

**Yemen: Comprehensive Development Review**  
**Building Block: Education**

1/12/00  
 Draft

**I Basic Data and Trends**

**A. Introduction**

1. This building block covers the education sector, i.e., basic and secondary education, universities, and – for public expenditure – vocational training.

**B. Sector Indicators and Trends**

2. Although Yemen's education system has improved over the last two decades, much remains to be done to increase access, equity, and attainment. Education expenditure is high as a share of GDP, but outcomes and internal efficiency are low in comparison with other low-income countries. Yemen has the lowest adult literacy rate in MENA (44%), as well as low enrollment rates, poor school attendance, and the lowest average years of schooling. Throughout the 1990s, enrollment growth in basic education (6 years of primary and 3 years of preparatory school) has barely kept pace with the 3.5% population growth rate. The basic education gross enrollment rate (GER), 61% in 1998, has been stagnant for the last few years. With a significant number of

**Table 1. Basic Indicators in Education Sector**

	1994/95	1995/96	1996/97	1997/98
<b>Adult illiteracy rate (%)*</b>	56	-	-	-
Female	76	-	-	-
<b>Gross enrollment ratio (%)**</b>				
Basic -total	60	58	61	60
boys	82	81	84	80
girls	36	34	37	40
Secondary-total	27	27	29	29
boys	41	42	43	41
girls	10	11	13	15
Tertiary-total	8	8	8	7
<b>Girls' enrollment share of total (%)</b>				
Basic	28	28	29	32
Secondary	19	19	21	24
Tertiary	15	15	17	15
<b>Private share of total enrollment (%)</b>				
Basic			0.8	1.1
Secondary			0.3	0.9
<b>Student-teacher ratio***</b>				
Basic	32	28	26	26
Secondary	20	22	17	17
<b>Foreign teachers' share of total (%)</b>				
Basic	8	8	4	
Secondary	42	33	17	
<b>Student-class ratio</b>				
Basic	32	32	31	-
Secondary	39	40	37	-

Sources: Census 1994. CSO Statistical Year Books 1995-1997. Education Census 1997/98

Notes: (\*) Data are for 10 years and above.

(\*\*) GERs are calculated using population projections by World Bank staff based on Census 1994 and preliminary results of DHS 1997.

(\*\*\*) Teacher-student ratio are for MOE schools. Other indicators in basic and secondary education are for MOE and General Authority for Scientific Institutes (GASI)

overage children enrolled, the net enrollment rate (NER) for the 6–14 age group is only 55%, implying that about 2.1 million children in this age group are not in school. Without major changes in the education system, this number will grow to 3.7 million by 2020. Enrollment in the three-year secondary cycle has expanded, and the GER increased slightly to 29% in 1998 from 27% in 1994. Higher education enrollment began to increase significantly in 1995, and the GER was 8% in 1997.

3. The challenge facing Yemen is to increase equitable access to quality education in a financially sustainable way. The efficiency of education expenditure thus needs to increase. Although fertility rates are declining, the school age population will continue to grow rapidly for twenty years due to demographic momentum. Geographic and gender inequities are pronounced. Boys and urban children in general enjoy greater educational opportunities. While 71% of the population lives in rural areas, the basic education NER is only 48%, compared to 80% in urban areas. The pattern is similar in secondary education. Gender inequities are among the largest in the world: According to the 1997/98 Education Census, the girls basic and secondary NERs are only 38% and 10%, compared to 71% and 23% for boys. There are also large access disparities among Governorates.

4. Inequitable distribution of inputs, particularly teachers, causes an inequitable distribution of quality manifest in uneven educational attainment. While there are large variances between urban and rural areas, the overall quality of teachers is low and half of basic education teachers have only 1 to 2 years of post-basic education training. The low student:teacher ratio of 23:1 hides extreme urban:rural differences, and indicates significant inefficiencies in teacher deployment and recurrent expenditures. There is a shortage of female teachers, especially at the secondary level and in rural areas. Progression rates remain low in basic education, indicating low quality and efficiency. Performance is typically better in urban areas. As presented in more detail below, low efficiency contributes to inequities. The high unit cost of school construction and the low deployment of teachers to rural areas are important factors.

### **C. Role of Education in Yemen's Development and Poverty Reduction**

5. The critical role which education plays in the development of low-income countries is well established, ditto. in poverty reduction. Yemen's education sector strategy reflects this importance: highest priority is given to basic education – key for overall contribution to economic growth through an educated and productive labor force, and education as an objective in itself on equity grounds. There are also linkages with other sectors and elements of the country's development strategy: basic education is important for rural development and the introduction of technical progress in agriculture; it also is a key input to industrial productivity. Higher education needs to reflect the needs of the productive sectors with future growth potential and provide the capacity to introduce and apply technological change. Female education is an important factor in improving the health and nutrition status of children and in reducing fertility and improving maternal health. It is also a key factor in introducing social change, including the status of women in the Yemeni society.

### **D. Key Aspects of IDA's Education Knowledge Base**

6. Our project and sector work has provided information on the institutional set-up of the education sector: predominance of the public sector in providing and financing education; an emerging private sector of still poor quality in higher education; private sector provision of schools limited to large urban centers; limited NGO activity in mobilizing communities around education and in providing primary-level schooling. Vocational training: attempts at giving a more active role to the private sector are continuing, but have not been successful yet. There is no Ministry responsible for all education sub-sectors; sector policy is being formulated by several entities – this makes it difficult to achieve coherence.

7. The social aspects on which our sector and project work has concentrated is the gender impact of education – see above. The education sector also is a sector offering employment opportunities for women – we are promoting this under our project work.

8. The work done on the education policy environment includes policies for school location and efficient design standards. Deployment of teachers, O&M, and community participation in school construction and management. There are also linkage to macro-level policy reforms which the bank is pursuing, in particular civil service reform and decentralization. Education is the largest civilian employer in the public sector ; and MOE is being used as the provider of public sector employment for large numbers of secondary school graduates (this eases political pressure in the short run, but creates an unsustainable fiscal burden and contributes to an inefficient school system providing education of low quality). Deployment of teachers and administrators are examples gradual implementation of civil service reform in the education sector. As regards decentralization, MOE is preparing devolution of responsibilities to governorates and below; budgetary allocations need to follow, and clear accountability. Overall government efforts at decentralization could help.

9. Fiscal: issues for education are the high shares of GDP and the budget going to education, while outputs and outcomes are poor. There is a need to rationalize allocation of resources among subsectors (universities vs. basic education) and to increase efficiency. Underfunding of investment needs in basic education and of O&M at school level –different funding mechanism needed.

## II. International Comparisons

**Table 3. International Comparison of Education Expenditure (most recent available data)**

Country	GNP per capita 1996		Adult illiteracy rate 1994-1996* (5 and above)	GER-Primary/Basic** 1993-1997*	Public education expenditure as share (%) of, 1994-1996*	
	current US\$	current PPP US\$			public GNP	expenditure
Yemen	380	790	56	61	6.5	13.2
Egypt	1,080	2,860	49	100	6.6	16.7
Morocco	1,290	3,320	56	83	5.6	22.6
Jordan	1,650	3,570	8	94	6.3	16.6
Bangladesh	260	1,010	62	92	2.3	8.7
Kenya	320	1,130	22	85	5.4	18.8
Nepal	210	1,090	73	110	2.9	13.2
Malawi	210	690	44	135	5.7	15
Ethiopia	110	500	65	31	4.7	13
Burundi	210	590	65	70	2.8	-
Chad	240	880	52	55	2.2	-
Mali	310	710	69	32	2.2	-
Madagascar	240	900	-	72	-	-

Sources : WDI 1998, UNESCO 1998, World Bank database (EdStats), and MENA Education Strategy Paper 1998

Notes: (\*) Most recent available data during these years. Yemen data are for adults aged 10 and above.

(\*\*) Yemen, Jordan, and Kenya data are for more than 7 years of basic education.

Egypt, Morocco, Nepal, Bangladesh, Burundi, Chad, Congo, Ethiopia, Mali, Madagascar data are

for primary education of less than 7 years. For information, GER for primary (grades 1-6) was 72% in 1998.

10. Yemen data have improved greatly over the last 2 years with the availability of two comprehensive education surveys: data on students, teachers, facilities are becoming more

reliable and trends can be established. Poor population data, however, hamper the calculation of NERs; regional data are messy, because of creation of now governorates and districts.

### **III. Development Goals and Prospects**

11. Provision of basic education is central to the Government's poverty reduction goal. Yemen, like many countries, has signed up to international agreements to achieve Education for All, and not been able to meet the goal within the timeframe. The education sector strategy on which the Government and the Bank agreed last year, sets more realistic targets for the medium term. Our projections show that enrollment in basic education could be increased from 62% to 72% over 5 years, provided the investment budget is increased substantially; the recurrent cost implications would be sustainable if ongoing measures to rationalize staff deployment are carried through. The objectives for higher education are less clearly defined. A national debate has started recently on the subject; IDA sector work is supporting it.

### **IV Policy and Program Priorities**

**A. Policy and program options agreed** (including feasibility, sustainability, expected impact, risks)

12. The Government is addressing these educational challenges in several ways. It continues to give high priority to expanding basic education through provision of schools, improved teacher deployment, improved quality of the learning environment, and measures aimed at increasing female participation and reducing regional disparities. Aware that improved efficiency and sector management capacity are crucial to education advancement, the Government is implementing education expenditure reforms which reflect these strategies. At the same time, the Government has also initiated several sub-sector studies in order to develop a sound sector-wide strategy, including: a national strategy plan for girls' education, a primary education dropout study, and a University graduates' employment study and subsequent work to rationalize higher education.

13. **Renewed priority to basic education.** The initial impetus for education reform was the 1992 Education Law that provides nine years of free basic education and the 1994 Constitutional amendment which provides six years of compulsory basic education (primary education). In late 1994, the Government initiated an economic reform program that received support from IDA and the IMF and included a commitment to maintain GDP allocations to the education sector at 1995 levels. The share of education in total government expenditure increased from 13.2% in 1996 to 18.6% (budget) in 1998. However, despite a real 52% increase in allocation for basic and secondary education between 1994 and 1998, their share in education expenditures has declined from 90% to 77%, largely due to the unprecedented expansion of vocational and higher education. The Government, however, recently renewed its commitment to maintain high priority on basic education.

14. **Increased emphasis on girls and rural children.** The Government and communities are aware that Yemen needs more rural schools to increase enrollments, especially for the first six years of basic education. However, over two thirds of villages lack schools and 20% of existing schools lack buildings. Moreover, 65% of schools lack toilet facilities, which could discourage children, particularly girls from attending. To address these needs, the Government intends to expand the double-shift system for urban schools, complete all ongoing Government-financed school construction projects by 2000, protect school construction projects that are at least 50% completed from budget cuts, continue to gain experience with community-based approaches, and prepare the basis for an expanded investment program to start in 2001 through adopting more efficient construction design standards, improving school siting with community participation and school mapping, and improving the flow of funds and supervision.. The Basic Education Expansion Project under preparation is being designed to assist with implementing this element of the government strategy.

15. The MOE recognizes that increasing the share of girls who complete basic education cannot be achieved by simply building more co-educational primary schools. Therefore, it is providing separate classrooms for girls at the preparatory level, building girls' secondary schools to give parents added incentive to keep their daughters in basic education, providing more qualified female teachers for preparatory and secondary levels, and changing the physical design of schools to include sanitary facilities and boundary walls. Developing school clusters (a group of primary schools feeding into fewer preparatory schools and secondary schools) to provide support to primary education while developing a pool of girls who have completed secondary education (to become teachers) is a key feature of the MOE's strategy for expanding girls access to basic education. While girls will be exempt from a proposed 50% increase in school fees for basic and secondary education, scholarships for girls may also be required to offset the high costs of sending girls to school.

16. **Improved teacher selection, deployment, and performance.** The MOE's 1997/98 Education Census found that the existing pool of teachers is more than adequate to accommodate enrollment growth in basic education over the next decade. The MOE has taken the first step toward implementing the public sector hiring freeze, by applying an overall hiring freeze in school year 1998/99 and limiting new recruitment for school year 1999/2000 to identified shortages such as rural female teachers and some secondary school subject teachers. In addition, the MOE has maintained a policy requiring annual reductions in costly expatriate teachers. Together with universities, the MOE has also initiated an intake adjustment for the Faculty of Education in order to acquire future candidates trained for such needed subjects as mathematics and science.

17. The most significant challenge is providing more female teachers or head teachers in rural areas, at least for the medium term. Two recent actions are intended to encourage teachers to locate to rural areas: (i) the authorization to waive formal qualifications (a degree from the Faculty of Education) for rural female applicants as preparatory teachers, and (ii) the 1999 Teacher Law, which establishes incentives for teachers in remote rural postings. However, at the same time, this law established new scales for teachers' base salaries and new incentives and special allowances, intended to improve teachers performance, for example, improved attendance. The law, if implemented for the current number of teachers, could increase expenditures for MOE salaries by as much as 1% of GDP over the next two years, which could be unsustainable. The MOE is preparing implementation schedules for the Teacher Law to link the wage increase to improved teacher deployment and performance in a financially sustainable way.

18. **Improved quality of the learning environment.** The Government has realized that further investments will not yield results without appropriate inputs for non-salary recurrent expenditure, that is, operations and maintenance. The 1998 operations and maintenance budget for basic and secondary education, before a huge drop in oil prices, accounted for 12% of the MOE recurrent budget, of which 9% was allocated for textbooks and less than 1% for both in-service teacher training and physical maintenance. The Government plans to increase budget allocations for operations and maintenance, channel these funds to schools, increase accountability for the use of the funds, improve the allocation among governorates, and allow schools to retain the fees collected. The MOE has also initiated a study to estimate operations and maintenance requirements for basic education.

19. **Improved sector management.** Two reforms are underway. The first is the introduction of a sound information system with reliable data. The MOE completed two Education Census in 1997/98 and 1998/99. To utilize this data for policy formulation, implementation, and monitoring effectively, the MOE has begun renovating the education management information system at both

central and governorate levels. In addition, the MOE has begun to improve its financial management information system.

20. A second reform relates to more decentralized management. While the Government is considering a comprehensive program for devolution to local government, in 1997, the MOE has issued a ministerial directive for deconcentrating the ministry's responsibilities to the governorate level in order to streamline and strengthen administration. The 1997/98 Education Census and 1998 Civil Servants Census raised issues concerning over-staffing in the education sector. The MOE wage bill absorbs around 80% of the sub-sector budget, a significant proportion of which pays the 31,000 administrative staff. As a result, the MOE has undertaken measures to reduce staffing, particularly in the central ministry by eliminating line management and posting central staff to governorate-level offices. Other MOE decentralization measures would strengthen governorate- and district-level administration, establish school clusters, and increase community responsibility for maintaining and supervising schools.

### **B. Monitoring**

Through updates on PER and through project monitoring, esp. BEEP for basic education.

### **V. Bibliography**

Q:Pers:YemenCDR.doc