

POLICY RESEARCH INITIATIVE

YEMEN ARAB REPUBLIC

EDUCATION MANAGEMENT INFORMATION SYSTEMS

Draft Status Review

September 1987

IEES

Improving the
Efficiency of
Educational
Systems

Florida State University
Howard University
Institute for International Research
State University of New York at Albany

United States Agency for International Development
Bureau for Science and Technology
Office of Education
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EDUCATION MANAGEMENT INFORMATION SYSTEMS

YEMEN ARAB REPUBLIC

Sana'a, Yemen Arab Republic

Recent Developments of Educational Data in the Yemen Arab Republic

Economic development is becoming increasingly dependent upon the availability of data. It is because of the availability of data and the ease with which information is being processed that current technological advancement became possible. Therefore, the continuous flow of information is becoming vitally important to decisionmakers. Such information and data will provide the base upon which calculated and proper decisions can be made. This course of action would allow policy and decisionmakers the opportunity to make objective plans and to avoid random decisions which are detrimental to development planning. The availability and accessibility of information is a valuable asset for all industrial nations, comparable in value and kind to the energy resources of developing nations.

A number of objectives can be realized with the availability of an extensive data base. The availability of a data bank will, therefore, assist policy and decisionmakers in a number of ways. It will for example:

- facilitate technology and know-how

transfer from one nation to another,

- provide guidelines for current and future research at the individual or state level,
- make available an extensive data base from which solutions to different problems can be drawn,
- provide alternative techniques and different options to address future problems, and
- ensure proper actions and decisions at different levels.

It is not surprising, then, that our age is being called the Age of Information.

The availability of data as a result of publications and information processing during the 20th century has become so huge in volume and has reached a level that is unparalleled and unprecedented in the history of human civilization.

The Yemen Arab Republic, like so many other developing nations, has recently started to realize the role which information can play at different stages of development. The achievements which were made in the field of data collection and information processing, though modest, were so diverse and versatile.

The preceding remarks were intended to provide a quick overview of the global significance given to the concept of information-processing and to data analysis. Within this perspective,

a more detailed analysis of the Educational Data Management Systems in the Yemen Arab Republic seems appropriate.

Educational Developments and Educational Data Management Systems in the Yemen Arab Republic: An Historical Overview

An analysis of the developments in Educational Data Management Systems in the Yemen Arab Republic from the period preceding 1962 through 1986 can be subdivided into five phases:

Phase 1: The Era before 1962

Educational institutions in the YAR before 1962 were very limited and were accessible only to the privileged. Teaching in these institutes was limited to reading, writing and basic arithmetic with specific emphasis on rote learning of the Holy Quran. There was no curriculum, no well-defined teaching methodology, no syllabus or official textbooks. A school was simply a one-room building, usually annexed to a mosque. The school had no levels or grades. A student's cumulative knowledge of and competency in Islamic Law and Islamic Jurisdiction was the criterion against which educational levels could be assessed.

It is worth mentioning here that the State then never viewed education as a birthright for all. Rather, the Hamid al-Din Dynasty, which ruled the country before 1962, attempted deliberately to deny the majority of the people the right to education and to hold a whole nation hostage. This state of affairs made it ex-

tremely difficult for any research specialist to collect statistical data on the status of education in the YAR before 1962. However, two types of schools were in operation. These are:

Al-Madaris al-'ilmiya. These were intended to be schools in religious and administrative law to prepare young Sayyids and a few others to take over their fathers' positions as governors and judges. Part of the revenues of the Ministry of Endowments was allocated for these schools. A number of cities were privileged to have such schools. These were: Sana'a, Hajja, Jibla, Zabeed, and Dhamar.

Junior High Schools. Junior High Schools were intended to fulfill the needs of a small segment of the Yemeni society for further education at home in an attempt to discourage concerned parents from sending their children abroad. The schools were also intended to fulfill the State's growing needs for clerks and junior employees at different levels. Only a few cities were privileged to have such schools. These were: Sana'a, Hajja, Taiz, and Hodeidah.

It is clear from the preceding remarks that the school models were intended to simply respond to two pressing needs: the need for governors and judges and the urgent demands for clerks and junior employees to fulfill different functions within the State administrative system. Unfortunately it is quite difficult to find documented data about the status of education during the aforesaid period for a number of reasons. These are:

1. the absence of an official body, agency or an administration that is responsible for educational data management due to the lack of qualified personnel to undertake responsibilities;
2. the State's total negligence of the utility and value of educational management and educational planning;
3. even the very limited data which was available then had never been subjected to any research investigation to ascertain its future implications;
4. the entrenched gap between policymakers and concerned educators; and
5. lack of coordination in data processing and data documentation among the schools which were in operation then. This made it virtually impossible to maintain a reliable archive of the state of education in the YAR before 1962.

Phase 2: The Period from 1962-1973

In 1962 a revolution broke out and brought an end to the despotic rule of the Imamate of Yemen. In 1962, education became the birthright of all, and has been since then a top priority by all state officials. From 1962, the number of schools at different levels (primary, intermediate, and secondary) has increased rapidly in response to the popular demands for more and better educational institutions to fulfill the rapid and urgent needs for qualified personnel to contribute to the socioeconomic development of the

country. Accordingly, an educational policy was drafted with the following objectives in mind.

1. *To Create Social Equity.* This means that every individual has the right to pursue education to the maximum possible level in accordance with each individual's abilities and talents. It also means that opportunities will be extended to all citizens for continued self-education. Along with this, the State has issued a law making primary education compulsory for all (males and females) and has expanded the number of intermediate and secondary schools. The State has also consistently encouraged informal education for all.
2. *To Create Economic Equity.* This means that the State is committed to providing equal educational opportunities to all. Put differently, discrimination is prohibited on the basis of sex, socioeconomic status or geographical location.
3. *To Create Economic Equity.* This means that education should aim at preparing competent individuals to contribute (quantitatively and qualitatively) to the overall economic development of the country.
4. *To Allow Local Authority in Planning, Directing and Financing Educational Policies Adopted by the State.*

5. *To Adopt the Scientific Approach in Implementing Educational Policies.* This means that all present and future educational plans should be subjected to a well-defined methodology and governed by the principle of scientific objectivity.

The above listed objectives explain why educational efforts during the period from 1962-1972 were concentrated primarily on expanding the base to provide (as much as possible) equal educational opportunities for all (see Table 1).

Due to the lack of adequate educational data before the Revolution, educators consider 1962 as an historic turning point in the development of educational data in the YAR. There are several reasons to support the above argument, among them are the following:

1. Education has become a top priority in all policies instituted by the YAR since 1962.
2. Nineteen sixty-two (1962) marked the beginning of all laws and legislations enacted by the State to organize and restructure all educational institutions and establishments.
3. By 1962, the YAR had, for the first time, an educational policy with clear and well-defined objectives and goals.
4. Educational and statistical data have become partially available to concerned authorities since 1962.

A close reading of Table 1 shows some degree of fluctuation in the number of primary schools, due to a school merger during 1963/64-1966/67.

Table 1 also shows an appreciable increase in student enrollment at the intermediate level, due to the rapid increase in number of primary school graduates. Secondary school enrollments jumped seven times as much from 84 students in 1963/64, to 656 in 1966/67. This trend continued through the period from 1967/68 until 1971/72. By 1971/72, student enrollments in intermediate and secondary schools had doubled. It is also worth noting that all traditional elementary schools were ordered to close by 1970/71, and have been replaced since then by modern primary schools.

The period from 1962-72 also witnessed the endorsement of the first educational policy in the history of the YAR. This policy was envisioned in 1969 and implemented by 1970. The first educational policy in the YAR came as a result of a regional conference on education which was held in Sana'a during this period. Top officials from the Ministry of Education, the UNESCO Representative in Sana'a, representatives from the Regional Center for Educational Planning in Paris, representatives from the World Bank and other Arab and international organizations participated in the proceedings of the conference.

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TABLE #1

Expansion in Schools and Enrollment Numbers
1962 - 1972

Number of Schools				Number of Students Enrolled		
Year	Primary	Intermediate	Secondary	Primary	Intermediate	Secondary
1962-63	919	3	--	61,335	730	--
1963-64	785	7	3	57,894	1,032	84
1964-65	934	5	3	62,832	1,462	226
1965-66	997	7	3	69,139	1,462	433
1966-67	708	7	3	63,366	1,672	656
1967-68	749	9	3	66,830	2,007	711
1968-69	744	13	4	66,468	2,073	803
1969-70	700	20	4	72,107	3,118	939
1970-71	821	22	4	88,217	3,851	1,270
1971-72	1,155	47	6	1,118,868	5,768	1,370

Source: Department of Statistics, Ministry of Education, Yemen Arab Republic

There is no doubt that the period from 1962-72 witnessed quantitative and qualitative improvement in the field of education in the YAR. This was accompanied by comparable improvements in areas of information processing and educational data analysis. With the availability of data, educators and policymakers became better advised on issues pertaining to the utility and value of education. Yet much is expected from education in Yemen. Despite the educational data which was available during the period from 1962-72, all educational objectives stipulated by the state could not be obtained.

Phase 3: The Period from 1972-1976

This period witnessed the preparation and execution of the first comprehensive development plan in the history of the YAR. During the First Three-Year Development Plan (1972/73-1976), much attention was given to the educational sector with a specific aim to strengthen and develop this vital sector. With this objective in mind, the government of the YAR approved the first educational loan extended by the International Development Agency to finance the Basic Education Development Project (BEDP). The objectives of this project were as follows:

- to expand the base of technical and vocational education,
- to introduce informal education,
- to develop teacher training programs and to provide support to the faculty of education at Sana'a University,

- to help in establishing an educational center for audiovisual aids, and
- to help upgrade the administrative capabilities of educational establishments through scholarships and training programs.

Accordingly, the educational sector enjoyed a great deal of improvement from 1972-76. There was a diversified increase in the number of educational institutions coupled by significant improvements at management and administrative levels. Because of this, the years between 1972-76 are viewed as the base period for modern educational planning (see Table 2).

Phase 4: The Period from 1976-1981

This period marked the beginning of the First Five-Year Plan (FFYP) in the history of the Yemen Arab Republic. The FFYP adopted a comprehensive approach to restructure the national economy by creating some sort of synchronization of economic and educational plans. The plan is partially imperative and partially indicative. Put differently, the FFYP clearly spelled out the long-term national goals and allowed a definable degree of freedom to concerned authorities to pursue these objectives and goals.

This period was also notable for the significant progress which was made possible in different educational areas. Table 3 shows the data upon which educational projects pertaining to the FFYP were based.

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TABLE #2

Expansion in Schools and Enrollment Numbers
1972 - 1976

Year	Number of Schools			Number of Students Enrolled		
	Primary	Intermediate	Secondary	Primary	Intermediate	Secondary
1972-73	1,442	59	8	154,607	7,306	2,267
1973-74	1,561	81	14	179,180	9,362	3,098
1974-75	1,952	98	25	232,784	12,113	4,350
1975-76	2,137	134	27	252,116	15,919	6,050

Source: Department of Statistics, Ministry of Education, Yemen Arab Republic

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TABLE #3

Expansion in Schools and Enrollment Numbers
1976 - 1981

Year	Number of Schools			Number of Students Enrolled		
	Primary	Intermediate	Secondary	Primary	Intermediate	Secondary
1976-77	1,537	97	24	220,159	17,676	7,193
1977-78	1,604	104	30	251,286	21,263	7,973
1978-79	1,711	135	37	251,967	18,852	7,165
1979-80	2,534	197	55	414,273	25,037	9,895

Source: Department of Statistics, Ministry of Education, Yemen Arab Republic

Phase 5: The Period from 1981/82-1985/86

During this period most of the educational projects envisioned in the Second Five-Year Plan (SFYP) were executed. Table 4 shows a more detailed listing of these projects.

Description of Existing Educational Data Management Systems in the Yemen Arab Republic

Since there was no credible educational data prior to 1962, the following descriptive analysis will concentrate primarily on the period from 1962 through 1986. Much attention will be given to data collection methodologies and to methods of data analysis and data documentation.

The Place of Educational Data Management Systems Within the Administrative and Organization Structure of the Ministry of Education in the YAR

Phase 1: The Period from 1962-1976

It has been noted earlier that prior to 1962, education had received virtually no attention from the Hamid al-Din dynasty. The dynasty showed a great deal of hostility to students, scholars, and educators. The only form of education available was religious teaching, plus some basic arithmetic. Even this was accessible only to a few privileged families. There was actually no system(s) for school administration, no school records, and virtually no

qualified personnel to undertake such responsibilities, which explains why it is extremely difficult for researchers to find any documented data prior to 1962. Against this dismal background came the 1962 Revolution which made education accessible to all citizens in both urban and rural areas. Since 1962, the country has experienced sustained growth in educational institutions both vertically and horizontally. This increased awareness of the value and utility of education has been accompanied by an equal understanding of the importance of educational data to the country's overall development plans. Accordingly, the Ministry of Education introduced new methods and techniques to facilitate data which are necessary for data analysis, data documentation, and publication.

Phase 2: From the Mid-Seventies to the Present

This period was marked by several achievements at the political, social, and economic levels. The political stability which characterized this period created an optimal situation for a number of achievements: the first Triennial Development Plan (1973-76); the first and second Five-Year Plans (1976-81 and 1981-86); the second and third census (1981-1986).

In light of the above, it is fairly reasonable to argue that this period represents a new era in the history of the YAR. The key concept which governed this era is planned and programmed development. As programmed development is based heavily on data, government officials

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TABLE #4

Expansion in Schools and Enrollment Numbers
1981-82 through 1985-86

Number of Schools				Number of Students Enrolled		
Year	Primary	Intermediate	Secondary	Primary	Intermediate	Secondary
1981-82	3,711	314	94	522,996	32,528	11,831
1982-83	4,169	420	117	602,212	43,302	11,984
1983-84	4,645	476	135	675,402	56,031	15,788
1984-85	5,078	635	161	895,832	89,250	26,821
1985-86	5,792	744	197	907,470	96,587	45,435

Source: Department of Statistics, Ministry of Education, Yemen Arab Republic

started to realize the importance of having data management systems to serve all sectors of the Yemen economy.

Based on this, policymakers became increasingly aware of the role which education can play in the training and preparation of qualified personnel upon whom development projects heavily depend. As the whole infrastructure of the state underwent tremendous change after 1962, the Ministry of Education has also been restructured to meet the new functions and responsibilities assigned to it. Accordingly, new departments were created and each department or section directed to discharge specific duties and services. Regional offices for the Ministry of Education were inaugurated in all governorates.

The Ministry of Education had suffered from a total state of chaos prior to 1962. This prompted educators and policymakers to propose the first educational policy in the history of the YAR in 1969. The proposed policy was debated and analyzed during the educational symposium which was arranged and sponsored by the Ministry of Education in 1969. Local and international organizations participated in the proceedings of this conference. The Ministry of Education seriously considered most of the recommendations which emanated from the symposium. One of the recommendations called for the establishment of appropriate data management systems for future educational plans. This was considered by officials in the Ministry of Education.

In 1974, a Republican decree was issued to establish a new structure for the

Ministry. Accordingly, the General Administration for Planning and Follow-up was inaugurated to direct and supervise the activities of the following departments:

- Department of Planning
- Documentation and Educational Research Department
- Department of Statistics
- Projects - Follow-up Department
- School Map Department

In 1976, Law Order #136 was enacted to merge the Department of Statistics with the Department of Planning. The merger resulted in the establishment of the General Administration for Technical Affairs. In 1981, the Prime Minister's office issued an order requiring all Ministries to establish administrative units for statistics, planning, and project follow-ups. The Prime Minister's order allowed for the provision of funds to attract qualified Yemenis to serve in the new departments and units. Efforts were also made to provide job training and overseas short-term training to qualified candidates.

Methods of Data Collection, Data Analysis and Data Classification During the Period from 1962-1970

During this period, educational data was collected on a random basis, as

there was no central office or organization to perform such functions. Each department in the Ministry of Education collected and published its own data without coordination with any other department.

Regional offices used to forward their annual statistical reports and requests for financial or human support to the Ministry. These reports were often highly inflated to allow regional directors to get the maximum support in human and financial resources. Because the Ministry of Education did not have an administrative system to check the accuracy of such reports, the reports were published as they were.

Phase 1: The Period from 1971-1986

This period is marked by significant improvements in a number of areas pertaining to educational data management. Several acts and orders were issued to reorganize and update the functions and duties of education. For example, the Department of Educational Statistics has been assigned to perform services and duties such as:

1. regularly issue the Educational Statistics Yearbook;
2. design blank forms for statistical purposes;
3. issue appropriate instructions on how blank forms can be filled with desired statistical data;
4. forward blank forms to the regional offices of the Ministry of Education at least two months after the beginning of each academic year, on the grounds that these forms will be completed and mailed back to the Ministry of Education within one month from the date of delivery;
5. design forms for the analysis and classification of the field data collected from regional offices; and
6. retain, preserve and document all educational publications (i.e., books, pamphlets, bulletins, statistical reports, etc.) in a well-organized archive.

Despite the apparent lack in qualified personnel and the scarcity of incentives for employees, the Department of Educational Statistics was able to:

1. issue the statistical yearbook for the Ministry of Education;
2. design blank forms for statistical purposes (i.e., data collection, data classification and data analysis);
3. modify forms used for statistical purposes (until 1979) to address the following:
 - inadequacy of the previous forms,
 - obscurity and complexity of previous forms made them incomprehensible to respondents,
 - inapplicability of the questions on the forms to reality and field data, and

- previous forms did not account for all types and modes of education in the YAR.

The new forms, which were designed in 1979, were intended to offset the shortcomings and inadequacies of the previous forms. Accordingly, these forms were designed to respond to all types and levels of education. An example of these forms can be found in Appendix 1.

The questionnaire represents a great deal of diversity and encompasses all forms and types of education in the YAR. Because of this, the new questionnaire is still in use in all schools within the country. Since regional offices of the Ministry of Education are not equipped with statistical units, the above described questionnaires are mailed directly from the Ministry of Education headquarters to regional offices and from there to schools operating within each region. As has been noted earlier, these questionnaires, after being filled out, are sent back to the regional offices which review them and then forward them to the Department of Statistics in the Ministry of Education.

Methods of Data Analyses and Data Classification.

Despite the fact that the Department of Statistics of the Ministry of Education dispatches questionnaires to regional offices at the beginning of each academic year, regional offices often fail to respond on time. Completed questionnaires reach the Ministry, not after one month from

delivery date, but rather at the end of each academic year.

Upon receipt of all responses, officials at the Department of Statistics begin processing the data for analysis and classification. Classified data are then compiled and published in the Ministry of Education yearly statistical book. Since the Ministry of Education is lacking in technology, the data analysis process described earlier is done manually.

Department of Planning and Statistics, Ministry of Education: Staff Preparation and Qualifications

The Department of Planning and Statistics is exclusively responsible for collecting, classifying, and analyzing educational data covering all governorates of the YAR. Despite such a heavy responsibility, employees of this department rarely concentrate on their primary duties. They are overly burdened with day-to-day paperwork and bureaucracy. The shortage in qualified human resources complicates the problem. This condition is in strong contrast to overstaffing, a condition from which a number of other departments within the Ministry of Education suffer. This condition calls for action to be taken by officials in the Ministry of Education to ensure proper management of human resources.

Another problem facing the Department of Educational Planning and Statistics is the transfer of employees in this department to other departments.

This disrupts continuity and affects the quality of services provided by this department. Most new employees have no previous experience in statistics.

The Department of Educational Planning and Statistics is also plagued with a number of underqualified employees (i.e., holding only primary or intermediate school-leaving certificates), who have little or no chance to upgrade themselves by participating in short-term training in their areas of specialty. All of the above deficiencies increase error-probability and adversely affect the work of such a vital department.

To offset such deficiencies, the following measures are recommended:

- to supply the Department of Education Planning and Statistics with sufficient and permanent staff members,
 - to provide appropriate incentives to employees of the departments, and
 - to arrange for short-term training opportunities in data processing and computer programming areas to qualified employees of this department.
- the inability of the state to positively respond to such demands if the situation remains as is;
 - the increasing demand for a more scientific approach to resolve educational issues within the State Comprehensive Development; plans which aim at creating socioeconomic equity among all citizens. This ultimate goal can be achieved by:
 - inviting local authorities to participate in determining and funding future educational policies and plans,
 - extending equal educational opportunities to all governorates,
 - emphasizing the importance of data as a base for future educational plans, and
 - accurately assessing educational needs (i.e., books, furniture, stationers, audiovisuals, etc.).

There are a number of reasons to support the call for a more efficient and better equipped department to undertake the responsibility for developing a dependable education management system. These are:

- the increasingly rapid demand for education;

Exogenous Agencies Contributing to the Development of Educational Data Management Systems in the YAR

Several regional and international organizations have established close educational and cultural ties with the YAR and have contributed to the development of educational data management systems. These are:

- UNESCO;
- The Regional Center of Educational Planning, Paris;

- Arab Nations Education, Scientific and Cultural Organization (ANESCO);
- World Bank;
- U.S. Agency for International Development (USAID);
- Arab Offices for Development Projects;
- The Islamic Bank; and
- Arab Development Fund.

This is in addition to several other regional and international organizations that are extending grants and technical support to the YAR in the field of education. Grants and assistance are usually extended on the basis of needs which can be assessed after careful analysis of available educational data. This once again underscores the importance of data for future educational plans and policies.

Educational Data Management Systems: Objectives and Purposes

Educational data, if properly managed, can be used for the following purposes in the YAR:

- to present the current educational situation;
- to assist in determining future educational plans and strategies within the state comprehensive Five-Year Development Plans;
- to help in assessing educational needs (i.e., teaching staff, books, stationers, audiovisuals, school buildings, etc.);
- to project future trends;
- to establish comparison and contrast with other nations in the field of education; and
- to establish some sort of cost-efficiency in all educational projects (i.e., research and teaching).

Available Educational Data in the YAR

- statistical data about those who are eligible for education by sex and category;
- number of schools by subject, level, and type of education;
- educational developments by level and sex;
- teaching staff by sex and nationality;
- Yemeni and Non-Yemeni teaching staff comparative statistics;
- education finance: an historical overview;
- dropout statistics in primary-level schools;
- brief summaries about formal, nonformal and religious education in the YAR, plus brief introductory remarks about vocational and teacher-training institutes

and college education inside the country. There are also statistical tables about students pursuing their education on scholarships abroad by country and major;

- student population by governorate;
- teacher distribution by governorate;
- administrative staff and capabilities;
- statistical data about school-leaving examinations and results; and
- conditions of school buildings (i.e., rooms, utilities, foodstuffs, etc.).

The above information is published in the Ministry of Education Statistical Book. Other sources which provide information on the education sector are:

- the Central Planning Organization Yearly Statistical Book,
- USAID Regional Office in Sana'a; and
- representatives of regional and international organizations in Sana'a.

Unpublished Educational Data in the YAR

There is useful information available to the Ministry of Education, although not all of it is in published form. For example, information is available about:

- schools without buildings (where students receive their education in the open air, under trees or tents, in cot-

tages or mosques, etc.);

- availability of student seats;
- audiovisual aids;
- stationers and books;
- school maintenance;
- current expenditures;
- capital expenditures;
- assessment-reports about the state Five-Year Development Plans;
- teaching staff distribution plans;
- educational supervisors and inspectors;
- Ministry of Education manpower resources by profession, qualification, major, scale, and service record; and
- status reports on education by hamlet, district and governorate.

Much of this information is not readily accessible. The following factors may be the reason for not making such information accessible to research specialists and to the public:

- lack of qualified and well-trained specialists to collect, classify, analyze, and publish such data;
- the inaccuracy of such data;

- the lack of adequate incentives to employees of the Department of Statistics and Planning;
- the lack of a proper understanding of the significance of such data to future educational plans and policies; and
- inadequate and insufficient facilities of the Ministry of Education.

Data Circulation and Data Promulgation Sources in the YAR

Education data pertaining to the Yemen Arab Republic is promulgated and circulated in a number of publications, such as:

- statistical yearbooks published by the Department of Educational Statistics of the Ministry of Education;
- The Journal of Education, published by the Ministry of Education;
- UNESCO publications (i.e., books, bulletins, fliers, etc.);
- Central Planning Organization statistical yearbooks;
- follow-up and status reports about educational projects as specified in the state Five-Year Plans;
- publications of the Center for the Development of Educational Research; and
- publications of regional and international organizations concerned with

education in the YAR.

It is worth noting that the Ministry of Education is the only source from which educational data can be obtained, whether published by the Ministry of Education or by any other regional or international organization.

Other Educational Publications (i.e., bulletins, journals, circulars, etc.)

- Statistical Yearbooks - Department of Educational Statistics, YAR;
- The Ministry of Education Yearbook about educational achievements;
- Directory of Education - prepared by the Department of General Education; and
- newspaper interviews.

EDUCATIONAL DATA MANAGEMENT SYSTEMS

YEMEN ARAB REPUBLIC

Summary and Conclusions

It is clear from the preceding remarks that educational data was not given due consideration by officials in the Ministry of Education until the second half of the 1970s. Before that time there was no central organization to undertake responsibility in connection with the compilation, publication,

and circulation of educational data. The fact that there were several sources dealing with educational data without proper coordination led to serious complications and problems such as:

- publication of contradictory educational data by several departments,
- a substantial increase in data collection and data analysis costs,
- several contradictions in educational terminologies used by different departments, and
- inability of decision- and policymakers to undertake proper actions for lack of accurate and dependable educational data.

To avoid such problems, the Ministry of Education issued an order giving the Department of Educational Statistics the sole right to collect, analyze, and publish educational data. To achieve this objective, the Ministry of Education has recently committed itself to providing the Department of Educational Statistics with qualified and well-trained specialists to enable it to fulfill the following objectives:

- to provide the government and the outside world with status reports on education in the YAR,
- to supply concerned authorities with accurate comparative statistical data on basis of which international organizations can be approached for financial and technical support, and

- to furnish local authorities with dependable data upon which future educational plans can be made.

This support for the Department of Educational Statistics creates an optimal atmosphere conducive to efficiency and high productivity. Consequently, better questionnaire models were designed in 1974 and further improved in 1979. The UNESCO Regional office in Sana'a is to be credited for its generous support for the Department of Educational Statistics. These orchestrated local and international efforts contributed significantly to the creation of more dependable educational data management systems in the YAR. Along these lines, the Ministry of Education has recently inaugurated a Center for the Development of Educational Research. Work is underway now to install computers in the Educational Projects Implementation Unit and in the new Center. These developments are likely to have an appreciable impact on Educational Data Management Systems in the YAR.

The second phase of this research will examine perceptions of educational decisionmakers in the YAR regarding the data available to them. A sample interview protocol for collecting such data is included in Appendix 2.

Appendix 1: Data Collection Form (Example)

Appendix 1

Ministry of Education

Data Collection Form (Example)

1. School name: _____
Village _____ City _____
District _____ Governorate _____

2. Type of school: _____
Boys _____ Girls _____ Mixed _____

3. No. of classes: _____

4. Teaching time:
Morning classes _____ Evening classes _____ Both _____

5. Student status and classification:
New _____ Repeater _____ Transferee _____

6. Data pertaining to students receiving maintenance allowance:
(i.e., food or money): Males: _____ Females: _____
Food-Financial support _____

Financial support only _____

Housing financial support _____

None of the above _____

7. Staff: Yemenis _____ Expatriates _____

Teachers _____ Administrators _____

Technicians _____ Employees _____

8. No. of teachers:

Yemenis _____ Expatriates _____

Tenured _____ On loan basis _____

On contract basis _____ On contract basis _____

Males _____ Males _____

Females _____ Females _____

9. Classification of expatriate teachers on basis of nationality:

Egypt _____ Palestine _____

The Sudan _____ Tunisia _____

Syria _____ Jordan _____

Saudi Arabia _____ Other nationalities _____

10. Yemeni teaching staff according to academic qualification:

Tenured _____ On contract basis _____

Yemeni teachers with university diploma:

Males _____ Females _____

Yemeni teachers with equivalent qualifications:

Tenured: Males _____ Females _____

On contract basis: Males _____ Females _____

11. Classification of teaching staff by subject matter:

Islamic education: Yemeni _____ Non-Yemeni _____

Arabic language: Yemeni _____ Non-Yemeni _____

English language: Yemeni _____ Non-Yemeni _____

Social Sciences: Yemeni _____ Non-Yemeni _____

Science (Biology, Chemistry and Physics):

Yemeni _____ Non-Yemeni _____

Mathematics: Yemeni _____ Non-Yemeni _____

12. Administrative Staff No.:

Principal _____ Supervisor(s) _____

Deputy Principal _____ Librarian(s) _____

Secretaries _____ Lab Technician(s) _____

Registrar _____

Employees: Males _____ Females _____

13. The school building(s):

Building material: Stone _____ Brick _____

Mud _____ Wood _____

Building condition:

In good condition _____

Needs repair _____

Not in good condition _____

Rooms no. and type per school building:

Classrooms No. _____

No. of rooms used for administrative purposes _____

No. of libraries _____

No. of laboratories _____

No. of warehouses _____

No. of restrooms _____

Power supply: Available _____ Not available _____

Water supply: Available _____ Not available _____

Water is delivered to school from other sources _____

Extracurricular activities:

Sports _____ Fine Arts _____ Music _____

Appendix 2: Interview Protocol for Regional Level C

Appendix 2

IEES

Education Management Information System

Yemen Arab Republic

Interview Protocol for Regional Level C

1. Does the regional office keep the following records? _____
Student enrollment records _____
Teacher records _____
Financial records _____
Other records (specify) _____

2. Who in the regional office keeps those records? _____
Statistics office _____
Student affairs _____
General Director's office _____
No one _____
Other office (specify) _____

3. Does the regional office have a standard data collection format for student and teacher information that is the same from year to year? (Check all that apply.)

The same data format is used every year _____

The data format is established by the _____

Ministry of Education _____

This office does not keep written records _____

The data format is established by the office _____

4. What types of data summaries (if any) are prepared at the regional office?
For example:

Student enrollment summaries _____

Cost summaries _____

Summaries of expenditures _____

Summaries of teacher load _____

Summaries of student performance _____

Other _____

No data summaries are prepared at the regional office level _____

5. Who in the regional office is responsible for preparing these data summaries?

Statistics office _____

Student Affairs office _____

General Directors office _____

Other office _____

6. What type of training and experience does this office have in summarizing data?

7. What type of information about the education system do you need to do your job effectively?

I don't need data about the education system

to do my job well

I need the following type of data:

(Describe the type of data and reasons for needing them)

8. How many times in the last three years have you received summaries or results back from the Ministry of Education that reports information about:

Number of times in the last three years:

School regions

The overall education system

9. In your judgment, how accurate is the education data that is currently available to you?

Extremely accurate

Very accurate

Somewhat accurate

Not at all accurate

10. What are the most likely causes of inaccurate data?

11. In your judgment, what is the most important thing that could be done to improve the quality of the information that is available to you about the education system?

12. In your experience, what types of information about the school is needed at the local level?

Student enrollment

Number of teachers

Number of schools _____

Number of classes _____

Financial data _____

13. In your judgment, how are education data actually used after they are analyzed in Yemen?

To determine teacher salaries _____

To determine school budget _____

To determine teacher assignment _____

To determine textbook allocation _____

No specific use is made of data _____

Other (specify) _____

14. To what extent do you believe that improving the quality of educational data is important, given other priorities within the Ministry?

Extremely important _____

Very important _____

Somewhat important _____

Not at all important _____

15. How important do you regard each of the following sources of information when you are making decisions about your region?

1 - extremely important

3 - somewhat important

2 - very important

4 - not at all important

Personal experience

Conversation with headmasters

Conversation with teachers

Conversation with the people in the MOE

Conversation with personal friends

Conversation with other people you respect

Reading previous statistical analyses about the educational system

Formal statistical analyses of the educational system

Other

16. How important do you think quantitative (**numeric**) data is in making decisions about the educational system?

Extremely important

Very important

Somewhat important

Not at all important

17. To what extent are your decisions about your region based on your analysis of school data?

Always _____

Most of the time _____

Sometimes _____

Seldom _____

Never _____

18. Who are the primary people you consult in making policy decisions that affect your region?

19. What could be done to improve the data collection procedures:

At the school level?

At the regional level?

At the national level?

20. In your judgment, what information should be in the format, but is not there now?

21. What type of verification do you use to ensure the quality of data when you receive it from the school?

22. Do you report the data as you receive it from schools or do you make some changes as required?

Report the data as received from schools _____

I make some changes as required _____

23. Does your office utilize the information?

Yes _____

No _____

If the answer is yes, then for what purpose?

Making decisions _____

Making local policy _____

Publishing educational
information about the region _____

As a record _____

24. In your judgment, what are the difficulties you face when you distribute or collect data from your schools?

Problems in distributing the data:

Difficulties in collecting the data:
