Girls and Schools in Sub-Saharan Africa

From Analysis to Action

Adhiambo Odaga and Ward Heneveld
<table>
<thead>
<tr>
<th>No.</th>
<th>Author(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>214</td>
<td>Bonfiglioli</td>
<td>Agro-pastoralism in Chad as a Strategy for Survival: An Essay on the Relationship between Anthropology and Statistics</td>
</tr>
<tr>
<td>215</td>
<td>Umali</td>
<td>Irrigation-Induced Salinity: A Growing Problem for Development and the Environment</td>
</tr>
<tr>
<td>216</td>
<td>Carr</td>
<td>Improving Cash Crops in Africa: Factors Influencing the Productivity of Cotton, Coffee, and Tea Grown by Smallholders</td>
</tr>
<tr>
<td>217</td>
<td>Antholt</td>
<td>Getting Ready for the Twenty-First Century: Technical Change and Institutional Modernization in Agriculture</td>
</tr>
<tr>
<td>218</td>
<td>Mohan, editor</td>
<td>Bibliography of Publications: Technical Department, Africa Region, July 1987 to December 1992</td>
</tr>
<tr>
<td>219</td>
<td>Cercone</td>
<td>Alcohol-Related Problems as an Obstacle to the Development of Human Capital: Issues and Policy Options</td>
</tr>
<tr>
<td>220</td>
<td>Kingsley, Ferguson, Bower, and Dice</td>
<td>Managing Urban Environmental Quality in Asia</td>
</tr>
<tr>
<td>221</td>
<td>Srivastava, Tamboli, English, Lal, and Stewart</td>
<td>Conserving Soil Moisture and Fertility in the Warm Seasonally Dry Tropics</td>
</tr>
<tr>
<td>222</td>
<td>Selvaratnam</td>
<td>Innovations in Higher Education: Singapore at the Competitive Edge</td>
</tr>
<tr>
<td>223</td>
<td>Piotrow, Treiman, Rimon, Yun, and Lozare</td>
<td>Strategies for Family Planning Promotion</td>
</tr>
<tr>
<td>224</td>
<td>Midgley</td>
<td>Urban Transport in Asia: An Operational Agenda for the 1990s</td>
</tr>
<tr>
<td>225</td>
<td>Dia</td>
<td>A Governance Approach to Civil Service Reform in Sub-Saharan Africa</td>
</tr>
<tr>
<td>226</td>
<td>Bindlish, Evenson, and Gbetibouo</td>
<td>Evaluation of T&amp;V-Based Extension in Burkina Faso</td>
</tr>
<tr>
<td>227</td>
<td>Cook, editor</td>
<td>involuntary Resettlement in Africa: Selected Papers from a Conference on Environment and Settlement Issues in Africa</td>
</tr>
<tr>
<td>228</td>
<td>Webster and Charap</td>
<td>The Emergence of Private Sector Manufacturing in St. Petersburg: A Survey of Firms</td>
</tr>
<tr>
<td>229</td>
<td>Webster</td>
<td>The Emergence of Private Sector Manufacturing in Hungary: A Survey of Firms</td>
</tr>
<tr>
<td>230</td>
<td>Webster and Swanson</td>
<td>The Emergence of Private Sector Manufacturing in the Former Czech and Slovak Federal Republic: A Survey of Firms</td>
</tr>
<tr>
<td>231</td>
<td>Elisa, Barghouti, Gillham, and Al-Saffy</td>
<td>Cotton Production Prospects for the Decade to 2005: A Global Overview</td>
</tr>
<tr>
<td>232</td>
<td>Creighton, Transport and Economic Performance</td>
<td>A Survey of Developing Countries</td>
</tr>
<tr>
<td>233</td>
<td>Frederiksen, Berkoff, and Barber</td>
<td>Principles and Practices for Dealing with Water Resources Issues</td>
</tr>
<tr>
<td>234</td>
<td>Archondo-Callao and Faiz</td>
<td>Estimating Vehicle Operating Costs</td>
</tr>
<tr>
<td>235</td>
<td>Claessens</td>
<td>Risk Management in Developing Countries</td>
</tr>
<tr>
<td>236</td>
<td>Bennett and Goldberg</td>
<td>Providing Enterprise Development and Financial Services to Women: A Decade of Bank Experience in Asia</td>
</tr>
<tr>
<td>237</td>
<td>Webster</td>
<td>The Emergence of Private Sector Manufacturing in Poland: A Survey of Firms</td>
</tr>
<tr>
<td>238</td>
<td>Heath</td>
<td>Land Rights in Côte d’Ivoire: Survey and Prospects for Project Intervention</td>
</tr>
<tr>
<td>239</td>
<td>Kirmani and Rangeley</td>
<td>International Inland Waters: Concepts for a More Active World Bank Role</td>
</tr>
<tr>
<td>240</td>
<td>Ahmed</td>
<td>Renewable Energy Technologies: A Review of the Status and Costs of Selected Technologies</td>
</tr>
<tr>
<td>241</td>
<td>Webster</td>
<td>Newly Privatized Russian Enterprises</td>
</tr>
<tr>
<td>242</td>
<td>Barnes, Openshaw, Smith, and van der Plas</td>
<td>What Makes People Cook with Improved Biomass Stoves? A Comparative International Review of Stove Programs</td>
</tr>
<tr>
<td>243</td>
<td>Menke and Fazzari</td>
<td>Improving Electric Power Utility Efficiency: Issues and Recommendations</td>
</tr>
<tr>
<td>244</td>
<td>Liebenthal, Mathur, and Wade</td>
<td>Solar Energy: Lessons from the Pacific Island Experience</td>
</tr>
<tr>
<td>245</td>
<td>Klein</td>
<td>External Debt Management: An Introduction</td>
</tr>
<tr>
<td>247</td>
<td>Ameur</td>
<td>Agricultural Extension: A Step beyond the Next Step</td>
</tr>
<tr>
<td>248</td>
<td>Malhotra, Koening, and Sinsukprasert</td>
<td>A Survey of Asia’s Energy Prices</td>
</tr>
<tr>
<td>249</td>
<td>Le Moigné, Easter, Ochs, and Giltner</td>
<td>Water Policy and Water Markets: Selected Papers and Proceedings from the World Bank’s Annual Irrigation and Drainage Seminar, Annapolis, Maryland, December 8-10, 1992</td>
</tr>
<tr>
<td>250</td>
<td>Rangeley, Thiam, Andersen, and Lyle</td>
<td>International River Basin Organizations in Sub-Saharan Africa</td>
</tr>
<tr>
<td>251</td>
<td>Sharma, Rietbergen, Heimo, and Patel</td>
<td>A Strategy for the Forest Sector in Sub-Saharan Africa</td>
</tr>
</tbody>
</table>

(List continues on the inside back cover)
Girls and schools in Sub-Saharan Africa: from analysis to action
/ Adhiambo Odaga, Ward Heneveld.

Includes bibliographical references.


I. Heneveld, Ward. II. Title. III. Series.

Library of Congress Cataloging-in-Publication Data

Odaga, Adhiambo, 1962--

Girls and schools in Sub-Saharan Africa: from analysis to action
/ Adhiambo Odaga, Ward Heneveld.

p. cm. — (World Bank technical paper, ISSN 0253-7494 ; no. 298)

Includes bibliographical references.


I. Heneveld, Ward. II. Title. III. Series.

Library of Congress Cataloging-in-Publication Data

Odaga, Adhiambo, 1962--

Girls and schools in Sub-Saharan Africa: from analysis to action
/ Adhiambo Odaga, Ward Heneveld.

p. cm. — (World Bank technical paper, ISSN 0253-7494 ; no. 298)

Includes bibliographical references.


I. Heneveld, Ward. II. Title. III. Series.

Library of Congress Cataloging-in-Publication Data

Odaga, Adhiambo, 1962--

Girls and schools in Sub-Saharan Africa: from analysis to action
/ Adhiambo Odaga, Ward Heneveld.

p. cm. — (World Bank technical paper, ISSN 0253-7494 ; no. 298)

Includes bibliographical references.


I. Heneveld, Ward. II. Title. III. Series.

Library of Congress Cataloging-in-Publication Data

Odaga, Adhiambo, 1962--

Girls and schools in Sub-Saharan Africa: from analysis to action
/ Adhiambo Odaga, Ward Heneveld.

p. cm. — (World Bank technical paper, ISSN 0253-7494 ; no. 298)

Includes bibliographical references.


I. Heneveld, Ward. II. Title. III. Series.

Library of Congress Cataloging-in-Publication Data

Odaga, Adhiambo, 1962--

Girls and schools in Sub-Saharan Africa: from analysis to action
/ Adhiambo Odaga, Ward Heneveld.

p. cm. — (World Bank technical paper, ISSN 0253-7494 ; no. 298)

Includes bibliographical references.


I. Heneveld, Ward. II. Title. III. Series.

Library of Congress Cataloging-in-Publication Data

Odaga, Adhiambo, 1962--

Girls and schools in Sub-Saharan Africa: from analysis to action
/ Adhiambo Odaga, Ward Heneveld.

p. cm. — (World Bank technical paper, ISSN 0253-7494 ; no. 298)

Includes bibliographical references.


I. Heneveld, Ward. II. Title. III. Series.

Library of Congress Cataloging-in-Publication Data

Odaga, Adhiambo, 1962--

Girls and schools in Sub-Saharan Africa: from analysis to action
/ Adhiambo Odaga, Ward Heneveld.

p. cm. — (World Bank technical paper, ISSN 0253-7494 ; no. 298)

Includes bibliographical references.


I. Heneveld, Ward. II. Title. III. Series.

Library of Congress Cataloging-in-Publication Data

Odaga, Adhiambo, 1962--

Girls and schools in Sub-Saharan Africa: from analysis to action
/ Adhiambo Odaga, Ward Heneveld.

p. cm. — (World Bank technical paper, ISSN 0253-7494 ; no. 298)

Includes bibliographical references.


I. Heneveld, Ward. II. Title. III. Series.

Library of Congress Cataloging-in-Publication Data

Odaga, Adhiambo, 1962--

Girls and schools in Sub-Saharan Africa: from analysis to action
/ Adhiambo Odaga, Ward Heneveld.

p. cm. — (World Bank technical paper, ISSN 0253-7494 ; no. 298)

Includes bibliographical references.


I. Heneveld, Ward. II. Title. III. Series.

Library of Congress Cataloging-in-Publication Data

Odaga, Adhiambo, 1962--

Girls and schools in Sub-Saharan Africa: from analysis to action
/ Adhiambo Odaga, Ward Heneveld.

p. cm. — (World Bank technical paper, ISSN 0253-7494 ; no. 298)

Includes bibliographical references.


I. Heneveld, Ward. II. Title. III. Series.

Library of Congress Cataloging-in-Publication Data

Odaga, Adhiambo, 1962--
AFRICA TECHNICAL DEPARTMENT PAPERS

Technical Paper Series

No. 122 Dressing, Support for Microenterprises: Lessons for Sub-Saharan Africa
No. 130 Kiss, editor, Living with Wildlife: Wildlife Resource Management with Local Participation in Africa
No. 132 Murphy, Casley, and Curry, Farmers' Estimations as a Source of Production Data: Methodological Guidelines for Cereals in Africa
No. 135 Walshe, Grindle, Nell, and Bachmann, Dairy Development in Sub-Saharan Africa: A Study of Issues and Options
No. 141 Riverson, Gaviria, and Thriscutt, Rural Roads in Sub-Saharan Africa: Lessons from World Bank Experience
No. 142 Kiss and Meerman, Integrated Pest Management and African Agriculture
No. 143 Grut, Gray, and Egli, Forest Pricing and Concession Policies: Managing the High Forests of West and Central Africa
No. 161 Riverson and Carapetis, Intermediate Means of Transport in Sub-Saharan Africa: Its Potential for Improving Rural Travel and Transport
No. 165 Kellaghan and Greaney, Using Examinations to Improve Education: A Study in Fourteen African Countries
No. 179 Speirs and Olsen, Indigenous Integrated Farming Systems in the Sahel
No. 181 Mining Unit, Industry and Energy Division, Strategy for African Mining
No. 188 Silverman, Public Sector Decentralization: Economic Policy and Sector Investment Programs
No. 197 Zymelman, editor, Assessing Engineering Education in Sub-Saharan Africa
No. 199 Hussi, Murphy, Lindberg, and Brenneman, The Development of Cooperatives and Other Rural Organizations: The Role of the World Bank
No. 202 Cleaver, A Strategy to Develop Agriculture in Sub-Saharan Africa and a Focus for the World Bank
No. 208 Bindlish and Evenson, Evaluation of the Performance of T&V Extension in Kenya
No. 209 Keith, Property Tax: A Practical Manual for Anglophone Africa
No. 214 Bonfiglioli, Agro-pastoralism in Chad as a Strategy for Survival: An Essay on the Relationship between Anthropology and Statistics
No. 218 Mohan, editor, Bibliography of Publications: Technical Department, Africa Region—July 1987 to December 1992
No. 225 Dia, A Governance Approach to Civil Service Reform in Sub-Saharan Africa
No. 226 Bindlish, Evenson, and Gbetibouo, Evaluation of T&V-Based Extension in Burkina Faso
No. 232 Creightney, Transport and Economic Performance: A Survey of Developing Countries
No. 238 Heath, Land Rights in Côte d'Ivoire: Survey and Prospects for Project Intervention
No. 250 Rangeley, Thiarn, Andersen, and Lyle, International River Basin Organizations in Sub-Saharan Africa
No. 251 Sharma, Rietbergen, Claude R. Heimo, and Jyoti Patel, A Strategy for the Forest Sector in Sub-Saharan Africa
No. 255 Mohan, editor, Bibliography of Publications: Technical Department, Africa Region, July 1987 to April 1994
No. 277 Convery, Applying Environmental Economics in Africa
No. 301 Mohan, editor, Bibliography of Publications: Technical Department, Africa Region, July 1987 to April 1995
Discussion Paper Series

No. 82 Psacharopoulos, Why Educational Policies Can Fail: An Overview of Selected African Experiences
No. 83 Craig, Comparative African Experiences in Implementing Educational Policies
No. 84 Kiros, Implementing Educational Policies in Ethiopia
No. 85 Eshiwani, Implementing Educational Policies in Kenya
No. 86 Galabawa, Implementing Educational Policies in Tanzania
No. 87 Thelejani, Implementing Educational Policies in Lesotho
No. 88 Magalula, Implementing Educational Policies in Swaziland
No. 89 Odaet, Implementing Educational Policies in Uganda
No. 90 Achola, Implementing Educational Policies in Zambia
No. 91 Maravanyika, Implementing Educational Policies in Zimbabwe
No. 132 Fuller and Habte, editors, Adjusting Educational Policies: Conserving Resources while Raising School Quality
No. 147 Jaeger, The Effects of Economic Policies on African Agriculture: From Past Harm to Future Hope
No. 175 Shanmugaratnam, Vedeld, Massige, and Bovin, Resource Management and Pastoral Institution Building in the West African Sahel
No. 181 Lamboray and Elmendorf, Combating AIDS and Other Sexually Transmitted Diseases in Africa: A Review of the World Bank's Agenda for Action
No. 184 Spurling, Pee, Mkwanya, and Nkwanyana, Agricultural Research in Southern Africa: A Framework for Action
No. 211 Weijenberg, Dioné, Fuchs-Carsch, Kéré, and Lefort, Revitalizing Agricultural Research in the Sahel: A Proposed Framework for Action
No. 219 Thillairajah, Development of Rural Financial Markets in Sub-Saharan Africa
No. 230 Saito, Raising the Productivity of Women Farmers in Sub-Saharan Africa
No. 231 Bagchee, Agricultural Extension in Africa
No. 234 Keck, Sharma, and Feder, Population Growth, Shifting Cultivation, and Unsustainable Agricultural Development: A Case Study in Madagascar
No. 242 Biggs, Moody, van Leeuwen, and White, Africa Can Compete! Export Opportunities and Challenges for Garments and Home Products in the U.S. Market
No. 251 Aryeetey, Baah-Nuakoh, Duggleby, Hettige, and Steel, Supply and Demand for Finance of Small Enterprises in Ghana
No. 258 Duncan and Muvandi, The Rate of Fertility Decline in Botswana and Zimbabwe
No. 259 Scribner, Policies Affecting Fertility and Contraceptive Use: An Assessment of Twelve Sub-Saharan Countries
No. 260 Popiel, Financial Systems in Sub-Saharan Africa: A Comparative Study
No. 265 Gopal and Marc, World Bank-Financed Projects with Community Participation: Procurement and Disbursement Issues
No. 266 Venkatesan, Seed Systems in Sub-Saharan Africa: Issues and Options
No. 280 Cleaver and Donovan, Agriculture, Poverty, and Policy Reform in Sub-Saharan Africa
Table of Contents

FOREWORD                                                          vii

ABSTRACT                                                          ix

ACKNOWLEDGMENTS                                                    xi

I INTRODUCTION                                                     1

BACKGROUND                                                        1
  Objectives and Organization of the Study                          3

II FACTORS AFFECTING FEMALE SCHOOLING IN SUB-SAHARAN AFRICA:
  A LITERATURE REVIEW                                               4

  Introduction                                                     4

THE STATUS OF FEMALE EDUCATION                                     8
  Access                                                           8
  Persistence                                                      11
  Literacy                                                         12
  Access to employment                                            13
  Summary                                                          14

SOCIOECONOMIC AND SOCIOCULTURAL FACTORS INFLUENCING FEMALE
PARTICIPATION IN EDUCATION                                         15
  Socioeconomic Factors                                           15
  Direct costs of schooling                                       15
  The high opportunity costs of girls' education                 17
  Parental/familial perceptions of the irrelevance of schooling for girls  19
  Sociocultural factors                                           22
  Initiations                                                      22
  Religion                                                        24
  Summary                                                          27

FACTORS RELATED TO THE SCHOOL ENVIRONMENT                          28
  The learning environment                                        28
  Type of school                                                   28
  Distance to school                                              30
  Teacher attitudes and pedagogy                                  31
  Curricula, textbooks and other learning materials               33
  Sexual harassment                                               34
  Pregnancy                                                       36
  Girls' expectations and motivation                              41
  Summary                                                          44

POLITICAL AND INSTITUTIONAL FACTORS                                45
  The financing and management of the education sector             45
  The limited effect of women in development initiatives           47
  Political instability                                           48
  Summary                                                          48

CONCLUSION                                                        48
Female education is recognized as one of the critical pathways to promote social and economic development. Evidence from Sub-Saharan Africa indicates that although there have been improvements in female participation, girls’ and women’s access to education remains limited in several countries across the region. It is evident that, once enrolled, girls are more likely to drop out of school than boys; that their academic achievement is poorer than that of boys and that few girls opt for math and science-related fields of study. While the multiple, interrelated school, socioeconomic, sociocultural, political and institutional factors that constrain female education are increasingly well-documented, much remains to be done to design and implement programs to accelerate female education in the region.

In recent years, African governments, non-governmental organizations and donors have been working together to develop programs that address the problems of improving girls’ educational participation. This study is part of the Africa Technical Department’s contribution to this effort. Based on a review of recent literature, it provides a summary of the state of knowledge of the factors constraining girls’ schooling in Sub-Saharan Africa. It also presents an outline of how this accumulated knowledge can be used in practical ways to facilitate the design of programs to accelerate female participation in education in the region. The study also discusses some promising international experiences and strategies to enhance girls’ schooling.
ABSTRACT

This study presents a summary of the major research findings on the factors that constrain girls’ schooling in Sub-Saharan Africa. The factors are discussed under three categories; sociocultural and socioeconomic factors, factors related to the school environment, and political and institutional factors. To help bridge the gap between the increasingly rich and detailed analyses of the problems of female education in the region and the dearth of actions to address them, the study provides an outline of an approach on how this knowledge may be used to design interventions targeted at reducing the gender gap in education access, attainment and achievement in the region. It also offers an overview of some of the promising strategies, programs and projects being tried to promote girls’ educational participation in various parts of the developing world.
ACKNOWLEDGMENTS

This paper is the product of a Regional Study on female education in Sub-Saharan Africa conducted by the Human Resources Division of the Africa Technical Department (AFTHR). It draws on AFTHR Technical Notes 7 and 15 and has been made possible by funding support from the Norwegian Government Trust Fund. The authors have benefited from the comments and suggestions of colleagues inside and outside the Bank. We are particularly grateful to Danielle Chopak, Peg Sutton, Katherine Namuddu, Sheila Wamahi, Mercy Tembon, Diane Van Belle Prouty, Ladipo Adamelokun, Jan Leno, Gibwa Kajubi, Michael Bamberger and Paud Murphy who took time to review earlier drafts of the paper. P.C. Mohan and Leo Demesmaker edited this paper. Elizabeth Acul and Donna McGreevy prepared the document for publication. The final product is however, the sole responsibility of the authors.
BACKGROUND

Despite the tremendous gains made by African governments over the past thirty years in increasing access to education, greater challenges lie ahead if the goal of Education For All is to be achieved. Fiscal crises, civil strife, political instability, drought, endemic poverty and persistently high demographic pressures on the education systems have resulted in a stagnation in enrollments and a decline in quality (World Bank 1988). Other pressing educational concerns include poor student participation, high drop-out and repetition levels, low academic achievement, and low teacher morale and attendance. Perhaps the most daunting challenge is that of promoting female education. This must be a central concern in efforts to improve learning achievements, school effectiveness, teacher motivation, education management, and issues of resource mobilization and reallocation of expenditure. Such initiatives provide an important opportunity for creating an enabling environment where girls and other disadvantaged groups\(^1\) can participate fully. The objectives of this report are to inform practitioners and policymakers of the major research findings concerning factors constraining female schooling in Sub-Saharan Africa; to identify gaps in knowledge and understanding of these factors; and, most important, to outline how the accumulated knowledge can be used to implement policies and programs that promote female participation in education.

The cross-cultural study of women's educational outcomes has increased tremendously since the 1970s. Analyses have revealed particularly wide gender gaps in enrollments in South Asia, the Middle East and North Africa, and Sub-Saharan Africa. Scholarship in this field has clearly identified the central problems of female education as access to school, attainment in years of schooling, academic achievement and accomplishment after school. All these problems are interrelated and influenced by in- and out-of-school factors. Increases in enrollments but continuing poor educational outcomes for females have been documented, and the multiple supply and demand reasons for persistent gender differentials in educational outcomes have been well elucidated (Brock and Cammish 1991, Colclough and Lewin 1993, Herz and others 1991,

\(^1\) While within countries gender inequity in educational outcomes is the most significant issue, significant regional and ethnic biases need to be addressed.


Studies have recently investigated the nature of interventions aimed at promoting female education and have catalogued promising approaches. The identified 'best practices' aim to improve both the supply of education for girls and the demand for girls' education. On the supply-side, these practices include, building more schools, improving the school environment, training more female teachers, and removing gender bias in textbooks, and, on the demand-side, launching information campaigns to promote the benefits of female education and providing stipends and scholarships as incentives to parents. The literature indicates that, to date, initiatives to raise the participation of girls in education have generally been implemented on a small-scale with little direct government involvement. It is difficult to assess their cost-effectiveness. Although a growing number of examples from Sub-Saharan Africa are documented, most of the examples cited are from South Asia, the Middle East and China (Herz and others 1991, King and Hill 1991, Tietjen and Prather 1991, UNICEF 1991, Wyatt 1991).

Despite this growing body of knowledge about the importance of female education and the complex problems of female education, few significant programs and projects have been implemented to reduce the gender gap in education, particularly in Sub-Saharan Africa, and those implemented have had limited impact. This can be explained by the apparent lack of political will on the part of governments and by the difficulty in pushing forward a program for girls in the midst of more urgent crises in African educational systems and in the economy at large. In

\(^2\) Economic benefits tend to be measured in relation to the formal labour market where women's participation is minimal. Women's contributions through domestic production and reproduction and the informal sector are not fully appreciated.
Sub-Saharan Africa, the research and policy dialogues on girls' education remain marginal to the broader debates on how to address the crises in educational systems in the region, even though the discussions of girls' education offer similar strategies for addressing the region's general education problems. This may be due to the fact that the current agenda on girls' education has grown out of donor sensibilities and has often tended to minimize local concerns about the relevance and practicability of proposed interventions in the African milieu. So far, research has not provided the tools needed to assist policymakers, planners and practitioners to translate the complex issues outlined in research in female education into actions which will promote improved educational outcomes for girls and boys.

Objectives and Organization of the Study

The central objective of this study is to outline a process for bringing an operational gender perspective to educational planning, programming, management, implementation, and monitoring and evaluation across the region. Towards this objective, and drawing primarily from literature published in the last five years, Chapter 2 summarizes the state of knowledge on the socioeconomic, sociocultural, school, political and institutional factors that influence female participation in education in Sub-Saharan Africa. The chapter suggests key areas for interventions and further research. Chapter 3 presents a summary of promising strategies for promoting girls' education outlined in the literature. The chapter ends with a brief discussion of some of the strategies being used to promote female education. Chapter 4 presents the outline of a process that can enable practitioners to articulate the major problems with regard to female education and the types of interventions likely to increase female participation. The conclusion highlights the challenges ahead for moving from analysis to action in promoting female education in Africa.

---

3 The marginalization of scholarship on girls' education is similar to that of the wider scholarship on women's experiences of development and gender and development. This is aptly illustrated by the manner in which development practitioners use the terms, 'women in development', 'women and development', 'women's issues', 'gender and development' and 'gender issues' interchangeably. 'Gender' refers to the social and cultural construction and representation of being 'female' and 'male'. Gendered outcomes are shaped by the broader historical transformations, economic, cultural and political consequences. Gender as a category of analysis seeks to do more than simply document women's experiences (as in women and development studies). It seeks to explain inequities between male and female (di Leonardo 1991, Goetz 1991, Okeyo 1989).
II

FACTORS AFFECTING FEMALE SCHOOLING IN SUB-SAHARAN AFRICA:

A LITERATURE REVIEW

INTRODUCTION

Increasing girls' participation in education has been identified as one of the most significant developmental challenges facing Sub-Saharan Africa (Gachukia 1992, Namuddu 1992, Njeuma 1993). Generally, the enrollment rate of girls remains lower than that of boys, their drop-out and absenteeism rates higher and their achievements and performance poorer, particularly in mathematics and science. The major issues with regard to girls' education have been broadly defined and are well known (Floro and Wolf 1990, King and Hill 1991, Subbaroa and Ramey 1993, Deble 1980, Kelly and Elliot 1982). Our aim in this chapter is to highlight the state of knowledge about the factors that influence female education in Sub-Saharan Africa.

These factors may be categorized in a number of ways. Some of these factors are related to institutional policies and practices; others are associated with society's customs, beliefs and attitudes about women's roles, responsibilities and capabilities. The present review will summarize the literature under three categories: socioeconomic and sociocultural factors, factors related to the school environment, and political and institutional factors. Socioeconomic and sociocultural factors, which influence the demand for female education, are significant in parental and familial decisions on whether to invest in female education. Pervasive gender ideologies at the household and community levels often favor males over females and promote differential educational opportunities and outcomes. Schools have been implicated in promoting the non-participation of girls in education. Research indicates that school-related factors affect both the supply of and the demand for female education. Political and institutional factors relate to government policies, practices and institutions which overtly or covertly promote gender biases and affect women's participation in educational systems. For each category, the study will assess and summarize the state of knowledge for Sub-Saharan Africa, identify areas where knowledge is weak and further research advisable, and recommend interventions that can be researched.
The review covers literature, particularly on primary and secondary education, published since Hyde's (1989) landmark review summarizing evidence from the literature on the status of women within the educational systems of Sub-Saharan African countries. Hyde discusses how family, societal and school factors influence female enrollment, grade-level attainment and wastage, and academic achievement and performance. A summary of her findings is presented in Box 2.1. They provide a good benchmark for assessing how the literature on female education in Africa has developed in recent years, particularly since the United Nations Decade for Women (1975-1985) and the World Conference on Education for All which focused international attention on the need to promote the education of girls and women (WCEFA 1990).

Box 2.1: Improving Women's Education in Sub-Saharan Africa

I. Factors leading to variations in female participation in education:

   Family level: Social class, parental attitudes, levels of parental education and child labour demands.

   Societal level: Views of female life course (including early marriage), urban residence, percentage of the nation's labour force in agriculture, government expenditures.

   School factors: Quality (particularly teaching quality), lack of role models, teacher attitudes.

II. Factors influencing achievement:

   Social and economic status, parental education, region of residence, religion.

III. Strategies to enhance female education:

   1. Increase educational supply through flexible and efficient use of teacher and school resources:
   2. Increase the numbers of female teachers, especially in science and mathematics.
   3. Improve teacher attitudes.
   5. Reduce demand for child labour, introduce simple technological innovations.
   6. Share the burden of providing education and increase coverage through initiatives with families, religious organizations and non-governmental organizations.
   7. Review administrative and fiscal policies that restrict opportunities for female schooling, female employment or both.

IV. Further research:

   1. Research needed in countries not represented in the studies
   2. Detailed examination of the processes that promote educational disadvantage.

Most of the studies reviewed were obtained through extensive library searches. Much of the literature has been commissioned by various donors to clarify the major issues in female education and help guide policy and program design. Although there are no significant new findings in the literature since Hyde's review, it is clear that there has been much work on the subject, with some interesting insights emerging about the factors that limit women's educational opportunities. One of Hyde's (1989) conclusions was the need for studies on women's education from more African countries. Today there is more information available on a larger number of countries. The studies are covering a larger number of countries and increasingly recognize the complexities and interrelatedness between the various factors that constrain female education in the region. What is not apparent is which factors will promote female participation in education.

The problem of obtaining gender dis-aggregated educational statistics persists, particularly with regard to efficiency indicators such as repetition, promotion and drop-out. Methodologically, most of the studies are qualitative rather than quantitative. This has facilitated a greater understanding of some of the demand-side constraints and also better informs the gender analysis required for more targeted interventions to accelerate female education. The increasing 'voice' being accorded students and parents to express their experiences of and with schooling also provide another dimension to the issues to be tackled in improving educational outcomes for girls. Many studies of female education tend to cover a wide array of factors without focusing on a particular aspect of the problem in detail. Consequently, the conclusions of several studies present a list of recommendations, which do not prioritize short- or long-term targets, nor necessarily fit into the overall education programs of the country in question. Often, girls' education problems are not contextualised within the broader education system problems. This suggests a need to strengthen the links between research on female education, research on the educational system in general and research on policy, program and project formulation.

**A HISTORICAL PERSPECTIVE ON FEMALE EDUCATION IN SUB-SAHARAN AFRICA**

The limited participation of females in education systems in Sub-Saharan Africa has historical precedents that have been adequately documented. The following section highlights factors identified in the literature as restrictive to formal education for women.

Non-indigenous education was introduced to Sub-Saharan Africa through Islam and Christianity. Female education was considered insofar only as it promoted the introduction of
Islam or Christianity and the consolidation of religious communities. When the colonial state became central in education, the education of women was not an important concern. There was much resistance to western schools in the early days and the idea of sending children, particularly girls, to formal schools was considered preposterous by local communities.

When women's education was finally considered part of the educational development program for indigenous communities, the type of education provided was used as a vehicle for promoting domesticity. A limited number of African women were trained to be good housewives and mothers, primarily for the emergent male clerks and church officials. In the process, the notion of the African woman as a dependent housekeeper wife and mother confined to the home and economically dependent on a husband, the breadwinner, was introduced into African culture. This Western patriarchal view ignored the central value of African women in the public and economic spheres of society. Assie-Lumumba aptly states that, "a new tradition was established for transmitting values of humility, low ambition and systematic underestimation of girls' and women's ability in cognitive achievement, social attainment and capacity to work in the public sphere" (1994:27). The cost of this externally-imposed tradition in conjunction with the local tradition was heavy for African women. They continued to take responsibility for providing for their families but did this without the benefits that accrued from access to education.

At the same time, because colonialism introduced educational opportunities, taxes and wage employment, men were drawn away from their homes and families to work. Many earned incomes too low to fulfill the 'bread-winning' responsibility accorded them by the introduced gender ideology, and this weakened their ability to meet their responsibility to the wives and families left behind.

Larson (1991) examines the reasons why the first educated African women did not become the first generation of African women professionals as did the first generation of educated African men. The type of education women received and its limitation in career choices afforded forms a large part of the answer, as does the effectual and legal restrictions on employment. For women who received western education, there were few choices; nursing and related health care professions, education, primarily teaching; and, of course, marriage. These choices persist. The following explanations given for not educating girls when the colonial powers introduced schooling remain the same today:
8 Girls and Schools in Sub-Saharan Africa: From Analysis to Action

- the threat to female chastity;
- control over women's productive and reproductive labour;
- women's economic value in bride wealth and productive and reproductive activities;
- apprehension that educated girls will not make 'controllable', 'obedient' and 'subservient' wives;
- the widely held belief that it is a waste of money to educate a girl who will leave home on marriage and not contribute to the maintenance of her natal home;
- limited relevance of formal education for girls;
- limited labour market opportunities available to educated girls; and
- the prohibitive costs of formal education.

These factors have limited the social demand for female education in Sub-Saharan Africa. Their persistence drives the question "What can be done to change these biased views and perceptions that continue to limit educational opportunities for many girls and women across the region?" (Awe 1990, Mazrui 1992, Pittin 1990, Robertson 1986, Surdarkasa 1982).

THE STATUS OF FEMALE EDUCATION

Access

The near-exclusion of women from formal education during the colonial period is reflected in the low levels of female participation in 1960 and the impressive growth in enrollments since then. In the early 1960s less than 20% of children in Sub-Saharan Africa were in school. Since then the proportion of children in school has more that tripled to approximately 80 million in 1990 (Table 2.2, DAE 1994). This growth has, however, not been maintained. Between 1980 and 1990 the proportion of primary school-aged children in school

---

4 Participation rates are generally measured by the Gross Enrollment Ratio. This is the ratio of the number of children in school to the population of school-age children. Because of the large number of over-age children enrolled the GER can be more that 100%. The Net Enrollment Ratio (NER) is the ratio of the number of children of the official age in school to the number of children of official school age in the population. It is a more accurate measure of participation (but not as widely available as the GER).
declined from 78 percent to 70 percent as adverse economic conditions and population growth led to stagnation in enrollments and a decline in education quality. Comparative data for Latin America, Asia and the Middle East indicate that in 1991 both the gross primary and secondary enrollment ratios were significantly lower in the Sub-Saharan African region than in other developing regions. And the net primary enrollment ratio for the region has declined from 68 in 1970 to 48 in 1991 (World Bank 1994), a clear indication of the large number of children who remain outside the formal education systems. Indeed, about 36 million girls are out of school in the Sub-Saharan Africa region (UNESCO/UNICEF 1993).

Table 2.1 Gross Enrollment Ratios by Gender and Level, Sub-Saharan Africa, 1970-1990

<table>
<thead>
<tr>
<th></th>
<th>1970</th>
<th>1980</th>
<th>1985</th>
<th>1990</th>
<th>Average Annual % Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>70-80</td>
<td>80-85</td>
<td>85-90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary enrollment (000's)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female as % of total</td>
<td>39</td>
<td>43</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross primary enrollment ratio</td>
<td>46</td>
<td>78</td>
<td>75</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>56</td>
<td>88</td>
<td>83</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>36</td>
<td>68</td>
<td>67</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Secondary enrollment (000's)</td>
<td>2,694</td>
<td>9,243</td>
<td>12,528</td>
<td>14,571</td>
<td></td>
</tr>
<tr>
<td>Female as % of total</td>
<td>29</td>
<td>35</td>
<td>39</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Gross primary enrollment ratio</td>
<td>6</td>
<td>16</td>
<td>22</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>8</td>
<td>21</td>
<td>26</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
<td>11</td>
<td>18</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Tertiary enrollment (000's)</td>
<td>189</td>
<td>419</td>
<td>819</td>
<td>1,219</td>
<td></td>
</tr>
<tr>
<td>Female as % of total</td>
<td>16</td>
<td>21</td>
<td>30</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Gross tertiary enrollment ratio</td>
<td>0.5</td>
<td>1.3</td>
<td>2.2</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.9</td>
<td>2.1</td>
<td>3.1</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.2</td>
<td>0.5</td>
<td>1.2</td>
<td>1.7</td>
<td></td>
</tr>
</tbody>
</table>


Across the region female enrollments contributed significantly to the increase in enrollments, increasing faster than males. This rapid growth has however slowed down in recent years. For example, in Niger, female enrollment ratios rose from 3 percent in 1960 to 18 percent in 1980 and then to 21 percent in 1990. For war-torn Somalia, the corresponding numbers were 3, 14, and 7 percent and for Nigeria 31, 90 and 63 percent. Within the region, the gender gaps in education appear widest in the Sahelian countries of Chad, Burkina Faso, Niger and Mali where overall enrollments are also low by regional standards (DAE 1994). Significant gender gaps persist despite the growth in female enrollment ratios, widening as one goes up the education ladder. In 1990 girls made up 45 percent of primary students, 40 percent of secondary students and 31 percent of tertiary level students (see Table 2.1).
While it is correct to assume that girls' enrollments lag behind those of boys', in Cape Verde, Mauritius, Zimbabwe and Kenya, universal primary education has been achieved, though quality degradation is a problem. In Botswana, Lesotho and Namibia, and certain regions of others, such as Eastern Nigeria, more girls than boys are enrolled in primary school because of the higher opportunity cost of boys' education. However, even in these countries, regional variations in enrollment persist. For example, in Lesotho, where more girls enter primary school than boys, the slow increase in the net enrollment ratio from 61 percent in 1981 to 70 percent in 1988 is attributed to high drop-out and repetition rates. As the data in Figure 2.1 indicate, within the country there are large enrollment gaps between the lowland districts (Berea, Naseru, Leribe, Buth-Buthe) and the mountain districts (Thaba-Tseka, Mokhotlong, Qacha's Nek) where because of the dispersed settlement patterns, poor educational outcomes are related to the high student/classroom ratio, poor facilities and lack of access because of the dispersed settlement patterns. In general, poor educational outcomes are related to the high student/classroom ratio, poor facilities and lack of access (IIEP 1992).

![Figure 2.1 Lesotho Net Enrolment Ratio Aged 6 Years by District and Sex, 1990](image)

Source: IIEP 1992

Between the primary and secondary levels, female access is reduced, partly because of poorer performance of girls in national examinations and partly because of inadequate supply. An analysis of female education in Côte d'Ivoire concludes that once girls have completed primary school, they are 37 percent less likely than boys to attend secondary school. Once girls complete lower secondary school, they are 14 percent more likely than boys to proceed to upper secondary school (Appleton and others 1990). Female secondary enrollments tend to be higher.
in those countries where girls' primary enrollments are higher, notably, Congo, Mauritius, Namibia, Swaziland and Zimbabwe where female enrollment ratios were greater than 40 percent in 1990.

The number of women enrolled in tertiary education has increased at a slower rate than male enrollment. At this level the gender gap in education is at its largest with male enrollments at least three times higher than females. Another salient feature at this level is the gender streaming by subject. Girls and women tend to enroll in education and arts subjects and to be under-represented in science subjects and mathematics where boys and men dominate. For example, in 1990, at the secondary level in Côte d'Ivoire, 23.2 percent of the literature students, 13.2 percent of the business students, 12.2 percent of the natural science students and 7.1 percent of the math students were girls (Eholie 1993). Table 2.2, (Annex 1), gives an indication of the subjects girls study at the secondary level. Table 2.3, (Annex 1), indicates the percentage of women in science subjects at the tertiary level. Female representation in science, math, vocational and technical courses is very limited. This has a distinct effect of limiting women's access to the formal labour market, where they are channeled into the lower levels (Beoku-Betts and Logan 1993, Namuddu 1992).

Persistence

Access to primary education is only part of the problem for girls. Once in schools, girls often have high repetition, failure and drop-out rates resulting in low primary completion rates. Student flow data for a selected number of countries is presented in Annex I, Table A2.4. Though the data are not dis-aggregated by gender, the numbers show that a significant number of children who in enroll in the first grade do not complete primary school. Few children gain access to secondary school. Drop-out rates at the primary level are high, with slightly more girls dropping-out than boys. However, the data indicate that retention is also poor amongst boys (Table A2.4, Annex 1). Dropping-out is associated with poor academic performance and it is evident that girls do not perform as well as boys at the primary and secondary levels (Dorsey 1989, Hyde 1994, Mbilinyi and Mbughuni 1991).
In Mozambique, a study on repetition and drop-out in primary schools concludes that, "The single most important factor that contributed to bad school achievement was work for the survival of the family" (Palme 1993: 23). In Ethiopia, girls' performance in all three national examinations in 1989 is reported to have been poorer than that of boys, and generally, more girls repeat and drop-out than boys. For example, in the first grade of primary school in 1987, 20.5 percent of the girls repeated and 30.1 percent dropped-out; corresponding figures for the boys were 17.5 and 28.5 (TGE/UNICEF 1993). In Kenya, a recent analysis of student performance in the primary and secondary promotion national examinations indicates that (except in languages) female achievement is lower than that of males. The author notes that, "Particularly worrisome are the disparities in mathematics and the sciences" (Makau 1994: 14).

Repetition and drop-out continue to be problems at the secondary level. In Côte d'Ivoire, for example, girls' enrollment in public and private schools at the secondary level has remained at about 30 percent over the past 10 years and there is a high level of repetition and drop-out between the middle and high levels of secondary education (Eholie 1993).

At the university level repetition and drop-out rates are also high. For example, to complete a three-year undergraduate program, students in Cameroon require on average 7.7 years in the arts, 8.9 years in law and economics, and 18.2 years in the sciences. In Madagascar, the 1988/89 repetition rate was close to 50 percent and the drop-out rate was 20 percent (Saint 1992). The drop-out rates for men at Makerere University in Uganda are reported to be 3 percent in comparison to 20 percent for women (Namuddu 1992a).

Literacy

One outcome of the low level of female participation in education in Sub-Saharan Africa is an extremely high level of female illiteracy. Figure 2.2 indicates illiteracy levels for selected developing regions. Illiteracy levels are high in Sub-Saharan Africa, second only to South Asia. Female illiteracy is more widespread than that

![Figure 2.2: Adult Illiteracy, Selected Regions, 1990](image)

of men.

**Access to employment**

One of the greatest disincentives to female education is the low level of female participation in the formal labour force. The International Labour Organization estimates that in 1990 the female labour force in Sub-Saharan Africa was 73 million, 38 percent of the total labour force, a decrease from 40 percent of the total labour force in 1970. Figure 2.3 indicates the breakdown of the female labour force by economic group. Although women are actively engaged in the agricultural labour force, their numbers have declined from 84 percent in 1970 to 76 percent in 1990. Women are well represented in the informal sector where their level of participation has registered an annual growth rate of 6 percent. In the modern sector where women who have gone through formal education aspire to work, there was rapid growth in female participation, from 1.9 percent in 1970 to 6 percent in 1985, and then a decline to 5 percent in 1990. But overall female employment in the modern sector remains low. Within the modern sector, women have been employed mainly in the civil service, with their employment in parastatals and the private sector remaining low. In the civil service, women tend to be located at the lower end of the hierarchy, working mainly in community, social and personal services. There are very few women managers and administrators. For example, in 1990 women made up less than 1 percent of managers in Ghana, Rwanda and Togo at the upper end. In Kenya and Uganda, the figures were 3.1 percent and 3.5 percent, respectively (ILO/JASPA 1991, Leigh-Doyle 1991, Palmer 1991).

Women's unemployment has been on the increase since 1985 (See Figure 2.5). This can be attributed to movements out of the agricultural sector and the diminishing growth of the urban informal sector, particularly in trade where women are concentrated. Women have also been affected by the overall economic recession in the region, retrenchment policies, and attempts to reduce the public sector as the major employer in the modern sector. Box 2.2 discusses the effect of retrenchment policies on female civil servants in selected countries.
Box 2.2: Women’s Vulnerability in the Modern Sector

In Benin, Senegal and Ghana, the experience of women under retrenchment policies provides a good example of women’s vulnerability in the labour force. In 1987, when Benin went through a retrenchment process, women constituted only 6 percent of the parastatal and private sector labour force. Yet they comprised 21 percent of the retrenched personnel. Thirty-one percent of the women retrenched were in the banking sector, 40 percent in manufacturing. In Senegal, women made up 12 percent of the labour force in parastatals, but 20 percent of those retrenched in 1987 were women. Similarly, in Ghana, women constituted 23.5 percent of the total wage employment but formed 31.5 percent of those retrenched. Because of the education they receive, women are concentrated in sectors most likely to be targeted for restructuring. For example, in Benin, 57 percent of those retrenched were in unskilled positions and 39 percent held clerical positions. In Ghana, 40 percent of those retrenched had no education at all and 70 percent had less than 10 years school.

Source: (ILO/JASPA 1991:75)

Since governments have been more active than the private sector in promoting female employment, the moves to limit the role of government as an employer, including the cessation of guaranteed employment schemes for graduates, such as teaching, and the deregulation of labour market policies do not augur well for women’s participation in the labour market, for both the formally educated and for those who lack any formal education or training (ILO/JASPA 1991, Palmer 1991, Vandermoortele 1991).

Summary

This overview of the level of female participation in education in Africa indicates that although tremendous gains have been made since the 1960s in most places, participation levels of girls still remain lower than those of boys. Repetition, drop-out and failure is very high among girls, beginning at the primary level and continuing throughout the system: many girls remain outside the formal education system. The small number of girls who remain in the system tend to be directed away from science, mathematics and technical subjects which are in high demand in the labour market, into arts and social science subjects. Consequently, female participation in the labour market is limited, with women concentrated in the informal market. The few in the modern sector are relegated to the lower end of the hierarchy, and female participation in the private sector and parastatals remains low. Female illiteracy remains high. It is against this background that we present the following review of the obstacles to female education in Sub-Saharan Africa.
SOCIOECONOMIC AND SOCIOCULTURAL FACTORS INFLUENCING FEMALE PARTICIPATION IN EDUCATION

Socioeconomic Factors

Sending girls to school entails direct and opportunity costs which are prohibitive to families, particularly poor families and rural families. The following section discusses these constraints and some of the perceptions that underpin the decisions not to enroll, or to withdraw girls’ from school.

Direct costs of schooling

The increasingly prohibitive cost of schooling is the major reason parents offer for not educating or for removing children, particularly girls, from school. Almost all the studies reviewed specify this as a constraint to female education. This is not surprising, given the prevailing economic crisis in the region. Poverty is widespread and affects schools and families alike. The literature indicates the extent to which parents have to cover the shortfalls due to the fiscal crisis which has had a devastating impact on household incomes and educational systems (Asomaning and others 1994, Graham-Browne 1991, Njeuma 1993, Palme 1993).

The trend to shift educational costs to parents in the name of cost-sharing is especially likely to work against girls’ education (Kinyanjui 1993, Namuddu 1994). When fees were introduced in Nigeria between 1982 and 1986, primary enrollments declined from 92 percent to 75 percent (Obadina 1993). In Ethiopia, the construction of SIDA-assisted Primary Village Schools dependent on community contributions has been delayed or foiled because of the severe economic problems affecting local communities (TGE/UNICEF 1993). Schooling costs are considerable in Mozambique and are beyond the means of many rural and peri-urban families. A recent study reports that most of the rural families interviewed could not imagine sending their children to schools in town to complete primary school or attend secondary schools. Where would the child stay, how would they raise the money to supply the food, and how would they find the money to maintain the child and provide the necessary learning materials? (Palme 1993). In Cameroon many secondary schools are private and charge fees. This reportedly affects girls more than boys (Cammish and Brock 1994).

Even where primary education is free, household educational expenditures can be heavy. Apart from tuition, other cost items identified in the literature include fees for registration and
admission, examinations, boarding, school building fund, parent and teacher association (PTA) fees, book rental, the cost of uniforms, the provision of furniture, extra tutorials, and transportation. These costs can add up to two or three times the cost of tuition.

The prohibitive costs of schooling have affected the ability of communities and households to educate their wards. In Mali, parents have to buy all the school furniture and make a monthly contribution to schools, an economic commitment the average family cannot or may choose not to meet for girls (Dall 1989). In Uganda, poorer parents are not enrolling or are withdrawing their children when financial burdens become too great. Indeed, parental difficulty in paying school fees is reported to have resulted in delays in the opening of schools for two consecutive years. The beginning of the school year was pushed back to allow parents to raise the required fees and to allow children to work to raise their school fees. School fees are a 'delicate and complex issue in Uganda and almost at par with the issue of teacher's salaries'. The introduction of statutory fees at the primary level, which are more than ten times greater than the previous fees, has fueled the ongoing debate, and also provides another excuse for the non-participation of girls in schools (Fleuret and others 1992: 20, World Bank 1992).

Studies show that in Ghana, Guinea, Malawi and Zimbabwe the costs associated with schooling are higher for girls than boys. This is due in part to the higher cost of girls' uniforms. For modesty reasons, girls are less likely to go to school in torn or ill-fitting uniforms. Because of safety reasons, parents tend to spend more money on transportation costs for girls (Davison and Kanyuka 1992, Hyde 1993, Kapakasa 1992, Ilon 1990, Lloyd and Gage-Brandon 1993, Long and Fofanah 1990). Anecdotal evidence indicates that a major problem for girls' school attendance (rarely mentioned in research findings) is their lack of underwear and sanitary protection when menstruating. The cost of sanitary protection and underclothes may also contribute to making the costs of educating girls higher than those for educating boys. A recent study in Zimbabwe indicates that, 'At the onset of menstruation, girls who have no underwear or sanitary protection remain at home while menstruating and this undermines their confidence on their return to school and ultimately contributes to early drop-out (Camfed 1994: 7).

When decisions have to be made because of financial constraints, girls are more likely than boys to be held back or be withdrawn from school. The literature suggests that girls from better-off homes, who live in urban areas, are more likely to enroll and remain in school for

In many countries, some students are responsible for covering their educational costs. This has a negative effect on the length of time they remain in school and on their performance. For young girls in upper primary and secondary school, the responsibility for covering their educational costs often leads to sexual relationships with older men who can support them. Such relationships carry the risk of pregnancy which can end their schooling (Asomaning and others 1994, Bledsoe 1990, Brock and Cammish 1991, Camfed 1994, Fanta 1991, Fleuret and others 1992, Hallam 1994, Palme 1993). Such relationships also increase girls' exposure to the risk of contracting sexually-transmitted diseases, including the HIV virus. It is becoming increasingly evident that some men will seek sex from young women who are perceived to be free of HIV (Camfed 1994, Hallam 1994). In Zimbabwe, for example, sexual harassment of young girls is reportedly high in some areas and the deteriorating economic situation is driving many young girls into prostitution. A study in Matebeland found that 'adolescent girls were seven times more likely to be HIV-positive than their male peers' (Camfed 1994: 7).

The high opportunity costs of girls' education

Child labour is indispensable to the survival of some households, and schooling represents a high opportunity cost to those sending children to school. While the importance of child labour for agricultural, domestic and marketing tasks, has been well documented, when it comes to child care, girls are more likely to be involved than boys, and children in the rural areas spend more time working than those in urban areas. Consequently there are fewer rural girls in schools than their urban peers (Asomaning and others 1994, Brock and Cammish 1991, Cammish and Brock 1994, Ilon 1990, Lloyd and Gage-Brandon 1992, Prouty 1991, Soumaré 1994).

With the rapid rate of growth in urbanization, the demand for domestic labour in urban areas has also increased. Resource-poor rural households have responded by sending their daughters into the domestic labour market in exchange for a regular cash income. This also draws young girls away from schools (Fanta 1991, Niane and others 1993, Lange 1994). Information from some studies and from the Department of Community Development in Ghana
indicates that rural young girls are sent to urban areas to become domestic servants for kin and non-kin families. Such displacement often occurs in their primary school years. Their parents receive payment for their services but the girls have little or no opportunity to return to school (Asomaning and others 1994).

A Zimbabwean proverb aptly represents the economic value of girls “He is poor who has no daughters” (Dorsey 1989: 2). Due to the continuing importance of institutions such as bride price, polygamy, and adultery fines, the economic value of girls, particularly in rural areas, remains high. Girls are an important source of income for their families, and the need for additional household income often takes priority over education. This, in addition to the high status accorded marriage and motherhood, depresses the demand for female education (Cammish and Brock 1994, Soumaré 1994) (see Box 2.3). In a resource-poor environment, this value takes on a significant meaning, particularly as girls approach puberty. An unplanned pregnancy may bring shame to the family and also reduce the bride price. Western education may be considered a liability to marriageability because of the common ideas about educated girls. Consequently, parents are afraid to allow their daughters to stay in school for too long (Brock and Cammish 1991, Kapakasa 1992, Niane and others 1993, Niles 1991, Norton, Owen and Milimo 1994, Prouty 1991). Other studies indicate that in some areas the lack of education may also limit the marriage prospects of young girls (Kane and de Brun 1993, Holte Dahl 1993). For example in Cameroon, a young woman states that ‘In all the neighboring houses young illiterate girls live with their fathers, some of them have given birth out of wedlock. The fathers do not manage to find husbands for them because the young men prefer girls who have gone to school.’ (Holte Dahl 1993: 286).
Box 2.3: The Economic Value of Girls

In Zambia, a recent participatory poverty assessment revealed two reasons for the low value and demand for education in a rural Tonga village. The education of girls is viewed as a waste because marriage is a source of income through bride wealth cattle. Most girls are withdrawn from school after grade four because bride wealth payments diminish for an educated girl. Boys' education also suffers as a result of the cattle economy, which requires that they spend half the year, June to November, with the family's cattle at a transhumance site away from the village. Generally, parents feel that western education will lead to disrespectful children and to a denigration of their way of life (Norton, Owen and Milimo, 1994: 57).

Several girls from the Northern region of Ghana are reportedly among the kayayooos, head porters, of Accra. Many young girls are sponsored to come to Accra by family members for fixed periods of time. It is worthwhile to note how the income they earn is invested. Part of their income goes into personal savings for their marriage or trading activities once they return home; part is invested in buying goods for their marriage or future trade; and part goes towards supporting their families in the rural areas. Here is the example of a 16-year old kayayo, whose journey to Accra was financed by her mother and herself, "I save on a daily basis of 500 cedis with the susu collector and 300 cedis on a monthly basis with ten colleagues of mine...I send at least 5,000 cedis monthly to my old lady (mother). But when I have more than enough, I send it earlier or even twice in the month. I buy certain valuable items such as wax prints, ceramic bowls, saucepans and other household items to keep me in readiness for marriage in the future" (Asomaning and others 1994: 9).

The following examples from Uganda also demonstrate the economic value of girls,

'Daddy told me that he didn't have any more money to pay for my fees but I didn't believe it because about a month after, he told me that I was old enough to get married, so they introduced me to my would-be husband and about two months later they married me off. I am now the second wife of our husband'.

Unless the parents are convinced that the girl can fetch more bride wealth by being educated, she does not see any hope of being authorized by her parents to go back to school. She says she was forced to drop-out as a deliberate act to prepare her for marriage.

The drop-out says even if the government was to provide school fees for her, the parents might refuse to let her go to school--she got pregnant in P6 and "the whole village is complaining about girls that the earlier they get married, the better, instead of losing bride wealth." (Fleuret and others 1992).

Parental/familial perceptions of the irrelevance of schooling for girls

Children's educational outcomes are a direct result of how much resources and priority parents and families attach to each child. To a large extent the decision of which child to invest in is governed by prevailing gender ideologies. These may be described as sociocultural attitudes: behavior and expectations society has of women and men. When households and families make educational investment decisions, the decisions are often gender-differentiated and related to birth-order and number of siblings. Educational costs are often shared by parents, and even in households where fathers are responsible for paying school fees, mothers contribute substantially to education costs. Older siblings and relatives may also be responsible for covering educational expenses. A recent study in Cameroon showed that relatives contributed to the education of 17 percent of secondary students, the majority of whom were girls (Kilo 1994). Attention has recently been drawn to the complex web of networks and relationships that affect
human capital investment behavior in the African context. These are determined by high fertility levels, high marital instability, polygamy, child fostering and a wide variety of living arrangements and family ties, gender of the child in question, birth-order, and number of siblings (Asomaning and others 1994, Bledsoe 1990, Fleuret and others 1992, Kilo 1994, Lloyd and Gage-Brandon 1992).

Parental and familial attitudes have a strong influence on the decision to invest in children's education. The literature highlights an ambivalence towards investment in female education, based on many negative perceptions of girls and women: these perceptions need to be challenged. Some parents believe that boys are more intelligent, that they perform better in school and that they are a better educational investment than girls. A factor often ignored in discussions of parental preference for boy's education is the prevalence of patrilineal inheritance systems. As the prime beneficiaries of family assets, boys are favored in human capital investment decisions. In addition, parents worry about wasting money on the education of girls who are likely to get pregnant or married before completing their schooling. There is a strong belief that, once married, girls become part of another family and the parental investment is lost (Davison 1993, Davison and Kanyuka 1992, Kapakasa 1992, Long and Fofanah 1990, Prouty 1991). Some communities and parents hold a negative view of educated girls. For example, in Chad, some parents believe that schools push girls to prostitution, make them unfaithful to their husbands and make them difficult to control by parents (Bello and others 1993). In some regions of Cameroon, educated girls are perceived as being too independent and demanding and being likely to challenge the traditional submissive role expected of them in marriage (Cammish and Brock 1994).

However, in Kenya, and Rwanda, a significant number of the mothers interviewed preferred to invest in girls' education for the same reasons often given for not investing in girls, more secure family and old age support (Davison 1993, Prouty 1991). In Zimbabwe, a group of rural parents stated that education for all their children was important, stressing that daughters were future mothers who would require money to look after their families, "and even look after us as our sons are deserting us for South Africa" (Graham-Browne 1991). In Zambia, increases in female primary and secondary enrollments, despite drought and acute economic hardship, are attributed to "peoples' belief in the value of education and their awareness of the importance of educating girls to achieve progress" (Kelly 1991: 98).
Across the region, formal education has historically been linked to employment opportunities in the labour market, particularly in the civil service (UNICEF 1992). Families tend to judge the value of education by the returns from the labour market. Given the historical exclusion of girls from education and the formal labour market, it seems prudent for families to invest in the formal education of boys because they will always be better placed to explore formal labour market opportunities. The tradition of poor female participation and performance in school and the labour market reinforces this familial and community bias (Appleton and others 1990, Brock and Cammish 1991, Davison 1993, Davison and Kanyuka 1992, Dundow and Howuth 1993, Kapakasa 1992).

Other educational agencies are viewed by society as more efficient than the formal education systems at preparing girls to be wives and mothers. Apprenticeships continue to provide practical entrepreneurial skills to young people across the region. Such programs are popular with parents who often want to ensure that their daughters acquire some practical skills before they get married. Sewing and trading are particularly popular (Akpaka and Gaba 1992, Niane and others 1993). In some instances girls will leave school of their own accord to engage in economic activities, 'Enough education to set up as a hairdresser or to run a chicken parlor may encourage bright girls to drop-out of school in order to earn.' (Cammish and Brock 1994; 238).

Parents and families often give the excuse of lack of resources for not educating daughters and girls. Although poverty is a very real constraint to education and the economic costs of education are prohibitive to some parents, research findings suggest that this categorization needs to be held to close scrutiny. Research in Malawi and Uganda (Box 2.4) suggests that 'lack of money' may in some cases be an excuse for the reluctance of parents and families to invest in the education of girls because they do not perceive the value of education for girls and also because of the sociocultural perceptions about the role of women in society (Fleuret and others 1992, Kapakasa 1992).
Box 2.4: ‘Lack of Money’?

A survey of 237 drop-outs in Uganda suggests that ‘lack of money’ as a reason for not educating children or withdrawing them from school may be a cover-up for other priorities in situations where money is not the issue. Socio-cultural factors come into play. The authors also highlight the significance of which parent takes responsibility for meeting education expenditures. They challenge the notion of there being a "tradition" which determines who pays school fees. The prevailing ideology suggests that fathers are responsible for this expenditure, though mothers often take full or partial responsibility for school-related costs. The study points to a worrying trend of parents abdicating responsibility for education and expecting children to take responsibility for their fees. Students were observed engaging in a range of economic activities to raise their fees; cultivating, burning charcoal and trading. This issue was brought to the attention of the researchers by several senior female teachers, who argued that it is directly related to increasing student delinquency and pregnancy amongst older schoolgirls, who generate income for their education through relationships with older men. Attention is drawn to the danger of AIDS and the special vulnerability of war orphans with regard to educational opportunities (Fleuret and others 1992).

In Malawi it is observed that when one probes beyond inability to pay, other reasons emerge, "she lost interest", "I did not think she was learning anything her mother could not teach her", "I did not want her to walk to school alone when her brothers started going to the afternoon session", "she became pregnant", "she left because she wanted to get married". Several parents cite lack of interest and peer pressure as a cause of drop-out yet the author also notes the reluctance of parents to insist that children remain in formal school. This factor is contrasted to parental insistence that children go through initiation despite the fact that these ceremonies often cost more than formal education (Kapakasa 1992: 9).

Sociocultural factors

Sociocultural expectations of girls and the priority given to their future roles as mothers and wives has a strong negative bearing on their formal educational opportunities. Sociocultural customs and beliefs influence decisions to enroll girls in school, decisions to withdraw them from school, their own decisions to drop-out of school, their academic performance, and their grade level attainment.

Initiations

Initiation ceremonies are still important in some Sub-Saharan African communities. In recent years research has explored the influence of these ceremonies on schooling outcomes for girls. Evidence from Malawi shows that initiation brings several dilemmas for girls, affecting their school attendance and academic performance and even leading to drop-out. The scheduling of initiation ceremonies conflicts with the school calendar, leading to absenteeism from school. Although initiation marks the passage from childhood to adulthood, school authorities continue to treat initiated girls who return to school as children. They expect them to participate in certain activities and punish them in a manner which is considered inappropriate for adults. Initiated girls also find it difficult to return to formal school or concentrate on their studies because their
next expectation is marriage. A study in Malawi indicates that some parents are more willing to
cover the costs of initiations than to cover formal schooling costs (Kapakasa 1992). Malawian
boys also go through initiation ceremonies but the literature is silent on what effect this has on
their education (Grant Lewis 1990, Kapakasa 1992).

Some initiation ceremonies include circumcision. Girls and boys who go through
initiation ceremonies that include circumcision face similar dilemmas to those who go through
initiation ceremonies that do not include circumcision. In Kenya, initiation/circumcision
ceremonies are scheduled to take place during school holidays, but the process begins earlier,
leading to absenteeism from school. Once children are circumcised, they perceive themselves as
adults. On returning to school they have a negative influence on their uncircumcised peers, they
are rude towards uncircumcised teachers, especially female teachers, and they become
undisciplined. There is a sharp decline in their academic performance and they are likely to play
truant and eventually drop-out of school. (Gicharu 1993, Nangurai 1994, Njau and Wamahiu
1994, Wamahiu 1994). The interrelationship between initiation ceremonies, bride price and
early marriage and schooling is graphically illustrated in a recent publication, Figure 2.5 (Njau
and Wamahiu 1994).

In Tanzania, 1991 data indicates that ‘training’ was the most common cause of drop-out
for both boys and girls. Of the 45, 487 children who reportedly dropped-out of primary school
that year, 36,941, about 81 percent of drop-outs, were attributed to ‘training’, which, “appears to
be ‘unyango’ and ‘jando’ or puberty rites.” In the past, children missed two to three weeks of
schooling because of their participation in puberty rites. Today, the rites provide a reason for
withdrawing children from school altogether, suggesting that the value placed on formal
education is very low (TGNP 1992:82).

In some rural areas of Mozambique, families keep daughters in school after their first
menstruation and initiation rituals, in a state of artificial childhood. This is viewed as a high risk
against the certain need for daughters to marry and draw in male labour in the matrilineal lineage
system (Palme 1993).
Religion

Religion, especially Islam, is usually associated with low female participation in schools (Appleton and others 1990, Colclough and Lewin 1993, Lange 1993). The history of the imposition of formal western education, which is associated with Christianity, and the pressure to convert, is still very much an issue in some Islamic regions. It is evident that some parents prefer Islamic education for their daughters, as the fear that western education promotes values and behavior for girls which are contrary to cultural norms (often articulated as religious edicts) remains strong (Brock and Cammish 1991, Kane and de Brun 1993, Niles 1989, Pittin 1990, Robertson 1986). However, religion is often a proxy for cultural views about appropriate female roles and it is necessary, although difficult, to distinguish between these factors.

For example, the Fula of Northern Sierra Leone were a poor Moslem society twenty-five years ago. Today they are a strong entrepreneurial force in Freetown, investing in real estate and property development. They are also using their wealth to invest in the education of their children. They have established schools and encourage their children to seek professional occupations. Twenty-five years ago, there were few Fula girls in formal schools. But as families fortunes have changed, the education of Fula girls has increased significantly (Brock and Cammish 1991). In Northern Nigeria, despite government efforts to promote Universal Primary Education, rural parents still hold negative attitudes towards western education and prefer Koranic education for girls. However, the influence of an urban setting is demonstrated by the sample of urban women in one study who supported western education for their daughters and had high aspirations for their education and employment (Niles 1989).
A recent study suggests that the negative attitudes towards female education in the north of Cameroon, predominantly a Moslem area, can be explained by 'the remoteness, the vast
distances, the poverty and the resentment of change imposed from afar'. Although the seclusion of women and their low status is justified by men as being Islamic, elite Muslim families in urban areas educate their daughters with enthusiasm (Cammish and Brock 1994; 240).

An analysis of factors in constraining girls' schooling in Mali concluded that, 'religion, as measured by the intensity of parents' religious belief and its impact on their decisions, does not appear to be a fundamental factor in shaping parents' decisions to send their daughters to school.' (Soumaré 1994: 16). The majority of parents interviewed, 78 percent, disagreed that school ruins their daughters' religious beliefs. The majority of parents who did believe that religion undermines their daughters' religious beliefs were rural based. Early marriage was used to measure cultural impact on parents' attitudes towards female schooling. Thirty-five percent of the parents preferred marriage over school for their teen-aged daughters. Parents from the region who held stronger views of the potential negative impact of education on their daughters' religious beliefs, the majority of them rural, also indicated a stronger preference for early marriage over schooling for their girls. The other parents reportedly would neither fail to send their girls to school nor withdraw them from school for marriage alone, 'They all maintain that as long as their daughter is in school and doing well, they would ask a potential suitor to hold off marriage and give her a chance to pursue a degree. Nevertheless, during conversations with parents, they also added, "while some of our daughters drop-out due to pregnancy, most of them usually fail school and end up feeling unfit in our society any longer due to the little school experience they had. Consequently such girls would run away to the city for they would not want to marry in the village." (Soumaré 1994: 17).

In Guinea, religious beliefs are reported to keep children, particularly girls, away from public school. A study team came across three villages where no children were sent to school because of religious reasons and one village where there was more resistance to educating girls than boys. Koranic school co-exists with public school but, depending on religious beliefs and gendered expectations of appropriate education for boys and girls, some communities send most children, mainly boys and few girls, to public school. The general perception is that girls "only need to learn prayers" and have no use for reading as they are unlikely to become scholars. This expectation appears to be transferred to expectations for children's schooling in the public system. Consequently girls tend to attend Koranic school for less time than do boys (Anderson-Levitt and others 1994).
Summary

The sociocultural and socioeconomic factors that constrain girls' education at the household and community level are closely interwoven. Their effects on girls' education are potent and far-reaching and affect the performance and persistence of those girls who remain in school. An understanding of how socioeconomic and sociocultural factors govern household decisions leading to low investment and ambivalence about investment in female education is the key to formulating strategies to address the low societal demand for female education.

The literature demonstrates that lack of resources to cover the direct and opportunity cost of educating girls is a major constraint to girls' education. Attention could well be focused on the following points for a deeper understanding and better response to key demand-side factors.

- Demand for female education appears to be lowest in rural and marginal areas where poverty is most endemic and opportunities for income generation are limited. There is a need to identify regions and areas where participation of girls in schools is particularly poor, and systematically investigate, document and address the causes. This should be done in collaboration with local communities and should involve all the stakeholders—teachers, parents, and students.

- The complexity of household and familial perceptions of female education, residential arrangements and how these shape low investments in formal education for girls is beginning to get due attention. This warrants further research, particularly where the provision of subsidies and incentives to allow poorer parents to send their daughters to school is being considered.

- Cultural institutions and practices which limit the potential for formal female education need further analysis, preferably with communities, to enable the design of interventions in which they will participate. The limited research on the role of parallel institutions such as apprenticeships and initiations in limiting the demand for female education needs to be reinforced and discussed.
FACTORS RELATED TO THE SCHOOL ENVIRONMENT

Research on the impact of school-level factors on female education provides some interesting insights into the way schools perpetuate the gender gap in education. The school environment, teacher attitudes and pedagogy, and the gender bias in learning materials, all affect female performance and attainment in schools.

The learning environment

The poverty of African states is evident in the physical state of institutions of learning. The poverty of schools is apparent in the lack of classrooms, equipment and learning materials. Those facilities that are available are inadequate and dilapidated, often lacking basic amenities such as water and electricity.

In several countries, governments are unable to pay teachers' salaries regularly, and funds for running schools are disbursed intermittently. The result is teacher absenteeism and lack of motivation. Schools and teachers are both forced to look for alternative sources of income. Consequently there is a greater demand for financial support from parents and for the use of student labour to generate income. The situation has a negative impact on the quantity and quality of time spent teaching and degrades student performance and attainment. Some parents are increasingly discouraged from sending their children to school (Brock and Cammish 1991, Fleuret and others 1992, Hyde 1993b, Kapakasa 1992, Grant Lewis and others 1990, Moskowitz and others 199, UNICEF 1993, World Bank 1988).

Type of school

Access to education is lower for girls than boys at all educational levels. There is much commentary on the educational outcomes related to the type of institutions girls have access to, particularly at the post-primary level: single-sex or coeducational, private, government or community-funded. In Cameroon, girls in good-quality coeducational schools generally came from better socio-economic backgrounds than boys, and also performed academically better than their male classmates in both science and language (Kilo 1994). The consensus in the literature is that girls in single-sex schools tend to perform better in national examinations than those in
coeducational schools, particularly in science subjects and mathematics\(^6\) (Lee and Lockheed 1990, Ministry of Health/GTZ Support Unit 1988). The tentative results of experiments with gender streaming in Malawi discussed in Box 2.5, suggest this as an alternative to single-sex schools for promoting better female performance at the secondary level (Hyde 1993b).

**Box 2.5: Gender Streaming**

A research project in Malawi examined the institutional and instructional factors that affect girls' education at the secondary level. Findings indicated that in coeducational schools, girls were in a minority, averaging 30 percent of the student body. Girls also tended to be younger than their male colleagues. The learning environment was difficult for girls with harassment, teasing and ridicule from boys for being unfeminine if one is intelligent and also when one is not too intelligent. Teacher-initiated experiments with gender streaming have shown promising results. In one school, streaming by gender and ability during math class benefited both the male and female students at the Junior Certificate and Malawi Certificate of Education level and narrowed the gap between boys and girls at the Junior Secondary level. In another, schoolgirls were streamed into one class for all subjects. Once again, an improvement in performance for both boys and girls was noted. The author suggests that gender streaming may offer an alternative to single-sex schools (Hyde 1993b).

In Tanzania, private secondary schools have a higher pupil-to-teacher ratio and a larger proportion of low-quality teachers than public schools. More girls than boys are enrolled in private schools. As a result, the performance of students in the private sector is poorer than that of students in state-subsidized schools (Mbilinyi and Mbughuni 1991, World Bank 1991). Similarly in Kenya government, schools have a wider catchment area, better-qualified teachers and score better results in national examinations than Harambee (community) schools. Harambee schools may receive government assistance. A study suggests that girls in Harambee schools are from poorer homes, have less promising educational prospects, and are more susceptible to pregnancy. With regard to persistence in school, drop-out rates were found to be higher in rural areas, especially at the primary level, and were twice as likely to occur if the institution was coeducational. The study further suggests that the smaller the female population in a school, the larger the number of female drop-outs (Ministry of Health/GTZ Support Unit 1988).

---

\(^6\) It is often argued that girls' performance is poorer than that of boys. But it is also argued that there has been an overall decline in academic performance for all children, particularly in science subjects and mathematics (Mwiria 1993, Kinyanjui 1993, World Bank 1991).
Generally there are fewer government-funded schools for girls than boys. Not surprisingly, there are more girls than boys in the poorer-quality private and community schools (Kinyanjui 1993, Ministry of Health/GTZ Support Unit 1988, World Bank 1990, 1991). There is strong parental preference for Koranic or Madarassa schools for daughters in some places (Anderson-Levitt and others 1994, Kane and de Brun 1993, Niles 1989, Niane and others 1993).

**Distance to school**

In Ethiopia, Gambia, Guinea, Kenya, Mali, Sierra Leone, Tanzania and Zimbabwe, the long distance girls often have to travel to get to school is also a deterrent to their participation and achievement in school, particularly in rural areas (Brock and Cammish 1991, lion 1990, Kane and de Brun 1993, Long and Fofanah 1990, Mbilinyi and Mbughuni 1991, Nangurai 1994, Save the Children USA 1993, Soumaré 1994, World Bank 1991). There are two dimensions to this concern: one relates to the length of distance and the energy children have to expend to cover the distance, often with an empty stomach. The other relates to the concern and apprehension parents have for the sexual safety of their daughters.

In Ethiopia about 20 percent of first grade students travel more than ten kilometers daily to attend school (TGE/UNICEF 1993). In a survey of primary school students in Freetown, Sierra Leone, 87 percent were concerned about the distance they have to cover to get to school. The authors relate this concern to zoning problems and the poor transportation system in Freetown. The study also mentions the difficulty of access to rural schools because of poor roads (Brock and Cammish 1991: 89). This problem has implications for supervision of schools and is also a factor noted in a study of girls’ education in Guinea (Long and Fofanah 1990). Another study indicates that close proximity of schools in Guinea encourages female participation (Anderson-Levitt and others 1994). In a study in Mali, distance accounted for 14 percent of the variance in girls’ enrollment. Distance was a significant factor for both rural and urban girls, but more so for rural girls. Most of the girls stated ‘that living far away from school and having to walk discourages them’ (Soumaré 1994: 36).

---

7 In this case, poor quality is defined by high pupil-to-teacher ratios and higher numbers of untrained teachers.
Teacher attitudes and pedagogy

The literature suggests that teachers’ attitudes, behavior and teaching practices have perhaps the most significant implications for female persistence and academic achievement and attainment. Teachers’ attitudes to their students are a reflection of the broader societal biases about the role of women in society and the academic capacity of girls. Evidence from Cameroon, Sierra Leone, Malawi, Guinea and Rwanda indicates that both male and female teachers believe that boys are academically superior to girls (Anderson-Levitt and others 1994, Brock and Cammish 1991, Davison and Kanyuka 1992, Kilo 1994, Long and Fofanah 1990, Prouty 1991).

In classroom observations in Kenya, Malawi and Rwanda, teachers paid more attention to boys than to girls, or completely ignored girls. In Cameroon, teachers acknowledged that they preferred to teach boys and that they focused more on boys than on girls in the classroom (Kilo 1994). In other instances, however, there is little evidence of gender discrimination by teachers in class (Grant -Lewis 1991, Hyde 1993). This may be the exception rather than the norm. In Zimbabwe, there is some gender discrimination by secondary school teachers, with boys receiving more attention and being given priority in the distribution of school books and other learning materials (Graham-Browne 1991). In Mozambique, it is noted that, “the little communication between pupils and teachers there is in Mozambican primary schools, exists outside the few truly urban schools, between boys and teachers. The higher rate of failure for girls might to a considerable extent also be an effect of inequality of treatment within the classroom” (Palme 1993, 34). The quality of teacher-student interaction is noted as often negative and discouraging when a female student is involved. There is little evidence to suggest that female teachers are any better or worse than their male counterparts with regard to in-class relationships to students.

The promotion of female teachers has been recommended as a strategy to encourage girls' education. Apart from providing positive role models to young girls, particularly in rural areas, parents are put at ease about their daughter's safety by the presence of female teachers. Yet there is little evidence of the positive impact of female teachers on girls' performance. The analysis suggests no difference in low expectations of female students between male, or female teachers (Anderson-Levitt 1994, Palme 1993, Prouty 1991, Serpell 1993). However, a study in
Uganda does indicate that the largest gender gaps in enrollment exist in poorer regions where the percentage of female teachers is low (World Bank 1992).


**Box 2.6: Teacher Attitude and Pedagogy**

A study carried out in two secondary schools in Nairobi, Kenya, indicated that girls in the coeducational school were more likely than boys to have negative perceptions and experiences of science education. Girls in the single-sex school had more positive experiences with science and were better able to study and follow science careers. However, discussions with the students revealed a genuine concern about the potential conflict between science careers and their future roles as mothers and wives. In the coeducational institution, girls cited peer pressure from those girls who have failed in science and mathematics subjects as a contributory factor to their low expectations of their capabilities in science and mathematics classes. The belief that science is difficult is self-reinforcing. In the coeducational school, the girls were passive in science and mathematics classes, partly because of their own self-doubt, but also because of their teachers' behavior. For example, in a physics class, it was observed that the teacher directed attention only to boys. During practical and laboratory sessions, girls took records: boys carried out the experiments. Science students stand a better chance of gaining entry into university, yet girls in the coeducational school had already given up hope of passing the national examinations long before the examination period (Ndunda 1990).

A sample of Malawian teachers characterized their female students as shy and unlikely to raise their hands in class. Eighty percent believed that girls are better behaved than boys and 90 percent were of the opinion that boys are better academically than girls. Most of the reasons given to explain why boys are academically superior to girls were negative responses about the girls rather than positive characteristics about the boys. They include girls' lack of ambition, loose morals and early pregnancies (Davison and Kanyuka 1992: 463).

Classroom observations in Tanzania showed that teachers pay more attention to boys than girls. The school environment is described as an authoritarian 'macho' environment where corporal punishment is frequently meted out, and where the popular teacher-centered pedagogy creates a competitive classroom environment which is not conducive to learning, particularly for girls (Mbilinyi and Mbughuni 1991).
Curricula, textbooks and other learning materials

The lack of social demand for girls education is often related to the fact that families and communities do not value or are ambivalent about formal education for girls. There is strong evidence in the literature to support this view, and several studies cite parental disillusionment with the present educational systems and express their support for more relevant curricula more closely related to the daily lives of students and providing practical skills for future employment (Brock and Cammish 1991, Kinyanjui 1987, Koczka 1992, Serpell 1993, World Bank 1992). The studies also discuss the limited options available to girls within the present educational systems. There is a strong gender bias in subject choices available for girls, and girls are often streamed out of the sciences and mathematics fields into the traditional 'female' subjects. Because of cultural factors and perceived and preferred career possibilities, girls also tend to opt for subjects that steer them into education, health and administrative support employment. This further limits options open to women in the formal labour market as women continue to remain concentrated in non-competitive fields (Baden 1993, Beoku-Betts and Logan 1993, Kinyanjui 1987, Ndunda 1990, Mbilinyi and Mbughuni 1991, Vandermoortele 1991).

The images girls face in school are powerful in shaping their self-perceptions and views of themselves. The need for more positive and accurate representation of women and their contributions to the economy is stressed in several studies. In a study on the portrayal of girls and women in Kenyan textbooks, the author states that, "Textbooks are Africa's mass medium for children" (Obura 1991: 10). According to Obura, the images that Kenyan textbooks portray are very powerful in shaping young minds as they are the key academic stimulus in the book-poor environment that characterizes many households. However, women and girls are nearly invisible in textbooks, even in agriculture where women are very productive and contribute much of the labour. Although the exclusion of women and girls in the textbooks is by no means deliberate, there is a clear unrecognized gender preference for males in the texts reviewed. In misrepresenting the real world, these texts promote the received wisdom that women are not competent, active citizens, and deprive schoolgirls of positive role models (Obura 1986, 1991).

In the Gambia, a recent review of textbooks for English, Social and Environmental Studies, Mathematics and Science, and Islam, and teacher's handbooks for Science and Mathematics and Islam corroborates the Kenya study. It concludes that despite efforts to remove
gender bias in school books, the tendency to portray women in nurturing, passive roles in relation to men persists (Kane and de Brun: 42, 43, Annex 3.11). The Kenya and Gambia conclusions are supported by other studies that conclude that textbooks and learning materials perpetuate a stereotypical and erroneous view that women's contributions to the economy are marginal (Lange 1994, Malenzapa 1994, Niane and others 1993, Mbilinyi and Mbughuni 1991, Wamahi 1994). In Zambia, the review of gender bias in school textbooks has led to a marked difference in the portrayal of male and female roles in educational materials.

The availability of textbooks to students has been identified as a key determinant of student performance (Khan and Berstecher 1988, Kudjoh and Mingat 1993, Lockheed and Verspoor 1991, UNESCO/UNICEF 1993). But the extent to which girls' access to textbooks, with or without gender stereotypes, affects their academic performance has not been explored.

Sexual harassment

"While the many social and economic constraints on women obtaining an education in Africa are the subject of much concern, the issue of sexual violence and harassment has been largely neglected" (Hallam 1994).

Sexual harassment in educational institutions around the world has increasingly been discussed (AAUW 1990, Larkin 1994). The mass rape of 75 secondary schoolgirls and the death of 19 more during an attack by their male schoolmates at the Catholic St. Kizito Mixed Secondary School in Kenya in July 1991 brought sexual violence and sexual harassment in educational institutions in Africa to international attention. But such acts of violence against girls in schools are not uncommon. A recent study suggests that "there is a pandemic of sexual violence and harassment in educational institutions in Africa" (Hallam 1994). This is a very real concern for students, parents and school authorities (Kane and de Brun 1993, Mbilinyi and

---

8 A recent publication defines sexual harassment as: 'unwanted conduct of a sexual nature, or other conduct based on sex affecting the dignity of women and men. This can include unwelcome physical, verbal or non-verbal conduct. Sexual harassment includes, but is not limited to, the following:

i) Unwanted physical conduct of a sexual nature such as unnecessary touching, patting or pinching or brushing against another person; ii) Unwanted verbal conduct of a sexual nature such as sexual advances, propositions or pressure for sexual activity, suggestive remarks, innuendos or lewd comments; iii) Unwanted non-verbal conduct of a sexual nature such as the display of pornographic or sexually suggestive pictures, objects or written materials, leering, whistling or making sexually suggestive gestures (Sutherland for Ramphele 1994).

Who are the perpetrators? Male pupils are identified as major offenders. In groups, as members of clubs and cults, they prey on female students, abuse them verbally, cartoon them in obscene campus publications, harass, beat and rape them (Hallam 1994). A study in Guinea indicates that boys are very aggressive towards girls and that they used physical force, threatened and teased girls to silence them in class (Anderson-Levitt and others 1994). Similar observations were made in classrooms in Rwanda. It was particularly evident when male teachers encouraged the “ganging-up” and abusive verbal interaction (Prouty 1991). Teachers also prey on their female students, threatening to fail them, or publicly humiliate them, to prod them into sexual liaisons. Teachers are also reported to reward female students who 'cooperate', with grades and tuition waivers. During confrontations between students and State forces, females are known to have been raped by policemen and soldiers (Hallam 1994). A particularly worrying development is the increase in the sexual abuse of very young schoolgirls by older men because of their fear of contracting the HIV virus from older women and their belief that young girls are unlikely to be sero-positive (Camfed 1994, Fidani 1994).

These limited accounts of sexual harassment and violence indicate that girls and young women face an extremely hostile and uncomfortable learning environment in schools and universities. The lack of redress by authorities, and the abuse of female students within educational institutions, grossly undermine the efforts to increase female access and achievement in education. Acts of sexual harassment and violence in schools and universities reflect society's negative views of women. These acts have a profound and devastating effect on the girls, inevitably affecting their educational attainment and performance. A study in Tanzania implicates sexual harassment in the poor levels of performance by female students and suggests that the issue of sexual harassment of schoolgirls (and among college and university women) by fellow students and teachers requires more investigation and action (Mbilinyi and Mbughuni 1991).
Pregnancy

"The great problem is school pregnancy. We struggle to raise school fees for them (daughters) but they disappoint us. This influences us to give priority to the boys" A parent in rural Zimbabwe (Graham-Browne 1991:195).

As girls become adolescents, pregnancy becomes a major factor in school drop-outs. Indeed, pregnancy emerges as a major cause of adolescent schoolgirls leaving school. Fear of pregnancy is another reason why parents remove their daughters from school as they approach or reach puberty (Anderson-Levitt and others 1994, Bledsoe 1991, Brock and Cammish 1991, Palme 1993, Prouty 1991, Serpell 1993). A recent study in Cameroon suggests that a community's experience with schoolgirl pregnancies may negatively affect the prospects for educating young girls. For the past twenty years many Christian families in a community in Ngaoundere have sent their daughters to school. Consequently the girls did not get married at the traditional age of thirteen or fourteen. Now they are in trouble. The girls became pregnant by schoolboys, teachers or other civil servants who did not follow the customary rules on marriage and families and did not marry the girls. "They viewed such marriages as an obstacle to their careers. The obligation to work in the father-in-law's field was not compatible with their own education-based ambitions." Pregnant girls are expelled from school and parents of the girls who expected financial support from sons-in-law are now economically responsible for their adult daughters as well as their grandchildren. The author suggests that these experiences may explain a trend among Christian parents to marry off their daughters at puberty even if they have not finished primary school (Holtedahl 1993: 291).

The health implications of teenage pregnancy include a very high risk of death and illness for the adolescent mother and child. A study in Kenya showed that secondary schoolgirls who had been pregnant were twice as likely to report poor health than those with no pregnancy history (Youri 1993). The increasing indications of significant levels of illegal abortions, particularly in urban areas, and related health risks for young women are also frequently discussed in the literature, suggesting that the pregnancies are not planned and that there is a significant demand for contraception amongst teenagers (Lee and Made 1994, Van de Walle and Foster 1990, Yeboah 1993). The exposure to sexually-transmitted diseases, infertility, and

With regard to HIV/AIDS it is becoming evident that men prefer young women as sex partners because of the perception that they are AIDS-free. This is a particularly worrying development because —due to the harsh economic situation in many African countries—schoolgirls are trading sex for money. The example of Thelma a fifteen-year-old schoolgirl in Mozambique provides a good illustration, ‘(She) calls herself a “weekend prostitute” because she works only on Friday and Saturday nights. Her family is unable to pay her annual school-fees or buy any textbooks and was threatening to take her out of school. Now they are grateful for the money Thelma brings home every weekend. And Thelma has stayed on in school. ‘By doing this I can carry on studying. My favorite lessons are history, science and Portuguese.’ Thelma’s teachers don’t know that she is a prostitute.’ The study indicates that many of the young girls engaged in such sexual activity are not aware of the risks associated with not practicing safe-sex (Focus on Africa, April-June 1994 reported in Hallam 1994).

The high fertility level among girls in this age group in Africa compared to adolescents in other regions in the world is illustrated in figure 2.4. In 1990 almost one fifth of 15-19 year-old women in the region gave birth, comprising more than 20 percent of the total fertility rate. This level of adolescent fertility is attributed to several factors, including breakdown in the traditional systems of regulating sexuality and contraception, an apparent information gap in adolescent knowledge of sexuality and contraception, early marriage, a decrease in the age of menarche, and increase in age of first marriage (Meekers 1993, Yeboah 1993, Gyepi-Garbrah 1985).
Ethnographic literature indicates a diversity in views on premarital sex across the region. At one end, premarital chastity is prized; but premarital sex and pregnancy are acceptable even desirable (Lesthaeghe and others 1992). The abject poverty in which many families find themselves, and the temptation for young girls to use sex to generate an income, or finance their education, flies in the face of moral standards that forbid premarital sex. In Mozambique, it is noted that urban girls are more likely to leave school because of pregnancy than rural girls. The author suggests that girls get pregnant without the consent or knowledge of their parents. In rural areas girls of school age do get pregnant but are more likely to do so outside the school environment (Palme 1993).

More often than not, pregnancy marks the end of a girls' schooling. Generally, pregnancy results in expulsion. The official penalty for schoolgirl pregnancy is very high in most Sub-Saharan African countries. Faced with this situation, girls may opt to terminate pregnancy. It must be noted, however, that some countries have reviewed the punitive policies towards schoolgirl pregnancies. In Guinea, the policy to expel pregnant schoolgirls has been revoked and some students are now returning to school after giving birth. In some cases, however, girls are still expelled, and a recent study suggests that having a child makes it more difficult for girls to study. There are also girls who choose not to continue their education once they become pregnant. Interestingly, some parents are discouraged by this change of policy because no attempts are now made to determine if a teacher is responsible, complaining that "Ecole, c'est pour les donner aux maîtres, la proie des maîtres" (School is for giving the teachers their prey) (Anderson-Levitt and others 1994).

---

9 A recent ILO document presents some telling statistics from 13 studies in seven countries in the region. The studies indicate that the majority of women seen for abortion-related complications at major hospitals in these countries between 1974-1990 were adolescents. In Calabar, Nigeria, 72% of 147 cases were teenagers aged between 13-19; in Kenya, 53% of 1,077 at Kenyatta hospital in Nairobi were under 24; in Kinshasa, 57% were under 18; in Zambia, 59% at a Lusaka hospital were under 25; and in Sierra Leone, 81% of 560 women attended to at a Freetown hospital were between 15-24 years old (ICAF 1990 in Yeboah 1993: 22).
Box 2.7: Schoolgirl Pregnancy in Kenya

A study of schoolgirl pregnancy in Kenya covered 166 schools in seven provinces and a population of 20,000 secondary and 9,000 primary schoolgirls. The main data source was a prospective survey carried out during the three terms of 1987 but including retrospective data on 1985 and 1986 drop-outs. Findings of the study suggest that drop-out rates were two times more prevalent in Harambee community schools as in government-supported and private schools. Harambee schools are likely to be staffed by untrained teachers, and students attending such schools are more likely to have lower social economic status than their counterparts in government-aided and private schools (Kinyanjui 1993, Eshiwani 1988). More conceptions occurred amongst girls attending coeducational institutions than amongst those in single-sex schools. Over the three-year period covered by the study, only 6 of the 72 primary schools and 4 of the 82 secondary schools surveyed reported no pregnancy-related drop-outs. Data from the 1987 prospective survey indicated that over half the conceptions occurred during school holidays, indicating that girls in boarding schools are better protected from pregnancy while in school. More conceptions occurred within this group during holidays than in the group of day students. Primary school drop-outs related to pregnancy were more common in rural than urban areas. For secondary schoolgirls there was little difference in pregnancy-related drop-outs between rural and urban residents. The study revealed that girls who drop-out because of pregnancy tend to be older than their class average age, and to be performing below the class average, academically. Pregnancy-related drop-outs were much higher for the exit classes at the primary and secondary levels (Ministry of Health/GTZ Support Unit 1988: 39-47).

A more recent study of schoolgirl pregnancy in Kenya included 10,314 secondary schoolgirls in 17 districts. Sixty-eight percent of the sample were enrolled in mixed schools. Forty-one percent in government schools, 31 percent in Harambee schools, 21 percent in Mission schools and 5 percent in private schools. Most of the sample live in rural areas. Thirty-four percent of the sample reported being sexually experienced. Seven percent of them reported ever being pregnant, 11 percent at the time of the survey. Fifteen percent of the sample indicated that a sister had conceived while in school. There was no significant difference in the rate of pregnancy by type of school enrolled in. Only 28 percent of the sample knew when pregnancy was most likely to occur in the menstrual cycle. Only 18 percent of the girls reported using some form of contraceptive; 47 percent the pill, 10 percent inter-uterine devices, and 7 percent the injectable contraceptive. The survey suggests that abortions were most likely to occur in 15-18 year-old girls and less likely when the schoolgirl was aged 19-21 (Youri 1993).

In most of the studies reviewed, pregnancy-related drop-outs are reported for all levels of education particularly higher grade primary and secondary levels (Bledsoe 1991, Brock and Cammish 1991, Fleuret and others 1992, Long and Fofanah 1990, Palme 1993, Mbilinyi and Mbughuni 1991, Serpell 1993, World Bank 1990, World Bank 1991, World Bank 1992, Yeboah 1993). A study in Malawi suggests that the problem of schoolgirl pregnancy may be exaggerated, especially by male teachers (Grant Lewis and others, 1990). However, figures from other studies suggest that it is a very real problem. A study of schoolgirl pregnancy in Kenya estimates that an annual average of approximately 10,400 girls leave school because of pregnancy (Ministry of Health/GTZ Support Unit 1988:38). Data from Tanzania indicate that in 1983, 7,343 girls, approximately 30 percent of secondary schoolgirls, were expelled because
of pregnancy (World Bank 1991:58). In Mali, 10 percent of secondary school students were dismissed because of pregnancy and in Zambia, about 2 percent of all schoolgirl expulsions are related to reported pregnancies (République du Mali 1988:34; Senerowitz and Paxman 1985:26).

School pregnancy is often referred to in the media. In Zimbabwe, for example, there is a tendency to blame the girls without querying the responsibility of the men, "...whether young boys or, as is not uncommon, male school-teachers" (Graham-Browne 1991, 195). The findings of a study of secondary schoolgirl pregnancies in Kenya indicate that in rural areas boys of the same age were most likely to be responsible for schoolgirl pregnancies, but in urban areas mature men were most likely to be responsible (Youri 1993). Teachers are most often held responsible for schoolgirl pregnancies. Although it remains difficult to get accurate information on who is responsible for schoolgirl pregnancies, it is encouraging to see that researchers are broaching this sensitive topic.

Although senior teachers surveyed in the Kenyan study cited lack of discipline and control by parents as a major factor in schoolgirl pregnancy, poverty and ignorance of reproduction were also mentioned. With regard to sex education in Kenya, 60 percent of the teaching staff approved the inclusion of methods of contraception in the teaching of reproductive biology but only 15 percent of the schools included this subject (Ministry of Health/GTZ Support Unit 1988: 17).

Meekers (1993) provides a comprehensive review of countries in the region that have family life/population education programs incorporated into their education system. At present 32 countries have adopted in-school family life or population programs and 10 are preparing to incorporate such programs into their curricula. However, the implementation of these programs is weak and there is a great dependency on external funds and technical assistance to run the programs. Only Seychelles, Sierra Leone and Somalia have institutionalized the programs into their formal education systems. The training of staff to teach the programs and the provision of the materials to support them remains deficient. The knowledge of staff currently handling the programs remains limited. For example, the authors of the Kenyan study conclude that, "the teaching of reproductive biology and family planning topics in the sampled schools is a confused one: many teachers admitted that they, themselves, were not clear on some technical details and few felt confident in their ability to communicate effectively with the students" (Ministry of
Health/GTZ Support Unit 1988:17). These factors, plus the fact that these courses are not examined, has contributed to the ineffectiveness of the family life programs (Meekers 1993: 8-13).

**Girls' expectations and motivation**

Student attitude surveys in Malawi, Cameroon, Gambia, Sierra Leone and Kenya show that both male and female students have low expectations of female achievement in school and of career prospects. A study in Guinea shows that although primary school pupils showed few gender stereotypes in the first grade, by the fifth grade both boys and girls subscribed to gender stereotypes that generally favored boys, and that girls internalized self-images of inferiority (Anderson-Levitt and others 1994). In Zambia, an analysis of the meaning of schooling in a rural area suggests that at initial enrollment, many students, teachers and parents agreed that any child could succeed in school. However by the 4th or 5th grade, age 12 to 15, most girls drop-out of school. The author offers a twofold explanation from the perspective of girls "girls in general, and I in particular, do not have the intellectual ability to cope with the curriculum" and "the most important challenge at this stage in my life is to get married and start a family, and further schooling will contribute little or nothing to my attainment of those goals: indeed it may even impede it" (Serpell 1993).

Sociocultural factors and the socialization process (which constantly presents a subservient wife and mother role for girls) affect their self-image, performance and attainment in school and their career aspirations. With regard to aspirations, children in urban areas and male students articulated a wider range of career choices, including medicine, law and engineering. However, children residing in rural areas, and female students, had a more limited range of career aspirations, teaching and nursing being the most popular. Girls tend to aspire to traditional 'female' occupations, particularly teaching and nursing, regardless of place of residence. Science, mathematics and technology-related careers are considered masculine and in compatible with the demands of being a wife and mother (Brock and Cammish 1991, Kane and de Brun 1993, Davison 1993, Davison and Kanyuka 1992, Long and Fofanah 1990, Ndunda 1990). The fact that society, parents, teachers, and students have low expectations of female

---

10 A USAID-funded study found that frequently teachers redefined the content of family planning courses because they didn’t feel comfortable with the content in view of taboos regarding the discussion of sex. (Cain and Shuman 1994).
students, reinforces and supports girls' low academic performance and high drop-out rates (Ndunda 1990, Waweru 1994). Lack of interest on the part of parents and students can lead to truancy, and may contribute to the high level of educational wastage at the primary and secondary levels.

A recent study in Uganda argues that poor performance of children, particularly girls, related to the greater demand on their time to perform household chores, should be treated cautiously. The age of the children in question, truancy, lack of interest on the part of children and school-based factors must also be given credence. Preliminary observations in two schools in rural Uganda provided some insights into how students spend school time. About 90 percent of the children observed lived within a 3 kilometer radius of school, yet many spent 2 to 3 hours daily playing, inspecting merchandise and loitering on their way to and from school. Most of the children only had one hour of daylight at home. During this time, they fetched water, and helped with the cooking and the care of younger siblings. Several were asleep by 9.00 p.m. Most major chores and errands were carried out during weekends when there was no school. In the lower and upper school, out of 4 and 6 hours available of learning respectively, only an average of 1 and 3 hours respectively was used. About two-thirds of this time was taken up finishing exercises from the blackboard or textbooks (Namuddu 1989 quoted in Namuddu 1991).

The lack of interest in schooling illustrated by interviews with young Ghanaian girls sheds some light on some of the reasons for non-attendance by girls. An 8 year-old fruit seller in Makola market in Accra left school after grade one, aged 6. Her reason for leaving school; "I didn't like sitting in the classroom because I felt it was boring; to crown it all, sometimes the money I was given for transport and food wasn't enough and I had to walk all the way to Bubuashie and back". In response to the question of who paid her fees; "Mum, because daddy does not work and he claims he has no money for me." She has no intention of going back, "It was boring and I wouldn't stop my trading because this gives me money to help my mother. She is also a petty trader. “Schooling is good but if you do not have money it is difficult and sometimes it makes me unhappy that even when I was sitting in the classroom I could not concentrate. I envy those who came to school with packed foods and well dressed". A 12 year-old head porter in Accra who left school at age 8, claims she did so because "I lost interest in school, I just wanted to make money". Another young girl aged 10, who left school when she
was seven did so because "To me going to school was very boring, I preferred to pick colanuts instead" (Asomaning and others 1994, 13-18).

The lack of parental control of children's school attendance is highlighted in a study in Mozambique. In a recently established peasant refugee suburban settlement and an older peri-urban settlement, schooling is described as a contradictory project for both parents and students. The generally positive perception of education as the means to a better life is impaired by the reality of achieving the necessary 9 years of education in a context of uncertain educational outcomes, students' experiences with repetition and failure, and dire poverty, where the immediate daily struggle outweighs the longer-term potential benefit of education. For many students, schooling is a long-term project that can be left and returned to over a period of time. Parents often do not know if children attend school (Palme 1993).

In some Malawian secondary schools, female students are characterized as lazy and uninterested in school. In one case, it is reported that school authorities resorted to locking female dormitories during school and prep hours to ensure that the girls did not slip out of class or prep to go and sleep (Hyde 1993a, 1994). In Uganda, 13 percent of the drop-outs interviewed cited lack of interest and poor academic performance as the major reason for wastage (Fleuret and others 1992). Similarly in Malawi, students' lack of interest and peer pressure were among the factors cited for the high incidence of school drop-outs (Kapakasa 1992).

The amount of time students, particularly girls, spend on chores and other productive activities such as marketing, reduces the time and energy they have to spend in school, affecting their attendance, their performance and their attainment (Brock and Cammish 1991, Fanta 1991, Ilon 1990, Long 1990). In Guinea and Niger, girls are prominent in petty trading in the border towns and spend much of their time away from school marketing (Fanta 1991, Long and Fofanah 1990). Sometimes students are compelled to trade to raise money for their school costs and to ensure household survival.

As these examples and the quotes in Box 2.8 illustrate there are several complex, often interrelated reasons why drop-out is high. To ensure that as many girls as possible complete their education, planners and policymakers need to better understand how those key factors that lead to drop-out can be minimized through targeted interventions.
Box 2.8: In Their Own Words

“I felt it too much for not completing my school—I was the best amongst the girls in primary 6 and I'm not praying to the Almighty Allah for such a thing to happen even to my worst enemy”. Urban 19 year-old girl, mother of two, selling fruit, given to a businessman at 13.

“Some parents don't send their children to school because they want someone to help in the house. This is a very primitive idea. Girls have equal right as boys and should not be left behind. I want to marry an educated girl, either English or Arabic school, I don't want to marry an illiterate.” Thirteen year-old brother of a girl removed from school (Kane and de Brun 1993).

“.With us Africans, men are the ones who do things and ladies come afterwards and maybe that's why they behave like that in classes and they fear to do things such that the boys are the ones who volunteer to do things. They usually sit there and record the results of the experiments and they hardly do the experiments themselves.” Secondary schoolboy in a coeducational school.

“For many women after achieving what they want, they would like to settle down and have a family but once you find yourself achieving so much, like being a doctor or a scientist, it becomes hard for you to get some one to marry you and all that and I know women fear that and the shame of remaining single”. Secondary schoolgirl, science student (Nduna 1990:43,90).

“Parents are biased towards the education of boys because they say girls disappoint them by getting married prematurely and getting pregnant. So some of us are, unfortunately. I believe that even if I had the fees they would not have permitted me to go simply because I am a girl.”

“The boy "misbehaved" and impregnated the daughter of a chief. The parents were forced to pay compensation and raised the money by selling part of their land. Hence they were annoyed and made the boy work for himself. To the boy, it is not his girlfriend's pregnancy that forced him to drop-out, but his parents' reluctance; after all, he is a boy, and [her] pregnancy should not keep him from going to school" (Fleuret and others 1992: 41, 43).

Summary

The recent scholarship on school factors affecting girls' education provides a good indication of the many ways in which schools limit girls' academic potential. Through exclusion, avoidance and marginalisation, schools reflect and promote society's low expectation of girls. Studies focus on how the school environment affects girls' access to schools, their learning achievements and level of attainment. Teachers hold negative attitudes about the academic potential of female students and project the wider communities gender biases into schools and classrooms. School and classroom cultures are generally hostile to girls. Sexual harassment and sexual violence within educational institutions create an uncomfortable milieu for learning. The images of women in learning materials and textbooks further reinforce the negative view of women in society. The poverty of schools and low teacher morale exacerbate the situation. If girls can be used as a gauge of the efficacy of the educational systems in the region, there is much room for improvement. The literature indicates opportunities for research
which will promote female education and support the ongoing efforts to promote effective schooling and reverse the decline in quality in African educational systems.

- The inefficiency caused by the high rate of drop-out in schools must be arrested. The reasons that children, particularly girls, leave school in the early years of the primary cycle at the secondary and tertiary levels need to be investigated further. The quality of gender-disaggregated educational statistics needs to be reinforced to better evaluate and monitor student flows.

- Teachers, both male and female, must be made aware of the impact of their attitudes and teaching practices on educational outcomes by gender. Few studies discuss this in any depth. Such initiatives must be related to ongoing measures to improve education management, teacher training, morale and effectiveness. Research could monitor which activities promote more effective learning among girls. Manuals and training guides to eradicate gender bias in teaching are needed.

- Learning materials, curricula and examinations can be made more gender-aware. This will require the development of criteria for evaluating gender bias in the materials, gender-sensitivity training methodologies, tools and manuals and improvements in educational management and supervision. Follow-up evaluation of the effects of these materials on girls’ academic persistence and achievement will be important.

- The issues of schoolgirl pregnancy, sexual harassment, and violence in schools urgently require further investigation and action.

**POLITICAL AND INSTITUTIONAL FACTORS**

*The financing and management of the education sector*

In several Sub-Saharan countries, the capacity to finance and manage the education sector is increasingly under threat. The gains made in the 1960s and 1970s are being eroded as the number of children eligible for school each year continues to outstrip supply (World Bank 1988). A major issue of concern is the fiscal crisis and the inadequate public support being given to the education sector, particularly at the primary level. Table 2.5 (Annex 1) presents a
comparison of public recurrent expenditure per student by level in 1980 and 1990 in selected countries across the region. The data indicate a general decline in per student expenditure during the ten-year period, and the fact that per student expenditure is persistently lowest at the primary level where most girls in the education system are represented. Governments are urged to review overall investment in education and to make more funds available for primary education where most girls are enrolled and where there is much room to improve access to, efficiency of, and quality of education.

African governments have not intentionally inhibited girls education. Nevertheless, the lack of political will in promoting it is apparent. But political will and recognition of the importance of attaining education for all girls remain important in boosting female enrollments. Studies demonstrate the linkage between government commitment to universal primary education (UPE) and female education. Low gross enrollment ratios are associated with poorer countries, and large gender gaps are associated with low enrollment ratios. Low gross enrollment ratios are related to the failure of governments to achieve universal primary education. Low-capita income affects the capacity of governments to finance and deliver education, and restricts educational supply, making the proportion of public spending needed for universal primary education (UPE) greater in poorer countries (Colclough and Lewin 1993, King and Hill 1991). However, the authors of a recent study characterize about half the countries including Nigeria, Uganda, Tanzania, Ghana, Malawi and Ethiopia, with low gross enrollment ratios, as having low commitment to providing schooling for all children. They argue that these countries achieve UPE with an amount of public spending on primary schooling equivalent to less than 2 percent of Gross National Product (GNP). In other countries, the attainment of UPE would require an increase of between 3 to 7 percent of GNP (Colclough and Lewin 1993). Lockheed and Verspoor (1991) argue that as enrollments begin to slow and the population continues to grow, extending access to out of school children becomes more difficult and more expensive.

Recent reviews of education reforms and policies across the region indicate their limited effectiveness because of lack of implementation, partial implementation, and implementation but no appreciable effect (Craig 1991, Fuller and Habte 1992, Psacharopolous 1990). Not surprisingly, policies aimed at enhancing female education have a poor history (Subbarao and others 1994). Recommendations to promote girls’ education are often presented in the form of a long list with no rationalization about which interventions may lead to the greatest returns for all
children and how these actions complement overall efforts to improve educational access and quality (Brock and Cammish 1991, Fleuret and others. 1992, Namuddu 1991, 1994, Wyatt 1991). The issue of the capacity of education ministries (and indeed other institutions) to carry out the necessary gender analysis and to plan and manage the required changes to increase access to, improve the quality of, and ensure the efficiency of education systems is one concern. Another is the lack of effective use of statistics in policy and program formulation.

The limited effect of women in development initiatives

After the United Nations International Women's Decade which drew attention to the potential contribution of women to development, women's ministries, bureaus and offices were established in almost all African countries. Many of these units are understaffed and under-funded and their effectiveness in lobbying for women's issues at the national level and in improving the status of women has remained marginal. The proliferation of women's projects has distracted governments from focusing on the need to promote gender equity as a precondition for sustainable development. Although ongoing structural adjustment policies provide an opportunity to enhance the situation of women for increased efficiency and sustainable growth, unfortunately this option is not being engaged (Palmer 1991).

There are few women managers in the civil service and the representation of women in central government and in political parties remains weak. Consequently women are not visible in decision-making and they exert minimal pressure on their governments to make policy decisions and investments that will enhance the situation and contribution of women. For schoolgirls, this means a paucity of role models, particularly in the rural areas (Beoku-Betts and Logan 1993, ILO/JASPA 1991, Leigh-Doyle 1991, Namuddu 1991, UNESCO/UNICEF 1993).

With regard to women in development, several documents identify the need to improve the overall status of women in the region. These call for a review and revision of discriminatory laws and regulations that govern marriage, inheritance, women's access to and ownership of land, access to credit and to the labour market. It is argued that the facilitation of such an empowering context is a necessary precondition for gender equity in education and other sectors of civil society (King and Hill 1991, Namuddu 1991, Wyatt 1991).
Political instability

This, civil strife and war have destabilized several communities in the region, and have severely affected children's education. For example, in Sudan, the costs of war, drought and the displacement of about 3.5 million people have disrupted the social and institutional structures of education. In areas where the civil war of the 1980s was most intense, Bahr-al-Ghazal, for example, schools have been destroyed and deserted. In provinces such as Darfur and Kordofan, low enrollments reflect the drought which forced millions to leave their homes (Graham-Browne 1991). In Mozambique, the movement of families and children because of war and political instability, declines in the natural resource base, divorce, and death of parents have led to disruptions in children's schooling (Palme 1993).

Summary

Several political and institutional factors also constrain female participation in education. The political will to tackle the problems of non-participation and non-enrollment of girls is a key factor for improving educational outcomes for all children. Politicians and policymakers must send out clear, strong and positive messages about female education and about improving the status of women. These statements should be supported by well-argued and clearly justified action plans to create gender-sensitive policies and institutions. Such statements could well make clear the link between women's education and sustained development.

CONCLUSION

This chapter has reviewed recent literature on female participation in education in Sub-Saharan Africa. The factors that constrain female education have been identified. Hyde's (1989) review summarized the major constraints to girls' educational participation and achievement in the region. The present review indicates that a deeper understanding of some of the same factors and an elaboration of others has developed (see Figure 2.6 for a summary of factors that influence female education).
Figure 2.6. Typology factors that influence educational outcomes for female students in SSA

**School Related Factors**

- Poor quality of the learning environment
- Prohibitive costs of schooling
- Irrelevant curricula
- Long distance to schools
- High levels of repetition, dropout and failure
- Sexual harassment and/or liaison
- Pregnancy

**Political and Institutional Factors**

- Fiscal crisis
- Inadequate public expenditure in the social sectors
- Political instability and civil strife
- Unclear girls' education strategy
- Weak research and data collection capacity, and use in policy formulation
- Low status of women
- Limited employment prospects

**Socio-cultural Factors**

- Ambivalent parental/familial attitudes to female education
- Premium placed on apprenticeships
- Initiation ceremonies
- Early marriage and bride price/wealth systems
- Religion
- Gender socialization

**Socio-economic Factors**

- Poverty
- Direct Schooling costs
- Opportunity costs of schooling
- Limited employment prospects
- Socio-economic status and social class
- Parental/familial investment behavior
- The economic value of girls
- Rural/Urban residence
- Level of parental education

**OUTCOMES FOR GIRLS:**

- NON-ENROLLMENT
- OVERSEENROLLMENT
- ABSENTEEISM
- POOR MOTIVATION
- LOW SELF-ESTEEM
- POOR ACADEMIC PERFORMANCE
- HIGH LEVELS OF DROP-OUT
- HIGH ILLITERACY LEVELS
- LIMITED LABOR MARKET OPPORTUNITIES

- Demand-side factors
- Supply-side factors

1 Includes factors highlighted in Hyde (1989).

The socioeconomic and sociocultural factors discussed here can be further characterized as limiting the demand for female education. At the household and community levels, demand for female education is limited, particularly in poorer communities and rural areas. Poverty is a
major factor depressing the demand. Where resources are scarce and choices have to be made, boys are more likely to be sent to school. Sociocultural factors are a major deterrent to schooling for girls. Some parents hold very strong negative views or are ambivalent about girls' schooling and see little relevance in formal education for girls. The persistence of certain institutions and cultural practices, notably early marriage and the institution of bride price, further limits the opportunities for girls to attend and complete their schooling. Income from girls' labour is appreciable from an early age and further limits their educational opportunities.

The school-related factors and the political and institutional factors are supply-side characteristics. On the supply-side, education systems reinforce gender inequities by strengthening gender stereotypes about female roles and low academic expectations. The problems of girls' education cannot be divorced from the general problems of educational supply and quality in the region, particularly in poorer and rural areas. Despite efforts to increase female access to schools little has been done to improve the hostile learning environment. There is much concern about female safety directly related to sexual violence in schools and also to the high levels of schoolgirl pregnancy. Educational policies and other political and institutional factors also constrain female education. The fiscal crisis has had a devastating effect on the public financing of education, and the continuing high population growth rate has further exacerbated an already regrettable situation.

Demand and supply factors influencing female schooling are interrelated and should be viewed as a unitary concern. While the sociocultural and socioeconomic factors are difficult to address, these can be dealt with at the same time as the supply factors. Research indicates that in countries where gross primary enrollments are low, girls' educational participation is also low (King and Hill 1991, Colclough and Lewin 1993). This further reinforces the need to focus attention on actions that will enhance female education. This review demonstrates that enough knowledge exists to point the way towards targeted interventions to accelerate girls' education in the region. Research must provide policymakers and planners with timely and accurate information on the issues, and show how these can be tackled. The following chapter presents an overview of some promising interventions.
III

PROMISING INTERVENTIONS FOR PROMOTING FEMALE EDUCATION

INTRODUCTION

The review of the literature demonstrates the variation, complexity and inter-relatedness of the factors that constrain female education. These factors are similar to yet different from those exhibited elsewhere in the developing world. There is a growing body of scholarly reviews of strategies to enhance female education and their efficacy. This provides a detailed catalogue of policy and program approaches from which several conclusions can be drawn (Herz and others 1991, King and Hill 1991, Tietjen and Prather 1991, UNICEF 1992, Wyatt 1991).

First, it is difficult to assess the cost-effectiveness of most of the initiatives. But the question of finance for girls' education is critical and must be addressed within the context of resource mobilization for education to avoid underfunding, neglect or dismissal of promising interventions. The current trend of cost-sharing must also be evaluated for its potentially negative impact on female participation, particularly in light of the economic and social benefits of female education in the long term. Full female participation in education is a pre-condition for sustainable development in the region and for attaining the Education for All goals set across the region.

Second, since girls' education is constrained by several related factors at the home, school, community and governmental levels, the most promising approaches appear to be those which address supply-side and demand-side factors simultaneously. Though most interventions tackle either supply or demand-side factors, the appropriate 'mix' of interventions appears to be largely specific at the local level.

Third, most of the successful initiatives have been conceived and managed by non-governmental organizations, on a relatively small scale with little direct government involvement but with strong community engagement. This raises the question of the viability of making substantial progress in promoting female education without full government commitment and leadership within broader Education For All policies.
Fourth, the success of many of the initiatives must be treated cautiously: the effectiveness of many of the initiatives has yet to be proved. Tietjen's (1991) review of the impact of several initiatives demonstrates this clearly, as does the large number of girls who remain uneducated even after implementation of girls' education initiatives.

Fifth, despite this growing body of knowledge about the complex problems of female education, few significant programs and projects have been implemented to reduce the gender gap in education, particularly in Sub-Saharan Africa; and those implemented have had limited impact. Most of the examples cited in the literature are from Asia. Very few are from Sub-Saharan Africa. Yet it is in Africa that the need is most urgent to move from analysis of the causes of non-participation of girls to operational action supported by clear monitoring and rigorous evaluation.

The reviews have underlined the need to conceive of the problem in terms of supply and demand. For example, Herz and others (1991;34) suggest that 'Analyzing the returns and constraints associated with female education in the framework of demand/supply can help to formulate clearer strategies to increase girls' schooling and clarify the case for special efforts to educate girls'. Similarly, it has been argued that 'The interaction between supply and demand factors jointly determines the levels of girls' educational participation (Tietjen and Prather 1991, 8). Bellew and King (1991) assert that efforts to promote girls' education must improve supply by increasing the number of school places for girls, and at the same time improve demand by increasing the benefits and reducing the costs of schooling for girls' families. A summary of the recent literature also posits a supply and demand framework for the conceptualization of girls' education (UNICEF 1991). This chapter presents an overview of some promising interventions and ongoing interventions to enhance female education in the region. Interventions are grouped by whether they address demand or supply side constraints. Figure 3.1 presents a summary of some promising strategies for improving female participation in education. These and the following examples are in no way prescriptive but are meant to propose some interventions that are being tried in specific settings and that may be adapted to the local situation, after an appropriate and targeted analysis.
### Figure 3.1

**A Summary of Promising Interventions to Promote Female Education**

<table>
<thead>
<tr>
<th>DEMAND-SIDE FACTORS</th>
<th>POSSIBLE INTERVENTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Household and community factors</strong></td>
<td></td>
</tr>
</tbody>
</table>
| High direct costs of schooling | • Lower the cost of school materials.  
     | • Provide transportation and uniforms.  
     | • Introduce bursary, scholarship and fee waiver programs, school lunches, medical and health support such as deworming.  |
| High opportunity costs of schooling | • Adjust the school calendar to accommodate household child labour requirements.  
     | • Reduce the distance between school and home.  
     | • Use satellite schools.  
     | • Provide child care and pre-school facilities.  
     | • Promote labour-saving technologies.  |
| Low private economic returns to girls education | • Improve the legal and regulatory systems to enhance women’s status.  
     | • Make education curricula more responsive and relevant to livelihood and market demand.  
     | • Adjust the school calendar to accommodate household child labour requirements.  
     | • Reduce the distance between school and home.  
     | • Use satellite schools.  
     | • Provide child care and pre-school facilities.  
     | • Promote labour-saving technologies.  |
| **Chastity and sexual safety** |  |
|  | • Increase community participation in schools.  
     | • Construct culturally appropriate facilities.  
     | • Promote more female teachers.  
     | • Secularize Koranic schools.  |
| Low demand for female education | • Launch information campaigns that engage community, religious and civic leaders.  
     | • Promote adult literacy programs.  |

| SUPPLY-SIDE FACTORS |  |
|----------------------|  |
| **School level factors** |  |
| Enrollment and promotion policy  | • Increase enrollments by lowering the enrollment age.  
     | • Reduce drop-out rates; review repetition and expulsion policies.  
     | • Provide child care facilities.  
     | • Institute flexible hours.  
     | • Improve achievement; review learning materials for gender bias, improve science and math teaching.  
     | • Promote female teachers in the sciences.  
     | • Establish science laboratories and school libraries.  
     | • Institute tutoring and mentoring programs.  
     | • Promote gender sensitivity training in all pre and in-service training courses and for educational managers.  |
| Management: calendar and safety  |  |
| Curricula  |  |
| Materials  |  |
| Methods  |  |

| **Political and institutional factors** |  |
| Policy on schoolgirl pregnancy, promotion of female educators, training of staff | • Create a favorable environment to support women and the poor through policy review.  
     | • Invest in the necessary structures; schools, facilities for girls, toilets, dormitories, walls.  
     | • Launch information campaigns.  
     | • Enhance the status of women through the regulatory process.  
     | • Adopt poverty-alleviating strategies that release women and girls from the tasks of water and fuel collection for more productive activities.  
     | • Improve women’s access to the formal labour market.  |
| Attitude, will and commitment to empowering women and the poor  |  |
| Legal status of women  |  |
SOME INTERVENTIONS TO ENHANCE GIRLS' EDUCATION

Demand-side policies and programs

The demand-side policy and program responses are geared to increasing the social demand for formal schooling for girls. As the review in Chapter 2 has shown several socioeconomic and sociocultural factors at the household, school and community levels depress the demand for female education.

Examples of initiatives to reduce the direct costs of female schooling include economic incentive programs in India, Nepal, and Malawi. In India, girls from poor backgrounds are targeted for scholarships at the primary and secondary levels. In Nepal, girls are entitled to free education to the secondary level. Scholarships enable girls from remote areas to attend regional secondary schools. Free textbooks for all children until grade 3, and for all girls until grade 5 provide further economic incentives to facilitate attendance (APEID/UNESCO 1985 in Tietjen and Prather 1991).

In Malawi, the USAID-funded Girls’ Attainment in Basic Literacy and Education (GABLE) program launched in 1990 has had a positive effect on girls’ participation. The program includes a variety of interventions: tuition waivers for non-repeating primary schoolgirls; building classrooms and teachers’ houses; input into curriculum review; and teacher training. The tuition waivers appear to be having a significant impact on female participation. Preliminary enrollment data from the Ministry of Education show that girls comprised 54 percent of the children enrolled in primary schools, an increase from 44.8 percent in 1989. Net enrollment for girls is now 59 percent for girls compared to 54 percent for boys. Anecdotal evidence suggests a doubling of Standard I enrollments, mostly from an additional intake of girls. This has happened although the cost of uniforms and other requirements remain a parental responsibility. Apparently the tuition waiver has a strong signaling effect for parents of the importance now being given to the education of girls (Hyde 1994).

The provision of child care facilities to free girls' and women's time for schooling has been implemented in China and Columbia. In Gansu province, China, girls were allowed to bring their siblings to class in the new village schools. Since 1987 in Columbia, community care
programs for children under seven have enabled girls and women in poor neighborhoods to attend school or go to work (Herz and others 1991).

Improving the utility and type of education to make parents re-evaluate benefits from education is another strategy. In World Bank-financed projects in The Gambia and Mali, family life education (for example, basic principles in health, nutrition, and child care) has been included in the primary school curriculum to overcome initial parental reluctance to enroll girls (Herz and others 1991).

Negative parental and societal attitudes and perceptions of girls' education must also be addressed. Social marketing and sensitization programs are popular approaches for sharing information at the community level. Since 1988, the National Council of Women of Kenya has run a project which educates parents on issues that affect female participation in education: early pregnancy and marriage, female circumcision; and food taboos. Through seminars, workshops and home visits, forty-three district coordinators have informed people regarding girls' education. Similarly, in Burkina Faso, Cameroon, Uganda, Tanzania, Zimbabwe and Malawi, seminars, workshops and village meetings are used to persuade parents to reflect upon and understand the impact of certain traditional practices on girls' education. They are challenged to develop mechanisms for confronting sexual harassment, early marriage and pregnancy and for supporting girls' education at home (Namuddu 1993b).

Some supply-side policies and programs

Several school-related and institutional factors that lower the demand for female education have been tackled with supply-side responses. In response to girls' poor performance in science, the Basic Science Program in Sierra Leone was adapted to suit their needs. It uses examples of indigenous technology to illustrate basic scientific principles. Since its implementation in 1981, girls' performance in basic science has improved (Amara 1987 in Tietjen and Prather 1991).

Colombia's well-known Escuela Nueva program, launched in 1976, incorporates the principles of multi-grade teaching and a flexible promotion system in providing five years of education to children in rural areas. Module learning of sequential materials accommodates the reality of rural life by acknowledging absences related to the farming calendar and other
pressures on children's time, and in relating the curriculum content to local conditions. The streaming guides and curriculum emphasize problem-solving skills rather than rote learning. The program has increased girls' participation and lowered the repetition and drop-out rates in grades 2 to 5. Achievement levels are higher than in the traditional schools. The program is credited with improving girls' self-esteem (Bellew and King 1991, Lockheed and Verspoor and others 1990).

In some cases, the presence of female teachers is an important factor in encouraging parents to send their daughters to school. In Yemen, a program to encourage rural female teachers has been in operation since 1987 with support from UNICEF. Rural girls who have completed grade 6 are targeted to participate in the program. They are provided with a monthly stipend and transportation to and from class. Existing secondary institutions close to the girls' homes are used as primary teacher training colleges. Although several got married during the course period, the low drop-out rate of less than 1.5 percent among the first 80 participants indicated the success of the pilot program (Herz and others 1991).

In Bhutan, satellite schools in rural areas away from regular schools bring the classroom closer to girls in the first two-three years of primary school. Preliminary data suggest a higher enrollment and retention rate of girls. Feeder-school students are encouraged to continue their education because dormitories are provided (King and Hill 1991).

In Côte d'Ivoire, a school feeding program supported by the Ministry of Education is encouraging better attendance by pupils. The current program, which began in 1989, was preceded by earlier programs in the Ministry and is targeted at areas where school attendance is poor. It reaches 190,000 children at 1,800 canteens, supervised by 6,000 teachers. Each meal contains 40 percent of the calories the children need and half the protein. Food is supplied by the World Food Program and local vegetables, fruits and spices are bought or grown in school gardens. Parents have been encouraged to send their children to school as children's health and performance in class have improved as a result of the program. In particular, girls who make up 41.6 percent of schoolchildren, are staying in school longer. This has encouraged government to support the program to increase that number and by so doing reduce the incidence of early marriage and pregnancies. The effectiveness of the program, verified by a UNESCO assessment
in 1994, has lead to an extension of the World Food Program support for another four years (Kouassi N'guessan and Bequette 1994).

In 1987 the Ghana Education Services organized a two-week Science Clinic for 150 Ghanaian secondary schoolgirls. Since then, the Ghanaian Girls' Science Clinic has become an annual event. In 1989 the program was expanded to include girls and resource persons from other African countries. The girls participate in field trips, work on their own projects, receive guidance and counseling on science and mathematics careers, and have an opportunity to meet and interact with women in the same careers who can serve as mentors. Approximately 900 girls have participated in the clinics. During the year, members of the Association of Women in Science and Technology in Ghana (WIST), who are also active in the national science clinics, organize 'science days' for girls, workshops for women science teachers, and career guidance talks in schools. These initiatives have had positive results. An appreciable number of girls who attend the clinics have opted for careers in pure and applied sciences. Engineering has become particularly popular. Since 1987 there has been a 20 percent increase in girls pursuing science and mathematics at the secondary level; it is suggested that the science clinics have contributed to this increase (Andam 1993).

While identifying key supply and demand-side constraints to female education is important, research suggests that the most effective interventions should address supply and demand-side factors simultaneously and support the involvement of communities in resolving the problems of girls' access to, attainment and academic achievement in school. The CHILDSCOPE project in Ghana, (Box 3.1) and the Camfed project in Zimbabwe, (Box 3.2) provide examples of such interventions.
Box 3.1: The Child-School-Community (CHILDSCOPE) Project, UNICEF, Ghana

This focuses on empowering communities and teachers, pupils, community members and leaders to collaborate in identifying problems and finding solutions to a central policy concern of the Government of Ghana: Why do children appear not to be learning very much in primary school? The project aims to improve relevance and efficiency in primary schools, in order to attract and keep more children in school, especially girls.

CHILDSCOPE is an integrated community-based development project which uses the school as the primary resource for changing people's behavior to improve lives. Using participatory approaches to planning, the project is intended to empower parents and teachers to understand the interplay between education and development, and assist them in determining what schools can provide. Empowering communities to better manage and supervise their schools, training headteachers and teachers to make more efficient use of their time-on-task, and improving the school curriculum to reflect an understanding of children's needs, are strategies designed to bring the child, the school, and the community closer. Good health care promotion, including food consumption, reduction in micro-nutrient deficiencies, parasite control, sanitation and hygiene, are additional strategies to improve quality, because healthier children study better, and because children who are involved in practical health promotion activities are more active, enjoy their schooling more, and are more motivated to learn. Community child care, training of care-givers, and improving overall parenting and child-care practices are complementary activities.

Advances in health, nutrition, water and sanitation, have not always been matched by similar advances in education at the community level. The sectoral interventions are usually introduced vertically, with little integration and coordination at all levels. The CHILDSCOPE Project provides a possibility for integrated development, and through its implementation will examine the degree to which basic education programs integrated with health, nutrition, water and sanitation can alleviate the burden of finding those services in different locations. The project can demonstrate the advantages and disadvantages of vertical versus horizontal programming.

Schools are ideally placed as the only governmental institution at the community level to influence those processes that enhance children's lives. CHILDSCOPE can help to illustrate the importance of acknowledging children's critical welfare function in the community, and the importance of targeting them directly for behavioral change, rather than focusing only on adults. The critical role of schools in promoting learning for behavioral change becomes evident. This is the aim of the CHILDSCOPE Project. Fostering closer links between the child, the school and community, may be the most important way to sustainably improve the future of rural poor children, especially girls.

Box 3.2: Cambridge Female Education Trust (Camfed)

This was established in 1991 to provide financial support to girls in primary and secondary schools in rural Zimbabwe. All costs of the girls education are covered by Camfed, which also provides some material needs of the schools by linking them with schools in the United Kingdom. Sewing co-operatives are part of the program to provide employment and income-generating opportunities for girls leaving school.

Girls who want to continue their education, but whose families do not have the resources to support them, are identified by Camfed village committees, whose members include parents, community workers, headteachers, teachers at local primary and secondary schools, district education officials and Camfed staff. "This wide representation tempers favoritism in candidate selection and deflects the pressures that could be applied to individual members of the committee. The exercise is time-consuming and thorough...The school staff committee members observe that this process has brought interest to their work and given them more insights into their pupils' lives." (Camfed 1994: 15). The beneficiaries of the scheme are supported in groups from their communities into day and boarding schools within the districts of Nyaminyami, Chikomba and Nyanga.

The design and evolution of the Camfed scheme is based on continuous research and consultation with the communities involved. Teachers, parents and the community are actively involved in administering and developing all aspects of the scheme. Dialogue with parents, school staff and Camfed seeks to enhance the social environment in which girls can grow and learn. "For example, a balanced enrollment between boys and girls is one of the objectives which can help create a classroom atmosphere in which girls are more likely to participate actively. Our fieldworker also talks to parents about the need to provide time and opportunity for girls to do their homework in daylight hours. In some schools she teaches girls to make reusable sanitary towels as the practical considerations of menstruation are problematic for girls from poor families." (Camfed 1994: 3).

Attendance of the girls at school has been excellent and participants are achieving good academic results. Attrition from the scheme has been low: of the 246 girls who have enrolled since 1992, only 6 have left the scheme. The Camfed experience suggests that boarding school offers the most beneficial environment for girls from poor families. Parental support to the scheme is growing; no parents have turned down the offer of support for their daughters. Interestingly "school staff have provided some encouraging anecdotal evidence of girls' growing confidence and their own changing expectations in the light of girls' progress. For example, many teachers have noticed more classroom participation by girls in schools where the Camfed project has created a more balanced intake between boys and girls. In Mola, girls are speaking out on their own behalf against sexual harassment in the knowledge that they are in a sympathetic environment with people with who take their fears and concerns seriously. Visiting schools regularly, Camfed staff are encouraged by the growing ease in the dialogue with the girls which shows their emerging confidence" (Camfed 1994: 24).

Monitoring and evaluation are central to the scheme, and monitoring indicators and strategies have been designed. In 1994 a comprehensive study of education in the Chikomba district was undertaken by Camfed and initiated by the Forum for African Women Educationalists, FAWE, who view the project as replicable in other areas of Africa. The scheme is generating interest and support for girls within communities, and discretionary funds administered by rural district councils are now being used for it alongside the funds generated by Camfed which is supported in its work by organizations which include UNICEF and FAWE.

GIRLS' EDUCATION COMPONENTS IN WORLD BANK-FINANCED PROJECTS

An examination of recent girls' components in World Bank-financed projects in the region suggests a growing awareness of the need to address several factors simultaneously.

Figure 3.2 provides a summary of some specific activities being undertaken to enhance girls' participation in education in World Bank-financed education projects in Sub-Saharan Africa. Several projects include studies of factors influencing girls' education as the basis for these targeted interventions, particularly in regions where girls' educational participation falls below the national average. This suggests that there are still more investments to be made to promote girls' schooling. Other notable activities are: enhanced teacher training; review of the curriculum to improve relevance; and review of textbooks to reduce gender bias.

Figure 3.2

<table>
<thead>
<tr>
<th>Country</th>
<th>Construction</th>
<th>Teacher training</th>
<th>Information campaigns</th>
<th>Studies</th>
<th>Review curriculum or textbooks</th>
<th>Scholarships</th>
<th>Pilot Activities</th>
<th>Girls' Education Unit</th>
<th>Policy changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chad</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gambia</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Guinea</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenyan</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niger</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Nigeria (2)</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senegal</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zambia</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


In Benin, the current Bank-financed education project has a component to improve girls' participation at the primary and secondary levels. For the primary level, a study is being carried out to determine the major factors that influence girls' schooling positively. From the findings of the study, pilot projects will be implemented in three sub-regions which have the lowest levels of female participation in education. The project is supporting and training twelve motivators to work at building community awareness of the benefits of girls education, and to promote girls' schooling at the primary and secondary levels. At the secondary level, six boarding facilities to be managed by a non-governmental organization are being built or renovated; two in each region.
where girls' enrollment ratios are lowest. The construction is expected to increase female participation by 2 to 3.5 percent.

Within the Ministry of Education, in Chad, a unit managed by UNICEF for the promotion of girls' education has been established. The unit will study the economic constraints to girls' participation in education as the basis for targeted interventions in areas where girls comprise less than 30 percent of primary enrollment. The unit will also work with the Planning Directorate to strengthen systematic data collection and analysis of gender issues in education. Pre-service and in-service teacher training will cover issues necessary to sensitize teachers to the problems of girls' education. One criterion for eligibility for school construction will be local progress made in increasing girls' participation in schooling.

In The Gambia's Education Sector Project, the lowering of the school entry age from eight to six years; modified criteria for teacher training to help recruit more female teachers, (including the enactment of a policy to have females comprise 40 percent in teacher trainee intake); in-service teacher training programs; provision of positive female role models; and the introduction of family life education into the curriculum, are all expected to raise girls' enrollments considerably.

In Senegal, one objective of the current World Bank-financed Second Human Resources Development Project (Education V) is to extend access to primary school and improve its quality and efficiency. The focus is on rural areas and on the participation of girls. With regard to girls' education, the project will assist the Ministry of Education in developing and implementing broad-based interventions at the school, home and community levels. These include information campaigns to make parents aware of the benefits of girls' education, the evaluation of school policies and textbooks to eliminate gender bias; studies of female enrollment and attendance barriers to inform policy reform; and pilot interventions in selected areas where girls' enrollments fall below the 41 percent national average. The project will support a pilot School Development Fund to stimulate school-level-initiated interventions to promote quality and female participation (World Bank 1993a).

The current Zambia Education Rehabilitation Project focuses on improving access to, and the quality of, primary schools. Gender training is being incorporated into all training
courses, and the participation of women in training activities has been given priority. Criteria to evaluate gender sensitivity are being developed for the Curriculum Development Center and for the Examinations Council of Zambia. Provision is being made to construct sanitary facilities to ensure privacy for girls. A study on gender issues in education is planned (World Bank 1992c).

The Bank-financed projects complement other initiatives in the region where the Bank is involved. The Economic Development Institute of the Bank is sponsoring a series of regional seminars on female participation in education. Two have already been held in the Africa region. The objectives of the seminars are to gain the support of policymakers in promoting girls' education, to facilitate the development of action plans to promote female education and to enhance the local capacity in organizing seminars and disseminating information on female education.

<table>
<thead>
<tr>
<th>Box 3.3 The Economic Development Institute's Program on Girls' Education</th>
</tr>
</thead>
</table>

The Institute is operating a program aimed at raising international and country awareness of the problems of girls' education, analyzing the initiatives which have worked, and supporting the direct actions which countries wish to take. A central part of this program is a three-part series of seminars, beginning with a regional seminar involving teams from five or six countries, analyzing their situations and developing and refining plans. This is followed by a "training of trainers" workshop aimed at training two people from each country to design and deliver national seminars tailored to the specific needs of the country. The third part of the sequence is the national seminar.

EDI in partnership with the Regional Office for UNESCO/BREDA and the Rockefeller Foundation, held the first regional seminar on Girls' Education in Dakar in January 1994. This was followed by a "training of trainers" seminar in Washington in May 1994 for eight countries: national seminars have now been held in these eight countries. All these activities have been in partnership with the Human Resources Division of the Sahel region which has an ongoing program of support for girls' education in the region. In partnership with the Forum for African Women Educationalists (FAWE) and HEDCO of Ireland, EDI held a second regional seminar in Nairobi in May 1994 and held the "training of trainers" workshop for ten countries in October 1994. National seminars in each of the ten countries are planned for 1995. World Bank operational staff attended the seminars and workshops and will be involved in the national seminars and in the follow-up. Each series of African seminars has been held in cooperation with the Donors to African Education (DAE) Working Group on Female Participation.

A second aspect of the program for girls is the development of information and training materials. EDI has developed a training video (based on work in the Gambia) and an accompanying manual on participatory research methods for girls' education. The training video and manual are available from the Institute. A manual for non-researchers interested in carrying out research on girls education is being produced and will be available shortly. EDI is planning to develop educational materials aimed at assisting practitioners at a number of levels. This work is likely to be carried out in partnership with FAWE.

Source: P. Murphy, EDI.
The Donors to African Education (DAE) Working Group on Female Participation (WGFP), initiated in 1990, is composed of some 23 multi- and bilateral funding agencies\(^\text{11}\) that together, and in cooperation with African education officials and scholars, seek means for catalyzing sound national educational policies to increase and enrich the enrollment of girls and women in school. The working group has three program elements. Documentation and Innovation research is facilitated by a regional grants program “Educational Research Priorities for Girls and Women in Africa” funded by DAE agencies and run by the African Academy of Sciences, with direction given by a global advisory team of distinguished scholars and public leaders. The objective of the program is to strengthen local capacity for conducting independent, rigorous inquiry into problems relevant to closing the educational gender gap in Africa. The program is currently funding 43 major projects; 55 researchers are being supported to develop full project proposals for funding.

Exploratory work in two important areas, science and math and NGOs is being carried out by two subcommittees. One, led by the Government of Norway, on science and mathematics education, has drafted a proposal for a series of country profiles in selected FAWE countries on science education and gender. The other, led by CIDA, on the role of NGOs in promoting and providing education for girls, is outlining the terms of reference for a feasibility study to determine any problems with NGO performance and support which may hinder the possibility of creating an NGO consortium on female education in Africa.

No doubt the most dynamic element of the working group is the policy analysis and advocacy work being spearheaded by a group of 34 African women Cabinet Ministers, university vice-chancellors and educators who have formed a Nairobi-based Pan-African NGO, the Forum for African Women Educationalists, FAWE, to facilitate national policy debate within Africa and between African countries and the international assistance community (See Box 3.4 for details).

\(^{11}\) Rockefeller Foundation, lead agency; African Development Bank, Carnegie Corporation; CIDA; Commonwealth Secretariat/DAE Working Group on the Teaching Profession; DANIDA; Dutch Ministry of Foreign Affairs; FINNIDA; Ford Foundation; GTZ; HEDCO; IDRC; ILO; JICA; MacArthur Foundation; NORAD; SAREC; SIDA; Swiss Development Cooperation; UNESCO; UNICEF; USAID; World Bank.
Box 3.4 The Forum For African Women Educationalists

The Forum for African Women Educationalists, (FAWE), is an organization of African women ministers, vice-chancellors of universities and other senior policy makers in education. FAWE was established in 1992 by 5 women Ministers of Education and currently has 34 members representing 25 African countries. FAWE also includes selected male Ministers of Education as associate members. The formation of FAWE national chapters in 14 countries (Burkina Faso, Cameroon, Ethiopia, Ghana, Guinea, Kenya, Madagascar, Malawi, Mali, Mozambique, Seychelles, Uganda, Zambia and Zimbabwe) is a welcome development in institutionalizing FAWE concerns in member countries.

In 1994, FAWE’s work program covered five main areas: Strategic resource planning; seed grants for innovative demonstrative country experiments; awards for innovators, targeted capacity building and leadership programs; and advocacy and public education. Accomplishments to date include, supporting the gender sensitization of the Government White Paper on Education in Uganda by the Uganda Association of University Women; a Gender Sensitization Workshop by the Seychelles Association of Women Professionals, SAWOP, for Education Personnel in Seychelles; a successful Ministerial Consultation held in collaboration with the Mauritius Ministry of Education on, School Drop-out and Adolescent Pregnancy under the Theme: “Counting the Cost”, organizing the education sub-theme for the Africa Regional Preparatory Conference on Women in Dakar (November 1994) and coordinating the African education input to the 1995 world conference on women, in Beijing.

In a short time, FAWE has established itself as a key player in the efforts to accelerate female education in Africa. Mr. Frederico Mayor’s (Director-General of UNESCO) award of the Comenius Medal (an international prize created in 1992 by the Czech government to applaud outstanding achievement in the field of education innovation) to FAWE in October 1994 is a testimony to FAWE’s initiative.

Source: FAWE, Secretariat Nairobi Kenya

At present, most of these initiatives are too new to allow fair evaluation of their effectiveness. It is clear, however, that the poor participation and performance of girls in formal schools will remain the central challenge to providing basic education for all children in the region. Recognizing this, the Bank, its partner governments, and other donors, are fully committed to promoting girls’ education.
IV
AN APPROACH TO IDENTIFYING AND PLANNING EFFECTIVE INTERVENTIONS

OVERVIEW

This chapter outlines a general approach that may be helpful to educators, planners and
decisionmakers in the region in moving from analysis to action. The previous chapters have
summarized the knowledge about problems related to the education of girls and women in Sub-
Saharan Africa and the causes of these problems, and it has reviewed some of the interventions
being used to tackle the problems. Three general observations that provide a basis for the
approach outlined here stand out from this material:

- The problems of female education in Sub-Saharan Africa are inextricably linked with
  the general deterioration in the supply and quality of education;
- The issues related to female education are usually complex and require multiple
  interventions simultaneously; and
- There is much more knowledge and understanding about issues related to female
  education in the region than is so far being used to implement change.

Links with the general deterioration of education

The problems of girls' education are closely integrated with the severe problems of
educational supply and quality in the region, especially among the poorest communities and in
rural areas where poor school services, traditional cultural influences, and the lack of
employment possibilities are entrenched. The constraints on education in general are so great
that when girls are targeted outside larger programs to revitalize overcrowded and underfunded
education systems, any gains offered to them will be diluted significantly, if not completely, by
problems affecting the whole system. It may be that the greatest success for girls can be achieved
when girls are targeted within comprehensive reform programs, and that, since girls are the
disadvantaged half of the population, improvements in their education will increase the program
impact on boys. But if girls are to be helped in their educational attendance, attainment and
performance, it is necessary to rank-order the problems of girls' education to be given priority in
a given setting, and to integrate activities that target girls into overall programs to improve
education.
Complexity of issues

This study describes the complexity of the problems affecting female education by examining issues that influence the supply and the demand for girls' schooling. The analysis in Chapter II demonstrated that demand and supply issues are intertwined at the political and institutional, the school, the community, and the student levels. One could separate households from community in this categorization of the source of the problems. To identify how to ameliorate a problem such as girls' access or their repetition of a grade, the complex framework of reasons for the problem demands full consideration at each of these levels, and the reasons affecting girls must be compared with the reasons for the same problem as it affects both boys and girls. For example, the analysis in Chapter II indicates that biases in textbooks, a supply-side issue at the school level, should be improved. However, without simultaneous attention to possible changes in curriculum content and expected teacher behavior towards girls (institutional issues) and to raising community and student awareness that biases are depressing girls' results, changes in the textbooks will have little impact on girls' learning. Similarly, the general availability of books in the schools, and teachers' treatment of all students, frame the context in which these biases in textbooks influence girls' learning. The approach outlined in this chapter attempts to help planners and implementors define the complex relationship among causal factors influencing key issues that they have chosen to address.

Phases in moving from analysis to action

The gap identified between how much is known about the issues affecting the education of girls and how little is being done about these issues has to be closed. We propose three phases in moving from analysis to action. First, the priority problem in a given system or locale must be identified; then the principal controllable causes of this problem need to be diagnosed; and, finally, alternative mixes of possible interventions can be developed, assessed, and planned in detail to form an intervention program. Since this approach has not been fully implemented in the field, it is necessarily indicative of the complete process that people may go through to apply what is known elsewhere to the constraints on female education in Sub-Saharan Africa.

Selecting the most pressing problem

In selecting the most pressing problem affecting girls' education in a given setting, both the overall problems of the education system and the specific performance of girls need to be
considered. In most countries, the general problems are well documented, and general strategies for dealing with them exist (Colclough and Lewin 1993, Lockheed and Verspoor 1991). This information needs to be summarized and made available to inform discussion of the specific problems of female education in a specific education system.

To help more clearly specify the locally-relevant problems of female education, AFTHR Technical Note No. 7 defines statistical indicators according to four kinds of problems related to female participation in education (Hartnett and Heneveld 1993):

- **Access** which refers to the decision to enter girls in school;

- **Achievement** which is the academic performance of girls once they are in school;

- **Attainment** which is the length of time girls remain in school and the level of education to which they progress; and

- **Accomplishment** which refers to their success once they leave school.

Different educational systems will have different priorities for each of these problems. For example, in Mali, less than half the male population enters primary school, but the girls' admission rate is still less than half of this (Table 4.1). However, once in school in Mali, while the girls' completion rate is low, it is comparable to the boys' rate. In Malawi, roughly the same percentage of boys and girls enter primary school, but the girls' completion rate after entry is roughly half the boys' rate. It is clear that the two countries need to address female participation issues differently.
Table 4.1

MALI: Country Profile\(^{12}\)

Female Participation in Education

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Female Rate</th>
<th>Gender Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary admission rate, 1990</td>
<td>17%</td>
<td>0.57</td>
</tr>
<tr>
<td>Gross primary enrollment ratio, 1990</td>
<td>17%</td>
<td>0.57</td>
</tr>
<tr>
<td>Repetition rate, primary, 1990</td>
<td>28%</td>
<td>1.03</td>
</tr>
<tr>
<td>Persistence to grade 4, 1987</td>
<td>68%</td>
<td>0.91</td>
</tr>
<tr>
<td>Primary completion rate, 1990</td>
<td>37%</td>
<td>0.89</td>
</tr>
<tr>
<td>Continuation rate from primary to secondary, 1990</td>
<td>62%</td>
<td>0.98</td>
</tr>
<tr>
<td>Gross secondary enrollment ratio, 1990</td>
<td>8%</td>
<td>0.88</td>
</tr>
<tr>
<td>Repetition rate, secondary, 1990</td>
<td>27%</td>
<td>1.07</td>
</tr>
<tr>
<td>Secondary completion rate, 1990</td>
<td>73%</td>
<td>0.80</td>
</tr>
<tr>
<td>Continuation rate from secondary to tertiary, 1990</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross tertiary enrollment ratio, 1990</td>
<td>0.2%</td>
<td>0.15</td>
</tr>
<tr>
<td>Enrollment in sciences at tertiary, 1990</td>
<td>48%</td>
<td>0.87</td>
</tr>
<tr>
<td>Female teachers as of total, 1990:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>22.6%</td>
<td>..</td>
</tr>
<tr>
<td>Secondary</td>
<td>14.0%</td>
<td>..</td>
</tr>
<tr>
<td>Tertiary</td>
<td>NA</td>
<td>..</td>
</tr>
<tr>
<td>Mean years of schooling, 1992</td>
<td>0.1</td>
<td>0.14</td>
</tr>
<tr>
<td>Adult literacy rate, 1990</td>
<td>24%</td>
<td>0.58</td>
</tr>
<tr>
<td>Labour force participation rate, 1990</td>
<td>10%</td>
<td>0.18</td>
</tr>
</tbody>
</table>

NA = not available


Table 4.1 presents a full country statistical profile for Mali. This single table can be used to rank-order the issues affecting girls' education. It lists the data on eighteen indicators according to the female rate (data on females for each indicator as a percent of all relevant females) and the Gender Ratio (GR) (the female rate divided by the comparable rate for males). It can be seen that only 17 percent of the female age group entered primary school in 1990, and this rate was only .56 of the boys' rate. However, as the table also shows, once in school, girls are almost as likely to complete primary schooling as boys (GR = .89), and that those who complete are almost as likely as boys to continue from primary school to secondary school (GR = .98). At the bottom of the country profile, the cumulative effects of differences between men and women in education are suggested by the three outcome indicators: In Mali in the late eighties, women's mean years of schooling and labour force participation rates were, 14 and 18 percent, respectively, of the men's', and their literacy rate was 59 percent of the men's'. Using this analysis is the most pressing current issue for female education in girls' access to schooling in Mali.

At this stage in defining possible interventions, the statistical indicators provide a useful stimulus for selecting and defining key problems. Later, these indicators can be used to set targets for what interventions should accomplish in expected changes in selected indicators, and they can also be used to monitor progress over the life of a program and to compare performance among geographic units before, during, and after, interventions.

As a first step in moving from analysis to action, a country's statistical profile, or a profile of some other organizational unit, can help structure discussions establishing which problem areas are most important. Its one-page format provides an easily-read basis for reflection and debate on the data, during which discussants will bring to bear their own experience in the education system and consider existing government policy. Back-up statistics on the indicators for both females and males (preferably broken-down for geographic or administrative sub-units) and on the general state of the education system should inform the discussion. All stakeholders -- parents, teachers, older students, educational administrators and community leaders -- will easily comprehend these summaries of information, so making broad participation in discussion possible before planners and decision-makers act.
Diagnosing the causes of the key problem

Chapter 2 of this report presents a typology of the factors affecting female participation in education. The factors are organized as socioeconomic, sociocultural, or school-related. Additional dimensions to these categories are offered in *AFTHR Technical Note No. 15* which provides analytic questions that can help clarify factors that influence female participation in education at the household, school, community and national levels (see Annex 2). By assessing how much each factor contributes to the key problem, it should be possible to identify which factors probably need to be dealt with if an intervention is to be successful. Annex 3 provides a checklist of factors that will contribute to solving the key problem in different degrees, depending on the specifics.

Once a preliminary determination has been made of which factors are the major contributing causes of the key problem, it is necessary to assess how well understood these factors are in the system in which improvements are contemplated. Here, consideration in detail of the questions related to each factor will be helpful (*AFTHR Technical Note No. 15*; Annex 2). Finding answers to the relevant questions requires first assessing the information already available in the general research literature and in the country. Then, if additional information is needed, there are a variety of participatory methods for getting at the causes of the problem. The Rapid Rural Appraisal (RRA) methodology that has been applied so successfully in agriculture has a rich literature that describes the techniques used. These can be adapted for education (Gueye and Freudenberger 1991; International Institute for Environment and Development (IIED), *RRA Notes*; Theis and Grady 1991). Recently a study in the Gambia (Kane and de Brun 1993) and a World Bank Sector Study on Togo (*Togo: Scolarisation et Scolarité des Filles dans l'Enseignement Primaire*, Draft, 10 June, 1994) have used participatory methods to look at questions of female education, and a handbook for conducting participatory research on the education of girls, and a video and manual on how to carry out fieldwork on girls' education are available (Kane, 1995a, 1995b). These sources, and others, provide a rich array of simple to complex tools for involving people in the assessment of the factors that keep girls from being educated. Generally, these participatory methods rely on focus groups, workshops, and local meetings. Through a qualitative discussion of what is going on in the society and in schools, the definitions and weighting of factors causing the problem can be agreed upon.
Once there is consensus that the causes of the problem have been explored in depth, as much through discussion as through formal research, a definitive statement of the expected causes of the problem that clearly lays out the conditions in the society and in the schools that need to be changed if the problem is to be alleviated is prepared. This statement will form the basis for designing an integrated program of interventions.

Planning the interventions

During the participatory process suggested for defining the causes of the problem, ideas and suggestions for its resolution through interventions will undoubtedly be raised. In addition, planners and educators may want to brainstorm possible interventions. A true brainstorming session requires that a group of people knowledgeable about the key problem, the factors affecting it, and interventions tried elsewhere list together all the ideas, without criticism. Afterwards, this list of ideas needs to be evaluated, revised, and reduced in light of local knowledge and of experience elsewhere, until the ingredients of a potentially effective, affordable, and manageable program of actions have been defined.

A group of primary education specialists in Sierra Leone brainstormed without criticizing each other’s ideas. Within fifteen minutes this group identified three obstacles that would require minimal expenditures to change: 1). currently, Government policy requires that all unmarried teachers who become pregnant leave the teaching service; 2). all female teachers are required to wear uniforms (men are not required to do this) that they must purchase themselves; and 3). women do less well than men on entrance examinations to teacher training colleges. The group decided that there might be an increase in female teachers if the pregnancy regulation were changed, if female teachers were given a clothing allowance, and if female candidates for teacher training had coaching classes for the entrance examination.

The evaluation of ideas for interventions generated through brainstorming and discussions should consider:

- cultural acceptability;
- political feasibility;
- affordability;
- government and education system capacity to implement;
other criteria that may be considered important in the given context; and
the indicators that will be used to monitor progress and 'success' in implementation.

One method arrays all the possibilities in a matrix with the ideas down one side of the matrix and the evaluation criteria across the top. Each idea can then be rated with words or numerically (1-5, for example) (see Annex 4), and then these results can be discussed to arrive at an overall view of the ideas and a sense of which can be included in the program to alleviate the priority problem. The discussion of different participants' ratings on the criteria will probably also identify uncertainties about implementing the ideas and suggestions for revisions. These uncertainties and suggestions should be recorded so that the results of the discussion at this stage are available for the next planning steps.

Once the priority issue or issues have been defined and possible interventions identified, detailed planning must follow. During this planning, existing knowledge on the issue and experiences of others in tackling it can be examined as the discussion evolves the details of interventions. For each intervention, it will be necessary to specify in detail:

- the target audience (parents, for example);
- the beneficiaries (for example, x number of girls between the ages of 6-9 in a certain locality);
- the activities to be undertaken (for example, free uniforms, tutoring for girls);
- the resources required to carry out the activities.

The definition of activities should be in sufficient detail for everyone to envision what will happen when these are implemented. For example, if free uniforms are to be provided, the design might be that the PTA will make them, in which case delivery of uniforms would not be required, but the provision of cloth, sewing machines and thread would need to be specified.

Once notes are in hand on each intervention, the planners should step back and analyze how these actions fit together. This requires identifying how each action will potentially reinforce or obstruct another. Again, a matrix can be used to array all the interventions on each axis of the matrix (with "x's in cells where each intervention intersects). Comments on how the interventions interact can be noted in each cell. Annex 5 provides an example of such a matrix.
Once this table is filled in with notes, it can be discussed for comprehensiveness in dealing with the priority issue. Questions such as the following should be asked:

- Will these activities collectively have the desired effect on the issue they are meant to address? Why or why not?

- Are there interactions among them that will be counterproductive? That can be strengthened by changes in the design of the intervention? If so, what should be changed in the design?

- Are there possible interventions or interactions that have not been included in this summary of the interventions? What are these?

- Are there outlets among interventions that have been identified that do not seem to fit with or reinforce the others? If so, can these be discarded without negative impact on the overall objectives of the interventions?

As a result of this analysis, the planning team should be able to specify in detail what the components of the proposed intervention program will be and to quantify the resources required to undertake the intervention. Once this stage is reached, a detailed plan for the program can be prepared. Annex 6 presents a generic outline for such a program design.
CONCLUSION

There is growing recognition that the poor participation of girls in education systems in Sub-Saharan Africa is a major stumbling block to economic development, improved health and national welfare. Unless urgent action is taken to enhance female education, the ambitious goals set for education across the region will remain out of reach.

The factors leading to the non-enrollment, the poor participation and the low learning achievements of girls in schools are complex. The dearth of interventions to accelerate female education in Sub-Saharan Africa is often attributed to lack of information. Yet the considerable body of literature on female education in the region is robust enough to enable practitioners to design and implement interventions to promote sustained female participation in education. The major findings of the literature are significant. These cover the many complexities and nuances of factors influencing educational outcomes for girls.

However, several studies focus solely on girls and do not provide effective gender analysis of all the factors in play. The linkages between research findings, policy formulation, and program design and implementation remain weak. It is clear from the research that there are no easy solutions, and that effective interventions must respond to several interrelated problems on both the demand-side and the supply-side of education provision, and that priorities for action must be specific to local contexts. Since girls, and especially poor and rural girls, are amongst the most disadvantaged in prevailing education systems, the improvement of their participation is a key indicator of the efficacy of the existing whole system of education. A focus that specifically targets girls will by extension improve the effectiveness and efficiency of education for all children.

Our review suggests the following six problems as the greatest obstacles to girls' enrollment and attainment:

- the poor returns to female education in the labour market;
- the persistent apprehension, and ambivalence, on the part of parents, children, teachers and society at large regarding female education, its cost-effectiveness, and the value of keeping girls in school;
- the poor quality of the teaching/learning environment, particularly in the rural areas where most children in the region are expected to gain an education, in which most children, particularly girls, learn very little;
- sexual harassment/liaison and small girl pregnancy,
- the high level of wastage because of repeaters, and drop-outs which discourages parents, students and teachers; and
- the low level of girls’ self-esteem regarding their status in society and their academic potential, (and their sometimes limited realization of the value and benefit of remaining in school and attaining the highest level possible).

These findings suggest that attitudes about girls’ schooling must change at various levels, from households to schools to national governments. Political forces have an important and critical responsibility to support and promote gender-sensitive policies and institutions in the education sector as a precondition for “Education for All” and overall human resources development. They must work with the stakeholders concerned, particularly students, parents, teachers and education policymakers and planners, and with the private sector and non-governmental organizations, in tackling these core problems and the associated ones that may exist in their locale.

Research must provide policymakers and planners with timely and accurate information on what the issues are and how these can be tackled. This study indicates that much has been done to document the issues in female education in Africa. Much remains to be done, in designing and implementing interventions to accelerate girls’ schooling. This document is a call to action in this regard.
ANNEX 1: TABLES

Table 2.1 Gross primary enrollment data for selected countries in Sub-Saharan Africa 1960, 1970, 1980 and 1990.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>23</td>
<td>11</td>
<td>98</td>
<td>53</td>
<td>187</td>
<td>163</td>
<td>95</td>
<td>87</td>
</tr>
<tr>
<td>Benin</td>
<td>38</td>
<td>15</td>
<td>57</td>
<td>23</td>
<td>87</td>
<td>41</td>
<td>81</td>
<td>41</td>
</tr>
<tr>
<td>Botswana</td>
<td>36</td>
<td>41</td>
<td>63</td>
<td>67</td>
<td>84</td>
<td>100</td>
<td>114</td>
<td>119</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>13</td>
<td>5</td>
<td>15</td>
<td>9</td>
<td>23</td>
<td>14</td>
<td>45</td>
<td>28</td>
</tr>
<tr>
<td>Burundi</td>
<td>33</td>
<td>10</td>
<td>36</td>
<td>18</td>
<td>32</td>
<td>21</td>
<td>79</td>
<td>66</td>
</tr>
<tr>
<td>Cameroon</td>
<td>77</td>
<td>37</td>
<td>105</td>
<td>78</td>
<td>107</td>
<td>89</td>
<td>109</td>
<td>93</td>
</tr>
<tr>
<td>Central African R.</td>
<td>50</td>
<td>11</td>
<td>19</td>
<td>41</td>
<td>92</td>
<td>51</td>
<td>89</td>
<td>55</td>
</tr>
<tr>
<td>Chad</td>
<td>29</td>
<td>4</td>
<td>52</td>
<td>17</td>
<td>52</td>
<td>19</td>
<td>90</td>
<td>39</td>
</tr>
<tr>
<td>Congo</td>
<td>108</td>
<td>55</td>
<td>138</td>
<td>104</td>
<td>149</td>
<td>134</td>
<td>148</td>
<td>125</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>59</td>
<td>25</td>
<td>75</td>
<td>43</td>
<td>95</td>
<td>63</td>
<td>83</td>
<td>58</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>11</td>
<td>4</td>
<td>47</td>
<td>9</td>
<td>45</td>
<td>25</td>
<td>36</td>
<td>26</td>
</tr>
<tr>
<td>Gabon</td>
<td>67</td>
<td>41</td>
<td>175</td>
<td>158</td>
<td>158</td>
<td>154</td>
<td>174</td>
<td>166</td>
</tr>
<tr>
<td>Gambia</td>
<td>20</td>
<td>9</td>
<td>35</td>
<td>15</td>
<td>67</td>
<td>35</td>
<td>72</td>
<td>53</td>
</tr>
<tr>
<td>Ghana</td>
<td>60</td>
<td>32</td>
<td>71</td>
<td>54</td>
<td>89</td>
<td>71</td>
<td>84</td>
<td>69</td>
</tr>
<tr>
<td>Guinea</td>
<td>30</td>
<td>11</td>
<td>42</td>
<td>20</td>
<td>48</td>
<td>25</td>
<td>50</td>
<td>24</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>35</td>
<td>14</td>
<td>42</td>
<td>24</td>
<td>94</td>
<td>42</td>
<td>74</td>
<td>41</td>
</tr>
<tr>
<td>Kenya</td>
<td>64</td>
<td>30</td>
<td>72</td>
<td>52</td>
<td>120</td>
<td>110</td>
<td>97</td>
<td>93</td>
</tr>
<tr>
<td>Liberia</td>
<td>52</td>
<td>21</td>
<td>50</td>
<td>22</td>
<td>62</td>
<td>34</td>
<td>35</td>
<td>24</td>
</tr>
<tr>
<td>Madagascar</td>
<td>63</td>
<td>49</td>
<td>94</td>
<td>79</td>
<td>145</td>
<td>139</td>
<td>93</td>
<td>91</td>
</tr>
<tr>
<td>Malawi</td>
<td>50</td>
<td>26</td>
<td>46</td>
<td>26</td>
<td>72</td>
<td>48</td>
<td>76</td>
<td>62</td>
</tr>
<tr>
<td>Mali</td>
<td>13</td>
<td>5</td>
<td>29</td>
<td>16</td>
<td>34</td>
<td>19</td>
<td>30</td>
<td>17</td>
</tr>
</tbody>
</table>
### Girls and Schools in Sub-Saharan Africa: From Analysis to Action

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mauritania</td>
<td>11</td>
<td>2</td>
<td>21</td>
<td>8</td>
<td>47</td>
<td>26</td>
<td>58</td>
<td>43</td>
</tr>
<tr>
<td>Mauritius</td>
<td>97</td>
<td>90</td>
<td>97</td>
<td>95</td>
<td>98</td>
<td>98</td>
<td>104</td>
<td>108</td>
</tr>
<tr>
<td>Mozambique</td>
<td>64</td>
<td>39</td>
<td>51</td>
<td>27</td>
<td>114</td>
<td>84</td>
<td>76</td>
<td>57</td>
</tr>
<tr>
<td>Niger</td>
<td>8</td>
<td>3</td>
<td>18</td>
<td>9</td>
<td>33</td>
<td>18</td>
<td>37</td>
<td>21</td>
</tr>
<tr>
<td>Nigeria</td>
<td>54</td>
<td>31</td>
<td>46</td>
<td>27</td>
<td>118</td>
<td>90</td>
<td>82</td>
<td>63</td>
</tr>
<tr>
<td>Rwanda</td>
<td>69</td>
<td>30</td>
<td>78</td>
<td>61</td>
<td>66</td>
<td>60</td>
<td>72</td>
<td>70</td>
</tr>
<tr>
<td>Senegal</td>
<td>37</td>
<td>18</td>
<td>48</td>
<td>30</td>
<td>56</td>
<td>37</td>
<td>68</td>
<td>50</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>27</td>
<td>14</td>
<td>42</td>
<td>28</td>
<td>61</td>
<td>43</td>
<td>56</td>
<td>39</td>
</tr>
<tr>
<td>Somalia</td>
<td>10</td>
<td>3</td>
<td>9</td>
<td>3</td>
<td>24</td>
<td>14</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Sudan</td>
<td>29</td>
<td>11</td>
<td>53</td>
<td>29</td>
<td>59</td>
<td>41</td>
<td>56</td>
<td>43</td>
</tr>
<tr>
<td>Swaziland</td>
<td>58</td>
<td>57</td>
<td>91</td>
<td>83</td>
<td>104</td>
<td>103</td>
<td>109</td>
<td>107</td>
</tr>
<tr>
<td>Tanzania</td>
<td>33</td>
<td>16</td>
<td>41</td>
<td>26</td>
<td>99</td>
<td>86</td>
<td>69</td>
<td>68</td>
</tr>
<tr>
<td>Togo</td>
<td>64</td>
<td>25</td>
<td>99</td>
<td>44</td>
<td>146</td>
<td>91</td>
<td>134</td>
<td>87</td>
</tr>
<tr>
<td>Uganda</td>
<td>64</td>
<td>30</td>
<td>46</td>
<td>29</td>
<td>56</td>
<td>43</td>
<td>85</td>
<td>70</td>
</tr>
<tr>
<td>Zaire</td>
<td>80</td>
<td>29</td>
<td>120</td>
<td>70</td>
<td>108</td>
<td>77</td>
<td>81</td>
<td>60</td>
</tr>
<tr>
<td>Zambia</td>
<td>61</td>
<td>40</td>
<td>99</td>
<td>80</td>
<td>98</td>
<td>82</td>
<td>96</td>
<td>89</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>83</td>
<td>66</td>
<td>78</td>
<td>63</td>
<td>92</td>
<td>79</td>
<td>117</td>
<td>116</td>
</tr>
<tr>
<td><strong>Sub-Saharan Africa</strong></td>
<td><strong>48</strong></td>
<td><strong>22</strong></td>
<td><strong>56</strong></td>
<td><strong>36</strong></td>
<td><strong>88</strong></td>
<td><strong>68</strong></td>
<td><strong>75</strong></td>
<td><strong>61</strong></td>
</tr>
</tbody>
</table>

**Source:** DAE 1994

**Note:** Male and female enrollments by students of all ages are expressed as a percentage of the total male and female population of school age to obtain gross enrollment ratios. In many countries the official primary school age group is 6-11 years. The means are weighted by the school-age population. Estimates of school-age population used in the calculation are the 1992 Population Revision of the United Nations Population Division.
### Table 2.2 Field of study, females as a percentage of total secondary enrollment, selected Sub-Saharan Africa countries, 1980, 1990.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>26.2</td>
<td>28.1</td>
<td>25.1</td>
<td>34.7</td>
<td>33.8</td>
<td>39.9</td>
</tr>
<tr>
<td>Botswana</td>
<td>56.1</td>
<td>53.3</td>
<td>82.9</td>
<td>71.6</td>
<td>25.1</td>
<td>27.2</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>32.6</td>
<td>33.2</td>
<td>23.0</td>
<td>11.4</td>
<td>39.7</td>
<td>49.4</td>
</tr>
<tr>
<td>Cameroon</td>
<td>33.9</td>
<td>41.5</td>
<td>36.3</td>
<td>55.0</td>
<td>39.1</td>
<td>41.5</td>
</tr>
<tr>
<td>Congo</td>
<td>40.1</td>
<td>43.0</td>
<td>25.2</td>
<td>37.2</td>
<td>54.0</td>
<td>55.5</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>35.6</td>
<td>42.6</td>
<td>28.4</td>
<td>23.1</td>
<td>35.0</td>
<td>19.0</td>
</tr>
<tr>
<td>Ghana</td>
<td>38.5</td>
<td>38.8</td>
<td>40.5</td>
<td>45.5</td>
<td>24.8</td>
<td>22.8</td>
</tr>
<tr>
<td>Guinea</td>
<td>27.7</td>
<td>23.4</td>
<td>13.5</td>
<td>47.7</td>
<td>43.9</td>
<td>26.9</td>
</tr>
<tr>
<td>Kenya</td>
<td>41.0</td>
<td>43.7</td>
<td>40.2</td>
<td>43.8</td>
<td>30.0</td>
<td>24.0</td>
</tr>
<tr>
<td>Mali</td>
<td>29.1</td>
<td>33.4</td>
<td>23.7</td>
<td>19.4</td>
<td>31.3</td>
<td>26.5</td>
</tr>
<tr>
<td>Mauritania</td>
<td>21.2</td>
<td>30.8</td>
<td>19.3</td>
<td>30.0</td>
<td>7.3</td>
<td>20.5</td>
</tr>
<tr>
<td>Niger</td>
<td>29.5</td>
<td>29.4</td>
<td>28.7</td>
<td>41.9</td>
<td>8.4</td>
<td>8.8</td>
</tr>
<tr>
<td>Nigeria</td>
<td>35.5</td>
<td>42.6</td>
<td>35.9</td>
<td>43.9</td>
<td>17.0</td>
<td>44.9</td>
</tr>
<tr>
<td>Senegal</td>
<td>33.7</td>
<td>33.7</td>
<td>32.3</td>
<td>18.1</td>
<td>24.7</td>
<td>29.9</td>
</tr>
<tr>
<td>Sudan</td>
<td>37.5</td>
<td>44.3</td>
<td>42.9</td>
<td>54.0</td>
<td>21.2</td>
<td>22.0</td>
</tr>
<tr>
<td>Swaziland</td>
<td>49.0</td>
<td>50.0</td>
<td>77.0</td>
<td>80.0</td>
<td>32.6</td>
<td>33.1</td>
</tr>
<tr>
<td>Zaire</td>
<td>28.0</td>
<td>30.3</td>
<td>27.2</td>
<td>32.4</td>
<td>24.4</td>
<td>35.6</td>
</tr>
<tr>
<td>Zambia</td>
<td>34.8</td>
<td>37.3</td>
<td>46.8</td>
<td>44.9</td>
<td>26.3</td>
<td>22.5</td>
</tr>
</tbody>
</table>

*Source: DAE, 1994.*

*Note:* General education refers to education in secondary schools which requires at least four years of primary schooling and is not intended to prepare students for a specific trade or occupation, or for courses of study that when completed are minimum condition for admission to a university. Teacher training refers to education in secondary schools that train students in the teaching professions. Vocational and technical education covers education that prepares students for a trade or occupation other than teaching. Mean percentages are weighted by total secondary enrollment.
Table 2.3 Field of study, females as percentage of total tertiary enrollment, selected Sub-Saharan African Counties, 1990

<table>
<thead>
<tr>
<th>Country</th>
<th>Arts</th>
<th>Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>9</td>
<td>34</td>
</tr>
<tr>
<td>Benin</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>28</td>
<td>11</td>
</tr>
<tr>
<td>Burundi</td>
<td>33</td>
<td>19</td>
</tr>
<tr>
<td>Cameroon</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Congo</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>23</td>
<td>10</td>
</tr>
<tr>
<td>Ghana</td>
<td>29</td>
<td>14</td>
</tr>
<tr>
<td>Madagascar</td>
<td>51</td>
<td>36</td>
</tr>
<tr>
<td>Mali</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>South Africa</td>
<td>68</td>
<td>45</td>
</tr>
<tr>
<td>Swaziland</td>
<td>52</td>
<td>27</td>
</tr>
<tr>
<td>Uganda</td>
<td>32</td>
<td>13</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: DAE 1994

*Note:* Definitions of levels and the composition of fields of study are based on the international classification of Education. The "Arts" include education (education, science, teacher training), social sciences (fine and applied arts, humanities, religion and theology, social and behavioral sciences, law, home economics, mass communication and documentation, and the service trades) and commerce and business administration. The "Sciences" are made up of the natural sciences, the medical sciences (health and hygiene), agriculture (including forestry and fisheries) and mathematics and engineering (including computer sciences, architecture and tour planning, transport and communications, and trade, craft, and industrial programs).
### Table 2.4 Student Flows, selected Sub-Saharan countries, 1990

<table>
<thead>
<tr>
<th>Country</th>
<th>% of first grade entrants completing the primary level</th>
<th>Primary entrants proceeding to secondary schooling (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>40</td>
<td>15</td>
</tr>
<tr>
<td>Botswana</td>
<td>80</td>
<td>36</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>71</td>
<td>23</td>
</tr>
<tr>
<td>Burundi</td>
<td>77</td>
<td>8</td>
</tr>
<tr>
<td>Cameroon</td>
<td>69</td>
<td>21</td>
</tr>
<tr>
<td>Cape Verde</td>
<td>51</td>
<td>23</td>
</tr>
<tr>
<td>Central Africa Republic</td>
<td>62</td>
<td>19</td>
</tr>
<tr>
<td>Congo</td>
<td>54</td>
<td>33</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>71</td>
<td>16</td>
</tr>
<tr>
<td>Djibouti</td>
<td>88</td>
<td>24</td>
</tr>
<tr>
<td>Gabon</td>
<td>44</td>
<td>16</td>
</tr>
<tr>
<td>Guinea</td>
<td>67</td>
<td>39</td>
</tr>
<tr>
<td>Lesotho</td>
<td>50</td>
<td>51</td>
</tr>
<tr>
<td>Madagascar</td>
<td>38</td>
<td>14</td>
</tr>
<tr>
<td>Malawi</td>
<td>42</td>
<td>3</td>
</tr>
<tr>
<td>Mali</td>
<td>50</td>
<td>22</td>
</tr>
<tr>
<td>Mauritania</td>
<td>68</td>
<td>18</td>
</tr>
<tr>
<td>Mozambique</td>
<td>40</td>
<td>14</td>
</tr>
<tr>
<td>Niger</td>
<td>82</td>
<td>25</td>
</tr>
<tr>
<td>Rwanda</td>
<td>50</td>
<td>2</td>
</tr>
<tr>
<td>Swaziland</td>
<td>73</td>
<td>51</td>
</tr>
<tr>
<td>Togo</td>
<td>59</td>
<td>16</td>
</tr>
</tbody>
</table>

*Source: UNDP: 1994*
Table 2.5 Public recurrent expenditure per student, selected Sub-Saharan African countries

*(Constant 1990 US dollars)*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>174</td>
<td>219</td>
<td>779</td>
<td>1302</td>
<td>7999</td>
<td>7218</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>71</td>
<td>61</td>
<td>319</td>
<td>201</td>
<td>9114</td>
<td>4007</td>
</tr>
<tr>
<td>Burundi</td>
<td>45</td>
<td>27</td>
<td>417</td>
<td>245</td>
<td>2780</td>
<td>2280</td>
</tr>
<tr>
<td>Central Africa Rep.</td>
<td>100</td>
<td>45</td>
<td>126</td>
<td>88</td>
<td>3135</td>
<td>1726</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>26</td>
<td>51</td>
<td>90</td>
<td>77</td>
<td>1749</td>
<td>851</td>
</tr>
<tr>
<td>Kenya</td>
<td>52</td>
<td>46</td>
<td>113</td>
<td>162</td>
<td>3322</td>
<td>2347</td>
</tr>
<tr>
<td>Lesotho</td>
<td>43</td>
<td>37</td>
<td>361</td>
<td>223</td>
<td>3141</td>
<td>987</td>
</tr>
<tr>
<td>Malawi</td>
<td>16</td>
<td>15</td>
<td>289</td>
<td>192</td>
<td>2973</td>
<td>1782</td>
</tr>
<tr>
<td>Mali</td>
<td>96</td>
<td>107</td>
<td>243</td>
<td>830</td>
<td>2751</td>
<td>2618</td>
</tr>
<tr>
<td>Mauritania</td>
<td>167</td>
<td>86</td>
<td>972</td>
<td>406</td>
<td>2875</td>
<td>2020</td>
</tr>
<tr>
<td>Rwanda</td>
<td>41</td>
<td>54</td>
<td>415</td>
<td>182</td>
<td>3329</td>
<td>4050</td>
</tr>
<tr>
<td>Senegal</td>
<td>191</td>
<td>116</td>
<td>530</td>
<td>258</td>
<td>3676</td>
<td>2681</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>31</td>
<td>6</td>
<td>122</td>
<td>35</td>
<td>3672</td>
<td>777</td>
</tr>
<tr>
<td>Swaziland</td>
<td>74</td>
<td>70</td>
<td>268</td>
<td>246</td>
<td>1053</td>
<td>2316</td>
</tr>
<tr>
<td>Tanzania</td>
<td>11</td>
<td>12</td>
<td>193</td>
<td>132</td>
<td>1809</td>
<td>1412</td>
</tr>
<tr>
<td>Togo</td>
<td>45</td>
<td>46</td>
<td>180</td>
<td>189</td>
<td>4858</td>
<td>1398</td>
</tr>
<tr>
<td>Zambia</td>
<td>56</td>
<td>16</td>
<td>321</td>
<td>138</td>
<td>3084</td>
<td>865</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>143</td>
<td>126</td>
<td>761</td>
<td>233</td>
<td>2398</td>
<td>806</td>
</tr>
</tbody>
</table>

*Source:* DAE 1994
ANNEX 2: SOME QUESTIONS FOR ASSESSING GENDER ISSUES IN EDUCATION

The following questions can help to identify the types of issues that need to be addressed. The questions can be posed at the local and national levels. The local level includes the home, the school, participant groups (including students, parents, teachers, head teachers, inspectors, and the community). The national level encompasses education policy and macro-development issues. The questions on information systems bridge the two levels by identifying data that can help to guide the type of methodology to be used in soliciting useful information on gender differences in participation in education. The program planner should have answers, however impressionistic, to almost all the questions asked before designing interventions to improve female participation in education.

AT THE LOCAL LEVEL

At the household level

1. What are the significant economic barriers that hinder girls from attending school or that cause them to drop-out of school?
   a. Do direct costs (for example, tuition fees, costs for textbooks, school materials, uniforms, transportation, lodging) differ for females and for males? If so, why do they differ? If not, do they also hinder boys' participation?
   b. Do indirect costs (for example, free labour at home/in the fields, earnings foregone by attending school, time spent on chores) differ for females and for males? If so, why do they differ? If not, do they also hinder boys' participation?

2. What are the significant socio-cultural barriers that hinder girls from attending and remaining in school?

---

13 The original version of the questions presented here was prepared by Mubina Hassanali Kirmani. They have since been edited.
a. Which cultural costs are involved in females attending school (for example, attitudes and behavior learned at school that run counter to cultural norms?)

b. To what extent do parents perceive that formal schooling clashes with cultural norms (for example, is there a demand for separation of sexes at a certain age that may require separate classes/schools for girls and boys; are females expected to defer to males in social groups?)

c. Which cultural institutions or practices may interrupt or disrupt school attendance for girls? For boys? (Can age of highest losses of girls/boys from the school system be associated with cultural practices, such as marriage, initiation rites, assumption of responsibilities in the home?)

d. Does marriage affect female participation in schooling? If so, how?

e. What sexual risks do girls who are attending school face? (for example, fear of sexual abuse, sexual harassment, and loss of virginity?) How well-founded are these fears? How does government deal with the issue?

f. Are there urban/rural or regional differences in gender within the country that will require careful selection of sample populations to be able to reflect local situations in program designs?

Within the school

1. The School Setting

a. What process must parents go through to enroll their children in school? Does it in any way hinder girls' participation?

b. Is the distance to school a factor in explaining why some girls do not attend school/are frequently absent/drop-out early? If so, why (for example, time to travel, risk of travel?) Is distance equally or less important for boys?
c. Does the school's daily schedule and yearly calendar conflict with the demands on girls'/boys' time?

d. Are parents or any local groups involved in the determination of the school schedule? If yes, which parents, which groups? Are mothers and female community members involved?

e. Is the school facility viewed by parents as culturally appropriate for girls (for example, barrier walls in Muslim cultures?)

f. Does the school have facilities to respond to girls' needs (for example, separate bathrooms, changing rooms, dispensary with female nurse)?

g. Are there any special safety and security risks for females at school?

h. What are parents' feelings about the schools' attitude towards girls?

i. Is there an active Parent and Teacher Association? If yes, which parents are most active in the association?

j. Is there a strong old girls'/old boys' network involvement in the school? If yes, how does it influence school activities?

2. Curriculum

a. Does the curriculum limit the future career opportunities of girls? If it does, in what ways is it limiting?

b. Do girls have the same opportunity as boys to study mathematics and science at different levels of the education system? At higher levels, what proportion of females/males study mathematics and science?
c. What role do parents, local groups, community members, and the private sector play in the design of the curriculum content?

3. Learning Materials

a. Do textbooks or other learning materials reflect through their language, visual images, or lack of female images any bias or stereotypes in presentation of females and males?

4. Teaching Methodology

a. Do teacher expectations of girls differ from those of boys? If so, how?

b. How do teacher expectations affect female participation in class? Can differences in achievement found between boys and girls be based on teachers' classroom behavior?

5. Counseling

a. What communication links exist between schools, parents and the community to encourage academic success for females/males?

b. Is career counseling available? If so, does it serve females as well as males? At what grade does it begin? Who provides it? Is the career advice linked to growth sectors of the economy? To the reality of market opportunities locally or nationally? How is advice given to girls different to that given to boys?

c. Do schools provide special counseling to teachers, students or parents to meet females' and males' needs as regards their intellectual, emotional, and physical development? To meet needs related to career development and further studies/training? Is counseling provided for pregnancy and sexual harassment?

Within the community

1. How does the community view education in general for its children?
2. How does the community view female participation in education? Has it been informed of the benefits of girls' education? If yes, how? By whom? Was it convinced by the message?

3. Who are the most important community leaders, and which are the most important groups, and associations? Do any of them play an active role in schools? In promoting female participation in education? Do they have any national influence?

4. Are any non-governmental organizations involved in promoting female participation in education locally? What strategies have they used? Have these strategies been effective? What lessons can be (or have been) learned from these interventions?

5. What government incentives exist for communities to take part in the development of female education (for example, information, resources, or laws?)

Participant groups

1. Students

a. What are the similarities and differences between girls and boys in their educational aspirations? How does each group view the expenses their parents incur in sending them to school?

b. Are girls and boys aware of gender differences in enrollments, performance, repetition, and promotion? What is their opinion in this regard?

c. Are there special incentives to encourage female/male participation (for example, free textbooks, tuition) and achievement (for example, merit-based scholarships, awards?)

d. What do students think can be done to improve female/male participation in school?

e. Are there any single-sex schools? How do achievement and promotion rates compare between such schools and coeducational schools? Do girls think that their attendance in a mixed/coeducational school has any influence on their performance? Why?
2. Teachers

a. What is the ratio of female/male teachers at the primary and the secondary level?

b. What are teacher qualifications by gender at the primary and the secondary levels? Do these differ by grade level and by subject?

c. To what extent are teacher trainees sensitized to gender needs through pre-service or in-service training?

d. Are there differences in teacher absenteeism by gender?

e. Are teachers aware of differences in female and male enrollments, performance, attendance and drop-out rates? If so, what are their views on these differences?

f. What are teachers' views on early marriage and pregnancy amongst female students?

g. What role do teachers think they can play in improving the school environment for girls?

3. Parents, guardians or extended family

a. What are parents' attitudes toward educating their daughters? Toward educating their sons? (These questions could be addressed to mothers and fathers individually).

b. What return to their investment do parents believe they receive by sending their daughters to school?

c. Do parents think that school will enrich or hinder their daughters' future?

d. Are mothers' attitudes different to fathers' attitudes regarding educating girls?
e. Do these attitudes differ between parents who have attended school themselves and those who have not? Do they differ across regions of the country? Between urban and rural areas? By occupation? By religion?

f. Who decides whether a daughter or a son will attend school, the mother or the father or another family member? Who decides whether a daughter or a son should abandon school?

g. Who pays the direct costs of schooling for the female/male child: the mother, the father, a relative or a guardian?

h. How do parents communicate with the school (for example, through teachers, PTA, school meetings, other?) What are parents' view of the school and teachers? Is there a preference for religious schools?

i. Do parents have the same expectations for their sons and daughters regarding academic achievement?

j. What is considered an adequate amount of schooling for girls, for boys?

INFORMATION SYSTEMS

1. Are data collected on student enrollment, attendance, achievement, repetition, dropout, expulsion and promotion?

2. What data are collected on teachers?

3. Are data on students and teachers disaggregated by gender?

4. Are such data shared among local, regional, and national levels of government? Are indicators of female participation reported in statistical publications and policy and sector documents?
5. To what extent are the data known by senior education officials and used to guide education policy and planning?

**AT THE NATIONAL LEVEL**

*Policy*

1. Is there an education policy regarding females? What specific policies exist that might encourage female participation in education? Do these policies pertain to all levels of schooling?

2. Are there specific policies that might hinder female participation in education?

3. Are there special programs that encourage female participation? Are these supported with sufficient resources to ensure successful implementation? Are local or community groups involved in these programs? Do these programs reach remote areas?

4. Are there laws that encourage female participation in education (for example, laws that protect females from sexual harassment, allow pregnant females to attend schools, prohibit the removal of females from school for early marriage?) Are these laws commonly known and enforced? What, if any, laws discourage female participation in education?

5. Is there a task force charged with monitoring and directing a national program to promote universal primary education? How does the public view the government's effort in this area, especially with regard to female participation in education?

*Macro-development planning*

1. Are there fiscal and monetary measures, within structural and sectoral economic adjustment programs, that safeguard sustained investment and budgetary support to meet targets for female education? What are these measures?
2. Does the country have a national policy on women's participation in economic and social development? If so, what is the policy and how does it relate to the education of girls and women?

3. In which sectors are there specific policies related to gender? What are those policies and their implications for female education?

4. What structures and mechanisms exist for ensuring that gender issues are considered in the design and implementation of development programs?
ANNEX 3: CHECKLIST OF FACTORS THAT MAY INFLUENCE FEMALE PARTICIPATION IN EDUCATION

Socio-economic and socio-cultural factors

- Poverty
- Socioeconomic status
- Prohibitive costs of schooling
- Opportunity costs of schooling
- Residence: urban/rural/peri-urban
- Family structure
- Negative parental, children, and societal attitudes towards the benefits of, and returns to, female education
- Early marriage
- Bride price/wealth systems
- Initiation ceremonies
- Religious beliefs
- Lack of labour market opportunities
- Lack of opportunities for further education
- Lack of role models
- Girls as key economic resources
- Hunger and illness
- Pregnancy
- Over-age enrollment

School-related factors

- Lack of supply
- Type of schools available for girls- (boarding, mixed, single-sex, secular, Koranic or Madarassa, private, public)
- Poor learning/teaching environment
- Gender bias in teaching/teacher attitude
• Gender bias in text books
• Prevalence of repetition, drop-out and failure
• Sexual harassment and sexual liaison
• Punitive expulsion policies towards pregnancy

Political and institutional factors

• Lack of commitment to Education For All.
• Low investment in the education sector, and to basic education
• More investments in boys schools
• Cost-sharing policies
• Prohibitive costs of schooling
• Low commitment to gender equity
ANNEX 4: SAMPLE MATRIX FOR ASSESSING IDEAS FOR INTERVENTIONS TO IMPROVE FEMALE PARTICIPATION IN EDUCATION

PRIORITY PROBLEM TO BE ALLEVIATED: ________________________________

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Potential impact on problem</th>
<th>Cultural acceptability</th>
<th>Political feasibility</th>
<th>Affordability</th>
<th>Implementability</th>
<th>Does it fit with overall policy?</th>
<th>Other criteria</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideas for interventions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEX 5: SAMPLE MATRIX FOR POSSIBLE INTERACTIONS AMONG INTERVENTIONS IN A PROGRAM TO IMPROVE FEMALE PARTICIPATION IN EDUCATION

<table>
<thead>
<tr>
<th>Interventions</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMMENT S</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEX 6: SAMPLE OUTLINE FOR THE DESIGN OF A PROGRAM TO IMPROVE FEMALE PARTICIPATION IN EDUCATION IN SUB-SAHARAN AFRICA

1. IDENTIFICATION AND DESCRIPTION OF THE PRIORITY PROBLEM
   - Definition of the problem
   - Concrete (quantitative) information on its severity
   - Major causes of the key problem at the family, community, school, and system levels.
   - Existing local efforts to solve the problem
   - Knowledge and experience from efforts elsewhere
   - Summary of why a new initiative is necessary and of its potential

2. THE PROPOSED PROGRAM
   - Brief description of the program's various interventions and their integration
   - Statement of program objectives expressed as results
   - Why is the proposed solution appropriate?
   - Identification and rejection of other alternatives that have been considered
   - Expected impact of the project: direct, economic, spin-offs, staff development

3. PLAN OF ACTION
   - Narrative description of activities during initial take-off period (2-5 years)
   - Timetable for these activities
   - Activities unique to this program that are expected to continue beyond the take-off period

4. MANAGEMENT AND STAFFING
   - Organizational design (including lines of authority)
     - existing
     - changes needed for implementation of this program
- Description of actors’ functions and responsibilities that will be specific to this program
- Identification of new personnel and recruitment criteria
- Staff development activities required for effective implementation

5. **BUDGET**
   - Detailed breakdown of inputs required: capital, start-up (one-time only), recurrent
   - Budget summary (table with a total)

6. **EXPECTED FUNDING SOURCES**
   - Proposed sources and amounts for initial funding
   - Possible other sources of assistance
   - Plan for long-term financing of recurrent expenditures, including maintenance and staff ongoing support where appropriate
REFERENCES


Adenike, B. *Inculcating Interest In Science-Related Professions In Females.* World Bank, Washington, D.C. Processed.


Hyde, K. 1991. Regional Study of Female Participation in Education.


Levine, V. 1990. ‘Female Participation In Education.’ Submitted To The Rockefeller Foundation, USA.


Girls and Schools in Sub-Saharan Africa: From Analysis to Action


Ndunda, M. 1990. ‘Because I Am A Woman: Young Women’s Resistance To Science Careers in Kenya.’ A thesis submitted to the Faculty of Education, Queen’s University, Canada.


Distributors of World Bank Publications

ARGENTINA
Carlos Hirsch, SRL
Galerna Guemes
Florida 165, 6th Floor-OFC 453/465
1333 Buenos Aires
Oficina del Libro Internacional
Aliberti 40
1082 Buenos Aires

AUSTRALIA, PAPUA NEW GUINEA, FIJI, SOLOMON ISLANDS, VANUATU, AND WESTERN SAMOA
D.A. Information Services
688 Whitehorse Road
Mitcham 3132
Victoria

AUSTRIA
Gerold and Co.
Graben 31
A-1011 Wien

BANGLADESH
Micro Industries Development Assistance Society (MIDAS)
House 5, Road 16
Dhanmondi R/Area
Dhaka 1209

BELGIUM
Jean De Lannoy
Av. du Roi 202
1060 Bruxelles

BRAZIL
Publicacoes Tecnicas Internacionala Ltda.
Rua Pescado Comite, 209
01409 Sao Paulo, SP

CANADA
Le Diffuseur
151A Beul de Montigny
Boucherville, Quebec
J4B 5E6

CHINA
China Financial & Economic Publishing House
8, Da Fo Si Dong Jie
Beijing

COLOMBIA
InfoLibre Ltda.
Apartado Aereo 34270
Bogota D.E.

COTE D’IVOIRE
Centre d’Edition et de Diffusion Africaines (CEDA)
00 B.P. 541
Abidjan 04

CYPRUS
Center of Applied Research
Cyprus College
6, Diogenes Street, Engomu
P.O. Box 2006
Nicosia

CZECH REPUBLIC
National Information Center
P.O. Box 666
CIS-13357 Prague 1

DENMARK
Samfundslitteratur
Rosenørns Allé 11
DK-1970 Frederiksberg C

DOMINICAN REPUBLIC
Edición Talles, C. por A.
Restauración e Letras Catolica 309
Apartado de Correos 2190 Z-1
Santo Domingo

EGYPT, ARAB REPUBLIC OF
Al Ahram
Al Galaa Street
Cairo

FINLAND
Akatemien Kirjakauppa
P.O. Box 128
SF-00101 Helsinki 10

FRANCE
World Bank Publications
66, avenue d’lena
75116 Paris

GERMANY
UNG-Verlag
Peppepsdorfer Allee 55
53115 Bonn

GHANA
Greenwich Mag. and Books
Rivera Beach Hotel
PO Box 01198
Ou-Accra

GREECE
Papasotiriou S.A.
35, Stourmara Str.
106 82 Athens

HONG KONG, MACAO
Asia 2000 Ltd.
46-48 Wyndham Street
Wongking Centre
7th Floor
Central Hong Kong

HUNGARY
Foundation for Market Economy
Dobromvey Ut 17-19
H-1117 Budapest

INDIA
Allied Publishers Ltd.
751 Mount Road
Madras - 600 002

INDONESIA
Pt. Indra Limited
Jalan Borobudur 20
P.O. Box 1181
Jakarta 10320

IRAN
Kowkab Publishers
P.O. Box 19575-511
Tehran

IRELAND
Government Supplies Agency
4-5 Harcourt Road
Dublin 2

ISRAEL
Yezrot Literature Ltd.
P.O. Box 50250
Tel Aviv 61300

ITALY
Librairie Internationale
P.O. Box 19502, Jerusalem

ITALY
Liica Comandarina Sanoedi SPA
Via Duca Di Calabritia, 1/1
Casella Postale 552
50125 Firenze

JAMAICA
Ian Randle Publishers Ltd.
206 Old Hope Road
Kingston 6

JAPAN
Eastern Book Service
Hongo 3-Chome, Bunkyo-ku 113
Tokyo

KENYA
Afric Book Service (E.A.) Ltd.
Quaran House, Mliango Street
P.O. Box 43425
Nairobi

KOREA, REPUBLIC OF
Pan Korean Book Corporation
P.O. Box 101, Kwangwahamun
Seoul

MALAYSIA
University of Malaysia Cooperative Bookshop, Limited
P.O. Box 1127, Jalan Pantai Baru
59700 Kuala Lumpur

MEXICO
INFOBIB
Apartado Postal 22-660
14601 Tlalpan, Mexico D.F.

NETHERLANDS
De Lindeboom/InOr-Publicaties
P.O. Box 202
7480 AE Haaksbergen

NEW ZEALAND
EBCO NZ Ltd.
Private Mail Box 9914
New Market
Auckland

NIGERIA
University Press Limited
Three Crowns Building Jericho
Private Mail Bag 5095
Ibadan

NORWAY
Narvesen Information Center
Book Department
P.O. Box 6125 Etterstad
N-0621 Oslo 6

PAKISTAN
Minz Book Agency
64, Shahbaz-Quaid-e-Azam
P.O. Box No. 729
Lahore 54600

PEN
Australian Development Ass, Inc.
Apartado Postal 3824
Lima 1

PHILIPPINES
International Book Center
Suite 1703, Cityland 110
Condominium Tower 1
Ayala Avenue, H.V. dela Costa Extension
Makati, Metro Manila

POLAND
International Publishing Service
UL Pieka 31/37
00-677 Warsaw

PORTUGAL
Livraria Portugal
Rua Da Corno 70-74
1200 Lisbon

SAUDI ARABIA, QATAR
Jarrn Book Store
P.O. Box 3196
Riyadh 11471

SLOVAK REPUBLIC
Slovak G.T.C. Ltd.
Krupinska 4
P.O. Box 152
852 99 Bratislava 5

SINGAPORE, TAIWAN, MYANMAR, BRUNEI
Gower Asia Pacific Pte Ltd.
Golden Wheel Building
41, Kallang Pudong, 064-03
Singapore 1334

SOUTH AFRICA, BOTSWANA
For single title:
Oxford University Press
Southern Africa
P.O. Box 1141
Cape Town 8000

SWITZERLAND
Hans de Leerschino
P.O. Box 1095
Zurich 8022

THAILAND
Central Department Store
306 Silom Road
Bangkok

SWEDEN
Tidningsförlaget AB
S-106 47 Stockholm

SOUTH AFRICA, BOTSWANA
For subscription orders:
International Subscription Service
P.O. Box 41095
Johannesburg 2024

SWITZERLAND
Hans de Leerschino
P.O. Box 1095
Zurich 8022

SOUTH AFRICA, BOTSWANA
For single title:
Oxford University Press
Southern Africa
P.O. Box 1141
Cape Town 8000

SWITZERLAND
Hans de Leerschino
P.O. Box 1095
Zurich 8022

SOUTH AFRICA, BOTSWANA
For subscription orders:
International Subscription Service
P.O. Box 41095
Johannesburg 2024

TANZANIA
Oxford University Press
Maktaba Street
P.O. Box 599
Dar en Salam

THAILAND
Central Department Store
306 Silom Road
Bangkok

TRINIDAD & TOBAGO
Systematics Studies Unit
#6 Watts Street
Curepe
Trinidad, West Indies

UGANDA
Gusto Ltd.
1st Floor, Room 4, Geogas Chambers
P.O. Box 9997
Plot 69 Kampala

UNITED KINGDOM
Microld Ltd.
P.O. Box 1
Aiton, Hampshire GU34 2PG

ZAMBIA
University of Zambia Bookshop
Great East Road Campus
P.O. Box 33279
Lusaka

ZIMBABWE
Longman Zimbabwe (Pvt.) Ltd.
Taurl Road, Anderbury
P.O. Box ST 125
Souternet
Harare
RECENT WORLD BANK TECHNICAL PAPERS (continued)

No. 253 Jensen and Malter, Protected Agriculture: A Global Review
No. 254 Frischtak, Governance Capacity and Economic Reform in Developing Countries
No. 255 Mohan, editor, Bibliography of Publications: Technical Department, Africa Region, July 1987 to April 1994
No. 256 Campbell, Design and Operation of Smallholder Irrigation in South Asia
No. 257 Malhotra, Sinsukprasert, and Eglington, The Performance of Asia’s Energy Sector
No. 258 De Geyndt, Managing the Quality of Health Care in Developing Countries
No. 259 Chaudry, Reid, and Malik, editors, Civil Service Reform in Latin America and the Caribbean: Proceedings of a Conference
No. 260 Humphrey, Payment Systems: Principles, Practice, and Improvements
No. 261 Lynch, Provision for Children with Special Educational Needs in the Asia Region
No. 262 Lee and Bobadilla, Health Statistics for the Americas
No. 263 Le Moigne, Giltner, Subramanian, and Xie, editors, A Guide to the Formulation of Water Resources Strategy
No. 264 Miller and Jones, Organic and Compost-Based Growing Media for Tree Seedling Nurseries
No. 265 Viswanath, Building Partnerships for Poverty Reduction: The Participatory Project Planning Approach of the Women’s Enterprise Management Training Outreach Program (WEMTOP)
No. 266 Hill and Bender, Developing the Regulatory Environment for Competitive Agricultural Markets
No. 267 Valdés and Schaeffer, Surveillance of Agricultural Prices and Trade: A Handbook for the Dominican Republic
No. 268 Valdés and Schaeffer, Surveillance of Agricultural Prices and Trade: A Handbook for Colombia
No. 269 Scheierling, Overcoming Agricultural Pollution of Water: The Challenge of Integrating Agricultural and Environmental Policies in the European Union
No. 270 Banerjee, Rehabilitation of Degraded Forests in Asia
No. 271 Ahmed, Technological Development and Pollution Abatement: A Study of How Enterprises Are Finding Alternatives to Chlorofluorocarbons
No. 272 Grimshaw and Helfer, editors, Vetiver Grass for Soil and Water Conservation, Land Rehabilitation, and Embankment Stabilization: A Collection of Papers and Newsletters Compiled by the Vetiver network
No. 273 Govindaraj, Murray, and Chellaraj, Health Expenditures in Latin America
No. 275 Heggie, Management and Financing of Roads: An Agenda for Reform
No. 276 Johnson, Quality Review Schemes for Auditors: Their Potential for Sub-Saharan Africa
No. 277 Convery, Applying Environmental Economics in Africa
No. 278 Wijetilleke and Karunaratne, Air Quality Management: Considerations for Developing Countries
No. 279 Anderson and Ahmed, The Case for Solar Energy Investments
No. 280 Rowat, Malik, and Dakolias, Judicial Reform in Latin America and the Caribbean
No. 281 Shen and Contreras-Hermosilla, Environmental and Economic Issues in Forestry: Selected Case Studies in India
No. 282 Kim and Benton, Cost-Benefit Analysis of the Onchocerciasis Control Program (OCP)
No. 283 Jacobsen, Scobie, and Duncan, Statutory Intervention in Agricultural Marketing
No. 286 Tavoulareas and Charpentier, Clean Coal Technologies for Developing Countries
No. 287 Gillham, Bell, Arin, Matthews, Rumeur, and Hearn, Cotton Production Prospects for the Next Decade
No. 289 Dinar, Seidl, Olem, Jorden, Duda, and Johnson, Restoring and Protecting the World’s Lakes and Reservoirs