

ACCELERATING GIRLS' EDUCATION IN YEMEN: RETHINKING POLICIES IN TEACHER RECRUITMENT AND SCHOOL DISTRIBUTION

WORKING PAPER



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RECRUITMENT AND SCHOOL DISTRIBUTION**

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List of Abbreviations

CRC	Convention on the Rights of the Child
CSO	Central Statistical Office
EMIS	Education Management Information System
FTI	Fast Track Initiative
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
GoY	Government of Yemen
KFW	Kreditantsaft Fur Wiederaufbau
MDG	Millennium Development Goals
MoE	Ministry of Education
MTRF	Medium Term Results Framework
NBEDS	National Basic Education Development Strategy
WB	World Bank

Executive Summary

This policy paper focuses on the Millennium Development Goal 3: to promote gender equality and empower women. Yemen is the least developed country in the Middle East with a position as number 151 out of 177 nations on the Human Development Index and a GDP per capita of US\$ 631. Despite an increase in gross enrolment rates from 73% in 2000/01 to 76% in 2004/05, only 63% of girls were enrolled in 2004/05. The gender gap remains high and while it is being reduced, the rate of change is not enough to ensure that gender parity will be improved to less than 5 points by 2015.

Recent studies clearly show that the main causes for low enrolment and high drop-out rates for girls in Yemen are: 1) lack of accessibility 2) socio-cultural factors and 3) institutional factors. The 6.2% of GDP allocated to education is modest and with a constant increasing number of children to be provided with quality education, more investment is needed. To re-allocate the budget in favor of girls' education, the focus should be on the categories with the highest expenditure: salaries and infrastructure.

The causal link between recruitment of female teachers and girls' enrolment and retention is direct and very significant. Evidence also shows that parents are less likely to allow girls to go to school than boys if the distance to school is too far or keep them home after a certain age. Their decision to send girls to school is also influenced by the availability of girls-only schools. Data reflects disparity in availability of such schools with significant rural-urban differences.

The current policies on teachers' recruitment and deployment are not favourable for women, a conclusion supported by the limited number of female teachers especially in the rural areas. The recommendation is to establish specific targets for female teachers' recruitment, both in numbers as in geographical coverage. Policy options suggest to increase the number of female teachers include recommendations to adjust the minimum qualifications and admit secondary school graduates in entry positions amongst others. Although there has been recently a large investment in school construction, expansion and rehabilitation, the focus has not been specifically on girls' enrolment and retention and hence the figures for girls in the rural areas have stayed too low. Therefore, it is recommended to apply specifically targeted expansion with the aim to bring schools closer to girls.

The social and political environment needs to be targeted with advocacy efforts to promote education in general and girls' education in particular for girls' friendly policies in education to be effective. Also the progress towards gender sensitiveness both in the institutional environment and within a socio-cultural context is an important factor in the outcome of these policies. The final recommendation focuses on strengthening the Education Management Information System (EMIS) since this should support a deliberate result based management process that ultimately will contribute to achieving the related Millennium Development Goals.

Resumen Ejecutivo

Este documento de políticas se centra en el Objetivo de Desarrollo del Milenio 3: promover la igualdad entre los géneros y la autonomía de la mujer. Yemen es el país menos adelantado del Oriente Medio, ocupa la posición número 151 de un total de 177 países en el Índice de Desarrollo Humano y tiene un PIB per cápita de 631 dólares. A pesar de un aumento en las tasas brutas de matriculación desde un 73% en 2000/01 a un 76% en 2004/05, solamente un 63% de las niñas se matricularon en 2004/05. La brecha entre los géneros sigue siendo elevada y aunque se está reduciendo, la tasa de variación no es suficiente como para asegurar que la paridad entre los géneros mejore hasta llegar a menos de 5 puntos en 2015.

Los últimos estudios indican claramente que las principales causas de las bajas tasas de matriculación y las altas tasas de abandono escolar de las niñas de Yemen son: 1) falta de acceso 2) factores socioculturales y 3) factores institucionales. El 6,2% del PIB asignado a la educación es modesto y, debido al aumento constante del número de niños que deben recibir una educación de calidad, se necesita una mayor inversión. Para reasignar el presupuesto en favor de la educación de las niñas, es preciso centrarse en los salarios y la infraestructura.

El vínculo causal entre la contratación de maestras y la matriculación y retención de las niñas es directo y muy importante. Las pruebas indican también que hay menos posibilidades de que los progenitores permitan a las niñas ir a la escuela, en comparación con los niños, si la distancia de la escuela es excesiva, o las mantienen en el hogar después de determinada edad. En la decisión de enviar a las niñas a la escuela influye también la disponibilidad de escuelas exclusivas para niñas. Los datos reflejan una disparidad en la disponibilidad de estas escuelas, con notables diferencias entre los medios rurales y urbanos.

Las políticas vigentes sobre la contratación de maestros y su ubicación no favorece a las mujeres, una conclusión sustentada por el número limitado de maestras, especialmente en las zonas rurales. La recomendación es establecer metas específicas para la contratación de maestras, tanto en lo que se refiere a los números como a la cobertura geográfica. Las opciones en materia de políticas para aumentar el número de maestras incluyen recomendaciones destinadas a ajustar las calificaciones mínimas y admitir egresadas de la escuela secundaria para los puestos de entrada. Aunque recientemente se ha producido una amplia inversión en la construcción, ampliación y rehabilitación de las escuelas, no se ha centrado específicamente en la matriculación y retención de las niñas y por tanto las cifras sobre las niñas en las zonas rurales han permanecido demasiado bajas. Por tanto, se recomienda aplicar una ampliación específicamente dirigida a las niñas con el objetivo de que las escuelas estén más cerca de sus hogares.

Para que las políticas favorables a las niñas en la educación sean eficaces, es preciso dirigirse al entorno social y político por medio de actividades de promoción destinadas a fomentar la educación en general y la educación de las niñas en particular. Asimismo, el progreso hacia una sensibilidad en materia de género tanto en el entorno institucional como en el contexto sociocultural es un factor importante para el resultado de estas políticas. La recomendación final se centra en el fortalecimiento del Sistema de Gestión de la Información en la Educación, ya que debe prestar apoyo a un proceso deliberado de gestión basado en los resultados que en última instancia contribuya al logro de los Objetivos de Desarrollo del Milenio pertinentes.

Résumé Analytique

Ce rapport de politique générale est centré sur le troisième Objectif du Millénaire pour le développement : promouvoir l'égalité et l'autonomisation des femmes. Le Yémen est le pays le moins développé du Moyen-Orient, classé 151^e nation sur 177 dans l'indice du développement humain, avec un PIB par tête de 631 dollars américains. En dépit d'un accroissement des taux bruts de scolarisation, passés de 73 % en 2000/2001 à 76 % en 2004/2005, 63 % des filles seulement étaient scolarisées en 2004/2005. Le fossé entre les sexes demeure profond et, bien qu'il soit en passe de se combler, la vitesse à laquelle le changement s'opère ne suffit pas pour s'assurer que la parité des sexes sera ramenée à moins de 5 points d'ici à 2015.

Des études récentes montrent clairement que les causes principales du faible taux de scolarisation et des taux élevés d'abandon scolaire chez les filles du Yémen sont les suivantes : 1) le manque d'accessibilité 2) les facteurs socio-culturels et 3) les facteurs institutionnels. Les 6,2 % du PIB alloués à l'éducation sont modestes, et comme le nombre d'enfants qui doivent recevoir une éducation de qualité ne cesse d'augmenter, il faudra investir davantage. Pour procéder à une redistribution du budget en faveur de l'éducation des filles, l'accent devrait être mis sur les catégories aux dépenses les plus importantes : salaires et infrastructure.

La relation de cause à effet entre le recrutement d'enseignantes et la scolarisation des filles et leur rétention à l'école est directe et très significative. Il y a également des signes précis qui montrent que les parents enverront moins volontiers les filles à l'école que les garçons ou les garderont à la maison après un certain âge si l'école est trop éloignée. Leur décision d'envoyer les filles à l'école est aussi influencée par l'existence d'écoles de filles. Les données reflètent des disparités dans l'existence de ce type d'écoles, avec des différences significatives entre milieux urbains et ruraux.

Les politiques actuelles sur le recrutement et le déploiement des enseignants ne sont pas favorables aux femmes, conclusions confirmées par le nombre limité d'enseignantes surtout dans les régions rurales. Il est recommandé de définir des cibles spécifiques pour le recrutement de ces dernières, aussi bien en termes de nombre que de couverture géographique. Au nombre des possibilités suggérées pour accroître le nombre d'enseignantes, on recommande de réajuster le minimum de qualifications requis et d'accepter des diplômées du secondaire aux postes d'enseignantes débutantes. Bien qu'un investissement considérable ait été récemment effectué dans la construction, l'expansion et la restauration des écoles, on n'a pas mis expressément l'accent sur la scolarisation et la rétention des filles, et les effectifs de filles dans les zones rurales sont donc demeurés trop bas. C'est pourquoi il est recommandé de cibler spécifiquement les politiques d'expansion de façon à opérer un rapprochement entre l'école et les filles.

L'environnement social et politique doit être l'objet d'efforts de plaidoyer pour promouvoir l'éducation en général, et celle des filles en particulier, si l'on veut que les politiques visant à faire de l'école un univers convivial pour les filles soient efficaces. De plus, les progrès réalisés dans le sens d'une sensibilisation à la spécificité des sexes, à la fois dans l'environnement institutionnel et au sein du contexte socio-culturel, représentent un facteur important dans les résultats de ces politiques. La recommandation finale porte sur le renforcement du Système d'information sur la gestion de l'éducation, puisque celui-ci devrait être mis en place à l'appui d'un processus délibéré de gestion axée sur les résultats qui, en dernier lieu, contribuera à l'atteinte des Objectifs du Millénaire pour le développement qui y sont liés.

1. Introduction

The Republic of Yemen is the least developed country in the Middle East. Though the country has seen yearly growth rates between three and five percent in most years since the unification, it continues to be categorized as a “least developed country” with a position as number 151¹ out of 177 nations on the Human Development Index and a GDP per capita of US\$ 631. More than half the country’s population is considered below the poverty line and 16% of the population has Purchasing Power Parity (PPP) of less than \$1 a day. On the gender equity scale Yemen demonstrates large inequalities between men and women², ranking 121st out of 140 countries.

Yemen has signed almost all UN conventions on human rights, including the convention on the rights of the child and the convention on the elimination of all forms of discrimination against women, and aligned its national constitution with these commitments³. As acknowledged by the CRC Committee in 2005 in its third periodic report on Yemen, the country has undertaken various institutional and legal processes and adopted several national strategic plans and policies aimed at improving the status of women and children.

However, social and economic progress has not kept pace with these policy developments. Economic indicators have faltered in recent years and poverty has increased despite the discovery of oil in 1984. More than half of its 20 million⁴ population is under the age of 18 years and more than half of the children in the country live below the poverty line. There are increasing disparities in access to social services and income because of downward economic growth and high population growth (3.02%), rising inflation (13%), high unemployment (20-40%) lack of private sector development, and slow paced reform in public finances, fiscal decentralization and service delivery.

1.1. Problem Identification

The GoY has committed itself through a wide range of initiatives and instruments to improving gender parity and increasing girls’ enrolment and retention in basic education. However, these commitments have not yet resulted in a steady rise in the number of girls going to school and finishing their basic education. The gender gap remains high and while it is being reduced, the rate of change is not enough to ensure that gender parity will be improved to less than 5 points by 2015. The proportion of GDP allocated to education (6.2 percent) is modest and with a constant increasing number of children to be provided with quality education, more investment is needed. The donor pledges of 4.7 billion USD during a high-level meeting in London in November 2006 should be used to seriously invest in the country’s education. However, this paper does not focus on the size of the investment but looks at the strategic use and management of available resources.

1 Human Development Report 2005, UNDP, New York. The rank of 151 is out of a total of 177 countries.

2 Human Development Report 2005, UNDP, New York

3 Article 6 of the Yemen constitution states that “the State affirms that it shall abide by the Charter of the United Nations, the Universal declaration of Human Rights, the Charter of the Arab League and the recognized rules of international law in general”.

4 National Census 2004, Ministry of Planning and Central Statistical organisation, Sana’a 2005

1.2. Issues to be addressed

This paper looks at policy areas that have considerable potential to increase female enrolment and retention in Basic Education in Yemen. The authors contend that, using gender as major criteria, current policies can be improved and better educational outcomes can be achieved for girls. Policy areas are selected by taking into account the budget allocation within the educational sector. This results in an analysis of the policies related to teachers' recruitment and school distribution from a gender perspective. The analysis leads to recommendations on how to refocus the policies in these two areas. It is expected that a case can be made to the Ministry of Education of Yemen to take a serious look at its current policies to ensure that girl's education is made a priority.

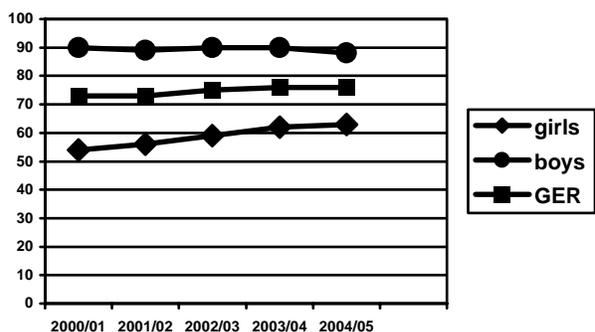
2. Problem Analysis

2.1. Situation of education in Yemen

Although the gross enrolment figures have been growing over the last 5 years, recent trends in primary education still point to slow progress⁵. As illustrated in figure 1 below, despite an increase in gross enrolment rates from 73% in 2000/01 to 76% in 2004/05, only 63% of girls were enrolled in 2004/05. While gender parity has improved (from 0.60 in 2001 to 0.72 in 2003)⁶ the pace of progress is insufficient for Yemen to achieve the relevant MDG by 2015, partly because the improvement in parity is also indicative of a slow rate of improvement in boys' enrolment.

Figure 1:

Gross enrolment rate for Basic Education of girls and boys between 2000 and 2005



Data in table 1 also indicate an increasing trend in the number of students per teacher as well as an increase in the number of students per classroom. It also shows that the percentage of the private sector share in enrolment has increased from 1.3% in 200/01 to 2.3% in 2004/05. There is clearly the need for further investment in school construction and teacher training and recruitment.

⁵ Concluding observations of the committee on the rights of the child: Yemen CRC/C/15/Add.266, June 2005 (Paragraph 62, 63)

⁶ PAFAM Family Health Survey 2003

Table 1: Changes in Indicators for Basic Education between 2000 and 2005

	2000/01	2001/02	2002/03	2003/04	2004/05
Gross Enrollment Rate (percent)					
Basic education	73	73	75	76	76
girls	54	56	59	62	63
boys	90	89	90	90	88
Girl's share in enrollment (percent)	36	37	38	39	40
Private sector share in enrollment (percent)	1.3	1.5	1.7	1.8	2.3
Student-teacher ratio	24.49	37.22	40	40	40
Student-class (section) ratio	29.1	30.5	31.0	31.8	32.0

Source: MOE enrollment/ CSO Census 2004 Population and WB Calculation

The National Basic Education Development Strategy (NBEDS) adopted by the Yemeni Government in 2002 is serving as a framework to achieve the goals of GER of 90% in 2010 and 95% in 2015, and reduce the gender gap to 11% by 2010. Basic education in Yemen consists of 9 compulsory years. It is followed by 3 years of general secondary education. This paper will mainly focus on basic education.

2.2. Girls' education

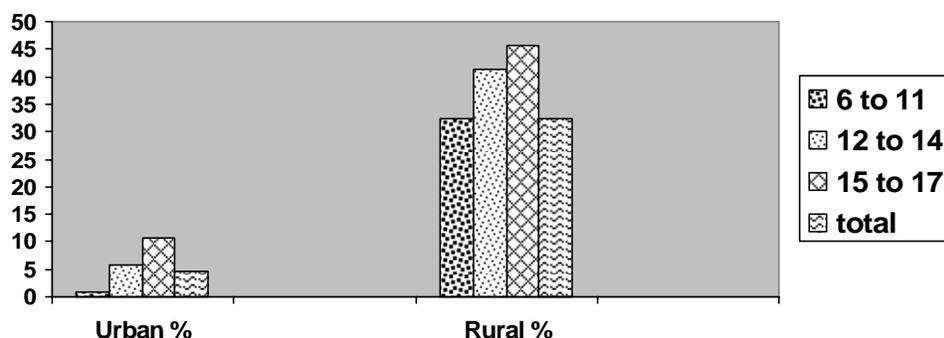
The gender gap in enrolment is lowest in the first year of basic education; in 2003/4, 43% of children enrolled in the first basic class were girls, which represents 76 girls for every 100 boys enrolled (there are 94 girls for 100 boys at birth and 96 women for 100 men in the total population of Yemen – calculated from 2004 National Census). However, the gap widened considerably as students' age increased. Overall, girls accounted for only 38.9% of children enrolled in basic education in 2004/05 (63 girls for every 100 boys), and by the ninth grade, only 44 girls were enrolled for every 100 boys⁷. This is partly due to the greater gap in first grade enrolment in the past but also reflects higher dropout rates by girls in higher grades.

The gender gap is also related to rural-urban differences, which can be seen in the following figure:

⁷ Based on MOE statistical yearbook 2003-2004 figures

Figure 2:

The gender gap in enrolment rates by age group between urban and rural areas in 2003



The 1990/91 Yemen Demographic Survey found that the average gender gap in urban areas was only 8.1% compared to 55.7% in rural areas which translate in a gender gap almost seven times larger in rural areas. Between 1990/91 and 2003 progress was made in rural areas as well as in urban areas. However, the table below shows that in 2003, the average gender gap in enrolment in rural areas (32.4%) was eight times higher than in urban areas (4.5%), decreasing slower than in urban areas. This demonstrates that although with a significant decrease of the gender gap in rural areas, this progress is still not keeping up with development in urban areas. Rural areas are thus the major challenges for *Education for All*.

Table 2: Male and female enrolment rates in different age groups

Age group	Urban (%)			Rural (%)		
	Male	Female	Gender gap	Male	Female	Gender gap
6-11	84.6	83.7	0.9	70.3	47.9	32.4
12-14	89.3	83.4	5.9	82.8	41.4	41.4
15-17	74.3	63.5	10.8	66.6	21.0	45.6
Total	83.4	78.9	4.5	72.6	40.2	32.4

Source PAPFAM date: 2003

With such low current enrolment rates, it is not surprising to note that illiteracy is high in Yemen, estimated at 47% of the population aged 10 and above. Both gender and urban-rural differences are significant: 84.8% of urban and 68.9% of rural males in this age group are literate, compared to only 59.5% of urban and 24.3% of rural females⁸.

⁸ Based on figures from the 2003 Family Health Survey cited in the MOE statistical yearbook 2003-2004

2.3. Analysis of low enrolment

Studies clearly show that the main causes for low enrolment and high drop-out rates for girls in Yemen are: 1) lack of accessibility, 2) socio-economic and cultural factors and 3) institutional factors.

1. A large part of Yemen's population, approximately 72%, live in rural areas while the remaining 28% live in cities and towns⁹. Since Yemen is a large country with millions of people scattered widely over often difficult terrain, the accessibility of schools is a major challenge in rural areas. In many cases children are required to walk over an hour to reach the nearest school. The distances become further in the higher grades as not all schools offer both primary and secondary education.

2. At the same time, cultural and social norms have a more defining influence in the rural areas. Cultural and traditional perceptions of women and girls as 'vulnerable' have led to a tradition of segregation between the sexes. This poses specific demands on the education system, such as schools suitable only if within culturally acceptable distances and locations, and the need for female teachers for girls after the fourth grade. Where co-education is considered unacceptable, the lack of separate classes for female students strongly effects girls' initial enrolment and, more significantly, the retention of female students. In these communities there is a clear lack of demand to have their girls enrolled in school¹⁰.

The criteria to take girls out of school or not enrol them at all vary among communities and generations. The census of 2004 shows that 47.4% of persons above 5 years¹¹ never enrolled in schools, and declared absence of schools and long distances as cause for non enrolment. In the rural areas 49.6% of the respondents fitted in this category while in the urban areas this percentage was 37.1%. Lack of female teachers for girls was cited by 4.6% of women and only 1.4% of men mentioned lack of male teachers as reason. Lack of interest of the family in education was clearly much more decisive for women: 23.4% while only 7.3% for men.

The 1997 Demographic Health Survey surveying women aged 15-24 found that 29% left school because they got married, 15% of women who dropped out of school reported that they had had enough of school, while 13% cited a dislike for school. The other important reasons for non-attendance were that the "family need[s] help" (10%), that "schools are not accessible" (9%), and that "parents refused their daughters continuing school" (9%). In addition, a number of studies have stated that education is not considered an essential asset for girls in their future, particularly in poor families. A review done by Ashuraey (1995) revealed that the main obstacles to the education of girls were insufficient infrastructure and a lack of female teachers¹². Other criteria included the lack of girl-friendly school management that encourages girls' activities, poor availability of separate toilet facilities in mixed schools and, in some areas of the country, the lack of separation of girls and boys into separate classrooms or shifts at age nine¹³. The last point

9 2004 Census, Central Statistical Organisation, Sana'a, issued 2006

10 The Education Situation of the Girl Child in Yemen: Promoting Girls' Education in order to Achieve Equal Opportunities by MoE, UNICEF and ADRA, 2006

11 Please note that this question covered people of all ages in Yemen and was not restricted to school-age respondents.

12 Ashuraey et al, Girls Education in Shabwah, The Netherlands Women's Development Programme, San'a 1995, pg11

13 Sulayman S. Al-Qudsi, 2003, Economics of Education Review 22 567-580, Hassan, R, 2005, The Education situation of the Girl Child in Yemen (pg 28, 30, 43), World Bank, 2006 Issues and options for secondary education in Yemen (pg 5, 6)

is supported by other research which has shown that co-education and the presence of male teachers (especially single men who are not local residents) for the instruction of adolescent girls is a key reason for many Middle Eastern parents to remove their daughters out of school at a later stage (Rihani 1993, Mehran 1995).

Data related to income indicate that there is a significant difference between urban and rural areas but not such a difference between poor and non-poor families in rural areas. The 1999 Poverty Monitoring Survey also indicated that the utilization of educational services does not depend on poverty (poor and non-poor families) but on the distance of families to the school, particularly in rural areas.

3. Institutional factors are generated by the way the education sector has been managed in the past. In the early years of educational expansion, planners based their policies on school construction, curricula development and school fees on the notion that what is appropriate for boys is also appropriate for girls, and that what is useful in urban areas will also be useful in rural areas. Only when the gender gap in girls' education became increasingly visible did management begin to realize the importance of differences in social and economic factors between urban and rural families, and that the ability of rural families to send their girls to school is governed by a different set of criteria and requirements.

The three areas generating most obstacles – lack of accessibility, socio-cultural factors and institutional factors – demonstrate clearly that both supply and demand factors are influencing the educational situation in Yemen. The following part of the paper will thus discuss the policies formulated by the government to address these issues.

2.4. Current Policies and Instruments

The efforts of the GoY-MoE have focused on improving the quality education, strengthening educational institutions, and increasing the accessibility of schools within this framework. According to the policy documents, increasing accessibility involves three areas: 1) a recently designed programme of household incentives at a pilot stage, 2) infrastructure of schools and classroom and 3) focus on school management and promotion of community participation. The earlier mentioned National Basic Education Development Strategy (NBEDS) and more concretely defined in the Medium Term Results Framework (MTRF) adopted in 2006 form the basis of these efforts. The approach of both the NBEDS as MTRF to close the gender gap has been to mainstream the gender component in the general policies.

An important institutional step has been the creation of a girls' education sector, which is headed by a Deputy Minister in 2005. The sector has a monitoring role which is in sync with the overall approach of the MoE of mainstreaming gender. Each sector, such as infrastructure, teachers' recruitment, training, curriculum etc. should, within their policy formulation integrate a focus on girls. It has been anticipated by the Government of Yemen that this strategy will effectively address the obstacles of girls' education as discussed above.

3. Research Justification

While Yemen is making some progress towards achieving gender parity by providing universal primary education, the rate of progress is not satisfactory. The overall governance issues and security imperatives, which are detailed below, might be used as justification not to increase the budgetary allocation (over and above the current allocation) in order to achieve Millennium Development Goal 3. However as mentioned earlier, in the light of the committed donor funding advocacy efforts should focus on augmenting the current budget for education.

At the same time it is also fair to conclude that given the reasonable level of investment in primary education, the reasons for Yemen's slow progress can be attributed to the fact that the current policies and their implementation are not sufficient in reaching the targets specified in the strategic frameworks. The answer, therefore, lies in evaluating and strategically shaping these policy interventions to optimize the current budgetary outlays and achieve maximum effectiveness and efficiency with a focus on gender parity. To do this it is important to study the current allocation practices within the sector to identify where most expenditure is located, and evaluate the policies of these areas for responsiveness towards achieving gender parity.

4. Budget Status and Allocation

4.1. Stagnation of investment in the sector

Investment in education in per capita GDP terms is considered to be satisfactory, especially compared to the budget for Public Health. The public expenditure on education in 2003 is 5.8% of GDP compared to the budget for the Ministry of Health, which is only 1.3% of GDP in 2004.

Table 3: Public Spending on Health and Education, 2000-2004

Year	2000			2003			2004		
	Rials (billions)	% of public expenditure	%of GDP	Rial s	% of public expenditure	% of GDP	Rials	% of public expenditure	% of GDP
Health	20.3	4.3	1.3	30. 5	4	1.4	32.1	3.7	1.3
Education	88.8	17.7	5.7	133. 3	17.2	6.2	147.9	17	5.8

Source: CCA –HR – October 2006 – Please note Rials are reflected in billions

However, at the same time the table below shows a trend of stagnation in the investment over the last few years¹⁴.

¹⁴ Please note that the slight differences in the table of educational expenditure is related to the difference in models used between the Worldbank and the Government and to the exchange rate.

Table 4: Public Education Expenditure, 1997-2006

Overall Public Education Expenditures	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total expenditures (current US\$ million)	356.6	417.4	431.9	549.2	602.8	699.9	726.8	805.	n/a	n/a
<i>As(%) of total public expenditures</i>	15.0	18.8	19.6	17.7	19.5	20.7	17.2	16.7	21.2	15.6
<i>As (%) of GDP</i>	5.2	6.7	5.7	5.8	6.2	6.8	6.4	6.2	n/a	n/a
<i>Current expenditures as (%) of total public current expend</i>	15.1	19.2	22.1	21.1	23.1	25.5	22.1	20.3	24.5	16.8
<i>as (%) of GDP</i>	4.2	5.3	5.0	5.2	5.4	5.9	5.3	5.0	n/a	n/a
<i>Capital expenditure As(%) of total public capital expenditures</i>	15.7	19.4	12.1	7.4	9.3	7.6	7.2	8.7	14.7	13.1
<i>as (%) of GDP</i>	1.0	1.4	0.7	0.5	0.6	0.5	0.8	0.9	n/a	n/a

The high rate of population growth, measured at 3% per year in the 2004 population census, means that approximately 640,000 children are ready to begin school every year¹⁵. The stagnation of investment has negative implications for the achievement of MDGs 2 and 3 as more children have to be served by the same level of funding. However, as it will become clear in further discussion, this aspect is not dealt with in this paper.

The causes of stagnation in investment in per capita GDP terms on primary education are complex and not very well documented. The most obvious cause, however, is poor governance, which has implications for all processes including planning and fiscal management of social sectors and allocation practices. Yemen is a fragile state¹⁶ and is ranked 16th on the Failed State Index¹⁷ (FSI 2006) putting it between Burundi (15th) and Sierra Leone (17th). Tribal relationships determine and shape the relatively weak democratic state institutions, which further distorts an already complex decision making process. The dominant culture of patronage has given rise to high levels of corruption¹⁸. The slow pace of economic and civil service reform, reluctance to decentralize government functions and low technical capacity at the local level means there is a chronically low absorption capacity in line ministries and local governments which limits investment.

15 Please note that this figure only reflects children of 6 years of age who should enrol in first grade. However, the real figure will be much higher since many children above 6 years will enrol in grade 1. The latest figures of all ages enrolling in grade 1 has been calculated by the MoE to be approximately 752,000. Also this figure is just an estimate since many adults and children in Yemen do not know their exact age due to very low birth registration (JAR, MoE document May 2006).

16 As classified by DFID: any country appearing in the World Bank CPIA listing at least once in 4th of 5th quintiles between 1999 and 2003.

17 Generated by Fund for Peace International, this includes 12 indicators. Among these Yemen does particularly badly on Ruling justly indicators 1-Mounting Demographic Pressures, 2 - Massive Movement of Refugees and IDPs, 3-Legacy of Vengeance - Seeking Group Grievance, 4-Chronic and Sustained Human Flight, 5-Uneven Economic Development along Group Lines, 6-Sharp and/or Severe Economic Decline, 7-Criminalization or Delegitimization of the State, 8-Progressive Deterioration of Public Services, 9-Widespread Violation of Human Rights, 10-Security Apparatus as "State within a State", 11-Rise of Factionalized Elites, 12-Intervention of Other States or External Actors

18 The World Bank recently cut its aid to Yemen by 34% citing corruption as a major problem

An unstable security situation, international pressure to be a part of war on terrorism and increasing challenge from Islamist parties to the secular state is a growing concern. This, in view of authorities, necessitates a high budget allocation to defence and internal security costing the country a high percentage of its GDP every year. This current approach does not leave much room for improving allocations to social sectors within the context of a resource poor country.

4.2. Allocation system

As in many other countries, the Ministry of Education in Yemen is not the only actor in planning and financing the educational sector. At the central level, besides the Ministry of Education, the Ministry of Planning and Ministry of Civil Service are important decision makers when it comes to the budget of the educational sector. In addition, the Ministry of Finance and Ministry of Local Administration are involved in the financing and service delivery of the education sector. At the governorate and district level, local authorities play a role in requesting, transferring and implementing the funding.

The education budget is divided in recurrent (85%) and capital (15%) expenditures (see the table below). Within the recurrent budget the salaries and wages make up for approximately 75%, while three other categories of Goods and Services, Maintenances and Transfer/support receive the remaining 25% of funding.

Table 5: MoE Central and Governorate Total Expenditures (Nominal/ in billion YR)

Year	2000	2001	2002	2003	2004	2005	2006
	Actual	Actual	Actual	Actual	Actual	Budget	Budget
Total	66.73	82.61	100.75	106.56	119.09	136.88	139.42
Recurrent	62.75 (94.0 %)	78.06 (94.5 %)	95.08 (94.4 %)	96.29 (90.4 %)	104.61 (87.8 %)	116.89 (85.4 %)	118.32 (84.9 %)
Salary and Wages	46.27	60.24	78.37	78.84	86.10	96.69	97.75
Goods and Services	7.72	8.44	7.60	7.56	7.55	7.82	8.00
Maintenance	0.18	0.22	0.16	0.17	0.16	0.25	0.26
Transfer/ Support	8.57	9.36	8.95	9.72	10.79	12.14	12.30
Capital	3.98 (6.0 %)	4.55 (5.5 %)	5.67 (5.6 %)	10.27 (9.6 %)	14.48 (12.2 %)	19.99 (14.6 %)	21.11 (15.1 %)

Source: Raw data of MoE based on 2004 census with calculation by World Bank 2006

The allocation for salaries accounts for 70% of the recurrent budget. Knowing that salary and wages are by far the dominant category of this component, one can draw the conclusion that changes in the budget allocation within that category will have a more significant effect than in any other category. Hence the policy related to teachers will be one focus of this paper.

Regarding the capital expenditure, one can observe that this funding has been largely invested in hardware, mainly the construction of schools and additional classrooms. Between 2000 and 2005, the number of schools increased by 10.2% from 13,078 to 14,417¹⁹. The largest portion of

¹⁹ Raw data MoE 2005

the external funding from the World Bank, UK/DFID, the Dutch Government, KFW, FTI and others focus on school construction, expansion and rehabilitation.

Based on the above it can be concluded that to re-allocate the budget in favour of girls' education, the focus should be on the categories with the highest expenditure: salaries and infrastructure. The following section will discuss the correlation between the policies in these areas: teachers' recruitment and school distribution. The results of the analysis will provide input for alternative policy recommendations.

5. Correlations Observed

Within the large number of interventions being implemented by the public sector and based on the information above, we have selected two areas in particular for a potentially large effect (correlation) on gender parity: i) number and availability of female teachers ii) an investment bias in the public education sector development against²⁰ rural areas where most poor and deprived population resides.

5.1. Correlation between female teachers and girls' enrolment and retention

Based on the reviewed literature and given the cultural and traditional norms in Yemen, one of the policy instruments that can clearly bring about a change in gender parity is the availability of female teachers. There is evidence from many countries to show a correlation between the number of female teachers and girls' enrolment. In countries where there are more or less equal numbers of male and female primary teachers, there is close to gender parity in student intake. In contrast, in those countries where only 20% of teachers are female, far more boys than girls enrol in school²¹.

Many Yemeni families would like to see their girls continue schooling beyond the age of 11, provided there are female teachers. From the family's point of view, female teachers provide a safe environment for girls' education, particularly for those aged 11 and above. At the same time, from the girls' perspectives, the work of female teachers inspires them and raises their hopes to become teachers themselves, as the teaching profession is approved and respected by the community. There have been a number of cases in Yemen where schools were built for girls in response to demands but which remained unused because families refused to send their girls due to the lack of female teachers. The study conducted by Ashuraey in 1995 showed that in 28% of cases in which girls withdrew from school, the father had made the decision because of a lack of female teachers²².

There are several reasons for focusing on this particular issue:

- i) Increasing the proportion of female teachers, an increase in the overall number of teachers can be achieved within the targets of existing strategic frameworks, such as the Basic Education Development Strategy.

20 This may not be active bias in policy but may be a consequence of difficult to access topography, scattered and thinly populated areas

21 Bista, M. B. (2004) A Review of Research Literature on Girls' Education in Nepal. Bangkok: UNESCO.

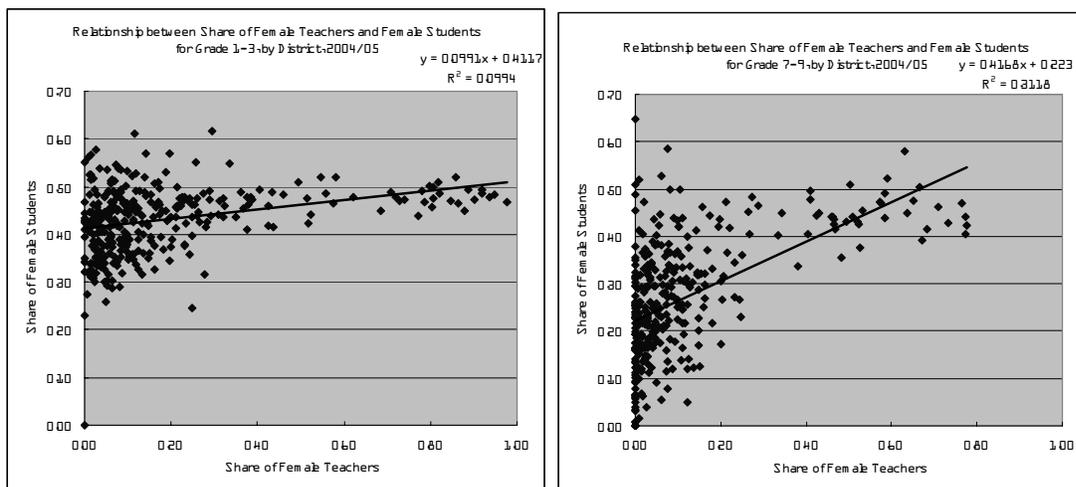
22 Ashuraey et al, Girls Education in Shabwah, The Netherlands Women's Development Programme, San'a 1995

- ii) Despite the availability and construction of additional schools, the limiting factor remains the availability of female teachers.
- iii) Traditional beliefs in Yemeni society prefer that girls from grade 6 upwards to be taught only by female teachers.
- iv) There is evidence to link availability of female teachers to girl's education as role models. Other studies point towards the positive effects that female teachers have over female students²³ and
- v) The fact that male teachers are seen as sometimes actively discriminatory towards girls.

This means that until an adequate number of female teachers is assured, it will not be possible to achieve universal female enrolment, even if all the other factors have been fully addressed.

The above is confirmed by research based on data from 226 districts (out of a total of 233 districts) in Yemen focusing on students clustered in three groups for grades 1-3, 4-6 and 7-9²⁴. This research proves that for higher grades, the relationship between female teachers and female students is very strong, and therefore the enrolment of female students is more subject to the availability of female teachers. When there is no female teacher, 40% of students are female at G1-3 level but only 22% in grades 7-9. The research results also show an exponential trend between the presence of female teachers and girls' enrolment as the students get older grade goes higher. The impact of increasing female teachers is thus the highest on female enrolment at grades 7-9.

Figure 3:
Relationship between share of female teachers and female students for grades 1-3 and 7-9



23 The Impact of Women teachers over girls education: Advocacy brief, UNESCO Bangkok March 2006

24 Original material based on MoE, raw data, analysis conducted by Miho Arimura, 2006

Feedback from focus group discussions with parents and teachers from a village in Dhamar Governorate also revealed that the presence of just one female teacher in a school had a positive impact on the entire village. Women said that they would put their daughters in school and also re-enrol some of their elder daughters²⁵. The availability of female teachers, therefore, has a major impact on girls' education, both in enrolment and above all on retention.

5.2. Correlation between more rural infrastructure development and Girls' enrolment

Better distribution of schools: Evidence shows that the lack of a school near the home raises more concern for the safety and security of girls than boys. This is especially true in the case of Yemen, a traditional tribal society where the concepts of family honour are linked directly to the women in the household. Parents are less likely to allow girls to go to school than boys if the distance to school is substantial in their view²⁶.

In Egypt, for example, for communities located within 1km of a school, the average enrolment rate is 94 per cent for boys and 74 per cent for girls. Where the distance is increased to 2km, boys' enrolment barely falls, while girls' enrolment drops by 10%²⁷. Another source studying the link between distances and school attendance in Arab countries, confirms that 'Students who trek a considerable distance to be part of the schooling process tend to drop out because of long distance and travel time increase the cost of schooling'²⁸. Also in Yemen findings confirm that distance from school is inversely related to the prospects of girls going to school, especially after puberty. Interviews held with parents and teachers in a small town (Yekar in Al Hadda district) as part of a study conducted in 1995, showed that the distance to the nearest preparatory and secondary school was a factor deterring parents from encouraging their daughters to continue school²⁹. The earlier mentioned data from the 2004 Census and the 1999 Poverty Monitoring Survey showed that the 47.5% of women from rural areas never enrolled in school was caused by the lack of nearby schools and 32% of girls dropped out of school due to same reason.

More girls-only schools: another factor that has to be taken into account when offering education and hence allocating schools is the availability of girls-only schools. International experience has shown that offering segregated education has a large impact on girls' retention. One clear example of this is Iran where at present girls comprised 49% of the total student population. A steep increase in enrolment and retention of girls has been observed from 1979 when the country started to offer wide availability of segregated education. This increase resulted in a net intake rate of 97.8% at primary school level, 90.3% at lower secondary level in 2000. No research of this kind has been done in Yemen but the fact that both countries have the same cultural understanding of this issue supports the assumption that segregated schooling would have a positive impact on the retention of girls³⁰. In 2002/03, 961,293 students were enrolled in segregated schools, of which almost half were girls, representing 26.6% of all female students

25 Basic Education for Girls in Yemen: Country Case study and Analysis, Mid-Decade Review of progress towards Education for All, 1996, Sharon Beatty (pg 25)

26 See http://www.unicef.org/teachers/girls_ed/barriers_02.htm

27 Oxfam Education Report, K Watkins, 2000

28 Family background, school enrolments and wastage: evidence from Arab countries by Sulayman S. Al-Qudsi

29 Basic Education for Girls in Yemen: Country case study and Analysis, Mid-decade Review of progress towards Education For All, Sharon Beatty, 1996 (pg 23)

30 The fact that almost all private schools in Yemen offer segregated education in higher grades (from 6 to 9 onwards) confirms that even in urban areas girls are expected to be taught in girls' only schools at a certain age.

(compared to only 19.4% of all male students). Almost half of all students in urban areas (44.5% of boys and 48.2% of girls) attended segregated schools compared to 9.8% of boys and 13.2% of girls in rural areas. These statistics reflect disparity in availability of such schools with significant rural-urban differences³¹.

It can therefore be safely assumed that an active bias towards more rural infrastructure development will improve the access of girls to school. Investing in rural education sector development, does not only look at the number of schools in rural versus urban areas, but especially takes into consideration the distances of the school from home and the availability of girls' only schools after a certain age.

6. Impact of Current Policies

6.1. Policy on teachers' recruitment and deployment

As discussed above, the presence of female teachers has a direct impact on the enrolment and especially retention of girls. However, although within the MoE priority areas, increase in recruitment of female teachers is identified as a main concern, the current recruitment policies have not resulted in a significant increase in female teachers.

Since 1999 the government began to adopt new strict recruitment policies aiming to minimize the volume of recruitment. Prior to this, all graduates from teacher colleges were recruited without any consideration of actual demand from the education sector. The new policy was meant to cope with the disparity in staffing which had caused unprecedented inflation in the state's administrative apparatus.³²

The government also decided to replace foreign teachers with local teachers (2003 –2004) and assigned the Ministry of Civil Service, Ministry of Education and the Ministry of Finance to implement this decision. It is important to note that although foreign teachers (mainly from Sudan, Egypt and Iraq) were an important source of teachers in the early nineties, their number has decreased considerably over the last 15 years.

The cabinet also took decisions aimed to improve the quality of teaching. Since 2005 the standard minimum qualification to become a teacher is a university degree, although exceptions to this rule are allowed in isolated areas where no other qualified teachers apply. Another related development was the decision to close the regional teachers' colleges and limit teachers' training to few major urban areas to ensure quality control. This decision in the cultural and geographic context of Yemen is discouraging rural female students from enrolling.

Finally, another important policy decision, issued as a decree in May 2006, is to link a teacher's post to a school instead of to a person. This shift has the potential for a major impact. Previously, teachers were allowed to take the post with them when changing residential areas. Since rural posts are not very popular they are often used as a way to enter the system. The perception linked to this practice was that especially female teachers in rural posts would move

31 The Education Situation of the Girl Child in Yemen; Promoting Girls' Education in order to achieve equal opportunities, Dr R. Hassan, 2005 (pg 28)

32 Gender budgeting within the MoE, Sana'a University 2006

away and take their posts with them when they get married. Although this perception has not been confirmed with research data, educational authorities in two governorates mention that this factor discouraged them from hiring female teachers and preference was given to male teachers³³. Since this decree is very recent, awareness of it is still low and the process of implementation has not yet commenced. Hence, the expected impact of this policy cannot be assessed for the moment; however, its proper implementation should be closely monitored.

In the following section, the above mentioned policy changes³⁴ will be analyzed to assess their impact on recruitment of female teachers and hence the trends in the percentage of female teachers.

National data from the Civil Service Department, the Ministry responsible for selecting and recruiting teachers, show that potential candidates for teacher's posts have increased significantly over the last two years in all categories, including female candidates with university degrees.

Table 6:

Number of applicants for teaching within the governmental schools years 2005-2006

Year of recruitment - registry request	2005				2006			
	Male	Female	% of Female	Total	Male	Female	% of Female	Total
Bachelor	13,945	13,784	50%	27,729	24,603	19,660	44%	44,263
License	1,108	1,186	52%	2,294	1,752	1,580	47%	3,332
Diploma	20,664	5,779	22%	26,443	23,058	6,781	23%	29,839
High School	1,437	4,721	77%	6,158	2,759	8,790	76%	11,549
Total	37,154	24,470	39%	62,624	52,172	36,811	41%	88,983

However, although the data demonstrate high numbers of potential female teachers in all categories, they do not identify the geographical distribution of these candidates.

Having explored the availability of potential female teachers, the next step is to look into how the actual recruitment of teachers occurs. Teachers are a substantial component of annual public service recruitment – in the range from 50-65% – and their recruitment involves a number of key ministries. Committees within the Ministry of Finance prepare ceilings for the state's general budget each year. On that basis, and the recruitment needs expressed by the Ministry of Education, Ministry of Civil Service starts the recruitment process, with support of the local councils. Within the system the reported bottleneck is the disparity between the needs expressed by district and governorate education officers and the allocation decided higher up. The decision

³³ Gender budgeting within the MoE, Sana'a University 2006

³⁴ Except the decree to link a teacher's post to school instead of to a person issued in May 2006 due to the early stages of implementation

makers justify their cuts by stating that numbers from the field are inflated while the District Education Officers report that they do not see the logic in the allocation decisions.

Within this process there are no special recruitment policies targeting female teachers. Men and women compete for the same posts and since there is no system in place that guarantees an objective selection process, the applicants with most influence and economic resources are likely to obtain the position³⁵. In Yemeni society where women are less empowered than men, female teachers will have less access to the networks and resources needed for recruitment³⁶. In addition, the cultural norms result in less flexibility for women to travel and work in remote places and to stay far from their family. It is not a custom in Yemen that a husband follows his wife to her workplace. Since no special incentives are given to overcome these obstacles, such as the provision of housing and extra financial incentives, it is much less likely that a female teacher will apply for a rural post compared to a male teacher.

The existing policy environment has resulted in a clear lack of presence of female teachers in rural areas. The latest data from the Ministry of Education indicates that female teachers account for only 22% of all teachers and the shortage of female teachers is particularly acute in rural areas where less than one-third (30%) of female teachers work. In 2003/04, only 6% of rural secondary teachers, and only about 10% of teachers in combined basic-secondary schools were female.

During 2005-06, only 9% of teachers currently involved in teaching in rural basic education schools are female (including those who are on permanent posts, contractual posts or who are lent to work as volunteers). The proportion is even lower in secondary schools (5.2%) and combined basic/secondary schools (3.6%). The situation is well illustrated by the sex ratios calculated in table 7 below:

Table 7: Gender distribution of staff working in schools^a (2003/04)

Position	urban schools			rural schools			all schools			
	male	female	% fem	male	female	% fem	male	female	total	% fem
Director	1,115	504	31	8,397	136	1.6	9,512	640	10,152	6.3
Deputy	1,729	1,233	42	5,173	198	3.7	6,902	1,431	8,333	17.1
Teachers	27,153	27,892	51	109,394	9,829	8.2	136,547	37,721	174,268	21.7
Qualified support	3,585	3,564	50	4,036	286	6.6	7,621	3,850	11,471	33
Workers	720	1,167	62	948	225	19.1	1,668	1,392	3,060	45
Others (watchmen, etc)	976	31	3	1,576	13	0.8	2,552	44	2,596	1.7
Total	35,278	34,391	49	129,524	10,687	7.6	164,802	45,078	209,880	21

^a These data cover MOE and private sector basic and secondary schools

** # of Male for 100 Female

Source: MOE Statistical Yearbook 2003/2004 Table 14. ³⁷

35 Gender budgeting paper, University of Sana'a 2006

36 It is important to note that, in the Yemeni culture, female professionals are often represented by their male family members. In addition to the sex of the teacher, his or her socio-economic background has a large impact on access to professional opportunities.

37 There are some minor internal discrepancies concerning classification of urban female staff as directors, deputies and qualified support categories in this table.

Every year approximately 2,434 new teachers are recruited, representing about 1.4% of the total teacher labour force which employs around 177,000 teachers³⁸. However, the trend in recruitment has shown that newly recruited women represented a larger share over the last 2 years. The table below also shows that there has been an increase of female teachers in rural areas (+13%) but the number of female teachers is still very low: only 9% of all rural teachers during 2004-2005 school year were female. On the other side there were more female than male teachers in urban areas during the last 2 school years while the overall proportion of female teachers in the country is still at 22%. This table shows that there have been much more female teachers recruited during the last two years (+ 3,303); however rural schools got only 18.6% of the recruited teachers, while rural population counts 72% of the total population of Yemen and has a wide gap to fulfil before reaching a situation of equality.

Table 8:

Recruitment of teachers segregated rural-urban and male-female between 2000 to 2005

Year	Total				Urban				Rural			
	Total	Female	Male	% fem	Total	Female	Male	% fem	Total	Female	Male	% fem
2000/ 2001	174,039	35,750	138,289	21%	56,097	26,511	29,586	47%	117,942	9,239	108,703	8%
2001/ 2002	166,725	33,439	133,286	20%								
2002/ 2003	171,396	36,025	135,371	21%	54,776	26,915	27,861	49%	116,620	9,110	107,510	8%
2003/ 2004	174,538	37,737	136,801	22%	55,113	27,900	27,213	51%	119,425	9,837	109,588	8%
2004/ 2005	176,972	39,328	137,644	22%	55,730	28,876	26,854	52%	121,242	10,452	110,790	9%
% ↑	1.7%	10%	-0.4%		0.7%	9%	9.2%		2.8%	13%	1.9%	

Source: Raw data from MoE 2006

A recent study by the Department of Gender Studies in Sana'a University demonstrated an interesting trend related to the recruitment of female teachers. In 2005, 11% of the newly recruited teachers were candidates with a high school diploma but in 2006 this share has decreased to 8%. These teachers are almost solely recruited in governorates with many isolated areas. This data is supported by anecdotal evidence demonstrating that high school graduates recruitment is restricted only to rural areas³⁹.

38 MoE Raw Data from disk

39 One exceptions is 5 high school degree teachers employed in the slums areas in Aden

The data also indicate a steep increase of women among the teachers recruited with a high school diploma, with 2005 and 2006 showing that the vast majority of recruits with high school credentials were female. This observed trend has to be understood in the Yemeni cultural context, which limits female mobility. The combination of the above-mentioned factors clearly suggests that a steady channel for female teachers in rural areas is by employing high school graduates from the same locality. This also implies that there are female secondary school graduates available in the rural areas that are able and willing to work, a finding confirmed by anecdotal evidence from the field⁴⁰.

After having analyzed all the available information, one can conclude that the current policies are not encouraging female teacher recruitment in rural areas. Although a large number of potential female teachers are present in the country, evidence shows that their locations are mainly restricted to the large urban centres. However, the national recruitment policies do not target women particularly and thus fail to offer incentives to overcome the obstacles related to taking up a rural teaching job. In addition, the current policy that a university degree is required to teach decreases the possibilities that women from rural areas are able to teach in their local schools. At the same time, there has been a slight increase in female recruitment, although it should be noted that with these percentages it will take many years to get a balance between male and female teachers in the rural areas.

6.2. Policy on school distances in rural areas

During the period of 2000-2005, the number of schools in Yemen increased by 10.2% from (13,078 to 14,417). For the analysis in this paper it is important to look at two areas which make a difference for girls' enrolment and retention: how the increase in number of schools affects the distances to school and how the increase in number of schools improves access to girls-only schools in higher grades. The table below shows that the increase of newly constructed schools is higher in urban than in rural areas. Although not reflected in this table, at the same time, it is important to note that the expansion of existing schools is also higher in urban areas than in rural areas.

Table 9: Number of Schools

School year	Rural Schools	Urban Schools	Total
2000-2001	11,558	1,520	13,078
2001-2002	11,645	1,517	13,162
2002-2003	11,865	1,560	13,425
2003-2004	12,292	1,662	13,954
2004-2005	12,663	1,754	14,417
Percentage increase	9.6%	15.4%	10.2%

Source: Raw data MoE 2005

In 2002/03, 961,293 students were enrolled in segregated schools, of which almost half were girls, representing 26.6% of all female students (compared to only 19.4% of all male students). Almost half of all students in urban areas (44.5% of boys and 48.2% of girls) attended segregated

⁴⁰ Sources are UNICEF experience in 5 governorates and interviews with education authorities in two others.

schools compared to 9.8% of boys and 13.2% of girls in rural areas. These statistics reflects differences in availability of such schools with significant rural-urban differences⁴¹.

Yemen has had some significant changes regarding the issue of co-education versus separated schools and the academic year 2004/2005 saw a particularly big development. Among the total number of schools, the number of boys' schools decreased by 48% (from 1,788 to 927), while girls' schools increased by 52% (from 812 to 1,236) and co-education schools increased by 17% (from 10,478 to 12,254). The result is that in 2004/05, girls' schools exceeded boys' schools by 33%. In the rural areas, there was a 71% increase in girls' schools compared to a 58% decrease in boys' schools.

Within this context it is important to note that most rural schools offering secondary classes combine basic and secondary grades. This is confirmed by the table below, which shows that although a large number of schools exist in rural areas, these are still mainly co-educational. Understanding that availability of separate schools for girls has a larger impact on girls retention, the number of only-girls school is still insufficient compared to the actual need.

Table 10: Number of schools according to rural-urban and co-ed, female only, male only

School year	Urban				Rural				Total			
	Males	Females	Co-ed	Total	Male	Female	Co-ed	Total	Male	Female	Co-ed	Total
2001/2000	389	320	811	1,520	1,399	492	9,667	11,558	1,788	812	10,478	13,078
2002/2001	380	311	826	1,517	1,209	499	9,937	11,645	1,589	810	10,763	13,162
2003/2002	385	322	853	1,560	1,051	528	10,286	11,865	1,436	850	11,139	13,425
2004/2003	408	348	906	1,662	911	538	10,843	12,292	1,319	886	11,749	13,954
2004/2005	343	395	1,016	1,754	584	841	11,238	12,663	927	1,236	12,254	14,417

Source: Raw data MoE 2005

The changes in the distances from home to schools are very difficult to track since no available data measures this particular aspect. However, based on the still much lower enrolment of girls in the rural areas compared to boys' enrolment it can be assumed that the obstacle of large distances as an obstacle for school enrolment has not yet been overcome.

7. Policy Options

The data analysis above has shown that in Yemen it is critical to adopt gender-sensitive policies in teachers' recruitment and school allocation to achieve the goals set for basic education.

41 The Education Situation of the Girl Child in Yemen; Promoting Girls' Education in order to achieve equal opportunities, Dr R. Hassan, 2005 (pg 28)

7.1. Increase female teachers

Increasing female enrolment rate is crucial for eliminating gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015 as committed to through *MDG3* and *Education for All*. And increased girls' retention in Yemen largely depends on the availability and recruitment of female teachers especially in rural areas. However, none of the current policies includes specific objectives to increase the number of female teachers in rural areas. Women from rural areas have difficulties in cultural and financial restrictions to continue their education in teachers' colleges and universities. At the same time, there are no special incentives given to female university graduates from urban areas to take up a teaching job in a rural environment.

In this context it is highly recommended to set specific quantified targets for the recruitment of female teachers in rural areas. Target setting could be progressive: for example, the appointment of at least one female teacher in each rural school could precede the achievement of a given percentage of female teachers actually assigned in rural schools. These targets should be monitored annually at national level as well as in different geographic areas and a transparent appropriate action should follow quickly if the targets are not met. In order to be able to achieve those targets, it is crucial to remove the obstacles in the recruitment of female teachers in the rural areas and to strengthen opportunities and incentives for female teachers to work in rural areas.

7.1.1 A compromise must be found to overcome the obstacle that the minimum qualification of a university degree required to become a teacher poses for female incumbents from rural areas. For instance as we have seen, in the most isolated areas of Yemen female secondary school graduates from the same rural areas are identified and selected to teach especially lower grades. This scenario has to be expanded and improved by focusing on teacher preparation and training. On-the-job training complemented by self-teaching materials, in-service professional support and use of media, especially radio would provide the secondary school graduates with the necessary basic teaching skills and improve their knowledge and confidence level to later teach higher grades.

In order to ensure the sustainability of this policy option, it is imperative that the current educational system and the community at large recognize and accept female secondary school graduates, having completed their in-service education, as formal school teachers. Presently, the Ministry of Civil Service is not accepting secondary school graduates as teachers on a consistent basis although there are rare exceptions to the rule through direct interventions by the Minister of Education. In the existing political and administrative context it is likely that a legal amendment has to be adopted by the parliament. Groundwork for this was laid during the Joint Annual Review of the Education Section in May 2006 when a recommendation to have female secondary graduates work as teacher's assistants was approved. The adopted text (*Aide Memoire*) also includes the need for a decree to counter the current decree on the requirement of

a university degree as the minimum qualification. The recruitment of teachers at a lower level of education should contribute to a budgetary reallocation towards staff training and supervision⁴².

7.1.2 The other area of potential change is to fine-tune the process of allocating teachers to schools. ‘It would be better for the state’s general budget and Local Councils budget to shift from recruitment guided by financial ceilings to recruitment classification to pave the way for budget engendering⁴³. At the moment there is evidence of a gap between the decision makers in the civil service sector on one hand and the expressed needs of the local councils on the other hand. The process of decentralization although initiated has not yet been implemented convincingly enough to make a difference on the ground. For example, the practice that Ministry of Finance still determines the financial ceilings for new recruitments is limiting the response capacity of the local council⁴⁴. By setting-up clear-cut criteria for teachers’ allocations specified to rural and urban schools, decisions on priorities within a governorate should become more transparent and focussed on gender sensitive necessities.

7.1.3 The current policies should also allow more space for innovation regarding incentives, special allowances and variety of positions. One obstacle behind deploying more university-educated female teachers in rural areas is the social restrictions they face in finding housing and the lack of freedom of movement they encounter especially if they are single. Although salaries for rural posts have a 35USD compensation, this counts for posts that are close to the main road as well as for posts in very remote areas, for male and females and thus does not achieve the intended objective. Therefore, policies should be formulated that provide schools and local authorities with the flexibility and finances to respond to obvious requirements for female teachers, such as special residency and transportation facilities. An impact and feasibility study should be conducted with a special focus on other incentives including financial incentives, to attract and thus increase the number of female teachers.

7.1.4 Finally, with an annual recruitment rate of 1.4% and the low proportion of female teachers in the rural areas (9%), it will take a very long time before change within the teachers’ corps is noticeable. Therefore to give the education sector a real boost of female presence, other ways have to be explored. In addition to the formal teaching scheme, there should be room for more flexible scenarios at school level, from hiring female assistant teachers to including female volunteers on the staff. Understanding that teachers’ salaries in Yemen vary between 110 USD to 175 USD a month depending on the educational background, limited investment can already generate a payment for an assistant teacher. By providing more direct funds to the schools and having the Local Councils play an active role in the supply of education in their community, these resources can be used for creative solutions⁴⁵.

42 Rough calculations show that an in-service training of 16 weeks for secondary school graduates would cost around 4,300USD per student. The training would mainly focus on general knowledge acquisition and teaching skills. Specialized training on subject knowledge will be much more difficult to provide in a decentralized manner and hence be much more costly (source: GTZ Sana’a 2007)

43 Gender budgeting, 2006 University of Sana’a

44 Gender budgeting study, 2006 University of Sana’a

45 Very recent there have been some piloting initiatives that directly fund the recruitment of teachers (through school transfer or other mechanisms). Besides a JICA project which has limited teacher contracting directly to schools, the initiatives of UNICEF and the World Bank targeting around 700 female rural teachers are in their design stage and will be implemented starting school year 2007-2008. These incentives might benefit of closer monitoring which might not be the case with public funds.

7.2. Bring schools closer to girls

7.2.1 As has been proven, distance matters for parents when deciding to send their daughters to school. Although there has been a large investment in school construction, expansion and rehabilitation, the focus has not been specifically on girls' enrolment and retention and hence the figures for girls in the rural areas have stayed too low. Therefore, it is recommended to apply specifically targeted expansion. There should be a serious effort to map schools and relate those maps to districts surveys. This would allow identifying the needs more objectively. For example, the selection of sites for new secondary schools villages where girls are enrolled in Grades 7-9 but lack convenient and safe access to a secondary school should be prioritized.

7.2.2 Bringing schools closer to the community in order to reduce commuting distances and strengthen ties between schooling and the community implies a drastic change of the traditional MoE approach to education. This change includes measures that allow smaller viable school sizes that work through multi-grade teaching, multi-subject teaching and alternate year entry. This may mean smaller schools and class sizes, only catering for grade 1 to 3, offsetting to some extent efficiency gains sought elsewhere in the country. The related concept of satellite school is being tried in Yemen on a small scale and has shown some encouraging results.

7.2.3 For infrastructural efforts to be responsive to the community motivation for education, it is also recommended that more construction investment is allocated for community schools. In Yemen the concept of community school refers to a very basic school structure built by the community and serviced by the educational sector. Having a decent building will sustain the demand of the community and encourage school retention.

7.2.4 It has been observed that although only-girls schools have expanded significantly in especially the last academic year, the supply is still not sufficient to meet the current demand in rural areas. Utilizing double shift schooling (girls in the morning and boys in the afternoon) in boys' and mixed schools might increase girls' enrolment rate without increasing the need to build new schools for girls. This is especially important for higher grades (grade 6 and above) where families are reluctant to send their girls to schools with boys. Since it is within the prerogative of the school principals to decide the use of school buildings, a policy instituting double shift schooling in areas with high female drop out rates might be a feasible solution to the problem. The issue of teachers related to segregated education has to be looked at closely. However, the fact that presently the governor has the authorization to allow teachers to work on a double shift demonstrates the ability to come up with several scenarios at a decentralized level.

7.2.5 Another important strategic option that has been often very successful in other countries is the opening of residential schools for older girls (11-15) in some of the areas where the requirement is greatest. Such schools combine reassurance to parents about the whereabouts and security of their children with the provision of safe residential facilities for both girls and teachers, particularly important for the latter given the circumstances mentioned in the paper. This approach had been implemented mainly for boys in the southern part of the country. But now for economic and political reasons most of these facilities are no longer available. This option may be difficult to implement for girls' schooling in the Yemeni context where their mobility is restricted by social and cultural rules. For this to be a viable option certain provisions need to be considered and explored.

7.3. Create an education and gender supportive environment

In this study, the different obstacles for girls' education were grouped into three categories: lack of accessibility, socio-economic and cultural factors and thirdly, institutional factors. This paper is proposing policy recommendations that focus on traditional supply factors: increased accessibility through female teachers and appropriate distribution of schools. This logic was followed since the selection of areas for analysis and hence policy recommendations were justified by the size of budget allocated to these areas.

7.3.1 As mentioned in the beginning of the paper the education sector has a share of 6.2% of the GDP. Although the allocation is reasonable, it is also apparent that even this budget level is at present not sufficient to have all children, both boys and girls complete basic education. Part of the response is to adopt more targeted policies and make them effective and efficient. Also, there is no doubt that the educational system itself needs to be streamlined and needs to function more costs-effectively. At the same time, it is a fact that once the children are reached, the Yemen society has to keep up with the increased number of school-going children⁴⁶, resulting in increased expenses for school construction/ maintenance⁴⁷ and teachers. If Yemen really is committed to providing every child with quality education a clear budgetary answer should be formulated and investment in education should increase. For this to be politically feasible, the MoE and its partners should advocate at the highest political level for Education to become a real national priority for which decision makers will be politically and socially accountable.

In addition to budget and policy recommendations, it is understood that the level of success depends on how the policies are implemented by the relevant institutions and how the result is received by the community. The progress towards gender sensitiveness both in the institutional environment and within a socio-cultural context is an important factor in the outcome of the policies.

7.3.2 The numbers of female staff working in the Ministry of Education is as low as 9%. Hence an obvious recommendation that facilitates the suggested policies is the establishment of a quota for female staff in the Ministry of Education and preferably the other relevant Ministries as well. There should be a target of at least 30% women working for the Ministry. Their ability to carry out their tasks should be facilitated through appropriate administrative rules and systems e.g. provision of transportation and socially-appropriate schedules⁴⁸.

7.3.3 Bringing change in gender perception in a society is very complex and any result cannot be solely contributed to one set of efforts. However, in addition to improving the supply side, there should be strong attention on reducing social and cultural constraints on enrolment of rural girls and hence making the communities more receptive to gender sensitive policies. Within this context, the recommendation is to expand the social awareness mandate of the Minister of Education and increase the responsibility of the local councils in the education situation of their community. The objective is to convince parents of the value of education for girls, and promote community-based initiatives and investments to enrol and retain girls in school. For example, a

⁴⁶ Also keeping in mind the large population growth of 3.02%

⁴⁷ Eventually when reasonable school coverage has achieved, the budget will shift more from school construction to rehabilitation and maintenance.

⁴⁸ In Yemen socially-appropriate schedules avoid overnight stays or paying for chaperones if an overnight stay is necessary.

policy that links the supply and demand side is the introduction of stipends and other financial incentives for girls to compensate the direct and opportunity costs of attendance. Yemen has just started a small pilot project on conditional cash transfer for girls and should explore the outcomes in such experiences in other countries, such as in India where parents receive on-off financial support once the girl has graduated from secondary school.

7.4. Strengthen the Education Management Information System (EMIS)

The formulation of this paper was seriously challenged by the lack of an effective EMIS in Yemen. Such system should support a deliberate result based management process leading to the achievement of set outputs and outcomes that ultimately will contribute to achieving the related Millennium Development Goals. For the moment it seems that an extensive but unutilized amount of raw data is available in the Ministry of Education. The capacity of MoE for data analysis, especially those related to budget allocation and utilization should be further strengthened to support the implementation of the proposed policy recommendations.

8. Conclusion

The commitment of the Government of Yemen to increasing girls' enrolment and retention in basic education and improving gender parity should be supported by policies that effectively result into a steady rise in the number of girls going to school and completing their basic education.

Different policy recommendations specifically promoting the recruitment of female teachers for rural areas, the distribution and construction of schools according to gender-sensitive criteria, an increased value of the education of girls in the society, and the improvement of the education management information system are reviewed in this paper. A further analysis of the listed policy options from the social acceptability and political sensitivity perspectives should be completed. A more in-depth economic and financial analysis that will look at the unit cost of policy interventions, their cost effectiveness, and efficiency will be possible only if the required data is made available by the EMIS.

This analysis should ultimately support advocacy efforts for the adoption and reallocation of resources towards these policy options by the Government. Budget allocation and swift policy implementation will confirm its commitment to the timely achievement of MDG3 and universal basic education.

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