. The following list of completed studies, appraisal reports and works in progress speaks for itself.

#### **Research Reports and Publications:**

1. Analysis of Classroom Space in the Ministry of Education Schools in Jordan.
2. Characteristics of Rented Rural Schools in Jordan.
3. A Summative Evaluation of the Higher Certification College (HCC).
4. How to Establish an Educational Management Information System (EMIS).
5. Analysis of School Size and Grade Structure in the Public Schools of Jordan Policy Implications.

6. Institutional and Administrative Requirements for Educational Reform .
7. Current status of General Education in Jordan: Indicators and Issues.
8. Indicators of Progress in the Jordanian Educational Reform: A Discussion Paper.
9. Staff Requirements for Preservice Teacher Education Programs at Jordanian Universities: A Discussion Paper.
10. An Assessment of Vocational and Technical Education in Jordan. (In collaboration with a USAID sponsored Team of Experts from the Academy of Educational Development (AED) .
11. Structural and Informational Analysis of the Ministry of Education. (In collaboration with Harvard Institute for International Development).
12. Trends in Expenditure and Student Costs of Higher Education in Jordan.
13. The Socio-Economic Characteristics of Jordanian Returnees, Part I : Statistical Analysis and Indicators.
14. The Socio-Economic Characteristics of Jordanian Returnees, Part 2: Analytical Study of the Social and Occupational Characteristics of the Jordanian Returnees.

15. Promotion, Repetition, and Dropout Rates of Male and Female Pupils Across Grades and Directorates.
16. Role of Research Centers in the Field of Basic Education in Jordan.
17. Research Needs of Reform Plan in Jordan.

### **Studies in Progress**

1. An Evaluation of the Pioneer Schools Project Implemented by the Ministry of Education.
2. Contexts of Teacher Education: Implications for Policy Makers.
3. Determinants of Performance on Tawjihi Exams.
4. Characteristic Profiles of High and Low Achieving Schools in Jordan.
5. Tawjihi Test Scores of Male and Female Students Across Directorates, Authority Location, Ownership, Gender and Shift.
6. Bibliography of Research on Basic Education in Jordan (In Collaboration with Yarmouk University under contract with Harvard Institute for International Development HIID).

7. Analytical Review of Research on Basic Education in Jordan (In collaboration with Yarmouk University under contract with Harvard Institute for International Development HIID).
3. Structuring and Communicating Normative Data for Decision Making at National, Directorate, and School Levels.
9. School Principals: Their Realities and Suggestions for Enhancing their Educational Leadership Capacity.
10. Current Status of Vocational Education in Jordan : Implications for Future Planning.
11. Social Development in Jordan (1970-1990).
12. Socio-Economic Characteristics of Jordanian Returnees and Their Impact on the Country.

### **Sub-Project Appraisals Completed**

As Technical Unit of the Intermediary the NCERD staff have already appraised a number of subprojects submitted by various beneficiaries so far.

- Arabic Textbooks Publication.

- Islamic Textbooks Publication.
- Mathematics Textbooks Publication.
- Science Textbooks Publication.
- Social Studies Textbooks Publication.
- Art Education Textbooks Publication.
- Vocational Education Textbooks Publication.
- Physical Education Textbooks Publication.
- English Language Textbooks Publication.
- Textbooks Distribution Subproject (Warehousing).
- School Facilities Improvement: Sub-Project 1
- School Facilities Improvement: Sub-Project 2
- Educational Technology Sub-Project.
- Amman Standard Testing and Training Center, Sub-Project.

### **Sub-Projects Currently Under Appraisal:**

- Yarmouk University Preservice Teacher Education Sub-Project.
- Muta' University Preservice Teacher Education Sub-Project.
- Jordan University Preservice Teacher Education Sub-Project.
- Vocational Training Center for Males and Females in Tafleeh.
- Irbid Vocational Training Center for Girls.

### **NCERD and Teacher's Training**

To the extent success of the Education Reform depends upon the efficiency of the teachers in the system, teacher education and training programs hold the key to success. In its endeavor to strengthen the national capacity to improve and enlarge teacher education and training programs, the NCERD works in close cooperation with the Jordanian Universities and the Ministries of Education and Higher Education.

The Center acts as a catalyst and helps initiate and develop, long-term preservice teacher

education programs and inservice teacher upgrading programs, and short-term inservice skill development and orientation programs by providing incentives and seeking ways and means for the implementing institutions to carry them out. One of the Center's major activities has been concerned with approaching international agencies and reputed educational institutions to obtain financial assistance and technical cooperation to carry out various teacher education and University faculty development programs.

The following are some examples of the activities that have taken place as a result of the Center's efforts.

1. A short-term visit by a team of members of the Educational Sciences Faculties of the three Universities (Yarmouk, Mu'tah, and University of Jordan) to a distinguished (in teacher education) University in the USA.
2. A series of specialized training seminars in the USA on inservice teacher training, for the Central Training Team of the Ministry of Education .
3. A postdoctoral fellowship program in the USA for selected faculty members of the three Universities (Yarmouk, Mu'tah, and University of Jordan) for studying and

developing new techniques is pre-service teacher education.

4. Organizing a visiting foreign faculty (teacher education experts) program at the Jordanian Universities.
5. Follow-up short-term inservice training programs at the Ministry of Education .

### **Information Documentation and Dissemination**

Towards achieving its objective of being a Center of Excellence and a medium for documentation and dissemination of information, the Center has established a comprehensive National Education Database and operationalized an Education Management Information System (EMIS). Besides information management and analysis, the Center has started its own publication series of technical and research reports to be distributed to all agencies and institutions interested in the state-of-the-art information in education and reform related issues. Furthermore, the Center organizes national and regional seminars, workshops and conferences in cooperation with other national and international organizations on pressing current issues in education.



As regional resource center, the NCERC provides consultancy services and takes commissioned assignments on fee paying basis from other national, and international public or private agencies and institutions in the areas of :

- Organizing short-term training programs and workshops.
- Database management and data analysis.
- Conducting policy oriented research.
- Testing and validation of educational innovations.
- Developing and designing educational projects.
- Conducting need analysis surveys.
- Publishing educational research and development brochures, books, reports and other documents.
- Undertaking all kinds of project and program evaluations .

