



EFA | TOP PRIORITY FOR INTEGRATED SECTOR-WIDE POLICIES

Education
for All
IN AFRICA
2 0 0 7

DAKAR+7 R E P O R T

DAKAR+7 R E P O R T 2 0 0 7

EFA | TOP PRIORITY FOR INTEGRATED SECTOR-WIDE POLICIES

Education
for All
IN AFRICA
DAKAR+7

Nota Bene:

The ideas and opinions expressed in this document are those of the authors and do not necessarily reflect the views of UNESCO.

The terms used in this publication and the data presented do not imply that UNESCO has adopted any particular position with respect to the legal status of the countries, territories, towns or areas, their governing bodies or their borders or boundaries.

Data sources:

- Schooling data

The bulk of the data (series up to 2004/05) was provided by the UNESCO Institute for Statistics (UIS). This concerns the final dataset made available in the first three months of 2007. The United Nations tables are used as reference for the indicators that require population data; these are sometimes different from those used at national level. This explains any differences between the figures in national publications and those in this report.

- Financial data

In addition to data provided by the UIS, data collected by the Pôle de Dakar education sector analysis and/or the World Bank technical teams during work on financial simulation sector models and/or medium term expenditure frameworks (MTEF) has also been used.

- Survey data

A wide range of sources has been used, specific examples of which are the MICS (Multiple Indicator Cluster Surveys) household surveys and the DHS (Demographic and Health Surveys) surveys for social indicators, the PARSTAT project 1-2-3 surveys for labour market indicators, and data and analysis from the CONFEMEN PASEC and SACMEQ programmes for surveys on school learning achievements and their determining factors.

In the interests of clarity, the specific source and precise year of data are not always mentioned in the body of the text or in the country sheets; we invite the reader to refer to the "tables" in the appendices for information on specific data.

Care has been taken by the authors to monitor and consolidate data, especially when there were several sources for the same data item.

- Data from CSR (Country status report) type sector analysis

Alongside comparative international data on education produced by the UIS, analysis makes use of complementary statistical information on the countries' education systems from CSR type sector diagnosis assessments already carried out or ongoing, particularly for the following countries:

- West Africa: Benin, Burkina Faso, Côte d'Ivoire, Guinea, Mali, Mauritania, Niger and Togo
- Central Africa: Cameroon, Congo, Central African Republic, Democratic Republic of Congo and Chad
- East Africa: Burundi, Ethiopia, Madagascar, Malawi, Mozambique and Rwanda
- Southern Africa: Lesotho, Namibia and Swaziland


Data sources, quality, definitions and conventions as to the calculation of indicators and averages, are specified in Appendices 1, 2 and 3.

UNESCO/BREDA publication number: ISBN. 978-92-9091-095-4

Photography:

© Mario Bels - www.bels-mario.com

© By Reg' - regdakar@orange.sn

Graphic design: , Mr Régis L'Hostis, Dakar

Printing: La Rochette, Dakar

Translation French > English: Ms Marjorie Leach, Montpellier

Proofreading - French: Mr Frédéric Duchesne, Paris

Proofreading - English: Ms Sirina Kerim-Dikeni, Dakar



Regional Office for Education in Africa

www.dakar.unesco.org

Pôle de Dakar

EDUCATION SECTOR ANALYSIS

www.poledakar.org

The authors:

This report has been drawn up by the Pôle de Dakar education sector analysis team within the Regional Office for Education in Africa (BREDA), with contributions from BREDA education specialists and the UIS regional centre, under the responsibility of Dr Lalla Aïcha Ben Barka, Director of BREDA. The Pôle de Dakar for education sector analysis (www.poledakar.org) is a platform of expertise reporting to BREDA. Resulting from a partnership between the French Ministry of Foreign Affairs and UNESCO, the Pôle de Dakar has been working to support countries and technical and financial partners in the areas of education system analysis, development of strategies and monitoring of education sector policies since 2001.

The Pôle de Dakar for education sector analysis team comprised:

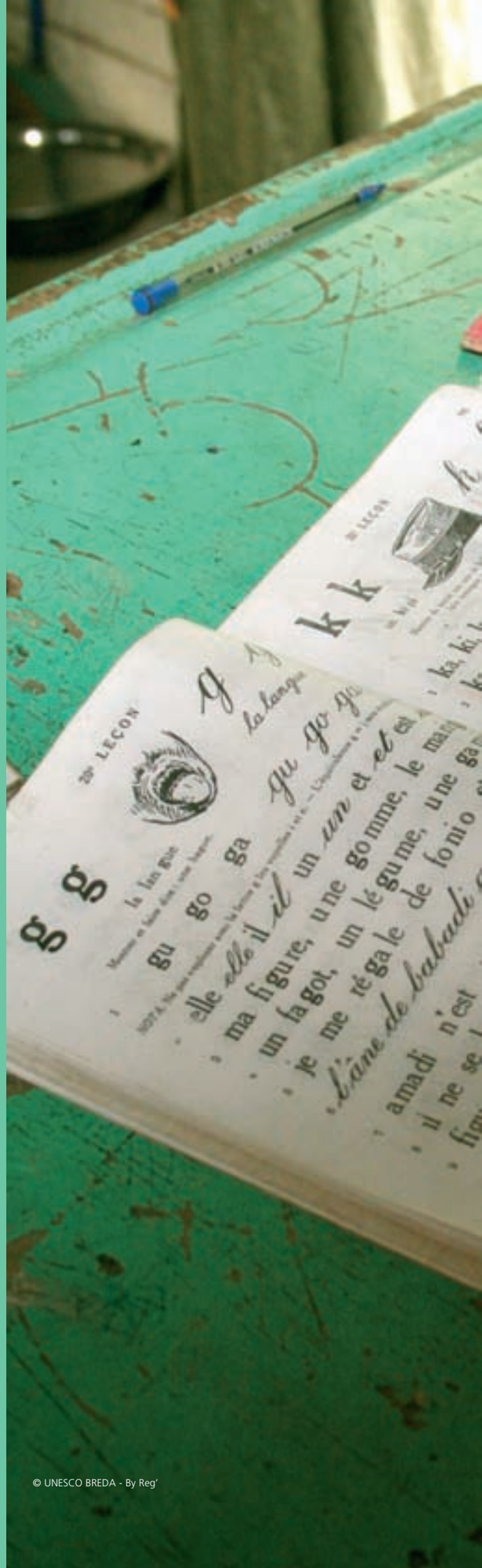
Mr Jean-Pierre JAROUSSE, Coordinator
Mr Jean-Marc BERNARD, Advisor in support to countries,
Mr Kokou AMELEWONOU, Education policy analyst
Mr Borel Anicet FOKO TAGNE, Education policy analyst
Ms Claire GALL, Education policy analyst
Mr Guillaume HUSSON, Education policy analyst
Mr André Francis NDEM, Education policy analyst
Ms Laure PASQUIER-DOUMER, Education policy analyst
Mr Nicolas REUGE, Education policy analyst

The BREDA team contributing to this report comprised:

Mr Teeluck BHUWANEE, Programme specialist
Mr Aimé DAMIBA, Consultant
Ms Rokhaya FALL DIAWARA, Programme specialist
Mr Magatte FAYE, Programme assistant
Mr Jacques GUIDON, Advisor to the Director
Mr Hervé HUOT-MARCHAND, Sector expert
Ms Fatoumata MAREGA, Programme specialist
Mr Luc RUKINGAMA, Programme specialist
Ms Virginie TORRENS, Sector expert
Mr Patrick WATKINS, Consultant

The UIS regional centre:

Mr Thierry Lairez, Regional advisor





Acknowledgements:

BREDA and the Pôle de Dakar for education sector analysis gratefully acknowledge the institutional, scientific and technical support of the following:

The UNESCO Head Office in Paris, for their support and confidence: Mr Koïchiro Matsuura, Director-General of UNESCO, Mr Nouréini Tidjani-Serpos, Assistant Director-General for Africa;

The French Ministry of Foreign Affairs: Mr Jean-Christophe Deberre, Director of development policies, Mr Alain Dhersigny, Head of the Bureau for education and vocational training policies, and his team;

The UNESCO Institute for Statistics (UIS) in Montreal, with which a special partnership has been established: Mr Hendrik Van der Pol, Director, and his team, particularly Mr Albert Motivans, Mr Saïd Belkachla and Ms Pascale Ratovondrahona;

The World Bank: Ms Jee-Peng Tan, Principal advisor, Mr Mathieu Brossard and Mr Rahamatra Rakotomalala;

The IRD- DIAL (Développement Institutions et Analyse de Long Terme): Mr Javier Herrera, Director of the research unit, Mr Christophe Jalil Nordman, Mr Sébastien Merceron and Mr Mathias Kuepie;

The Conference of Ministers of Education in countries sharing the French language (CONFEMEN), for communicating PASEC data and analysis : Ms Adiza Hima, Secretary-General, and all the CONFEMEN Programme for the Analysis of Education Systems (PASEC) team, particularly Mr Pierre Varly, programme coordinator, Mr Kenneth Hougbedji and Mr Beifith Kouak Tiyab;

The Southern and Eastern Africa Consortium for Monitoring Education Quality (SACMEQ), for communicating data and results: Mr Kenneth Ross and Ms Stephanie Dolata;

The Fast Track Initiative Secretariat: Mr Desmond Bermingham, Head of the FTI Secretariat, and Mr Luc-Charles Gacougnonle;

At country level, in the ministries of education and administrative departments involved in producing sector analysis: all the national teams and international experts who work with the Pôle de Dakar for education sector analysis team and who are too numerous to be listed individually here;

The following individuals : Ms Marjorie Leach, translator, Mr Régis L'Hostis, graphic designer and photographer, Mr Mario Bels, photographer, Mr Frédéric Duchesne and Ms Sirina Kerim-Dikeni, proofreaders, Mr Alain Mingat, constructive critic, and Mr Paul Coustère, former coordinator of the Pôle de Dakar for education sector analysis, for his constant support.

The authors would also like to thank all the institutions and companies who opened their doors to the photographers for the illustrations in this report.

DKR+7 contents

EDITORIAL	16
READER'S GUIDE	21
GENERAL INTRODUCTION	23
C H A P T E R 1	
Institutional changes following the Dakar forum	28
1 Major institutional changes...	31
1.1 Mechanisms for the promotion and monitoring of Education for All at international, regional and national levels	31
1.2 Definition of a global framework for the development of the education sector at national level	35
1.3 High international financial mobilization	44
2 ...that give rise to new questions	54
2.1 On education sector analysis	54
2.2 On the EFA monitoring mechanisms at country level	55
2.3 On financial mobilization for education	56
3 Conclusion	59
C H A P T E R 2	
The evolution of primary education	60
1 The evolution of education indicators in primary education between 1990/91 and 2004/05	63
1.1 High expansion in intake capacity since 1990/91	63
1.2 Coverage, intake and completion	64
1.3 Persistent gender disparities in 2004/05	66
2 The Dakar Forum in 2000 marked a turning point in the dynamics of primary education in Africa	69
2.1 A significant change in the average annual increase in pupil numbers	69
2.2 Confirmation of efforts made at intake level...	71
2.3 ...and at completion level	73
2.4 A word on repetition	76
3 Looking back at the projections regarding the perspectives of reaching universal education by 2015	79
4 Conclusion	83

C H A P T E R 3

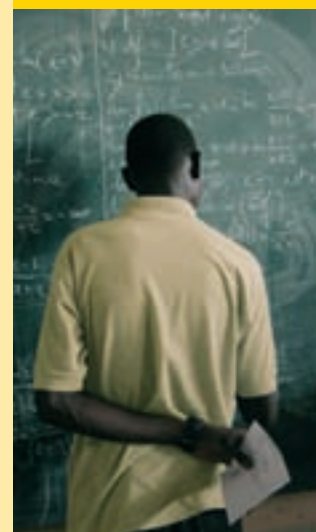
Post-primary levels and enrolment dynamics 84

1 Current status: many different situations throughout the continent	87
1.1 Post-primary coverage	87
1.2 Gender disparities are still significant	95
1.3 Pupil-teacher ratios	97
2 Enrolment dynamics at work	99
2.1 How has post-primary education developed since 2000?	99
2.2 Has focalisation on UPE goals mechanically increased the pressure of demand on general secondary education?	102
3 Conclusion	108

C H A P T E R 4

Measures, evolution and management of the quality of learning 110

1 Panorama of the quality of learning in basic education in Africa	113
1.1 The positioning of African countries in international surveys	113
1.2 Major disparities	115
1.3 Literacy as a measure of the quality of learning in primary school	117
2 Expansion of primary enrolment and quality of learning: far from the generally accepted ideas	121
2.1 Dynamics in terms of enrolment and literacy between 1970 and 1990	121
2.2 Recent dynamics	123
3 Disparities between schools and between classes at the heart of the problem of the quality of learning	127
3.1 The weight of the different factors in the learning process in African schools	127
3.2 The extent of the disparities between classes and schools	129
3.3 Disparities between classes and performance of the education systems	129
3.4 How can disparities between classes be reduced?	131
4 Conclusion	134



C H A P T E R 5

**What strategy for non-formal education
in the current panorama of education for all? 136**

1 Comparison of the social effects of formal and non-formal education in the African context	139
1.1 The extent of non-formal education greatly varies from country to country	139
1.2 Beneficiaries of non-formal education	141
1.3 Measuring the social effects of non-formal education	141
2 Determining factors in the quality and sustainability of adult literacy in Morocco	145
2.1 Adult literacy activities in Morocco	145
2.2 The exploratory survey and principal findings	147
2.3 Current research	149
3 Conclusion	150

C H A P T E R 6

**Financial sustainability in the development
of secondary and tertiary education 152**

1 The case of general secondary education	156
1.1 Memorandum of elements related to context and to educational policy for the countries analysed	156
1.2 Different scenarios for rates of expansion in general secondary education	159
1.3 Suchlike rates of expansion will have high financial consequences	165
2 The case of tertiary education	167
2.1 There is growing demand for tertiary education in Africa and this trend could continue	167
2.2 The current rates of expansion will not be financially sustainable in many countries	170
2.3 Physical sustainability is also to be taken into consideration	174
3 Conclusion	176

C H A P T E R 7

**Social and economic sustainability
in the development of post-primary education 182**

1 Characteristics of educational investment, its consequences on demand and financing of education	185
2 What are the specific social effects of post-primary education?	191
3 Access to employment for education system leavers in Africa	193
3.1 The global employment context and market structure	193
3.2 The situation of post-primary school leavers on the labour market	197
4 The contribution of the different levels of education to economic growth	204
5 Conclusion	209

CHAPTER 8

New benchmarks for action: top priority for integrated sector-wide policies 210

1 Maintaining the priorities not already met	214
1.1 Confirmation and consolidation of the quantitative goals of UPE	214
1.2 Quality to be a priority	215
1.3 The need to remobilize donor agencies in order to achieve quality UPE	217
2 Developing true sector-wide policies incorporating in-depth reform of post-primary education	219
2.1 Rethinking basic education a long-term strategic option	220
2.2 Ambitions for technical and vocational education and training	220
2.3 For an ambitious policy of redefinition of general secondary education clearly articulated with quality tertiary education	222
3 Flow regulation, financing of education and equity	224
3.1 Flow regulation and participation by the families in financing post-primary education	224
3.2 Private financing of education and equity	226
4 Adopting management and guidance instruments for the supply of training and appropriate frameworks for dialogue and action	227
4.1 Refining sector diagnosis at country level	227
4.2 Better management of the training supply by setting up mechanisms for regular monitoring of the employment market and training needs	228
4.3 Promoting and developing sector dialogue	229
4.4 Improving EFA coordination	231

COUNTRY SHEETS 234

HOW TO READ THE INDICATORS AND CHARTS?	336
Educational pyramids	346
Country Profiles	348

APPENDICES 350

APPENDIX 1: THE QUALITY OF AVAILABLE STATISTICAL DATA	352
APPENDIX 2: SUMMARY STATISTICAL TABLES	354
APPENDIX 3: LIST OF ABBREVIATIONS AND ACRONYMS	360

REFERENCES	362
------------	-----



DKR+7 list of il

B O X E S

Box 1.1: HIPC Initiative: potential yet unsystematic resources for education	52
Box 1.2: The effectiveness of Official Development Assistance in question	58
Box 2.1: The global description of the evolution in primary enrolments	78
Box 2.2: A simplified method of projection	79
Box 3.1: Cases of Ethiopia, Kenya and Malawi	91
Box 3.2: Breakdown by log-linearization of the growth observed in access to lower secondary education	105
Box 4.1: Measuring literacy in «household surveys»	119
Box 4.2: Time spent in school: a major factor in the quality of learning	133
Box 5.1: Literacy Assessment and Monitoring Programme (LAMP): a cornerstone of the LIFE initiative	146
Box 6.1: Method of calculation and hypothesis for expansion of secondary education	160
Box 6.2: The four scenarios tested in the financial simulations for expansion in tertiary education	172
Box 6.3: There will also be considerable needs for higher ranking teaching staffs	175
Box 7.1: Private returns to education in Africa	186
Box 7.2: The brain drain constitutes more of a handicap than an advantage for the development of the poorest African countries	188
Box 7.3: Underemployment as a measure of the imbalance of the labour market in Africa	194
Box 7.4: The issue of salary requirements	196
Box 7.5: The future of qualified secondary and tertiary education leavers in four English-speaking African countries	203
Box 7.6: Methodology (outline) for testing the effect of the different levels of education on growth	205

Illustrations

T A B L E S

Table 1.1: Current situation of sector-wide plans in education in Africa	38	Table 6.2: Countries grouped as to the theoretical number of years necessary to complete lower secondary education	161
Table 1.2: African countries equipped with a medium term expenditure framework (MTEF)	41	Table 6.3: Multiplication factor of secondary enrolments in 2015 per group of countries according to 3 reference scenarios on the hypothesis of non-attainment of UPE	162
Table 1.3: List of countries elected to the Fast Track Initiative and year of endorsement	48	Table 6.4: Multiplication factor of secondary enrolments in 2015 and 2020 per group of countries according to three reference scenarios on the hypothesis of attainment of UPE	164
Table 1.4: Catalytic Fund disbursements made and projected (in millions of US dollars)	50	Table 6.5: Current expenditure in secondary education as a percentage of resources available for education, according to two scenarios	166
Table 1.5: Share of Africa in bilateral and multilateral donors' aid flow	57	Table 6.6: Parameters affecting the mobilization of public resources and current expenditure for tertiary education, African countries, 2004 or closest year	171
Table 1.6: Share of education in bilateral and multilateral donors' aid flow, Africa	57	Table 6.7: Financing needs on current public expenditure on tertiary education in 2015 as per different scenarios, for 30 low-income African countries	173
Table 2.1: Situation of African countries according to gross enrolment rates in 1990/91 compared to 2004/05 (or closest year)	63	Appendix 6.1: Multiplication factor of secondary enrolments per country in 2015 according to three reference scenarios on the hypothesis of non-attainment of UPE	178
Table 2.2: Situation of African countries according to the level of their access rates to the last year of primary education in 1990/91 compared to 2004/05 (or closest year)	65	Appendix 6.2: Multiplication factor of secondary enrolments in 2015 per country according to three reference scenarios on the hypothesis of attainment of UPE	179
Table 2.3: Increase in pupil numbers in primary education	70	Appendix 6.3: Current level and projection of expenditure and public resources for running tertiary education in Africa, annual average (status quo scenario, 2004 in millions USD)	180
Table 2.4: Comparison in 2005 and 2007 projections	82	Table 7.1: Consolidated measure of the social impact for adults of the different levels of education on a variety of social dimensions in Mali	192
Table 2.5: Situation of African countries with regard to the 2014/15 UPE goal	82	Table 7.2: Measure of the different components of underemployment in the West African capitals	196
Table 3.1: Breakdown of countries as to the duration of each level of general secondary education	87	Table 7.3: Unemployment rate for the 25-34 age group (%)	198
Table 4.1: The performance of African countries in the TIMSS 2002 survey (8 th grade)	114	Table 7.4: Distribution of the most educated workers in the 25-34 age group according to the institutional sector	199
Table 4.2: Disparities within countries	116	Table 7.5: Distribution of the most educated workers in the 25-34 age group according to the type of job in the modern sector (%)	200
Table 4.3: % of pupils in 5 th grade not benefiting from specific facilities or not owning specific durable goods at home	124	Table 7.6: Distribution of workers in the 25-34 age group according to the qualification in relation to the job filled (%)	201
Table 4.4: Comparison of minimum and maximum average scores in PASEC French tests in 5 th grade of primary school	129	Table 7.7: Comparison of the number of executive job vacancies with the number of primo job seekers with qualifications from tertiary education	202
Table 4.5: Impact of low performance classes on the quality of learning within the education systems	130	Table 7.8: Qualitative appreciation of the impact of the initial level of education on economic growth between 1970 and 2003	207
Table 5.1: Distribution of the 15-49 years old segment of the population according to the type of education (%)	140	Table 7.9: Comparison in performance of the different groups of countries (1970-2003)	208
Table 5.2: Distribution of those trained in non-formal education according to individual and social characteristics (%)	141	Table 8.1: Intake and survival in the 28 countries not likely to reach UPE in current enrolment conditions (2004/05 or closest year).	214
Table 5.3: Impact of non-formal education in terms of literacy	142		
Table 5.4: Effects of non-formal education compared to absence of education	144		
Table 5.5: Combined percentage of success in the different items according to the operators	147		
Table 5.6: Variance in learning (%) associated to the different groups of variables	148		
Table 6.1: Main context and policy indicators in secondary education in the countries studied, comparison with the African average	158		

G R A P H S

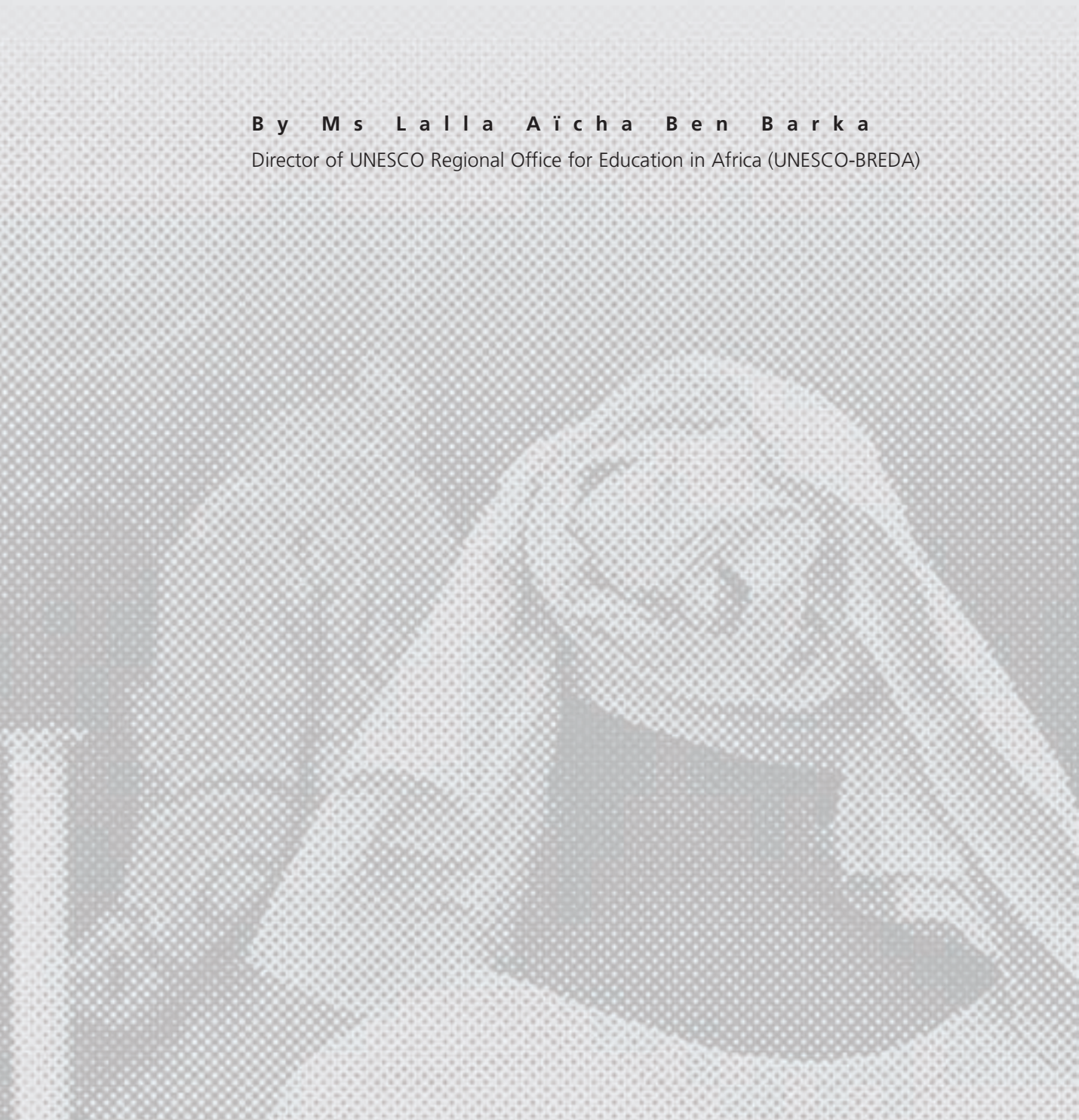
Graph 1.1: The principal stages of the programme approach	35
Graph 1.2: Sector-wide analysis in Africa	36
Graph 1.3: Evolution of Africa's share in the total amount of ODA	44
Graph 1.4: Weight of the different levels of education in ODA for education (sub-Saharan Africa)	46
Graph 1.5: Share of external aid for education assigned to primary education and according to primary completion rate (2005)	47
Graph 1.6: Share of current expenditure on education in State expenditure	53
Graph 2.1: Situation of African countries with regard to gross enrolment rate, apparent (gross) intake rate and primary completion rate, 2004/05 (or closest year)	64
Graph 2.2: AIR for girls vs. AIR for boys, Africa region, 2004/05 (or closest year)	66
Graph 2.3: Comparison of the boy-girl primary completion rate, 2004/05 (or closest year)	67
Graph 2.4: Gender parity indexes calculated on the basis of AIR and PCR, 2004/05 (or closest year)	68
Graph 2.5: Average annual increase in AIR: 1990-2000 and 2000-2004, Africa region	71
Graph 2.6: Average annual increase in PCR: 1990-2000 and 2000-2004, Africa region	74
Graph 2.7: Percentage of repeaters in 1990/91 and 2000/01 (or closest years)	77
Graph 2.8: Percentage of repeaters in 2000/01 and 2004/05 (or closest years)	77
Graph 2.9: Primary completion rate on the 2014/15 horizon, revised estimates	80
Graph 3.1: GER in the two levels of secondary education in 2004/05 (or closest year)	88
Graph 3.2: Transition and survival rates in lower general secondary education in 2004/05 (or closest year)	90
Graph 3.3: Transition and survival rates in upper general secondary education in 2004/05 (or closest year)	90
Graph 3.4: TVET coverage in 2004/05 (or closest year)	92
Graph 3.5: Share of TVET pupils in secondary education for 2004/05 (or closest year)	93
Graph 3.6: Tertiary education coverage in 2004/05 (or closest year)	94
Graph 3.7: Share of girls in general secondary education in 2004/05 (or closest year)	95
Graph 3.8: Pupil-teacher ratio in secondary education (general and TVET) in 2004/05 (or closest year)	97
Graph 3.9: Student-teacher ratio in tertiary education in 2004/05 (or closest year)	98
Graph 3.10: Access rates in 2000/01 and 2004/05 to lower secondary education (or closest years)	99

Graph 3.11: Average annual rate of increase in TVET coverage between 2000/01 and 2004/05 (or closest years)	100	Graph 6.6: Multiplication factor of increase in enrolments in tertiary education in Africa between 2004 and 2015, taking into account current rates of expansion (simulations)	169
Graph 3.12: Average annual rate of increase in tertiary education coverage between 2000/01 and 2004/05 (or closest years)	101	Graph 6.7: Evolution in the relationship between current expenditure and public resources for tertiary education for the 30 countries, status quo scenario, 2005-2015	173
Graph 3.13: Average annual rate of increase in access to general secondary education between 1990 and 2000 and between 2000 and 2004	102	Graph 7.1: Rate of unemployment in sub-Saharan Africa, 1995-2004 (%)	193
Graph 3.14: Access rate to general secondary education in 2000 and average annual growth rate in access between 2000 and 2004	103	Graph 7.2: Proportion of modern jobs in a sample of African countries	197
Graph 3.15: Average annual rate of increase in pupil numbers in the first grade of general secondary education between 1990 and 2000 and between 2000 and 2004	104	Graph 8.1: Proportion of 6 th grade pupils reaching Reading level 4 in the SACMEQ II tests	216
Graph 3.16: Breakdown of the improvement in access to lower secondary education between 2000 and 2004	106		
Graph 4.1: Scores in SACMEQ II Mathematics and Reading tests	115		
Graph 4.2: Scores in PASEC Mathematics and French tests in 5 th grade (Score out of 100)	116		
Graph 4.3: Measure of literacy after 6 years of primary schooling	118		
Graph 4.4: Relationship between quantitative and qualitative progress over the 1970-1990 period	122		
Graph 4.5: Learning achievements and access to 5 th grade of primary education in the perspective of universal primary education by 2015	123		
Graph 4.6: Pupil learning achievements and access to 6 th grade of primary education	125		
Graph 4.7: The weight of the different categories of factors in the school learning process in 10 sub-Saharan African countries	128		
Graph 4.8: The differences in performances within an education system with identical resources: the example of Cameroon in 5 th grade (French-speaking sub-system)	131		
Graph 5.1: Results of non-formal education and formal education in terms of literacy	143		
Graph 6.1: Multiplication factor of under 2 for enrolments in secondary education - hypothesis of not reaching UPE and status quo on secondary parameters	163		
Graph 6.2: Multiplication factor of over 2 for enrolments in secondary education - hypothesis of not reaching UPE and status quo on secondary parameters	163		
Graph 6.3: Multiplication factor of under 5 for enrolments in secondary education - hypothesis of achieving universal education of nine or ten years	164		
Graph 6.4: Multiplication factor of over 5 for enrolments in secondary education - hypothesis of achieving universal education of nine or ten years	164		
Graph 6.5: Number of students in tertiary education in Africa between 1980 and 2004 (in thousands) and projections in 2015 according to three scenarios	168		

DKR+7 editorial

By Ms Lalla Aïcha Ben Barka

Director of UNESCO Regional Office for Education in Africa (UNESCO-BREDA)





The second BRED report on EFA in Africa completes the previous one published in 2005. It incorporates the most recent available data, for 2004/05 or 2005/06 and as such, benefits from the necessary hindsight for drawing up a precise statement of the consequences of the Dakar Forum. This is not limited to enrolment trends, and concerns the many institutional changes made since that time. These changes establish new practices for governments, technical and financial partners, and sub-regional and regional institutions. The report is also concerned with monitoring the financial commitments made by the international community. In line with the previous report, it was appropriate to measure precisely the progress made towards Universal Primary Education (UPE). We found it important to go further and attempt to appreciate the consequences of this progress: firstly, in terms of quality of learning, since many observers are afraid that this has been sacrificed on the road towards UPE in favour of completion rates; secondly, by looking into the marginalisation of non-formal education in the current promotion of primary education; finally, in terms of enrolment dynamics at post-primary levels.

The outcome is positive overall. The Dakar Forum changed the deal and made a break with the long habit of exchanging only good words and good intentions. There has been true mobilization, both at the level of the governments and with the

international community; this is reflected in concrete terms by the primary education indicators (access, completion), which have risen as much between 2000 and 2005 as between 1990 and 2000. We have taken this as a basis for revising the projections made in the earlier report, as to attainment of UPE by 2015 : 15 countries will be in a position to reach the goal. The countries that will undoubtedly not reach the goal, and which for the most part were already lagging far behind in 2000, have nevertheless come much nearer. For these countries, the road to UPE will remain open beyond 2015; its consolidation must be a priority for all African countries. This concerns maintaining the completion level, which has dropped over the recent period in some countries where the goal of UPE had been practically reached in 2000, and above all improving the quality of learning.

Consolidating the quantitative and qualitative goals of UPE does not only concern the governments. Although the Dakar Forum gave rise to strong international mobilization, there are now signs of loss of impetus in terms of financing, while the initial promises have only been partially kept, both in volume of aid and in its appropriation. Also, it no longer seems sure that the Fast Track Initiative, which is the most characteristic example of the change in practices subsequent to the Dakar Forum promoting the development and sharing of «credible plans» and formalizing the new orientations of international cooperation (harmonization, alignment, programme-aid), will benefit from the resources necessary for the fulfilment of its ambitions.

As the report shows, it is possible to increase enrolment without necessarily having to sacrifice quality: some countries, the majority, have indeed succeeded in reconciling significant growth in enrolments with quality of learning, while others have not. Over and above this result, which contrasts strongly with the common opinion on this subject and confirms the existence of policies enabling to reconcile the two objectives often presented as contradictory, the quality of primary education still remains problematic throughout the continent. In international comparisons, the African countries performing the best are distinctly outdistanced; at continental level, the proportion of children who reach a minimum threshold of learning is low, including in countries where primary education is already well developed. This is definitely one of the priorities for the coming years. It will involve devising new assessment instruments at continental level, and also promoting local

policies for managing quality in each country, as outlined in this report.

If work towards UPE is still ongoing and justifies remobilizing the international community, other sub-sectors now merit just as much attention: firstly, non-formal education and its contribution to the global policy for the fight against illiteracy and, secondly, the much more vast and complex issue of post-primary education.

Non-formal education will have an important role to play in coming years, not only because UPE is not yet a reality in many African countries, but because non-formal education can constitute a preparation for vocational training for many informal sector participants, and thus make integration of young people on the job market easier. The report shows that non-formal training can be effective, especially in literacy terms, but it suggests also that the lack of attention given to the question of assessing the programmes, undoubtedly, represents a serious handicap in the unavoidable competition with the resources mobilized for formal education. It is urgent to bring about a change in practices in this respect and to follow the example of primary education, where the increasing number of assessments has made it possible to identify « good practices », certainly contributing favourably to the mobilization from which it has benefited.

Post-primary education now demands urgent attention. In fact, it has always been an important issue, but perhaps necessarily neglected in order to ensure mobilization around a simple, evident and consensual goal enabling all national and international stakeholders to implement practices that totally renew the modalities of elaboration, financing and piloting of education policies. It has certainly also been neglected as it is very difficult to manage both technically and socially. There is no general agreement on the way to organize technical and vocational education, secondary education and tertiary education, and on the definition of their content, unlike for primary education where there were very clear markers; another sizeable difference with primary education is that most of these levels of education are not intended for universal access. Consideration must therefore be given to the technical and social principles of the rationing that will have to be applied.

The report deals, in length, with the issue of reforming post-primary education. It does so by giving priority to an orientation, which is the promotion of genuine sector policies, and to a

mode of analysis, which is an economic and financial assessment of the changes advisable for these levels of education. This point of view does not, of course, cover the whole subject. It defines areas of possibilities and should be a good starting point for a true in-depth debate on the content of the policies to be conducted.

The reform of post-primary education in Africa is not only justified by the recent growth in primary enrolments. It is also to do with the mission of these levels of education today; they are often not in phase with the context of many African countries, of little relevance in terms of content and quality, and finally are frequently out of touch with job opportunities. This situation calls for the implementation of genuine sector policies, embracing all educational levels with a rationale of trade-offs giving priority to the interests of society. The challenge faced by most African countries tomorrow is not to attain UPE, as they will do so, but to structure their overall education system, in order to make the most out of this important achievement. It is indeed urgent to design forms of technical and vocational education that will enable rapid integration of large cohorts of young people leaving primary school and other levels of education, to prepare and, for some countries, to implement sound basic education going beyond the traditional primary boundaries, and to improve quality in upper secondary and tertiary education, which, in moving away from international standards, are no longer able to play their role correctly. Listing the goals defines neither the reforms to be undertaken nor their scale. This goes well beyond what went towards achieving UPE, especially allowing for the fact that the reforms should make coherent and, in many cases, completely redefine the content of the different teachings.

These policies are extremely constrained. In financing terms, there are very few countries that would be in a position to sustain current paces of post-primary expansion in their budget framework in the medium term; as for opportunities, there is already serious imbalance in many countries, especially for the highest qualified individuals. This is the context in which « credible plans for the overall sector » must be defined.

These plans are not to be based on a single model; this would be totally unfounded in view of the variety of country situations, both in terms of structure and enrolment dynamics, as well as of economic situations and financing modalities. They

must firstly be guided by the systematic promotion of the interests of society. They do not necessarily call for common solutions due to the variety of possible modes of organization and financing, but for solutions that take the constraints mentioned earlier into account. Bearing this in mind, the report suggests some « benchmarks for action ». These concern priorities, the agenda, financing modalities and technical and institutional tools, which must be defined in order to embark upon the reforms. Thus, the debate is open and must necessarily be enlarged to take in many other dimensions; BREDA intends to be an active participant.

The Dakar Forum has undeniably launched new dynamics and fostered new practices, the results of which are now tangible. Now that the UPE border has been - or is about to be -crossed, there is, of course, still ground to be covered, and one can imagine that the next stretches will be all the easier to cross as they will be in line with this same context of ambition, dialogue and transparency.

Finally, anyone reading this report will realize that there is implicitly in the background the whole debate, which cannot be ignored, on the choices of the kind of society one wants to live in and which are, to a great extent, at the heart of many of the African education systems' problems and impasses.





R E A D E R ' S G U I D E

The report is structured in two parts:
one analytical and one statistical.

The analytical section, starting with an outline of the overall issue comprises eight chapters :

- The first chapter deals with the institutional changes that have taken place since the Dakar Forum and the introduction of monitoring mechanisms both at national and international level;
- The second chapter draws up the current situation of primary education halfway to reaching the deadline for the Dakar goals, tackles the dynamics at work and looks at updated perspectives for the 2015 horizon;
- The third chapter examines the level of development and the dynamics of post-primary education;
- The fourth chapter handles the quality of learning in the African school, from the angle of measuring, and that of managing, this issue;
- The fifth chapter looks into the place of non-formal education in the current EFA context, studying its social effects and the quality of learning;
- The sixth chapter tackles the issues related to the financial sustainability of post-primary education development strategies;
- The seventh chapter provides additional input, looking into the social and economic sustainability of the development of post-primary education;
- The eighth, and final, chapter summarizes the overall results and proposes new benchmarks for action.

The statistical section comprises two entries:

- One entry per country, consisting of 53 double pages, one for each country on the continent ; the countries are in alphabetical order, in English;
- One entry per indicator, in the form of recap tables.

Definitions and methodological boxes complete the statistical section.

The report can be read on several levels and in different ways. However, the authors have intended to present the information, analysis and recommendations in such a way that they are structured in reference to each other.



Introduction

Marking one third¹ of the time span set in Dakar in the year 2000 for reaching Universal Primary Education (UPE), this report establishes a fairly precise assessment of the trends observed in Africa and endeavours to identify the successes and failures, in order to learn useful lessons. It examines the consequences of the progress made towards UPE, particularly in terms of learning achievements and of the dynamics in the development of post-primary education, looking into the social, economic and financial sustainability of same. It draws the conclusion that genuine sector-wide policies are urgently needed in many countries, requiring new investigation instruments and new frameworks for action

The Dakar Forum has undeniably changed the deal for the development of education. The changes are manifest at institutional level, first of all, and are related to government and donor commitment. Secondly, much has been accomplished in terms of real progress towards the set goals. The march towards UPE has become a reality in Africa, even if, for many countries, this may not be achieved by 2015. This goes, hand in hand, with a reduction in gender inequalities in primary education and, to a lesser extent, a reduction in geographical disparities.

Negotiations around a « credible plan » have fostered in-depth and shared diagnosis on the way the sector operates. Activities are carried out within the enlarged framework of poverty reduction and support to development. Real progress has been made in terms of harmonization and aid alignment. **In many countries, local donor groups have set up a trusting dialogue with the governments, making it possible to move towards the globalization of actions** (programme and budget aid) and to cover current expenditure. These mechanisms will certainly undergo further change, especially regarding the development of rules for elaboration and decision-making for the common use of technical and financial partners. However, they do bear witness to the important changes that have already taken place in cooperation practices and mark the progressive disappearance of competition between stakeholders. The coordination of actions in the perspective of programme aid is gradually replacing the juxtaposition of projects that were developed outside the national administration, often with no real impact on the latter in terms of capacity of analysis and action. Today, each partner takes the risk of transparency, more so than in the past: governments, by registering the sectoral development programmes in documents open to social debate and explaining the financing modalities in detail; donors, in making their analysis and commitments public. The Fast Track Initiative has systematized this new type of relationship and is currently the most emblematic element of same. However, although there has been considerable international enlistment, it is far from addressing the needs and the commitments made. There have even been signs of a relative loss of impetus recently and this is cause for some concern.

The international data used in this report show the undeniable progress accomplished in terms of primary enrolments in Africa : there has been clear progress in access, and the efforts made on the supply side, as well as those devoted to mobilizing the populations, have been rewarded. There are still difficulties in terms of completion compromising the 2015 UPE goal for many countries. These are not to be systematically considered as a failing in mobilization for UPE in that they correspond to the intake of the most fragile populations (poverty, low demand for education ...) not attending school previously. At the same time, they do show the limitations of policies based primarily on supply and reinforce the need to allow for the characteristics of demand of the underprivileged populations: on an educational level first of all, by adopting teaching

1 With reference to the most recent data available (2004/05 and more rarely 2005/06).

practices and repetition more adapted to their specific situation; on the economic level secondly, free education possibly not being sufficient for the most destitute families as a condition for keeping children in school.

The assessment set out in this report is not limited to the significant changes registered in the accomplishments and mechanisms of cooperation. It also concerns the consequences of the general trend in scaling up enrolments. **It attempts to answer interrogations on the evolution of the quality of learning and on the place of non-formal education and specific literacy programmes in this general trend; and finally it looks at the concerns that may arise from the rapid development of post-primary education.**

The constraints weighing on the development of the education systems have led to lower standards for recruitment and training of teachers and also to frequently larger class size. These tendencies lead to concern as to whether progress towards UPE means a drop in the quality of learning. While such interrogations are legitimate and demonstrate the desire to make the most of the development of schooling, they are nevertheless in contradiction with the (limited number of) results from assessments of learning quality factors: these show, quite systematically, that a limited increase in average class size has little consequence on quality. In countries where it was possible to make direct comparisons, the educational effectiveness of « new » teachers was seen not to differ, on average, from that of those recruited at a higher level of initial training and who had benefited from longer training. In the report, household surveys give similar results and do not bring out a systematic negative connection between quantitative development of primary education and quality of education, measured by the proportion of sustainable literate adults after a full course of primary education. **Most countries seem to have managed a growth in enrolments while maintaining the quality of learning.** This is also confirmed by the little temporal data available in terms of measuring pupil learning achievements. Some countries have clearly improved coverage of primary education without a drop in quality, and others have not managed to keep the balance between quantity and quality. In this area, the choice of the most efficient policies is therefore decisive and the quantity/quality trade-off is not a prerequisite.

Concerns as to the place of non-formal education and literacy in the general move for the promotion of EFA are certainly justified by the limited attention given to them by governments and technical and financial partners (TFP). Whereas there will still be significant needs for many years to come, the lack of interest can be explained to some extent by the mediocre professionalism of the sector and the scarcity of information available on the coverage and effectiveness of devices in operation. A special effort has been put in to tackle this issue in the report. On analysing the available data, it can be seen that the **different programmes of non-formal education have principally a positive impact on literacy but only rarely enable changes in beneficiary behaviour, in particular with regards to birth control and health**, which are often considered to be positively connected to the implementation of these programmes. The processed data goes to confirm that these effects are also very variable from one country to another and that there are therefore some policies that are clearly more effective than others, and which should be defined. While enrolments have increased in primary education in recent years, the evolution in post-primary enrolments has been no less important. Beyond the mechanical effect connected to the development of primary education, **there is clearly a rise in demand for education in secondary and tertiary education.** This could legitimately be expected. Arguments in favour of UPE refer to the social benefits of the development of basic education. Broader dissemination of this level of education reduces its private value and constitutes a strong incentive to pursue education further, in a process where diploma-holders will be more visible in the competition for job vacancies. **The said growth in post-primary education must rapidly lead to more explicit provision for same in the definition and evolution of “credible” education system development plans,** which so far have focused mainly on securing financing for the expansion of primary education. The issue of the physical and financial

sustainability of the development of post-primary education is raised, just like that of its economic and social sustainability.

There are very few African countries in a position to sustain the current growth patterns in secondary and tertiary education enrolments in the long term, within the present financing framework. Projections bring to light very high financing gaps that could possibly result in considerable deterioration of conditions of intake and of quality of education and could compromise UPE stabilization (maintaining access, improved survival and quality). Judging from the delays already registered in financing UPE by the international community, there is not much hope of the latter covering additional expenditure.

The issue of the economic and social sustainability of the development of post-primary education is more delicate to handle as, more than on primary level, there is significant divergence of individual and community interests. The generalization of literacy is of benefit to the community through its positive impact on economic and social development. It brings individuals, aside from productivity gains in a large spectrum of activities, the satisfaction of a fundamental right. **Community benefits gained from the development of post-primary education depend above all upon their economic relevance, in quantity and in quality.** Now, many countries are already in a situation of imbalance on these two aspects: general education is over-represented as opposed to vocational education and training; unemployment of diploma-holders has long been a structural reality, with the number of graduates coming out of tertiary education exceeding, sometimes ridiculously, the number of job vacancies of this level in the formal sector (senior management, middle management). This situation of job shortage gives rise to a vicious circle, a race for qualifications and the perpetuation of student status, which again steps up the demand for education. Over time, individual interests (positioning on the market) diverge totally from community interests (benefit of employment in the branches corresponding to the education received). In this context, for countries already in a situation of pronounced imbalance, stepping up the demand for post-primary education will lead to situations that are economically, socially and politically unmanageable.

Integrating these issues into education system development plans is far from easy, as this is out of the consensual area accompanying and justifying support to UPE ; these policies are less well affirmed technically and more distressing socially. By definition, there is no quantitative restriction for UPE and it does not pose insurmountable problems of implementation. **Managing post-primary education, which has, of course, a shifting border with primary education that may or may not include access to lower secondary education, is a more delicate issue. As individual regulation is hardly effective, it is appropriate to implement processes for controlling and directing pupil flow.** These two activities present relatively interdependent technical and social problems. Technically, the number of individuals to be trained at the different levels and types of education has to be determined, and the levels and types of education, as well as the most useful fields of study, defined; these activities also require procedures to be set up, leading individuals to make choices in line with the interests of society as a whole. Socially, the question raised is directly connected to the existence of rationing and the basis of same.

There are no simple solutions to the technical and social issues raised by the management of post-primary education. It is undoubtedly this very complexity that has often led to avoiding them in the past. Projections in enrolments and in financial terms, set out in this report, justify raising them urgently and taking the risk of defining some «benchmarks for action». These benchmarks concern the technical conditions of regulation and direction of pupil flow and the most socially fair management of financial coverage of a part of post-primary education by the families ; this is inevitable in some countries, on account of the low financial sustainability of the development of these levels of education.

The first of these benchmarks is the reference to a genuine sector-wide vision. It is of little interest to consider the improvements that can be made in each sub-sector without reference to the global constraint of coherence in its productions related to the needs of society and to the constraint of public funding. These constraints reinforce the need to define priorities: **completing UPE in the best possible conditions, preparing a rapid transition to extended basic education, maintaining quality in secondary and tertiary education, and finally and above all, developing relevant technical and vocational education with the integration of young people as its primary objective.** This will oblige many countries to introduce flow regulation. For those countries still very much behind with primary completion, the hypothesis of rapid generalization of nine or ten years basic education is not a very realistic option, even if this should be taken into consideration as a medium-term objective.

The second benchmark is to give preference to a pragmatic approach in restructuring the overall sector. While it seems difficult today to identify the short-term needs of the different labour markets, one can at least, through succinct analysis of the markets, estimate orders of magnitude corresponding to the capacities for absorbing leavers from the different levels and types of education. At the more refined level of branches and occupations, solutions will arise from close interweaving of the sectors of education and those of production, and also from aggressive economic policies aimed at strategic sectors to be combined with targeted training actions. At this point, it is no longer a question of sector-wide policies but of multi-sectoral policies demanding aggressive political will.

The third benchmark has to do with the need for integrating the social dimension in all the issues of pupil flow regulation. Rationing access to studies, through competitive examinations and/or private funding of a part of the costs of education, is often rejected on the pretext that it penalizes the poorest. The argument deserves to be taken into consideration in order to effectively open the debate. In concrete terms, this boils down to suggesting that direct financing by the families of a part of the costs of post-primary education could also be used to fuel a grant programme for post-primary schooling for the poorest, but also for primary schooling, where the provision of free education is not enough to guarantee school attendance by the most underprivileged.

The challenge of post-primary flow regulation should not settle for privatization of education, a frightening prospect often capable of staving off the debate. With the exception of vocational education and training, which makes sense through direct partnership with market stakeholders, the elements designated here concern the restoration of a national public education and training policy, for the overall sector. The private financing of a part of education costs does not only have to make up for low national public resources. It also aims at breaking the vicious circle mentioned earlier by realigning public and private interests. If the provision of quality education can facilitate rapid integration, then the rise in the private cost of education can be compensated for by a rise in real benefits (and not only relative benefits like in a situation of competition for employment). It gives the government the possibility of flexible incentives and offers a solution enabling deployment of the resources necessary for the development of a genuine social policy for the promotion of the poorest through schooling. That does of course not mean that there would not be room for a sizeable private education sector for secondary and tertiary education. It is rather a question of defining the conditions of a real public private partnership, which only has a signification in reference to the restoration of a public sector capable of dictating standards and quality references.

The main lesson to be learnt from this report and from the perspectives indicated by the trends registered since the Dakar Forum is undoubtedly the need to refocus on national specificities. In this context, **the fourth and final benchmark concerns the necessary evolution of the instruments and frameworks for action specific to the definition, assessment and determination of these sector policies.** In a genuine sector-wide perspective, the diagnosis instruments used for examining education systems and defining educational policies must, in the future, enable finer consideration of all the sub-sectors and extend analysis of the employment situation on the basis of new data to be produced. In the same way, the evaluation of financial leeway, based on simulation models aimed first and foremost at securing national and international financing for primary education, should be extended to specific policies envisaged for all the other sub-sectors. It can be asked whether the frameworks for dialogue and action, in which trade-offs have taken place since the Dakar Forum, have the necessary capacity to handle more complex issues than before. In the same manner, the advocacy activity of the different EFA monitoring bodies should be extended to this sectoral vision; this is also the case of the TFP coordination groups who implement new aid principles. In general, these frameworks for action will undoubtedly have to significantly increase their technical capacity for analysis and guidance, in order to play an effective role in supporting these more complex policies.



DAKAR +7
EDUCATION FOR ALL IN AFRICA

C H A P T E R 1

Institutional changes following the Dakar forum

The Dakar Forum in 2000 marked an important turning point in the monitoring and the development of African education systems from an institutional angle. This chapter intends to provide an assessment of the mechanisms that originated from the Forum for the promotion and monitoring of the EFA goals. The Forum also fostered the definition of a more global framework for action for the different education sector stakeholders at country level, with the generalisation of medium-term sector development programmes as a cornerstone. Implementing and monitoring these programmes, which are often based on extensive and shared diagnosis, are facilitated by the integration of education expenditure into a global budgeting programme and by an increasingly transparent and open dialogue between the different stakeholders, through the setting up of partnership framework documents and joint monitoring reviews. Finally, the Dakar Forum generated significant financial mobilization for education from external partners and governments alike, although this is still insufficient in view of the commitments made and showing some initial signs of loss of impetus.

Following the somewhat questionable outcome of the 1990 World Conference on Education for All in Jomtien, the Dakar Forum in 2000, reinforced by the agreement on the Millennium Development Goals the same year, seriously revived the cause of schooling in the world and initiated very real institutional changes. These changes took place first of all in the setting up of a series of mechanisms for the promotion and monitoring of the goals of Education for All (EFA). Seven years after implementation, these mechanisms, oriented around different geographical levels -international, regional, sub-regional and national - and around several dimensions - political, technical, analytical and participatory - are to be reviewed.

At national level, one of the most fundamental changes is certainly the insertion of the Education for All goals in a framework of overall development of the education sector, which is itself a component of a national strategy for growth and/or poverty reduction. This framework is founded on in-depth and shared diagnosis of the functioning of the sector and on the mobilization of the stakeholders around a national programme for medium or long-term development of the education sector. Carrying out and monitoring this programme are facilitated by a new type of dialogue between governments, technical and financial partners and civil society, which is usually formalized by a partnership framework document and joint monitoring reviews. The overall framework for development of the education sector is then reinforced by incorporating education expenditure in global budget programming through the medium-term expenditure frameworks. Finally, it becomes all the more legitimate through the assertive and better coordinated presence of civil society. This process towards a global framework could still be improved upon but it certainly makes a radical break with previous practices, where the education sector was compartmentalized in sub-sectors, where international aid came in the form of rival « cash dispensers» and where projects were developed outside national administration without real driving effect.

The Dakar Forum also gave rise to strong international mobilization for education, declaring Africa as a priority, in terms of official development assistance and in the different countries' intersectoral budget trade-offs. This mobilization has been reinforced by international initiatives in favour of heavily indebted poor countries (HIPC) and the accelerated implementation of EFA (Fast Track Initiative) as well as progress in terms of harmonization and alignment of aid. However, in spite of this effective mobilization, the resources made available to the different countries are not in line with the promises made and are now showing signs of loss of impetus.

Without claiming to be exhaustive, this chapter aims at putting forward the main institutional changes and assessing the consequences firstly in terms of development of « credible national education policies » and secondly in terms of resources mobilized for the achievement of the Education for All goals and Universal Primary Education.



© UNESCO BREDIA - Mario Bels

1. Major institutional changes...

1.1 Mechanisms for the promotion and monitoring of Education for All at international, regional and national levels

In order to generate strong political commitment at all levels in favour of education, the Dakar Forum (2000), drawing on experience from the Jomtien Conference which had rather limited consequences in terms of commitment, highlighted the necessity for setting up appropriate mechanisms for achieving the EFA goals. This section will cover the main mechanisms resulting from the Dakar Forum for the promotion, coordination and monitoring of progress of Education for All at international and regional (Africa) levels and in each African country.

1.1.1 At international level

The Dakar framework for action (UNESCO 2000) has introduced several mechanisms for monitoring EFA internationally, which are organized around different aspects : political with the High-Level Group, technical with the EFA Working Group, and analytical with the EFA Global Monitoring Report. civil society also has an important role to play, in vigilance and advocacy, especially with the Global campaign for EFA.

The High-Level Group: a political body

The Dakar framework for action describes the High-Level Group as a small, flexible body, made up of decision-makers, representing, at the highest level, governments and civil society of developed and developing countries as well as development organizations. Its mission is to reinforce political will and the mobilization of technical and financial resources for EFA, and to ensure that the international community respects the commitments made in Dakar.

The High-Level Group has met every year since the Dakar Forum: Paris (France) 2001, Abuja (Nigeria) 2002, New Delhi (India) 2003, Brasilia (Brazil) 2004, Beijing (China) 2005, Cairo (Egypt) 2006. More and more countries were represented in the High-Level Group throughout the different meetings, bringing it closer to a large forum rather than a small body.

Each High-Level Group meeting handled a limited number of topics, with the following permanently on the agenda: the monitoring of progress towards EFA, the reinforcement of partnerships, the fulfilment of commitments and the mobilization of resources. Variants concerned topics such as the role and nature of the High-Level Group, the challenges of coordination and cooperation or the effectiveness of aid.

One of the concerns of the High-Level Group is to have a well-targeted debate and effective and open dialogue. This has been better taken into account since 2002 with the publication of the EFA Global Monitoring Report which documents the progress on the six EFA goals, and focuses discussion on the main subject of each report. Finally, the purpose of these meetings is to submit a list of recommendations to governments, so that they affirm their will in achieving the EFA goals. These recommendations concern also the technical and financial partners, so that they honour their financial commitments for reaching EFA, and civil society, so that it can fully play its role in stimulating the commitment of all towards EFA.

The EFA Working Group: a technical body

The Working Group is an informal and consultative mechanism which brings together the EFA partners at technical level: governments, bilateral and multilateral organizations, civil society and private sector. It is in charge of providing the EFA movement with technical directives. It establishes and reinforces partnerships and creates links between the key programmes of the different organizations for achieving the six Dakar goals. It provides a forum for discussion and exchange of experience regarding EFA at national, regional and international levels and recommends specific actions. The Working Group meets once a year, usually towards the month of July, at UNESCO's head office in Paris. It prepares the annual meeting of the EFA High-Level Group.

The EFA Global Monitoring Report: an analytical tool



© UNESCO BREDA - By Reg'

The EFA Global Monitoring Report is the work of an independent international team based in UNESCO's head office. The Report has been published once a year since 2002 ; the first edition set out the progress made with regard to the six Dakar goals, highlighted effective policies and strategies and drew the attention of the international community to the new difficulties arising in terms of action and cooperation. The ensuing reports, although not forsaking this approach, focused each in turn on one of the six goals: gender equality in 2003/04, quality in 2005, literacy in 2006 and early childhood care and protection in 2007. One of the justifications for this practice is to give equal attention to each of the six EFA goals.

The Global Campaign for Education: an organization for advocacy

Faced with the manifest inability of reaching the goals set by Jomtien, two important members of the Collective Consultation of NGOs (CCNGO)¹, Oxfam and Action Aid, decided in 1999, to found the Global Campaign for Education (GCE). This coalition took advantage of the Dakar Forum and of the international collective consultation of NGOs organized on a parallel by the CCNGO, to present its own Global Action Plan for Education in order to remind the different states and the international community of their commitments. Joined by many leading associations, including Education International (EI) and the International Federation of Workers' Education Association (IFWEA), the GCE has since been lobbying on a large scale to defend all the Dakar goals and the participatory resources needed to reach them. With its international presence, as well as regional and national connections in over 150 countries, the GCE plays a dynamic role in the elaboration of critical reports and documented field studies which fuel the contradictory debate on the strategies used to further the cause of education. The GCE is also instrumental in the organization of Global Action Week, a time of global mobilization, where human chains and other public demonstrations remind leaders of their commitments and the efforts remaining to be made in order to meet them..

¹ This mechanism dates back to 1984, when it was not yet called the Collective Consultation of NGOs on Education for All (CCNGO/EFA) and included around one hundred international organizations; it aims at strengthening the partnership between NGOs and the education sector of UNESCO.

1.1.2 At African regional and sub-regional levels

The Africa EFA regional Forum

Drawing on the recommendations of the Dakar framework for action, UNESCO's Regional Office for Education in Africa (BREDA) has worked towards setting up an EFA regional Forum in sub-Saharan Africa. Taking the example of the EFA Working Group at international level, the EFA regional Forum brings together the sub-regional representatives of the national EFA coordinators, representatives of the United Nations agencies, technical and financial partners, African regional and sub-regional entities, representatives of NGOs and civil society. It is chaired by a minister elected by his/her peers and convenes twice a year. Each of the six sub-regions has a sub-regional Forum. This mechanism comes in addition to, and ties in with, the African regional authorities on consultation, exchange and cooperation in terms of education, i.e. Conference of African Ministers of Education (COMEDAF) under the aegis of the African Union and the Association for the Development of Education in Africa (ADEA). Each, in its own way, is involved in achieving the EFA goals and uses specific monitoring mechanisms for that purpose which benefit the regional Forum.

The issue of education in the African Union

Education has, for long, been one of the African Union's concerns, and this was reinforced by Jomtien (1990), Dakar (2000) and by the adoption of the New Partnership for Africa's Development (NEPAD) in 2000. In 1994, a group of African countries launched the Ségou Perspectives in Ségou (Mali), which they defined as a process for African integration through basic education. The most visible outcome of the Ségou Perspectives was the proclamation of the year 1995 as the year of education in Africa, the proclamation of a decade of education in Africa from 1997 to 2006 and the 1999 conference of the African Ministers of Education in the framework of the Organization of African Unity (OAU) which adopted the programme of action of the Decade of Education for Africa for its first meeting. This programme was structured around four priorities: equity and access to Education for All; quality, relevance and effectiveness of education; alternative methods of learning; capacity building. The implementation mechanism included an executive committee, regional committees at regional economic community level, as well as national committees.

The COMEDAF II Conference adopted the principle of launching a new decade of education for Africa from 2006 to 2015, during its meeting in Algiers in 2005. The action plan for this decade focuses on the following fields: gender and culture, information and management systems in education, education and training of teachers, higher education, technical and vocational teaching and training, teaching-learning content and materials, quality of education. The mechanisms planned for coordination and monitoring involve the African Union itself, the regional economic communities and the national level.

The issue of education in the African sub-regional organizations

The conferences of the ministers of education for the member States of the ECOWAS, CEMAC and PALOP were held in 2004. The purpose of these meetings was, firstly, to reinforce the mobilization of the member States for achieving the goals of education at sub-regional level and, secondly, to examine and approve the sub-regional programmes for educational development. From this point of view, the Southern African Development Community (SADC), which is the sub-regional economic organization that groups Southern African countries, has a protocol on education and training which generates many common programmes in terms of education; the Southern Africa Consortium for Monitoring Educational Quality (SACMEQ) is one of the best-known and vouches for EFA monitoring.

Africa Network Campaign on Education for All (ANCEFA)

Regional NGO networks and other associations have developed since the Dakar Forum, stimulated and supported by the Global Campaign for Education, several members of which supported the launch and consolidation of the Africa Network Campaign on Education for All (ANCEFA). With a solid network of national EFA coalitions in 32 countries, ANCEFA acts as a spokesperson with the international community, on behalf of the African national and local associations which are taking up the difficult challenge of Education for All. It also offers important logistic support, regularly organizing training courses and coordination meetings to improve and coordinate NGO and syndicate action with the governments and technical and financial partners, not forgetting its input with African regional structures such as OAU, ECOWAS, NEPAD, etc. Finally, ANCEFA launched the Education Observatory in Africa in August 2006 in partnership with the GCE, with a view to promoting the participation of civil society in the monitoring and evaluation of EFA.

An analytical instrument for monitoring EFA in Africa: the «Dakar+» reports

UNESCO's Regional Office for Education in Africa (BREDA) set up an analytical instrument for monitoring EFA in Africa in 2002: the « Dakar+ » reports (this report is the 2007 edition). They aim at providing all education stakeholders in Africa with details on the current situation of the African education systems and on progress made towards the EFA goals. To do so, the BREDA's Pôle education sector analysis team analyses the most recent data available on the African countries, including UNESCO Institute for Statistics (UIS) data. But beyond informing on the current situation, these reports intend to be of direct use in the evaluation of educational policy choices in reference to the Dakar goals, by drawing up a precise assessment of the evolution observed in Africa, by identifying what has been successful and what has failed and drawing useful lessons from same, and finally by giving thought to the changes to be made to implemented policies.

1.1.3 At national level

A multiplicity of mechanisms is in place at national level, which drives the processes of formulation, implementation and monitoring of education policies, plans and programmes. The traditional government mechanisms of coordination and monitoring in terms of education are usually activated by the education planning departments. They play a strategic role in internal coordination and in the relationship with external partners both for the simple development of an education project and for the more complicated one of a reform or a ten-year education plan. But since the Dakar Forum, the EFA movement has generated specific mechanisms such as the national EFA Forums. They have been set up by the Dakar framework for action to develop national EFA plans according to a democratic participatory approach. These Forums are composed of officials from administrative departments, representatives of technical and financial partners, NGOs and civil society as well as a coordinator. They have contributed to placing EFA high on the list of national priorities and made possible, in 42 sub-Saharan African countries, the drawing up of education plans incorporating all the EFA goals (UNESCO BREDA 2004).

1.2 Definition of a global framework for the development of the education sector at national level

In order to reach the goals set by the different countries for the development of their education sector, the need became clear in the 1990's to move towards a more global framework for action for the different stakeholders in the education sector ; the aim being to avoid past mistakes such as external support on the periphery of the national strategy which incurs very high transaction costs or resources-oriented running of the system with no medium or long-term strategic vision, lack of intersectoral dialogue, absence of appropriate budgeting, etc. The desire to see these practices change, both by the governments and their partners, arose from these admissions. In most African countries, the evolution towards a more global framework for development of the education sector has been established in the desire to move towards a sector approach or programme approach, the principal stages of which are described in graph 1.1. In this section, the principal institutional changes contributing to this evolution will be detailed.

Graph 1.1: The principal stages of the programme approach

Sector analysis	Education system diagnosis in all its aspects to identify needs and policy options
Strategy	Education system diagnosis in all its aspects to identify needs and policy options
Programme	Priorities for carrying out this strategy, whatever the financing source
Medium term expenditure framework	Pluriannual budgeting of expenditure per major programme theme fitting into a global budget framework
Action plan (annual)	Budgeted programming of actions for coming year as a base for disbursements (during sectoral reviews) comparing expenditure and acquired resources
Cash flow forecast, procurement	Tools for the implementation of this action plan, to check the material feasibility of the scheduled programme

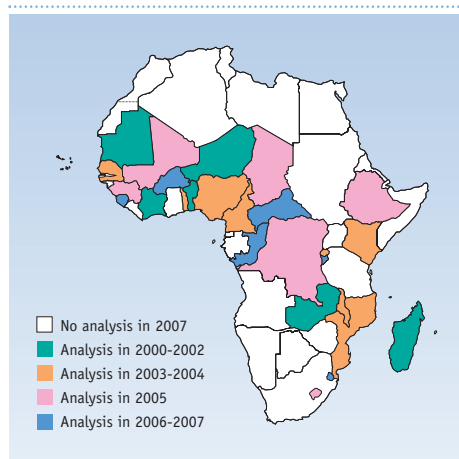
Source: Pôle de Dakar

1.2.1 More education system analysis with more participation...

As described in graph 1.1, a documented analysis of the education system, taking into account the different dimensions of the sector and the interaction between the different sub-sectors, constitutes the first stage of the sector-wide approach. It provides information on the trade-offs carried out or undergone in the educational policy, especially regarding the allocation of resources between the different levels and types of education, the regulation of pupil flow between levels, the expenditure per pupil and the total number of pupils enrolled or the breakdown of the expenditure per pupil between the main components (cf. Pasquier-Doumer, 2007). It also highlights the capacity of the sector for transforming resources into results.

Since 2000, most African countries have produced sector analysis fulfilling these conditions². 17 out of the 26 countries that have carried out this exercise are French-speaking countries

Graph 1.2: Sector-wide analysis in Africa



Sources: Pôle de Dakar, World Bank
 Note: Countries, that have made several sector-wide analyses, are ranked according to the date of the earliest analysis.

(graph 1.2). The initial explanation of the multiplication or even the systematization of sector analysis resides in the contribution such a tool represents at country level for designing, setting up and redirecting sectoral programmes in education to integrate the sector's socioeconomic and financial constraints and the human development goals set by the different countries. Next, the development of programme-aid means that donors, in financing education sector programmes as opposed to projects, require a diagnosis on the resources implemented for reaching national goals, and particularly the goals of Education for All or Millennium Development Goals, and on the way in which resources are transformed into results within the sector. Finally, the development of sector analysis is explained by an international context at the origin of initiatives such as the Heavily Indebted Poor Countries (HIPC) Initiative in the mid 1990's or the Fast Track Initiative as of 2000. These initiatives are indeed sources of financing for the education sector, on condition however that the educational strategy can be considered « credible ». Sector analysis provides the different partners in education with the necessary

information for making such a judgment.

Since the first sector analysis carried out in the early 2000's according to these new requirements, the format of this exercise has clearly progressed, even if it remains adapted to each country. Generally speaking, it can be said that sector analysis has moved towards a more and more participatory and open process. Indeed, the national teams working on these diagnoses, made up mainly of ministry of education executives, was expanded first of all to include ministry of finance, budget and planning executives and then teacher syndicates, parent associations and NGOs. In the Central African Republic for example, the syndicates participated in the overall sector analysis elaboration process, and particularly regarding the financial and management aspects of the system. Participating throughout the process facilitated dialogue on the necessary and sometimes difficult reforms of the Central African education system. Opening up in this way enables discussion on the major parameters and directions of educational policy, and promotes a convergence of points of view of the different stakeholders as to the reforms needed.

² These terms are described in the CSR methodology developed by the World Bank and used in particular by the Pôle de Dakar Education Sector Analysis. But some countries have carried out sector-wide analysis outside the CSR series which also complies with the requirements described above.

1.2.2 Education system stakeholders working around a common programme and jointly responsible for monitoring same

Sector-wide plans

The definition of a sector-wide plan is no doubt the most fundamental step in the programme-approach. A sector-wide plan is the culmination of a national process based on policy choices and defines a coherent set of interdependent policies, strategies, activities and investments, with a view to reaching a set of national goals, in the framework of a precise time-frame. It enables all the actions in favour of the education system to be registered in a common framework whatever the nature of the expenditure (investment or running), the source of financing (national or external) or the financial channel (project aid, programme aid, targeted or global budget aid). It then situates the strategies in a long-term perspective, thus ensuring continuity in the development of the sector. The dynamics accompanying this continuity enable the introduction of changes and the progressive adaptation of the annual plans and budgets according to the evolution of the sector-wide plan. Finally, the sector-wide plan is devised so that the sector can operate on the basis of results rather than resources.

Since the year 2000, more and more African countries have implemented sector-wide plans for education in an international context which is favourable to the programme approach. During the 1st African Conference on development financing held in Abuja (Nigeria) in May 2006 which brought together ministers of finance and ministers of education, 20 African countries made the commitment to produce a ten-year plan for education very rapidly. Some of these countries³ already had a plan, whilst others (Gabon, Nigeria and Swaziland) made the firm commitment to develop a plan as soon as possible (cf. table 1.1 for a list of countries with a sector-wide plan). During this conference, the different countries declared that these plans «*will show how Africa can reach the targets in the field of education with additional resources*» (Abuja Conference 2006).

With this declaration, the African countries underline the benefits they get out of the implementation of sector-wide plans. Sector-wide plans do indeed enable the government to give a clear and coherent vision of its policies, priorities and objectives in terms of education as well as the needs in external financing for reaching the goals. They also contribute to encouraging mutual efforts and concentrating the dialogue around the national sectoral policy and they encourage technical and financial partners to comply with national objectives, positioning the ministry of education or the government as sector leader.

The partnership vision is reinforced by the monitoring methods for sector-wide plans adopted by some countries, i.e. the partnership frameworks and the joint monitoring reviews in the education sector.

Partnership frameworks

The progressive shift from the project approach to the programme approach (UNESCO BREDA 2005) has brought about the need for better coordination of the technical and financial partners, between each other and also between all stakeholders in the sector. That is the reason why, in the past few years, some countries have launched the idea of a single framework for dialogue and harmonization of support to the education development programme. Some countries had long benefited from a consultative framework. But these frameworks have had to be reviewed in order to include the conclusions of the Rome Declaration (2003) or the Paris Declaration (2005) whereby the donors have undertaken to align their interventions in accordance with the countries' priorities, to harmonize their modes of intervention and to reinforce the capacity of beneficiary States to take on the role of lead donor.

³ Burkina Faso, Cameroon, Ethiopia, Gabon, Gambia, Ghana, Kenya, Madagascar, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Swaziland, United Republic of Tanzania and Uganda.

Table 1.1: Current situation of sector-wide plans in education in Africa

Country	Existence of a plan	Deadline	Comments	Country	Existence of a plan	Deadline	Comments
South Africa	yes	2003-2008		Madagascar	yes	2005-?	
Benin	yes : PDDSE	2006-2015		Malawi	no		Being prepared
Botswana	no			Mali	yes : PRODEC	2000-2011	
Burkina Faso	yes : PDDEB	2002-2010	Not sector-wide: only primary	Morocco	yes	2004-2011	
Burundi	no		Being prepared	Mauritania	yes : PNDSE	2001-2010	
Cameroon	yes	2006-2015		Mozambique	yes : ESSP	1999-2003 2005-2009	
Chad	no		Being prepared Policy letter already exists	Namibia	yes : ESSP	2003-2007	
Comoros	yes	2005-2009		Niger	yes : PDDE	2002-2012	
Congo	no		Being prepared	Nigeria	no		Being prepared
Côte d'Ivoire	no			Uganda	yes : ESIP	1998-2003	Ten-year plan for education being prepared
DRC	no			CAR	no		Being prepared
Eritrea	yes : ESDP			Rwanda	yes : RESSP	2006-2010	
Ethiopia	yes : ESDP	1998-2002 2002-2005 2005-2010		Senegal	yes : PDEF	2000-2010	
Gabon	no		Being prepared	Sierra Leone	yes	2005-2015	
Gambia	yes	?		Somalia	no		
Ghana	yes : ESP	2003-2015		Swaziland	no		Being prepared
Guinea-Bissau	no			U.R. of Tanzania	yes	2002-2006	Not sector-wide: Only primary
Equatorial Guinea	no		EFA plan	Togo	non		Being prepared
Guinea	yes	2002-?		Tunisia	yes		
Kenya	yes : KESSP	2005-2010		Zambia	yes		
Lesotho	yes : ESSP	2005-2015		Zimbabwe	no		
Liberia	yes : ESMP	2000-2010					

Source: Pôle de Dakar

Note: The Pôle de Dakar does not have information for the following countries: Angola, Algeria, Cape Verde, Djibouti, Libyan Arab Jamahiriya, Mauritius, Sao Tome and Principe, Egypt, Seychelles and Sudan.

The partnership frameworks, although they have no legal value, represent a moral commitment for the countries' partners to move towards harmonizing their interventions. They are generally flexible enough to allow for some progressiveness in this convergence, allowing for the constraints of each party. They specify in a more or less precise way the channels used to achieve harmonization, which can be the financing and evaluation modes for the sector (cf. the following paragraph on joint reviews), a common definition of the monitoring time-frame for the sector and a coordinated policy commitment, in line with the countries' priorities.

The government on its side undertakes to facilitate the harmonization of the technical and financial partners' interventions by ensuring the lead in coordination and by offering all stakeholders a clear and transparent vision of the management and performances of the education sector.

The forms to be adopted for partnership frameworks are the subject of many debates, resulting from the difficulties encountered in the sector and which are at the origin of a progressive formalization of the frameworks. It is to be noted in particular that in many countries there is the issue of the determination of which stakeholders should participate in the partnership frameworks. Indeed, although all the stakeholders recognize the necessity for partnership frameworks to stimulate and structure the technical and policy dialogue in the sector, *«all do not hold the same view of the stakeholders' place in the dialogue, of the impetus and running of same, and of the very purpose of the dialogue»* (UNESCO 2006). Some countries have chosen to open up the framework to a maximum number of stakeholders, with a view to greater harmonization, others have chosen to avoid the inclusion of those stakeholders whose status, legitimacy or interests are too divergent, with a view to being more effective.

As the partnership frameworks are recent, it is rather soon, on one hand, to make an assessment of these, and particularly of their impact on the harmonization and alignment of the partners' actions. On the other hand, it is already possible to mention the positive effect they have on the quality of the dialogue within the education sector. However, they will only have a true impact on the sector if the decision-making process within the partnership framework is clarified, so that the dialogue, more structured and richer, could have some effect through decision-making.

Joint monitoring reviews in the education sector

The joint monitoring reviews in the education sector, still called joint missions or supervision missions, are mechanisms designed to ensure regular monitoring of the education system, to be shared by all stakeholders. The variety of names used is a reflection of their diversity. Indeed, there is no international « standard » giving a definition of what a joint review should be and which would make it different from any other education sector meeting. Even so, starting around the year 2000, some African countries, generally those with a sector-wide plan, formalized exchanges between the different stakeholders on the performances of their education system. This practice seems to be becoming more widespread and takes on a variety of forms, even though there are several points in common which are worth considering.

The joint reviews bring together what is often a very wide range of stakeholders of the system (the ministry or ministries in charge of education, representatives of the transversal ministries, technical and financial partners, and sometimes representatives of civil society), on a regular basis, annually or biannually. They are directed by the ministry or ministries in charge of education which produce beforehand a set of documents, usually made up of technical

and financial execution reports of the sector-wide plan or more generally of the educational strategy for the past year or the past six months, action plans for the coming year, reports from consultants or audits according to the country's needs and the presentation of the common matrix of performance indicators for the sector when this exists. It should be noted however that the quality of these documents varies greatly from one country to another. The joint reviews are of variable duration (several weeks in some countries) and sometimes include field visits. The expected outcome is a memorandum which synthesizes the progress and delays in the sector and above all puts forward a number of recommendations for which a consensus has been reached among the stakeholders and which are aimed at improving the performance of the system.

By focusing on the national strategy, joint reviews make for concrete exchange around national priorities. For external partners, they offer greater visibility and transparency on the progress of education plans and strategies and enable data collection and the production of analysis to be generated systematically. On the national side, they facilitate the harmonization between donors, avoiding a situation where the latter monopolize the ministries' technical resources with each one requesting a separate report.



© UNESCO BREDA - Mario Bels

Nevertheless, the relevance of joint reviews depends very much upon the way they are organized, and especially on preparatory work. The quality of the debates conducted during the review does indeed depend upon the latter. Experience shows that it is essential to define in advance, clearly and by common consensus, the objectives of the review and the topics to be addressed and their priority: over-ambitious terms of reference are detrimental to the quality of discussion (Packer 2006). Some countries have chosen to structure the debates by organizing them in the form of thematic workshops. Others have gone further by conducting continuous preparatory work for the reviews through thematic groups representing the different stakeholders with meetings throughout the year. These groups, when they work well, enable the discussions to be focused on the most important issues for the sector and to fuel them with key elements.

There is another condition necessary for the success of the joint monitoring reviews of the education sector: that is the importance given to the recommendations put forward at the time of the reviews. It has been observed in several countries that the recommendations are hardly followed from one review to another. Sometimes, the reviews omit to provide an update on the implementation of earlier recommendations; in other countries, the same recommendations are made one year after another as they have had little effect. In these cases, the formulation of recommendations which, it should be recalled, is the main outcome expected from the reviews, has no impact upon the system. These weaknesses can be avoided if the reviews benefit from high level political support, which avoids them being limited to a purely technical exercise, and puts everyone face to face with their responsibilities.

1.2.3 Expenditure on education is incorporated in more global budget programming...

While significant changes have taken place in the definition and monitoring of educational strategies as seen above, the way these strategies operate has also changed in the past years, particularly through the medium term expenditure framework (MTEF). MTEFs appeared in the 1990's but have significantly developed in African countries since the year 2000. Since the Dakar Forum, over 20 MTEFs have come into existence in Africa which is a pioneer in this approach: to date, a large majority of African countries are equipped with such a tool (table 1.2). MTEFs represent a huge step forward in the management of expenditure on education as they enable it to be programmed both on the basis of the education sector policy and in a realistic medium-term tax and macroeconomic framework, thus avoiding the lack of connection often observed between the policies budgeted and they way they are actually put into practice. The MTEFs result from projections of available resources established at central level and from estimations of cost of sector programmes. The two are combined through an institutional process of adjustment which enables iterative exchange between global and sectoral levels. Thus, placed «*inside the strategic expenditure framework, which reflects both the constraint of resources and the government policy, the sectors have management autonomy for decision-making, which maximizes technical results such as efficiency and effectiveness*» (Le Houérou and Taliercio 2002). Incorporating education expenditure through the MTEF in a realistic and coherent framework contributes to making budget decisions more transparent and credible, which can result in further mobilization of financing, particularly in a context of harmonization of aid and budget support.

However, the assessment of MTEF implementation in Africa (Le Houérou and Taliercio 2002, Raffinot and Samuel 2006) shows that this single term conceals significant diversity in the conception of the tool, but also that MTEFs only enable an improvement in public expenditure management if the countries already have adequate budget procedures (correct monitoring of public expenditure, global vision of resources and public expenditure) and a minimum of capacities in the administrative departments.

Table 1.2: African countries equipped with a medium term expenditure framework (MTEF)

Uganda	1992	Namibia	2000	Mauritius	2005
Ghana	1996	Rwanda	2000	Senegal	2005
Malawi	1996	Benin	2001	Sierra Leone	2005
Guinea	1997	Mauritania	2003	Cameroon	2006
Mozambique	1997	Ethiopia	2004	DRC	2006
South Africa	1998	Swaziland	2004	Lesotho	2006
Gabon	1998	Zambia	2004	Nigeria	2006
Kenya	1998	Cape Verde	2005	Morocco	2007
Tanzania	1998	Madagascar	2005	Niger	2007
Burkina Faso	2000	Mali	2005	Tunisia	2007

Source: Pôle de Dakar

1.2.4 Civil society is more and more present and coordinated

In Africa, as in countries as a whole worldwide, the increase in the weight of NGOs has been accompanied by an official position legitimizing the participation of civil society representatives, to the point of making it the keystone of any sustainable development project. The Dakar Forum made no exception to this rule, by renewing the call for setting up a true partnership whereby civil society would be fully involved at each stage of fulfilment of the educational goals.

However, due to a structural imbalance connected to the inequality of North/South relations and programme priorities in the field, African NGOs have long been under-represented in international structures and world, or even regional, forums. Indeed, not only do the vast majority of international organizations, whether governmental or not, have their head offices in the northern hemisphere, but African associations have also often suffered from logistic and financial constraints which have limited the development of their organizational capacities.

To remedy their relative isolation and face up to the pressing need to unite in order to matter with governments and partners, there is now a tendency to associate in the form of national and thematic coordination units. This is how in virtually all the countries in the region, one or several NGO national coordinations, often coupled with thematic networks - women, education, AIDS, etc. - allow African national NGOs to make their voices be heard. Moreover, this grouping has often helped associations not only to reinforce a legitimacy sometimes contested by the national authorities, but also to give them the right to participate in regional or international forums inaccessible to national or local associations.

In spite of the reinforced capacity of action by associations in the field and the call for mechanisms based on civil society participation, the « partnership » invoked by the Dakar Forum has been interpreted in many different ways. It is true that this term covers very different realities which are dependent, for example, on the nature and quality of the sometimes confrontational relationship between civil society and the government, or on the degree of cohesion and financial weight of donors who can occasionally have more weight in the debate than the voice of association « partners », even when they form a group.

Even so, the participatory approach displayed by the EFA programmes and mechanisms set up by the governments constitute a progress and a basis for negotiation for civil society. The majority of plans now explicitly refer to the involvement of NGOs and civil society at different stages of their development, even if this is more often the case for non-formal education or at local level for decentralization policies.

For the vast majority of technical and financial partners, community and association participation is not only admitted but is often considered as a determining factor in the selectivity of national programmes and projects. It is a fact that, by placing the accent on reducing inequalities, educational strategies developed by civil society do sometimes enable some of the most underprivileged populations (orphans, AIDS victims, rural or nomad populations, etc.) to be included, where they would otherwise have been set aside from classical education systems.

The other major contribution of NGOs and civil society associations lies in their capacity to inform and mobilize the populations they have originated from: the principal illustration being the activities organized throughout Africa in the framework of global action weeks which are often the only tangible rallying point for raising awareness in many populations for the goals developed by the EFA programmes. Thus, thousands of people took place in rallies in around ten African countries in the last action campaign, including a human chain around the Congolese Parliament.

Despite the lack of resources and organizational difficulties, the association sector can pride itself on acting as a spur, potentially capable of redirecting national educational strategies and bringing to light the malfunctioning or achievements, which reveal the degree of authenticity of the participatory mechanisms in place. All too often, civil society is only included in educational programmes at the final stages of their development and NGOs are only authorized to express a consultative opinion with the monitoring mechanisms and authorities ; both these situations sometimes seem more like a feigned legitimization rather than a true political will for participation.

Finally, in a context where many African countries do not seem to be in a good position for reaching EFA by 2015, associations have also striven to fight the temptation of dropping some objectives in favour of others which are considered to be more pragmatic and achievable. Through its experience in the field and proximity with those populations most concerned by educational projects (notably parents, pupils and teachers), civil society is able to express in what way the programmes in their entirety are perhaps a condition of their success. Literacy, adult training, secondary education, early childhood and educational quality, are all fields where African civil society has already had the opportunity of expressing itself and influencing educational strategies. The success of the Kenya Elimu Yetu Coalition in its campaign in favour of a constitutional reform instituting free primary education is an example from which many associations hope to gain inspiration.

African civil society, endowed with its community traditions and with original education policies developed at the time of independence - Centres of Integrated Popular Education in Guinea, Ujamaa rural education in United Republic of Tanzania, etc. - is a potential source of proposals for the development of educational alternatives better adapted to the specific social and political realities of the countries concerned.



© UNESCO BREDA - Mario Bels

1.3 High international financial mobilization

The year 2000 marked a change in the international community's financial support to developing countries. Following an almost continuous decline in the 1990's, Official Development Assistance (ODA) underwent a sharp increase starting 2000, rising from 63.3 billion dollars in 2000 to 107.3 billion dollars in 2005, i.e. an increase of 69% in 5 years⁴. It is important to establish to what extent this international mobilization has been of benefit firstly, to Africa and secondly, to the education sector.

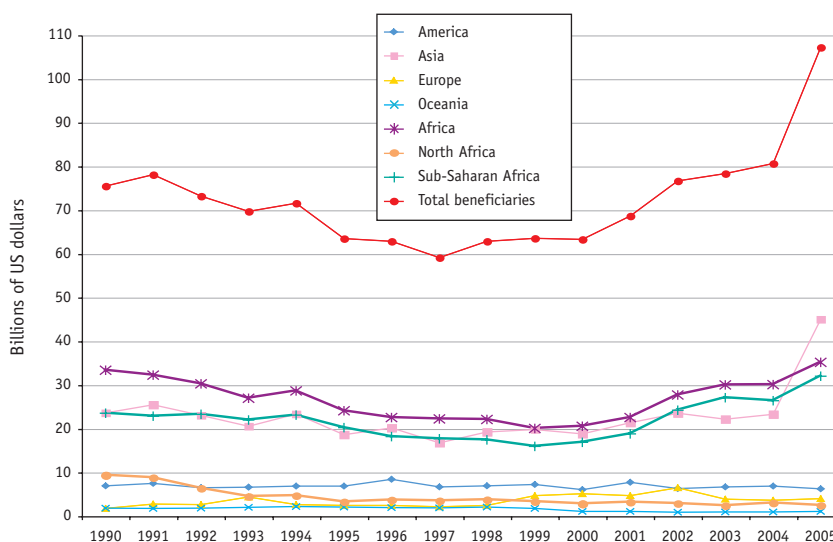
1.3.1 Aid remains favourable to Africa

While ODA has risen sharply worldwide, this is even more the case in Africa: with an increase of 71% registered between 2000 and 2005, rising from 20.6 to 35.2 billion dollars. However, in view of the large drop in aid in the 1990's, growth since 2000 has only enabled to catch up with and exceed the 1990 total (33.4 billion dollars) since 2005.

After a slight slowdown in the increase in aid for Africa between 2002 and 2004, 2005 showed a sharp upward trend: between 2004 and 2005, ODA to Africa increased from 30.1 to 35.2 billion dollars, and ODA to sub-Saharan Africa increased from 26.5 to 32 billion dollars.

In addition, Africa, and more specifically sub-Saharan Africa, still has high priority in aid flows: aid towards Africa represents around one third of total aid making Africa the leading beneficiary. In 2005, the share of aid towards Asia exceeded that for Africa for the first time since 1990, explained by the flow of aid to the Middle East, particularly Iraq (graph 1.3).

Graph 1.3: Evolution of Africa's share in the total amount of ODA



⁴ All the figures for Official Development Assistance in this section concern disbursements of aid, not commitments. As a result, the aid figures presented here may differ compared to other publications mentioning aid commitments. They only take into account official public flows from OECD donor agencies and multilateral organizations. In addition, the totals are given in 2005 constant US dollars, enabling a series of totals which are in no way dependent upon currency rates.

Source: OECD CRS online database 2007

More globally, **the share of official development assistance for Africa has fallen since 2003**: it represented 38% of ODA then, compared to 37% in 2004 and 33% in 2005. **Even if many promises have been made by donor agencies for a more favourable geographical distribution for Africa, the share of development aid for Africa in 2005 is far from what it was in the early 1990's**, as much as 44% in 1990, i.e. 11 points more than in 2005.

1.3.2 Much greater international mobilization for education after Dakar than after Jomtien

155 countries showed strong signs of commitment to respond to basic learning needs by signing the World Declaration on Education for All at the Jomtien Conference in 1990. This declaration and the framework, that accompanied it, committed the different countries to mobilize the necessary financial resources to universalize primary education and eradicate illiteracy. However, analysis of aid flows to promote education show that, from this point of view, the Jomtien Conference has had very little effect: the share of education in official development assistance, which admittedly started from a very low level (0.2%), had not exceeded 1% by 1997 and only reached 2.6% by 2000, i.e. 1.6 billion dollars.

Based on this acknowledgement, the countries participating in the Dakar Forum in 2000 made a much greater financial commitment to education promising that *«no country seriously committed to basic education (with a credible plan) will be thwarted in their achievement of this goal by a lack of resources»*. This time, the consequences were immediate and very significant: aid to education rose from 1.6 billion dollars in 2000 to 6.4 billion dollars in 2005, i.e. an increase of 250%. The share of aid put aside for education was therefore doubled over the period 2000-2004, increasing from 3% to 7%⁵.

The high financial mobilization for education following the Dakar Forum was also observed in Africa: aid for the education sector increased from 0.6 billion dollars in 2000 to 2.3 billion dollars in 2005. The share for the education sector in global aid thus increased from 3% in 2000 to 8% in 2004. However, in 2005, this share was cut back to 7%. The drop was even greater for sub-Saharan Africa as the share fell from 7% in 2004 to 5% in 2005 for the education sector. This new trend raises concern as it suggests stagnation in the priority granted to education and in the mobilizing effect of the Dakar Forum.

At this stage of the analysis, it is important to distinguish Northern Africa from sub-Saharan Africa. Indeed, the education sector is clearly a priority in North Africa, which it should be added only receives a low share of aid to Africa (between 7 and 15% depending upon the year), as aid for education represented over one quarter of the aid flows in 2005. The increase in the share for education shows how rapidly this sector gained in importance between 2000 and 2005: aid for education in North Africa represented 3% of aid in 2000, 13% in 2001, 22% in 2003 and 26% in 2005. However, aid for education is essentially directed at higher education. The share for basic education is under 10% which is coherent with the fact that the countries in this region have practically reached universal primary enrolment.

The situation in sub-Saharan Africa is quite different: the education sector weighs less in total aid received, representing 5% of total disbursements in 2005. Thus, **in this part of the World, while a Dakar Forum effect was noticed starting 2000** (the share for education increasing from 3% in 2000 to 6% in 2002 and to 7% in 2004), there seems now to be **a downward trend that raises questions as to the commitment of donors to education**.

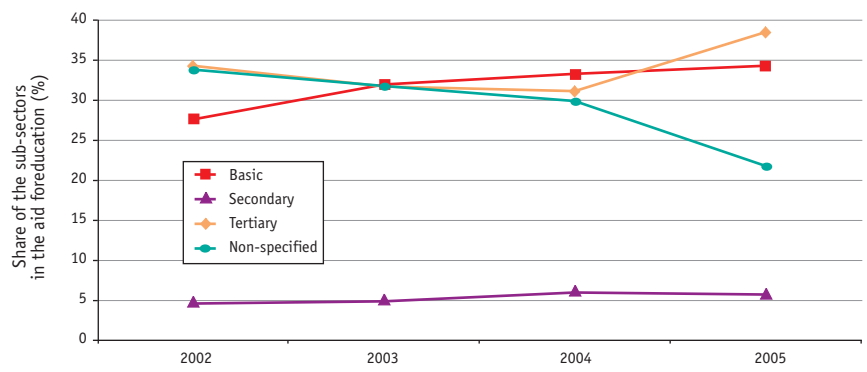
⁵ There is quite a difference between these figures and those presented in the EFA Global Monitoring Report 2007, where the share for education rose from 10% to 13%. This is due to the fact that the figures in the Global Report refer to aid in terms of commitments, whereas here, they refer to disbursements and this emphasizes the fact that commitments for the education sector are relatively less well respected than others.



© UNESCO BREDA - Mario Bels

It would be interesting to have a precise idea of the effect of the Dakar Forum on the intrasectoral distribution of aid for education, and particularly to know if it has contributed to a refocusing on basic education. Graph 1.4 presents this distribution using available data. However, the very large share of aid going to education, where the level of education is not specified, makes it difficult to draw conclusions as to trends in distribution. Even so, it would seem that the share assigned to basic education has grown since the Dakar Forum, even if this trend is cancelled out if non-specified aid goes first and foremost to basic education (inverse trend). It also seems that, for donors, higher education competes directly with basic education. Another important finding is the neglect of secondary education by international aid flows, with a share stagnating at around 5% for this level of education.

Graph 1.4: Weight of the different levels of education in ODA for education⁶ (sub-Saharan Africa)

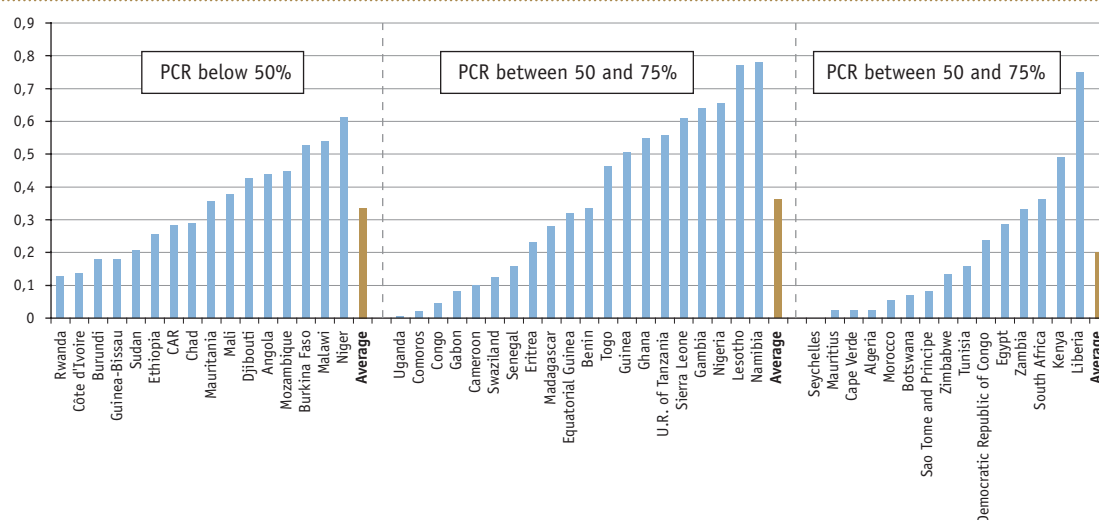


⁶ The years 2000 and 2001 do not appear in this graph due to the over importance of aid to "unspecified" education in 2001 (50%).

Source: OECD CRS online database 2007

Although not perfectly defined, the distribution in development aid disbursements for education in sub-Saharan Africa can raise some questions, especially when looked at in the light of the subcontinent's priorities. It should also be recalled that the Fast Track Initiative recommends that basic education receive at least 50% of the budget allocated to the education sector; to be in line with the 2003 Rome Declaration, it would be appropriate for this rule to be applied in the same way for external financing. In addition, it is noted that the share of aid inside the sector assigned to basic education does not take into account the distance separating African countries from Universal Primary Education. Graph 1.5 shows that aid for education in countries the furthest from UPE (i.e. those with a completion rate lower than 50%) is not directed more towards primary education than in those countries at intermediary distance from UPE (completion rate of between 50 and 75%). The former receive an average of 34% of their aid for education for primary education, the latter 36%⁷.

Graph 1.5: Share of external aid for education assigned to primary education and according to primary completion rate (2005)



Sources: OECD CRS online database 2007, UIS

There is also the question of the impact that commitments made at different international conferences by the donor community for the harmonization and alignment of aid have on aid modalities (Monterrey 2002, Rome 2003, Paris 2005 and Abuja 2006). More precisely, it would be good to know the evolution of the share of aid to Africa in the form of sectoral budget aid. Unfortunately, it is not possible to have a precise vision of this evolution with the data available up to now, even if surveys for obtaining this data are ongoing following the Paris declaration.

In conclusion, it should be remembered that the increase in aid noticed since 2000 has only today enabled a return to 1990 levels. The 1990-2000 decade was characterized by a loss of impetus in aid in a context of strong doubts as to the effectiveness of same. The commitments made by the international community and donor agencies, at the time of the many meetings at the turn of the 21st century, opened the way for new dynamics: an increase in global aid, clear priority for the African continent, and more specifically for sub-Saharan Africa, and an increasingly broad place granted to education. However, the most recent figures show a slowdown in these dynamics: the question is to know whether it is just a

⁷ These results are unchanged when taking into consideration only those countries, where the share of aid for education with undetermined intrasectoral distribution, is not too high (under 15%).

question of consolidation or whether there are new changes in priorities. **It is therefore appropriate to remain vigilant to ensure that the commitments made for supporting education and reaching the goals are kept.**

1.3.3 The Fast Track Initiative and its multi-donor funds for education

The current landscape of the African education system is largely shaped after international initiatives such as HIPC (box 1.1) and Fast Track. The Fast Track Initiative (FTI), with a partnership bringing together, in 2007, 31 developing countries including 20 in Africa (table 1.3) and the bilateral and multilateral donors involved in the education sector as a whole, is in line with the continuity of the Monterrey consensus, in the rationale of effectiveness of aid and of incentives : incentives for the beneficiary countries to set up a credible development policy for the education sector⁸ and incentives for donors to increase aid for education and the predictability of same. Moreover, the Fast Track Initiative has greatly contributed to the transition from the project approach to the programme approach, by encouraging local donors to coordinate around the education sector programme of those countries elected to the Initiative⁹ (Crouch and Umansky 2007). Since its creation in 2002, the FTI's role in the development of education sectors, especially in African countries, has become more and more important. With 7 countries elected at the origin of the initiative and 31 today, FTI has increased its coverage more than fourfold in five years. Today its impact is recognized as clearly positive for the reasons mentioned above, even if it is still difficult to estimate its effect yet in terms of progress in enrolments (Crouch and Umansky 2007). The Initiative's multi-donor funds -Catalytic Fund and EPDF - have played an important role in these developments and deserve to be presented in greater detail.

Table 1.3: List of countries elected to the Fast Track Initiative and year of endorsement (countries highlighted in blue benefit from the Catalytic Fund)

Africa		Other than Africa	
Burkina Faso	[2002]	Guyana	[2002]
Ethiopia	[2002]	Honduras	[2002]
Mauritania	[2002]	Nicaragua	[2002]
Guinea	[2002]	Yemen	[2003]
Niger	[2002]	Vietnam	[2003]
Gambia	[2003]	Rep. of Moldova	[2005]
Mozambique	[2003]	Tajikistan	[2005]
Ghana	[2004]	Timor-Leste	[2005]
Kenya	[2005]	Albania	[2006]
Lesotho	[2005]	Mongolia	[2006]
Madagascar	[2005]	Cambodia	[2006]
Djibouti	[2005]	Kyrgyzstan	[2006]
Cameroon	[2006]		
Rwanda	[2006]		
Mali	[2006]		
Senegal	[2006]		
Sierra Leone	[2007]		
Liberia	[2007]		
Benin	[2007]		

⁸ Any low income country can be elected to the Fast Track Initiative by the donors if it has a complete Poverty Reduction Strategy Paper (PRSP) validated by the World Bank and the IMF, as well as an education sector development plan deemed credible by the local coordination of the technical and financial partners, in accordance with the Initiative's indicative framework.

⁹ All FTI elected countries have an education sector plan since the existence of such a plan is one of the conditions for eligibility.

Source: from www.efafti.org, May 2007

Catalytic Fund

The Catalytic Fund was created in 2003, to enable low-income countries which have a credible education sector development programme but are donor orphans¹⁰, to benefit from transitional financing for a period of three years. This period of time allow them to show performance liable to attract additional donors for the education sector and thus obtain financing in the framework of new cooperation. Implementing this fund has brought to light the problems which could arise from its transitional nature and admission criteria. It was not easy to make take over by new donors happen and to foresee any change in this respect, in view of the tendency for bilateral cooperation to reduce the number of countries where it intervenes: it was therefore decided in November 2006 to allow financing in the longer term. The technical criteria for eligibility have been relaxed as they were not adapted to the large variety of situations : they no longer focus on the number of donors but rather on the level of recovery of the financing deficit of the sectoral plan by local partners, as far as basic education is concerned¹¹. These new modalities gave rise to the expanded Catalytic Fund in 2007.

Since its creation, the Catalytic Fund has become more and more important. While in 2004 donors transferred 49.1 million dollars through this fund for the education sector, this total had more than doubled two years later to reach 101.8 million dollars¹². If it is considered that donation promises made for 2006 have been kept¹³, then this sum has been increased nine-fold, not two-fold. However, promises announced for 2007 and 2008 are not encouraging as, even if the total remains high, they are decreasing from year to year, predicting the end of the rise in power of the Catalytic Fund: the promises of 430.4 million dollars in 2006 dropped to 334 million dollars in 2007 and 231 million dollars in 2008, i.e. a decrease of 46% between 2006 and 2008 (Fast Track Initiative 2006a).

In addition, out of the 231 million dollars disbursed by donors to the Catalytic Fund over the period 2003-2006¹⁴, 109.5 million were transferred to the Fund's beneficiary countries (table 1.3). The fact that African countries have predominantly benefited from the Catalytic Fund is explained by their particularly high financing needs. While African countries predominate in their numbers, they also predominate through the amounts disbursed to them: they received two-thirds of the total amount disbursed to the Catalytic Fund's beneficiary countries between 2003 and 2006, i.e. 72 million dollars. In addition, it is planned that these eight countries receive an additional payment of 90 million dollars before September 2007. On top of this payment to Africa, 117.3 million dollars have to be disbursed to Cameroon and Rwanda, eligible to benefit from the fund at the end of 2006, for the period 2007-2009 (table 1.4, information dated November 2006). This sum will enable Cameroon cover its entire financing need in 2007 and 2008, and Rwanda 100% of the need in 2007 and around 70% in 2008¹⁵.

10 Countries with at least five bilateral donors in the education sector, each contributing at least one million US dollars per year.

11 The country is eligible for the expanded Catalytic Fund if local donors cover less than 50% of the financing deficit for the plan for basic education, at the time when the plan is elected to the Fast Track Initiative.

12 Totals for 2006 do not take into account disbursements made by donors between November and December 2006.

13 This information is not yet available, but for previous years, no discrepancy was noticed between the promises made and the amounts disbursed by the donors to the Catalytic Fund.

14 Countries due to benefit from the Fund at end 2006 are not included here: Cameroon, Rwanda, Mongolia, Kyrgyzstan.

15 The idea of a Catalytic Fund steering committee is to encourage local partners to reinforce their position on the education sector in Rwanda.

Table 1.4: Catalytic Fund disbursements made and projected (in millions of US dollars)

	Countries admitted to the Catalytic Fund before end 2006		Countries admitted to the Catalytic Fund end 2006	
	Actual disbursements 2003 - 2006	Additional disbursements planned before the end of 2007*	Additional disbursements planned for 2007-2008	
Djibouti	3	4	Cameroon	47.3
Ghana	8	17	Rwanda	70
Kenya	24.2	24.2		
Lesotho	1.8	8.4		
Madagascar	10	25		
Mauritania	8	1		
Niger	9	8		
Gambia	8	2,5		
TOTAL AFRICA	72	90.1		117.3
Guyana	8	4	Mongolia	12.8
Moldova	0	4.4	Kyrgyzstan	15
Nicaragua	7	7		
Tajikistan	1	8.2		
Timor-Leste	1.5	3		
Yemen	20	10		
TOTAL OTHER THAN AFRICA	37.5	36.6		27.8
TOTAL	109.5	126.7		145.1

Source: Fast Track Initiative 2006a
 Note: * Estimation November 2006

Education Programme Development Fund (EPDF)

The multi-donor Education Programme Development Fund (EPDF), established in November 2004, was designed, first of all, to support low-income countries in the development or revision of sustainable education sector programmes, aimed at achieving quality Universal Primary Education. This backing consists in financing technical and analytical support to national teams but also, more widely, to donor coordination to stimulate national dialogue on the development of the sector. EPDF also seeks to generate knowledge on the performance factors of educational strategies, by financing international or regional comparative studies, and by disseminating this knowledge through forums or exchanges between countries. Through these goals, EPDF is therefore a privileged tool in the Fast Track Initiative for improving the mobilization of resources for the sector and the efficiency of education expenditure.

At the end of 2006, 59 countries, including 12 African countries, had received support from EPDF. Since it came into being, EPDF has received a total of 24.2 million dollars from its donors¹⁶. Africa is the main beneficiary, with allocations of 12.9 million dollars, i.e. 53% of the fund. However, a very small share (10%) of this total has been committed and an even smaller share spent: only 6% of the EPDF fund allocated to Africa has actually been spent. The extremely low level of this rate of disbursement is explained by the difficulties encountered in implementing financial circuits for some expenditure but, above all, by the very few requests for support made to EPDF.

¹⁶ At the time of setting up the fund, Norway (currently lead donor) and the United Kingdom were the only donors. They were joined later by Canada, Ireland, Luxembourg, the Netherlands, and Switzerland and more recently by Russia.

EPDF totals spent in Africa have helped Senegal, Cameroon, Rwanda, Mali, Benin and Sierra Leone to have their educational strategy accepted by the Fast Track Initiative. It plans to finance the development of the strategy for several African countries directly in 2007. EPDF has also supported several regional or multi-country programmes including a UNAIDS

Working Group on education and HIV/AIDS and an exchange trip to Asia for decision-makers from five African countries. The fund has also supported institutions recognized by the Fast Track Initiative as playing a strategic role for the advancement of education in Africa, such as Association for the Development of Education in Africa (ADEA), UNESCO BREDA (Fast Track Initiative 2006b).

In conclusion, the Fast Track Initiative, particularly through its two multi-donor funds, has stimulated aid for basic education, especially towards Africa, and has contributed to placing education at the centre of debates. The transformation of the terms of admission to the Catalytic Fund, although necessary, does raise interrogations. Indeed, with the extension in the span of time during which the different countries can benefit from the Catalytic Fund, with the considerable development in the number of countries elected to the Fast Track Initiative¹⁸, and with the promises from donors for the Catalytic Fund dwindling in the coming years, the question of the future sustainability of the Catalytic Fund is a crucial issue. Will the Fund be in a position to respond to the needs of all those countries, for which the Fast Track Initiative has undertaken to provide financial support, particularly when countries with a very large school population will join the Initiative? The answer is yes, on condition of substantial donor mobilization, which does not seem to be the current trend. If the Catalytic Fund's resources turn out to be insufficient, trade-offs will have to be made, either on the number of countries admitted to benefit from the Fund, or on the total amounts given to each country. In any case, it is important, as highlighted at the G8 Summit in Heiligendamm in June 2007, to decide upon trade-off criteria which would be favourable to those countries furthest from Universal Primary Education, especially fragile States, and to provide them with sufficient means to register true progress in terms of enrolments by 2015.

¹⁷ Around fifteen countries should join FTI by end 2007, most of them potential candidates for the Catalytic Fund.



© UNESCO BREDA - Mario Bels

Box 1.1: HIPC Initiative: potential yet unsystematic resources for education

The HIPC initiative was launched at the G7 summit in Lyon in 1996 and reinforced at the summit in Cologne in 1999; it defines a process whereby multilateral and bilateral creditors undertake to reduce the level of debt of heavily indebted poor countries which apply reform programmes supported by the IMF and the World Bank. The objective targeted is the reduction of poverty through the transfer of funds initially assigned to payment of the debt, to the financing of social sectors. 40 countries including 32 in sub-Saharan Africa have been deemed eligible for aid as HIPCs. In December 2006, 21 of those countries had already reached completion point and benefited from substantial debt relief.

Situation of the 40 countries eligible for the HIPC initiative, December 2006

	Countries that have reached completion point	Countries in the intermediary phase	Countries that have not yet passed the decision point
Africa	Benin, Burkina Faso, Cameroon, Ethiopia, Ghana, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Senegal, Sierra Leone, U.R. of Tanzania, Uganda, Zambia	Burundi, Chad, Congo, DRC, Gambia, Guinea, Guinea Bissau, Sao Tome and Principe	CAR, Comoros, Côte d'Ivoire, Eritrea, Liberia, Somalia, Sudan, Togo
Other than Africa	Bolivia, Guyana, Honduras, Nicaragua	Haïti	Kyrgyzstan, Nepal

Between 1999 and 2004, social expenditure (health, education, rural development) in countries which had passed the decision mark in 2004 increased from 5.9% to 8.2% of GDP. Today it is estimated that for the 30 countries which have already benefited from a reduction in their debt, payments to debt servicing have decreased by 2% of GDP on average between 1999 and 2005. Before the HIPC initiative, eligible countries devoted more resources to debt servicing than to expenditure on health and education. This expenditure is now five times higher on average than the total payments for debt servicing. Education is all the more liable to benefit from HIPC funds as it is an important component of the PRSP, based on a sound factual diagnosis.

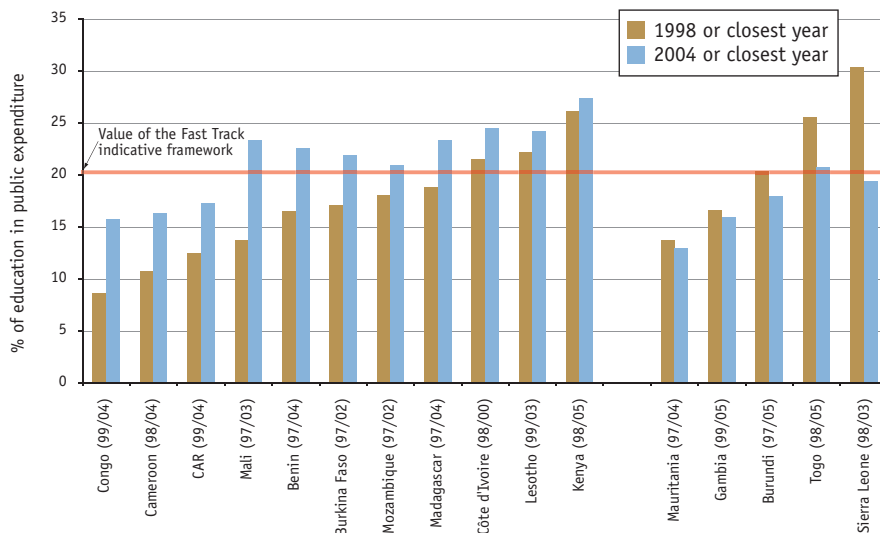
Apart from having an important effect on intersectoral budget allocation in favour of education, the HIPC initiative has generated a whole series of effects. For example, the French government decided to set up a mechanism for countries concerned by the HIPC initiative for the progressive cancellation of the balance of official development assistance debt still owed to France. This mechanism translates by the signature of a debt reduction and development contract (C2D), involving refinancing by donations, upon reaching completion point. 23 countries, including 17 sub-Saharan African countries, are concerned by this and the projected financial volume of these contracts is estimated at 3.7 billion Euros. To date, seven African countries have signed C2Ds with France: Mozambique, Uganda, Tanzania, Mauritania, Ghana, Madagascar and Cameroon. The weight of the education sector appears to vary greatly from one country to another: on the two C2Ds signed in Mozambique for example, nothing has been signalled on the education sector, whereas in Cameroon almost 20% of the overall contract total is to be used for financing the education sector strategy.

The HIPC initiative was then reinforced by the multilateral debt relief initiative (MDRI): in June 2005, the G8 proposed that the IMF, IDA and the African development fund cancel the total of their debt claims on countries that have reached or will eventually reach the completion point. At end 2006, 22 countries were admitted to the MDRI and had already received debt relief from the IMF for a total of 3.7 billion dollars, of which almost 2.9 billion for African countries. Although nothing guarantees that the sums released by the cancellation of debt will go to social sectors and to education in particular, it can be hoped that the new resources they represent for the different countries will contribute to increasing their efforts for education.

1.3.4 National priorities more and more in favour of education

The mobilization of the international community for education since 2000 is also observed at African country level. Even if the information available is far from exhaustive, it seems that most countries have made a greater financial commitment to education. This translates by a more favourable intersectoral trade-off for education: out of the 16 countries for which information is available, 11 showed an increase in the share of public expenditure on education between 1998 (or closest year) and 2004 (or closest year) (graph 1.6), enabling five countries to reach the level recommended by the Fast Track Initiative indicative framework. On the other hand, for the other five, the share decreased.

Graph 1.6: Share of current expenditure on education in State expenditure



Source: UIS data



2. ...that give rise to new questions

The new institutional landscape as described above, and to which the Dakar Forum contributed undeniably in its outline, gives rise to new questions. The idea is not to go over these questions thoroughly but rather to highlight some of them, especially regarding the consequences of this new landscape in terms of the analytical capacity and modalities of the education sectors, the connection between the new mechanisms for the development and monitoring of educational strategies (particularly between the EFA monitoring mechanisms at country level and the other mechanisms), and finally, the implications of the evolution of aid to development since 2000 on the financial viability of reaching the EFA goals of universal education by 2015.

2.1 On education sector analysis

The transition from the project approach to the programme approach, although it definitely represents a progress, has modified the external partners' technical input in the monitoring of the education sector. Indeed, programme aid, in adapting to budget systems and national expenditure circuits and by virtue of the volume of financing mobilized, has led local donor agencies to change, in recruiting mainly financial and public expenditure specialists rather than education sector specialists, able to analyze the performance factors of the education system. For some countries, this has resulted in focusing the sectoral dialogue on the monitoring of budget execution and on financial control, at the expense of the success or failure factors in reaching the goals defined in the sector-wide plans and a sector-wide vision of education.

Moreover, with a view to aligning support, more effectively appropriating educational policy and its results and reducing transaction costs, donors have sought to reduce their technical assistance in the form of staff placed in the departments of ministries of education, with the idea of concentrating their efforts on capacity building plans defined by the government and aimed at strengthening national capacities for the implementation of the educational strategy. However, while technical assistance has indeed been reduced, national capacity building plans have at the present time only very seldom been completed. In fact, the elaboration process is very long and complex: the profiles and competencies needed for each post must be clearly defined in advance in order then to evaluate the needs in terms of capacity building and make them operational. The different stages, which are complex, can sometimes result in tension between the different departments and building a consensus demands a lot of time. In this process of transition from technical assistance to support for the capacity building plan, most African countries find themselves faced with a vacuum as far as expertise for monitoring and implementing sectoral process is concerned, which could have strong implications on the capacity of the different countries to absorb future volumes of aid.

Finally, as will be seen in more detail in later chapters of this report, it appears essential today to move away from a vision focusing on primary education to a global vision for development of the sector. However, despite the multiplication of diagnoses covering the overall education sector as presented above, the national dialogue remains mainly focused on primary education at the present time. The priority displayed for this level of education, which in most countries is still far from the goals set, does certainly not justify looking at it outside the overall system. This focus of the dialogue can be explained by the visions much less consensual on the development of the other levels of education, by the existence in certain countries of several ministries of education, often compartmented and with their own monitoring procedures. It can also be understood by the absence of a fine analytical tool to comprehend and assess the performances of the education system in the other levels of education. In conclusion, while monitoring of and dialogue around educational programmes are now clearly structured for primary education, thanks to the Fast Track indicative framework in particular, it now proves necessary to pursue more in-depth thinking on the

analytical and monitoring tools for the other levels of education so that the global vision of the development of the education sector can become a reality in Africa (this will be covered in more detail in chapter 8).

2.2 On the EFA monitoring mechanisms at country level

Although the Dakar Framework for action stipulates that «*the heart of EFA activity lies at the country level*», the national EFA monitoring mechanisms that it has set up with the support of technical and financial partners - national EFA Forums, national EFA Coordinations, national EFA technical Committees - still exist but hardly operate. This transpires from a UNESCO BREDIA study (2007) which evaluates the EFA coordination mechanisms in around fifteen African countries¹⁸. Case studies, within the different countries, conclude that for Liberia, for example, «*the coordination of EFA activities by the EFA National Forum, by the Secretariat and by other coordination organizations was very minimal if not, non-existent*», for Nigeria that «*the Forum, at national level, was left in abeyance*», for Cameroon that «*the EFA National Coordination was more than discreet since the development process of ministerial or sectoral education strategies started in 200*», etc.

These mechanisms played an important role when they came into being enabling 42 sub-Saharan African countries to dispose of a national action plan for Education for All covering all the EFA goals, through a participatory device. However, very few of these plans have been validated technically, socially and politically: out of the 26 French-speaking, Portuguese-speaking and Spanish-speaking African countries, only 7 had reached the different stages of validation by 2005 (Damiba 2005). Now these plans can not be defended for their implementation without political approval. The non-implementation of a large number of EFA plans undoubtedly has a variety of explanations even if some of the reasons are common to many plans. First and foremost, the EFA action plans have rarely met the criteria for being «*credible*», even though it was difficult to reach a consensus on the definition of the credibility criterion. Indeed, the plans have suffered from not sufficiently taking into account the countries' macroeconomic and financial constraints and the feasibility of planned action in the field. They then had difficulty in fitting into ongoing national processes, such as national strategies for reducing poverty, promoting growth or more global mechanisms, for defining educational strategy set up by the different countries to document, amongst other things, the intrasectoral and intersectoral trade-offs necessary for reaching their educational goals. This lack of coherence has led the different countries and external partners to give priority to some documents and to drop others, often at the expense of the EFA action plans. For example, in the case of Cameroon, the EFA National Coordination has been «*supplanted by new mechanisms (the CSR Committee and the Sectoral Strategy Steering Committee) which both fit into an education sector global analysis approach in order to better situate the input of the different sub-sectors in EFA implementation. (...) By not following the movement for EFA resolution in a sector-wide framework, the EFA National Coordination has been marginalized, with little influence on the elaboration of educational policies*» (Fouda Ndjodo 2007).

These reasons partially explain the incapacity for most EFA plans to attract financing, particularly external financing, the latter focusing on more global educational policy definition frameworks, such as sector-wide plans or ten-year plans for educational development, some of which were in the elaboration phase before the Dakar Forum and which represent the actual country policy in terms of EFA. The mobilization towards sector-wide plans was strengthened by the Fast Track Initiative set up in 2002.

¹⁸ Benin, Burkina Faso, Cameroon, Comoros, Congo, Côte d'Ivoire, Gabon, Guinea-Bissau, Liberia, Mali, Namibia, Nigeria and Togo.

It must however be underlined that in some countries, the national EFA action plans, even if not implemented, have made a significant contribution to having the ongoing policy take into account all the dimensions of EFA, by fuelling more global educational strategies, as illustrated by the case of Burkina Faso : after setting up an interministerial commission to develop the ten-year basic education development Plan (PDDEB) in 1999 with the support of donors and a national EFA Coordination structure for the development of a national EFA action Plan in 2002, Burkina Faso appointed a technical committee in 2006 in charge of developing phase 2 of the PDDEB more fully incorporating the EFA goals and the MDGs, particularly on the basis of the EFA plan.

In conclusion, all the reasons mentioned above partially explain why many national EFA monitoring mechanisms set up following the Dakar Forum have been frozen. The question then arises as to the future of the national EFA bodies as opposed to other emerging mechanisms. Indeed, it would be detrimental on more than one count not to draw lessons from the current situation, first of all because maintaining authorities with no resources may throw discredit on the successful or promising aspects of the EFA programmes. However, the future of the EFA bodies can only be defined according to further analysis of national realities and their specific context; in this respect, a recent UNESCO BREDA study (2007) has brought to light a very great variety of situations which deserve distinct and adapted strategies.

2.3 On financial mobilization for education

While the « Dakar+5 » Report (UNESCO BREDA 2005) passed an optimistic judgement on the financial feasibility of achieving Universal Primary Enrolment by 2015, it is difficult to have the same optimism two years later. That judgement was based on the high growth rate of aid, and on the promises made by donors for very extensive reallocation of aid flow for Africa and education. However, as indicated in point 1.3, these reallocations have not occurred, quite the contrary.

Since 2003, the share of official development assistance for Africa has been on the decline, dropping from 38% in 2003 to 33% in 2005, a return to the level of the share in 2000. This disengagement for Africa is not due to multilateral donors, who have demonstrated an increasingly high priority for Africa in line with their promises (table 1.5). It is due to bilateral donors whose priority, in the geographical distribution of aid, seems to be shifting away from Africa, especially for bilateral donors who are not part of the OECD Development Assistance Committee (DAC).

Table 1.5: Share of Africa in bilateral and multilateral donors' aid flow

	2000	2001	2002	2003	2004	2005
Africa's share in bilateral aid	31%	30%	33%	37%	34%	29%
DAC bilateral donors	31%	30%	34%	39%	36%	30%
Non-DAC bilateral donors	38%	30%	26%	8%	6%	7%
Africa's share in multilateral aid	37%	39%	43%	42%	46%	47%
Overall	33%	33%	36%	38%	37%	33%

Source: OECD DAC online database 2007

In addition, as mentioned above, intersectoral trade-offs in aid flows seem to be moving away from education since 2005: indeed the share for the education sector in sub-Saharan Africa dropped from 7% in 2004 to 5% in 2005. There again, this does not concern multilateral donors who on the contrary made a very significant increase in the share of their aid for the education sector in 2005 (table 1.6). The drop only concerns bilateral donors. It remains to be seen if this drop is temporary or if it announces a decline of interest for the education sector to the benefit of other sectors with which it is in competition, particularly sectors like that of infrastructures which can, in the short term, have a more direct effect on economic growth.

Table 1.6: Share of education in bilateral and multilateral donors' aid flow, Africa

	2000	2001	2002	2003	2004	2005
Share of education in bilateral aid	3.3%	7.5%	7.3%	9.2%	9.5%	6.8%
Share of education in multilateral aid	0.6%	0.6%	0.5%	0.7%	0.7%	2.7%

Source: OECD CSR online database 2007

While the aid reallocations in favour of Africa and education have not occurred, the estimation of needs in external financing for Education for All by 2015 has been revised upwards. The latest estimations, concerning more specifically the achievement of UPE, ranged in 2005 from 5 to 7 billion US dollars per year, and around 3 billion for Africa (UNESCO BRENDA 2005). However, these estimations are based on annual needs between 2000 and 2015. And external aid disbursements between 2000 and 2015 were significantly below the level of the needs estimated for achieving UPE by 2015. It is therefore a question of filling the gap, which would bring the total annual needs for this period to 11 billion dollars per year (UNESCO 2007), i.e. almost twice the total aid observed in 2005.

At a time when the debate on the effectiveness of official development assistance is once again at a dead end (box n°1.2), **it is essential for countries to pursue their commitment for reaching the EFA goals by 2015**. This is what the European Commission puts forward in calling the High Level Conference on education it organized in Brussels in May 2007 «*Keeping our promises on education*». At this conference, the education sector partners were summoned to increase, make more effective and accelerate their support to education. Moreover, at the last summit in Heiligendamm in June 2007, the G8 countries have undertaken to increase their support to education in Africa through the bilateral channels and the Fast Track Catalytic Fund. **If this mass effort is not put in as early as 2007, then reaching the international goals in education by 2015 could be compromised.**

Box 1.2: The effectiveness of Official Development Assistance in question

The issue of the effectiveness of Official Development Assistance has been the subject of extensive debate in the literature, especially since the publication in the late 1980's and the early 1990's of several very critical studies, highlighting the ineffectiveness of aid on economic growth (Mosley, Hudson, Horrell 1987, 1992) and its perverse effects on institutions. These initial results, which came out at the same time as the acknowledgement of some « aid fatigue », reveal the first impasse in seeking aid effectiveness.

In this context of questioning, Burnside and Dollar published an article in 1997 which marked a turning point both in research on the subject of aid as in the attitude of agencies. They show that aid is only effective if accompanied by « good » economic policies such as control of inflation, a balanced budget and an open commercial policy. These conclusions, adopted by the World Bank, have opened the way to aid selectivity, which consists in aid being conditioned more often by the quality of policies implemented. However, Burnside and Dollar's work (1997, 2000) was criticised later both on the methodological level and that of the arguments put forward. Hansen and Tarp (2001) show that aid is effective on average, no matter what the institutional environment. Easterly, Levine and Roodman (2003), taking up Burnside and Dollar's methodology and data, show that simply taking into account other determining factors of economic growth cancels out the effect of aid. Taking up the idea of conditionality, Guillaumont and Chauvet (2001) bring to light conditions other than economic rigour, which would make aid more effective: they thus show that aid, by a potentially compensatory effect, is all the more effective as the countries are vulnerable to external shocks, whether economic or climatic. Finally, Cogneau and Naudet (2004) highlight the principle of selectivity that is in itself particularly unjust with regard to equity and justice: selectivity thus increases inequalities between individuals according to whether they are born in countries with privileged circumstances or not.

The second generation of studies has copiously fuelled the debate but seems once again to be in an impasse: the lack of sound results makes it impossible to come to a true consensus on aid effectiveness. Several reasons can be given to explain this ambiguity (Bourguignon and Leipziger, 2006). From a point of view of methodology firstly, there is the endogenous nature of aid (idea that the characteristics of those countries receiving the most aid are likely to have an effect on the results observed), then, the delicate distinction between its long term and short term effects (a recent study has shown that aid, aimed at strengthening policy development and social sectors, has *delayed effects*¹⁹ on growth while aid to productive sectors or budget aid has a *rapid effect* on growth), afterwards, the difficulties in checking the countries' specificities or the protean nature of aid (which makes the accounting exercise perilous) and, finally, its fungibility (corresponding to the fact that the receiving country can reduce its expenditure in the sector targeted by the aid to reallocate it elsewhere). In addition, the motivations and objectives of aid are multiple and are not always necessarily focused on development objectives, like for example emergency aid. Clemens, Radelet and Bhavnani (2004)²⁰ highlight that emergency or food aids are negatively correlative to growth due to their very purpose.

Two directions can be explored to break out of the impasse:

- 1) Bourguignon and Sundberg (2006) on the one hand suggest opening the « black box » to study more precisely the mechanisms through which aid can have an impact on economic and social results: i) results are determined to a large extent by the policies implemented, ii) these policies are developed by policy decision-makers according to the principles of good governance and iii) donors can to some extent influence policy decision-makers at the time of aid allocation.
- 2) Another possibility is to limit analysis to a precise sector; by assessing the effects of aid devolved to this sector, which can overcome some of the problems studied above, particularly that of the diverse motivations of aid.

This is the direction taken by Michaelowa and Weber (2006) and Dreher, Nunnenkamp and Thiele (2006) whose recent work strives to see to what extent aid dedicated specifically to education improves the educational indicators : in other words, « does aid to education make it possible to educate the young ? ». These studies try to separate the contribution of aid to education from the other traditional contributions such as the tax effort for education, the characteristics of schooling supply and demand, and the nature of the macroeconomic and economic environment, in the improvement of primary schooling coverage (or completion). Also, in these studies, the authors strive to deal with the endogenous side of aid through appropriate statistical and econometric techniques. However, the results hardly tally: Michaelowa and Weber show that the estimated impact of aid to education is indeed positive, albeit modest and above all, not very sound and hardly significant. Dreher, Nunnenkamp and Thiele conclude on the other hand that aid to education makes an important and significant contribution to improving primary school coverage (with regard to both enrolment and completion rates) and that this result is not affected by the way in which aid is measured (in the form of commitments or disbursements).

Once again, consensus seems far from being reached on this issue, but these studies are amongst the first to take a real interest in the « internal » effectiveness of aid in a specific sector and more research will be necessary in order to reach a conclusion. These initial results do however lead to some optimism in that they do show there is a positive correlation between aid to education and the indicators of schooling coverage.

¹⁹ The effect appears only after a minimum of four years.

²⁰ These authors were quoted, for example, by Bourguignon and Leipziger (2006) and in a recent publication of the IMF (2005).

3. Conclusion

The Dakar commitment for financing all « credible plans » for reaching the EFA goals has enabled more in-depth and shared diagnosis of how the sector operates and to register the activities to be carried out in a wider framework of poverty reduction and support to development. Definite progress has been made in terms of harmonization and alignment of aid and, in many countries, donor coordinations have implemented a trusting dialogue with the governments, enabling a shift towards a globalisation of actions. Today more than in the past, all partners take the risk of transparency: the governments by registering the sectoral development programmes in documents (and in terms) open to social debate and by explaining the methods of funding these programmes; the donors, by making public their analyses and commitments. The Fast Track Initiative has systematized this new type of relationship. These advances, which need to be consolidated, will however only reach their outcome if the international community effectively keeps the promises made for education and for Africa. Donors, especially bilateral donors, must work twice as hard as to the intensity and predictability of their financial support for the education sector in Africa, giving priority to those countries furthest away from reaching Universal Primary Education. On their side, the African countries must pursue their efforts for placing education at the centre of the debate, within the government and also with external partners and civil society.





© UNESCO BREDÁ - Mario Bels

DAKAR +7
EDUCATION FOR ALL IN AFRICA

C H A P T E R 2

The evolution of primary education

Can the goal of Universal Primary Education (UPE) on the 2015 horizon be reached? This chapter offers to establish a quantitative assessment of the five years following the Dakar Forum based on the latest available data, i.e. 2004/05, both in terms of intake capacity and of access, but above all of primary completion. It transpires that all the education indicators have significantly improved since 1990, with much more pronounced dynamics over the recent period than between 1990 and 2000, a sign that the Dakar Forum has instilled new momentum into the scaling-up of enrolments. These results lead to revising upwards the perspectives of reaching UPE by 2015. Nevertheless, although the latest tendencies are more optimistic than before, this will not be enough for guaranteeing achievement of the EFA goal n°2 in a number of countries, unless considerable progress is made in primary survival.

Chapter 1 has shown that the Dakar Forum definitely instilled fresh dynamics into the promotion and monitoring of education in Africa: nevertheless, the question is raised as to how this has translated in concrete terms. The latest data from 2004/05 now makes it possible to draw up a true quantitative assessment seven years on from the Dakar Forum, and to examine the mobilization that ensued, both at country level and with the international community. What is the current situation of primary education in Africa, and more particularly that of the different countries, as to the Dakar goal n° 2? Did the Dakar Forum enable the different countries step up their progress towards UPE? Can this goal be reached on the 2015 horizon?

The first part of this chapter closely examines the current situation of primary education in the African countries, in the light of the results observed in 2000. Several indicators are put into play, such as the gross enrolment rate, the apparent (gross) intake rate and, above all, the completion rate, directly referred to in the second Dakar goal. Completion levels are seen to greatly vary on the continent, highlighting the variety of tracks already followed and of challenges still to be taken up by the countries. The second part of the chapter compares the increase in intake capacity, and in primary intake and completion, registered over the 1990-2000 and the 2000-2005 periods, in order to reveal whether the institutional changes introduced since the Dakar Forum have resulted in a modification to dynamics. It can then be asked if present trends, in terms of primary intake and survival, will enable the African continent to enrol all theoretical school-age children in primary school in 2015. This leads to reviewing, in the third part of this chapter, the projections made earlier as to the perspectives of achieving UPE by 2015, on the basis of the most recent possible information.



1. The evolution of education indicators in primary education between 1990/91 and 2004/05

1.1 High expansion in intake capacity since 1990/91

Significant progress has been made in terms of intake capacity in primary education since 1990/91, measured by the evolution of the gross enrolment ratio (GER). On average, the GER was 98% in 2004/05 compared to 78% in 1990/91¹. Recent progress is manifest, since out of the 20% gained in the overall period, 12% were gained between 1990/91 and 2000/01 and 8% between 2000/01 and 2004/05. Table 2.1 presents the situation of the different countries in this respect according to GER rates in 1990/91 and 2004/05.

Table 2.1: Situation of African countries according to gross enrolment rates in 1990/91 compared to 2004/05 (or closest year)

		GER 2004/05 (%)					
		< 50	50 - 70	70 - 90	90 - 100	> 100	Not available
GER 1990/91 (%)	< 50	Niger, Djibouti	Sudan, Eritrea, Burkina Faso	Mali, Guinea, Ethiopia			
	50 - 70			Senegal, Gambia, Côte d'Ivoire, Chad	Mauritania, Benin	U.R. of Tanzania, Uganda, Rwanda, Mozambique, Morocco, Malawi	Guinea-Bissau
	70 - 90			Comoros, CAR, Burundi	Nigeria, Ghana	Egypt	DRC, Angola
	90 - 100					Algeria, Zambia, Togo, Botswana, Swaziland, Madagascar, Cameroon, Kenya	
	> 100				Namibia, Zimbabwe	Tunisia, South Africa, Sao Tome and Principe, Lesotho, Gabon, Equatorial Guinea, Cape Verde, Congo Mauritius, Seychelles	
	Not available					Sierra Leone, Libya	Somalia, Liberia

Source: Authors' calculations based on UIS and national data

Five countries still have coverage levels below 70% in 2004/05. On the one hand, Niger and Djibouti, with a GER of 47% and 40% respectively, are the two countries with the lowest coverage. On the other hand, significant progress has been made when taking into consideration the average African situation or that of specific countries: Niger had a GER of 26% in 1990/91. The current situation is therefore the result of substantial progress made since the early 1990's.

Moreover, in 2004/05, 25 countries had a GER exceeding 100% and 6 more a GER of between 90 and 100%: this means, on the one hand, that these countries, taking into account their current schooling conditions, do theoretically have the capacity to accept all children of the official age-group population in primary school. It does not on the other hand mean that these countries have reached, or are close to reaching, UPE, as the GER is not suitable as an indicator for measuring this goal: it describes an average enrolment situation and is very much dependent upon the repetition level practised in the system². It does not take into account the intake level and above all the completion level of primary education. Now, the goal of UPE as initially formulated in the Dakar Forum framework and then restated in the MDGs, implies that all children should complete primary education.

¹ When, instead of the simple average, the weighted GER average is taken into consideration for each country per the total school-age population, these values are 95% in 2004/05 compared to 73 % in 1990/91.

² cf. Reuge (2004a).

1.2 Coverage, intake and completion

Evolution in the apparent (gross) intake rate (AIR) and the ratio of access to the last year of primary education (PCR) which measures approximately the completion of primary education³ is just as remarkable: the AIR, which was 85% in 1990/91, registered at 105% in 2004/05⁴, with once again a more significant increase over the more recent period (10 points for each of the two sub-periods). Between 1990/91 and 2004/05, the PCR rose from 48% to 65% on average. While in all the countries studied, only one out of two pupils completed primary education at the beginning of the period, this has risen to two out of three today.

Graph 2.1 summarizes the situation of a number of African countries with regard to the gross enrolment rate, the apparent (gross) intake rate and the access rate to the last year of primary education for the year 2004/05. While a low GER is generally associated with a low level of primary completion, as is the case of Niger for example, a high GER can be the consequence of varied situations both in terms of admission and completion. Thus, although Botswana and Swaziland show comparable GER levels (105%), Botswana, with a PCR of 93% in 2004/05, is close to universal completion, whilst Swaziland still has a relatively low completion level (PCR of 63% in 2004/05).

Graph 2.1: Situation of African countries with regard to gross enrolment rate, apparent (gross) intake rate and primary completion rate, 2004/05 (or closest year)



Source: Authors' calculations based on UIS and national data

The rate of access to the last year of primary education, even if this constitutes a slightly biased estimation of the level of primary completion, is undoubtedly the best indicator for reporting progress made in terms of UPE and so measuring progress towards goal 2 of the Dakar Forum.

Table 2.2 presents the situation of African countries as to their level of completion in 1990/91 and 2004/05 (or closest years).

³ It is indeed calculated on new entrants to the last year of primary education, which implicitly supposes that there is zero loss during the last year.

⁴ 94% and 129% respectively for the weighted averages.

Table 2.2: Situation of African countries according to the level of their access rates to the last year of primary education in 1990/91 compared to 2004/05 (or closest year)

		PCR 2004/05 (%)				
		< 30	30 - 50	50 - 80	> 80	Not available
PCR 1990/91 (%)	< 30	Niger	Chad, Djibouti, Mali, Mozambique, Malawi, Ethiopia	Benin, Eritrea, Guinea		Guinea-Bissau
	30 - 50		Burkina Faso, Burundi, CAR, Côte d'Ivoire, Mauritania, Rwanda, Sudan	Comoros, Equatorial Guinea, Gambia, Madagascar, Senegal, Togo, Uganda, U.R. of Tanzania	Morocco	Angola, DRC
	50 - 80			Cameroon, Congo, Gabon, Ghana, Lesotho, Nigeria, Sao Tome and Principe, Swaziland	Algeria, Cape Verde, Kenya, Tunisia	
	> 80			Namibia, Zambia	Botswana, Egypt, Mauritius, South Africa, Zimbabwe, Seychelles	
	Not available			Sierra Leone	Libya	Liberia, Somalia

Source: Authors' calculations based on UIS and national data

There has been considerable evolution over the period under consideration. In 1990/91, 19 countries had a low primary completion rate (under 50%), and 11 of them were even below a PCR of 30%. By 2004/05, only Niger was still very much behind with a PCR of 28%, which must not however overshadow the progress made by this country, which showed a PCR of 17% in 1990/91. At the present time, there are still 13 more countries with a completion rate lower than 50%: Chad, Djibouti, Mali, Mozambique, Ethiopia, Malawi, Burkina Faso, Burundi, CAR, Côte d'Ivoire, Mauritania, Rwanda and Sudan.

While the evolution in terms of completion is generally on an upward trend, it should be noted that there are four countries with a completion level in 2004/05 below than that registered in 1990/91: these are Burundi (36% compared to 46%), Namibia (75% compared to 83%), Zambia (79% compared to 93%) and Zimbabwe (80% compared to 94%). The case of Namibia is peculiar insofar as it was considered to be close to UPE in 2002/03, with a PCR higher than 90%⁵.

Finally, some countries already show a completion level of over 90% and can therefore be considered as being close to UPE: Botswana, South Africa, Algeria, Tunisia, Egypt, Kenya⁶, Libya, Mauritius and the Seychelles.

5 cf. UNESCO BREDIA (2005).

6 International classification for education indicates duration of six years for primary education in Kenya.

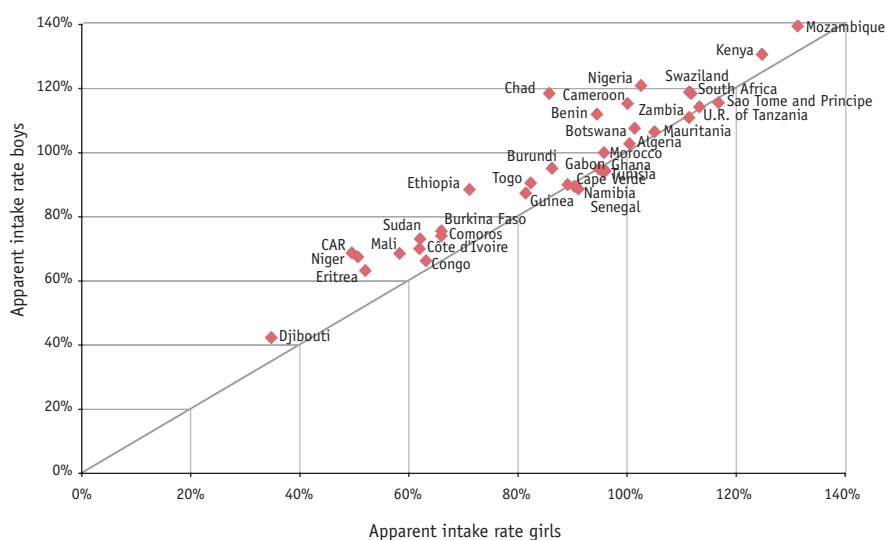
1.3 Persistent gender disparities in 2004/05

A number of countries remain far from the gender parity goal, both in terms of intake and completion.

1.3.1 From the intake point of view

For the 41 countries where data for calculating the parity index according to AIR is available, the simple average registers at 0.92 in 2004/05, which means that in these countries, there are only 92 girls for every 100 boys getting access to school. 14 countries have a parity index of under 0.9, and 3 of these are under the threshold of 0.8: Niger (0.75), Chad (0.72) and Central African Republic (0.72). 7 countries have, on the contrary, an index higher than or equal to 1: Ghana, Senegal, Sao Tome and Principe, Tunisia, Gambia, Namibia and finally Malawi, which have the maximum value observed on the continent overall (1.08). Graph 2.2 illustrates the diversity of situations, which also reflects the fact that disparities can be just as great in countries with a high intake level as in countries with a low intake level.

Graph 2.2: AIR for girls vs. AIR for boys, Africa region, 2004/05 (or closest year)



Source: Authors' calculations based on UIS and national data

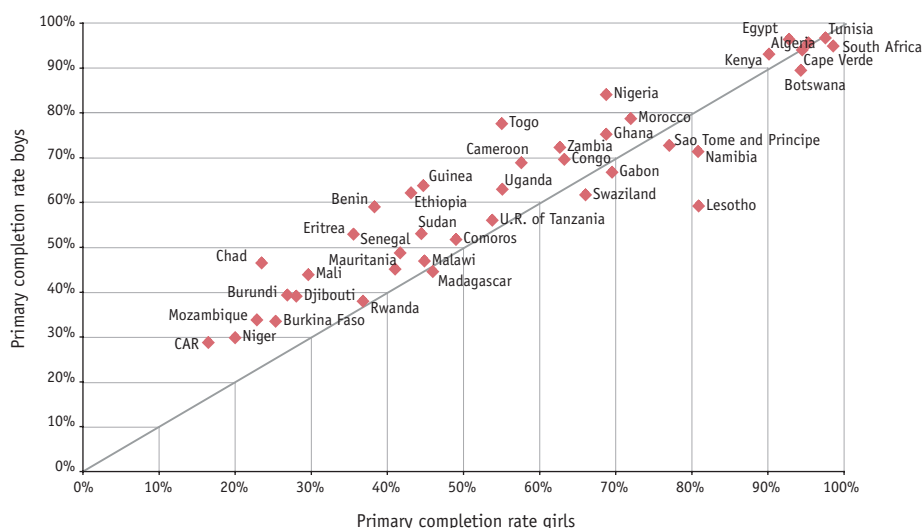


© UNESCO BREDA - Mario Bels

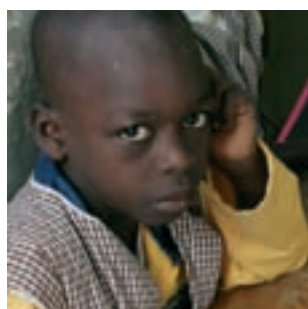
1.3.2 From the completion point of view

The gender parity index calculated on the basis of the Primary Completion Rate (PCR) has also been obtained for 41 countries. Showing an average of 0.88 in 2004/05, this has remained stable since 2002/03⁷. 13 countries are still under the 0.8 mark. The minimum value is observed in Chad (0.51), followed far behind by the Central African Republic (0.64) and Benin (0.66). 9 countries have an index of over 1: Botswana, Gabon, Lesotho⁸, Mauritius, Namibia, Sao Tome and Principe, South Africa, Tunisia and Madagascar. The parity index calculated on the PCR (0.51 - 1.36) has thus a much wider range than that calculated on the AIR (0.72 - 1.08)⁹. Graph 2.3 illustrates the diversity of situations observed in Africa on completion levels for boys and girls. Dispersal around the parity line appears greater than that observed earlier on the AIR.

Graph 2.3: Comparison of the boy-girl primary completion rate, 2004/05 (or closest year)



Source Authors' calculations based on UIS and national data



7 The gender parity index, calculated in the UNESCO BRED (2005) report, was based on data from 42 countries in 2002/03 and registered at 0.87.

8 The case of Lesotho is unique in that the parity index is particularly high (1.36) : for 100 boys completing primary education, there are 136 girls in the same situation.

9 In addition, the linear correlation between the apparent (gross) intake rates for the different countries, according to gender, is higher than that between the different primary completion rates.

1.3.3 Compared parity indexes

Graph 2.4 compares the parity indexes in terms of AIR and PCR, independent of the absolute level of intake or completion.

This graph calls for several comments:

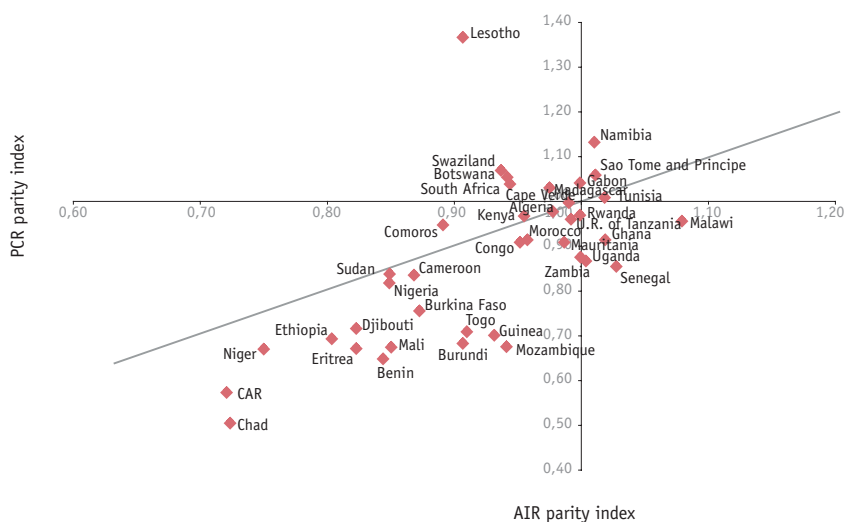
- The nearer the parity index, calculated on the basis of the gross intake rate, is to the unit, the smaller the disparities measured on the basis of the completion rate are. Thus, higher gender equity on entering primary education is followed by higher equity at the end of primary education.
- Most African countries are in a situation where gender disparities are accentuated on moving from admission to completion (countries below the 1st bisector on the graph, «equi-disparity» line between the AIR and the PCR). This suggests that most of the effort put in to reduce gender disparities has had an effect on admission but that difficulties remain at survival level, and therefore for completion.
- There are a number of situations where disparities in terms of completion are more in favour of girls. All of them concern countries where, concomitantly, the parity index on access is to the advantage of boys. This is the case particularly for five countries in Southern African: South Africa, Botswana, Namibia, Swaziland and above all Lesotho. These results suggest that in these countries, while, on the one hand, fewer girls than boys gain access to school, they do, on the other hand, survive better in the system.

10 For more information on these aspects, please refer to Mingat (2003).

Gender disparities both in terms of primary access and completion must not overshadow the existence of more significant disparity criteria such as geographical location or the families' resources¹⁰.



Graph 2.4: Gender parity indexes calculated on the basis of AIR and PCR, 2004/05 (or closest year)



Source: Authors' calculations based on UIS and national data

2. The Dakar Forum in 2000 marked a turning point in the dynamics of primary education in Africa

In 2000, the International Community renewed its commitments to UPE and it seems clear that there has been a positive evolution since that date. While it appears difficult to assess the true impact of the Dakar Forum and of the Millennium Summit, it is possible, even so, to examine in more detail how this date has marked a turning point in the rate of expansion of the education systems in the period following the commitments taken at these summits. It is proposed to look at this from three different angles: evolution of total pupils enrolled, evolution of intake and evolution of primary completion. The two sub-periods taken into consideration are 1990/91 - 2000/01 and 2000/01 - 2004/05¹¹.

2.1 A significant change in the average annual increase in pupil numbers

Table 2.3 enables comparison of the rates of average annual increase in pupil numbers observed in the two periods under consideration, which are 1990/91-2000/01 and 2000/01-2004/05. It is clear that the trends observed cannot be explained by educational policy changes alone insofar as there are a number of exogenous factors which may have significant consequences on schooling coverage.

For the period following 2000/01, twenty-five countries experienced a higher annual rate of increase in pupil numbers than between 1990/91 and 2000/01. For these countries, the average annual increase in pupil numbers between 2000/01 and 2004/05 was multiplied, compared to that observed between 1990/91 and 2000/01, by a factor fluctuating between 1.1 and 30.8. For most of these countries - i.e. 14 - the multiplying factor was between one and two, for four of them between two and three, and for seven of them over three. While it appears difficult to make an observation for countries that have been through a period of crisis, it can however be noted that among the countries with low schooling coverage at the present time, some of them have expended considerable energy, visibly more so over the recent period; this is the case of Niger, where the average annual increase in pupil numbers has increased very significantly since 2000/01 : the number of additional pupils accepted each year was around 29 000 before 2000/01 and this rose to almost 102 000 per year after that date, i.e. multiplied by 3.5. To a lesser extent, Burkina Faso has shown an increase in the annual average shifting from 41 000 to 92 000 additional pupils. In relative terms, these two countries have also intensified their efforts; for Niger, this represents a relative average annual increase in pupil numbers of 13% (in comparison with 2000/01) compared to 6% (in comparison with numbers in 1990/91) before 2000/01. For Burkina Faso, there has been a rise from 6% to 9%. Out of the 24 countries that have experienced, since 2000/01, a higher increase in average annual pupil numbers than during the period 1990/91 - 2000/01, 17 have also experienced a relatively faster rate of increase for the recent period.

Twelve countries have registered a slower rate of increase for the period 2000/01, with the multiplying factor fluctuating between 0.2 (Namibia) and 0.9 (Sao Tome and Principe). Six of these countries, mostly in Southern Africa, had a GER of over 90% in 1990/91 and over or equal to 100% in 2000/01: Lesotho, Namibia, South Africa, Swaziland but also Togo and Sao Tome and Principe. The remaining six countries had coverage lower than 90% in 1990 but some of these deployed considerable effort between 1990/91 and 2000/01 to reach, or even exceed 100% GER in 2000/01: this is notably the case of Morocco, a country which has in addition made its demographic transition.

¹¹ The years taken into consideration may fluctuate slightly from one country to another depending upon the structure of data available.

Table 2.3: Increase in pupil numbers in primary education

	Average annual increase in pupil numbers in absolute value			Average annual increase in pupil numbers in relative value		Rate of increase over the period	
	1990-2000 (1)	2000 - 2004 (2)	Ratio (2)/(1)	1990-2000	2000 - 2004	1990-2000	2000 - 2004
South Africa	46 164	10 242	0.2	0.6%	0.1%	6.6%	0.4%
Algeria	53 180	-89 802	-1.7	1.2%	-2.0%	12.7%	-7.6%
Angola	18 833	ND	ND	1.8%	ND	19.0%	ND
Benin	56 481	65 801	1.2	8.0%	5.7%	115.2%	24.9%
Botswana	4 594	-253	-0.1	1.5%	-0.1%	16.2%	-0.2%
Burkina Faso	41 253	92 387	2.2	6.1%	9.0%	70.1%	41.0%
Burundi	11 750	71 540	6.1	1.7%	8.4%	18.6%	38.1%
Cameroon	69 033	127 754	1.9	3.0%	4.6%	38.7%	9.4%
Cape Verde	1 837	-2 286	-1.2	2.4%	-2.6%	32.5%	-7.6%
CAR	14 899	8 457	0.6	4.0%	1.8%	48.3%	7.4%
Comoros	2 459	2 249	0.9	2.9%	2.2%	29.3%	9.2%
Côte d'Ivoire	73 691	-32 419	-0.4	4.3%	-1.5%	45.8%	-3.1%
Djibouti	1 099	1 990	1.8	3.0%	4.4%	34.6%	18.6%
Egypt	42 719	47 944	1.1	0.6%	0.6%	7.0%	2.4%
Eritrea	18 960	19 705	1	10.6%	6.0%	173.8%	26.4%
Ethiopia	452 954	1 051 295	2.3	9.9%	11.3%	157.8%	71.0%
Gabon	5 892	8 392	1.4	2.5%	3.1%	25.3%	6.4%
Gambia	7 355	5 999	0.8	6.3%	3.7%	73.0%	11.5%
Ghana	53 257	130 517	2.5	2.4%	4.8%	27.4%	26.3%
Guinea	50 682	80 883	1.6	9.4%	8.1%	146.1%	47.4%
Equatorial Guinea	389	-2 874	-7.4	0.5%	-3.9%	3.6%	-14.6%
Guinea-Bissau	-6 586	ND	ND	ND	ND	ND	ND
Kenya	-44 435	390 726	-8.8	-0.9%	7.4%	-9.1%	23.9%
Lesotho	6 338	2 787	0.4	1.7%	0.7%	18.0%	2.7%
Liberia	ND	ND	ND	ND	ND	ND	ND
Libya	ND	-11 178	ND	ND	-1.5%	ND	-7.3%
Madagascar	73 678	322 558	4.4	3.9%	11.7%	46.9%	55.9%
Malawi	163 168	42 059	0.3	8.0%	1.4%	116.5%	5.5%
Mali	73 203	89 810	1.2	11.0%	7.4%	185.2%	23.9%
Morocco	135 731	45 400	0.3	4.5%	1.2%	54.6%	4.7%
Mauritius	-341	-2 631	7.7	-0.3%	-2.0%	-2.5%	-7.8%
Mauritania	19 345	20 735	1.1	8.0%	5.3%	115.7%	23.0%
Mozambique	156 957	278 261	1.8	8.4%	8.6%	124.5%	39.3%
Namibia	8 393	1 685	0.2	2.4%	0.4%	26.8%	1.7%
Niger	28 786	101 867	3.5	5.9%	12.8%	78.1%	62.1%
Nigeria	555 119	650 756	1.2	3.5%	3.3%	40.8%	10.2%
Uganda	408 901	166 217	0.4	10.3%	2.4%	165.5%	10.1%
U.R. of Tanzania	150 259	664 905	4.4	3.7%	11.5%	44.5%	54.5%
DRC	ND	ND	ND	ND	ND	ND	ND
Congo	700	21 541	30.8	0.1%	4.0%	1.4%	17.2%
Rwanda	37 514	80 496	2.1	3.0%	5.3%	34.1%	10.9%
Sao Tome and P.	725	668	0.9	3.1%	2.3%	40.2%	9.6%
Senegal	45 127	71 111	1.6	5.1%	5.6%	63.7%	24.5%
Seychelles	-12	-201	16.6	-0.1%	-2.0%	-1.1%	-4.0%
Sierra Leone	ND	ND	ND	ND	ND	ND	ND
Somalia	ND	ND	ND	ND	ND	ND	ND
Sudan	75 704	119 577	1.6	3.2%	4.0%	37.1%	17.1%
Swaziland	4 561	2 096	0.5	2.5%	1.0%	27.4%	3.0%
Chad	45 906	69 542	1.5	6.5%	6.4%	87.4%	28.3%
Togo	29 814	12 901	0.4	3.9%	1.3%	46.1%	5.5%
Tunisia	-3 176	-47 401	14.9	-0.2%	-3.6%	-2.3%	-13.8%
Zambia	13 617	243 969	17.9	0.9%	12.7%	11.5%	61.4%
Zimbabwe	33 283	-24 995	-0.8	1.5%	-1.0%	15.7%	-2.0%

Source: Authors' calculations based on UIS and national data

There has been a reversal in the trend for some countries since 2000/01: after an expansion which led to over 100% GER in 2000/01, a decrease rather than a slow-down in the annual increase in pupil numbers has been observed: this is the case for Algeria, Botswana, Cape Verde or Equatorial Guinea¹².

While analysis of the evolution in pupil numbers gives an initial idea of the efforts made to increase the intake capacity of the systems, it proves to be insufficient for measuring the progress made toward reaching the Dakar goal, for each period. It is therefore appropriate to define the trends observed in terms not only of intake, but, also and above all of primary completion.

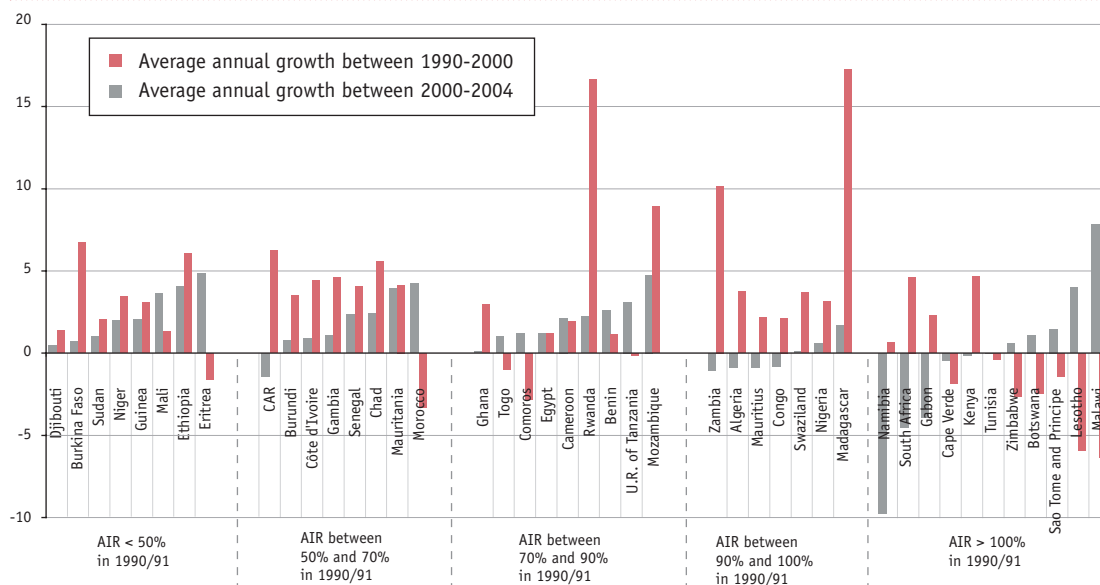
2.2 Confirmation of efforts made at intake level...

A simple approach is used here, comparing the annual increase in terms of percentage points on the apparent (gross) intake rate for the two sub-periods considered¹³. Graph 2.5 presents the situation of the different countries comparing the average annual increase for the 1990-2000 and 2000-2004 periods, and taking into account the AIR in 1990/91.

¹² The cases of Côte d'Ivoire and Zimbabwe are apart, on account of the events these countries have faced over the recent period.

¹³ For a given period, the average annual increase in terms of percentage points is calculated as follows: $(\text{GIR at end of period} - \text{GIR at beginning of period}) / \text{Period}$.

Graph 2.5: Average annual increase in AIR: 1990-2000 and 2000-2004, Africa region



Source: Authors' calculations based on UIS and national data

Hereunder, the figures specified in brackets for each group of countries correspond to the simple average of the average annual increases calculated for all the countries in the group for the 1990-2000 and 2000-2004 periods.

• **Countries with an AIR of under 50% in 1990/91**
(Average 1990-2000: 2.35; average 2000-2004: 2.80)

As a simple average, the annual increase in AIR for this group of countries rose from 2.35 before 2000/01 to 2.80 percentage points afterwards. Only Mali and Eritrea experienced a less sustained rate of increase for the 2000-2004 period compared to the 1990-2000 period : in Eritrea there was even a fall in AIR after 2000/01 (from 66% in 2000/01 to 59% in 2004/05); as for Mali, while efforts put in over the 1990-2000 decade enabled the country to move from an AIR of 26% in 1990/91 to 62% in 2000/01, this trend does not seem to have continued over the 2000-2004 period, taking into account the current AIR of 68%. For the other countries, the rate of increase in AIR has been multiplied by a factor ranging from 1.5 for Guinea to over 9 for Burkina Faso, where the average annual increase has risen from 0.71 before 2000/01 to 6.7 afterwards. It should be noted that efforts in Ethiopia have been constant since 1990 where the average annual gain has risen from 4.1 to 6.1 percentage points.

• **Countries with an AIR of between 50 and 70% in 1990/91**
(Average 1990-2000: 1.78; average 2000-2004: 3.65)

The trend has also been confirmed in this group of countries as to sustained efforts for increasing intake: the average increase has indeed risen from 1.78 to 3.65 percentage points. Morocco is the only country in the group with a reverse tendency but this is also the only country to have exceeded universal intake starting 2000/01, and with fewer children to enrol (demographic transition). As for Mauritania, an average annual increase of around 4 percentage points has been maintained, which made it possible to reach an AIR of 96% after 2000, peaking at 112% in 2004/05. Trends noted for other countries in the group show more significant increases in the recent period than between 1990-2000: the average annual increase in the AIR has thus been multiplied by a factor ranging from 1.7 in Senegal to almost 5 for Côte d'Ivoire¹⁴. The case of the Central African Republic is atypical in that the downward trend in the 1990's has given way to an average annual increase of over 6 percentage points.

• **Countries with an AIR of between 70 and 90% in 1990/91**
(Average 1990-2000: 2.04; average 2000-2004: 3.20)

With the exception of Mozambique and Rwanda, which have been through very difficult situations in the 1990's, with even so a level of intake of over 100% in 2000/01, a slow-down in the increase in intake can be noted in most of these countries (Benin, Cameroon, and Egypt, three countries with an AIR of 100% in 2000/01, or very close to same) or even a decrease. If, on the one hand, this situation appears natural for the United Republic of Tanzania, which had an AIR of 110% by 2000/01, it proves, on the other hand, to be of greater concern for Comoros and Togo, which are faced with a drop in intake level at primary school. Finally, Ghana is the only country in the group showing significant expansion, after a time of long stagnation - the AIR had only risen from 82% to 83% between 1990 and 2000 - enabling it to reach the threshold of 100% intake. For the countries in this group as a whole, the simple average increase has been higher since 2000/01 (average annual gain of 3.2 percentage points for 2000-2004 compared to 2.04 for 1990-2000).

¹⁴ Period before the events of September 2002.
 The most recent data for Côte d'Ivoire are for the 2002/03 school year.

- **Countries with an AIR of between 90 and 100% in 1990/91**
(Average 1990-2000: **-0.18**; average 2000-2004: **6.05**)

The tendency is once again for a sustained increase: the average annual progress observed for the 2000-2004 period is indeed higher than that for the 1990-2000 period for all six countries in the group. For Congo, Zambia and Algeria, there has been a move from a period of decline to a revival leading them to universal intake. For Madagascar, Nigeria and Swaziland, there is a trend to acceleration whereas these three countries already had an AIR of over 100% in 2000/01. The average increase for the countries as a whole in this group is the maximum average observed on all countries under consideration: 6.05 percentage points as an annual average against a deficit (stagnation) of - 0.18 before 2000/01.

- **Countries with an AIR of over 100% in 1990/91**
(Average 1990-2000: **-0.35**; average 2000-2004: **-0.80**)

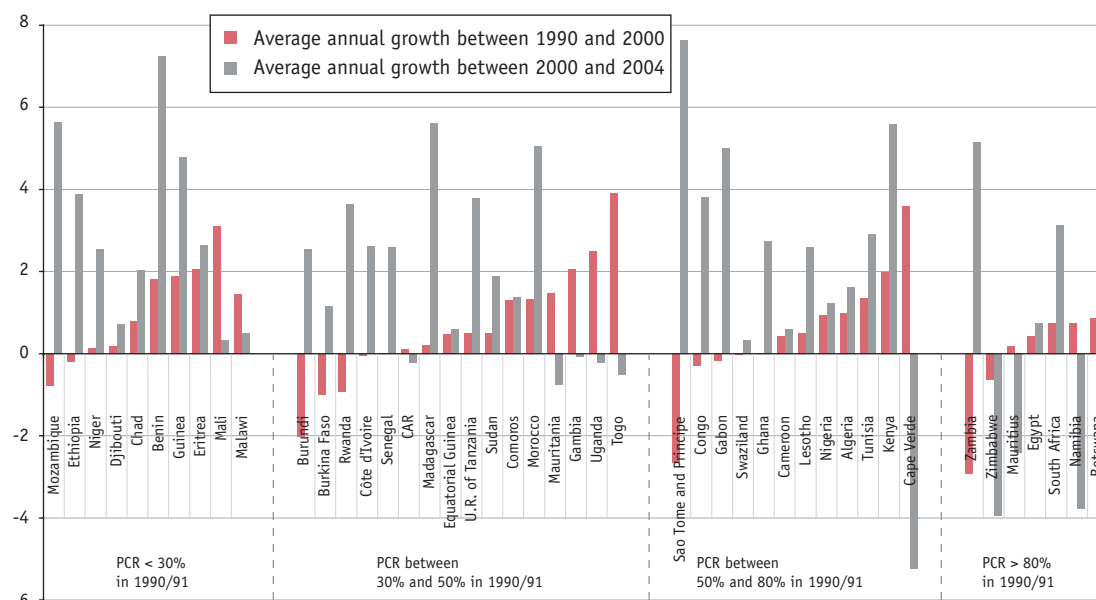
The results for this group are difficult to interpret insofar as these countries already had a universal level of intake in 1990/91 and were still mostly beyond the 100% mark in 2004/05. When recent evolution results in a drop in the value of the indicator, this usually goes along with a stabilization of the intake level in primary school. Within this group, it is to be noted that Namibia, Cape Verde and Gabon are again under the symbolic 100% mark, while maintaining high intake levels. The average annual increases for these countries, as a whole, shifted from -0.35 to - 0.8 after 2000/01.

2.3 ...and at completion level

Trends at completion level, due in particular to the time spans adopted here, must be interpreted with care insofar as completion, at a given time, results mainly from decisions taken several years earlier. We have nevertheless used the approach adopted for analysis in terms of intake, comparing average annual increases in PCR registered before and after 2000/01. This is presented in graph 2.5. Again, the countries are to be differentiated according to their initial completion level.



Graph 2.6: Average annual increase in PCR: 1990-2000 and 2000-2004, Africa region



Source: Authors' calculations based on UIS and national data

Once more, the simple average of the annual increase in percentage points registered on the PCR is specified in brackets for each group of countries, before and after 2000/01.

• **Countries with a PCR below 30% in 1990/91**
(Average 1990-2000: 1.05; average 2000-2004: 3.03)

Amongst the countries with a very low completion level in 1990/91, only two registered a drop in the progression towards UPE starting 2000/01. After showing the highest increase, on annual average between 1990/91 and 2000/01, Mali has been faced with a distinct slow-down shifting from an annual increase of over 3 points to 0.3 on the recent period. The same goes for Malawi.

The other countries made substantial progress with regard to their evolution over the 1990-2000 period: thus Mozambique moved from an annual decrease of 0.77 points to an annual increase of over 5 points after 2000/01. Niger experienced a definite change: after stagnating around 18%, the average annual increase in PCR was multiplied by almost 19 to arrive at an annual increase of 2.6 points. Niger's PCR has in this way increased by around 60% between 2000/01 and 2004/05 rising from 18 to 28%. Ethiopia is in a similar position. Other countries, such as Benin or Guinea have registered a radical change in rate of increase (x 7 for Benin and x 4 for Guinea), whereas Eritrea and Ethiopia have registered a more modest change.

The group's annual average increase has risen substantially, from 1.53 before 2000/01 to 2.71 afterwards, with a higher average observed on the recent period.

- **Countries with a PCR of between 30 and 50% in 1990/91**
(Average 1990-2000: **0.65**; average 2000-2004: **1.82**)

Amongst those countries with a low completion rate at the start of the period, there are several possible scenarios: on the one hand, Burkina Faso, Côte d'Ivoire, Rwanda and Burundi moved from an annual decline for the 1990-2000 period¹⁵ to a marked revival; on the other hand, Mauritania, Gambia, Uganda and Togo moved from a period marked by high increases to a more or less significant annual drop. The upward trend has been confirmed for Equatorial Guinea and Comoros. It has been amplified for countries such as Madagascar, Senegal and Morocco and, to a lesser extent, Sudan, with the first three countries registering average annual increases that have changed radically from one period to another. Senegal registered the biggest change in rate of progression insofar as its completion level, which had remained stable between 1990/91 and 2000/01 (40%), registered an increase of 10 percentage points on the recent period. For the group as a whole, the average annual increase registered on the PCR has been multiplied by almost three after 2000/01 shifting from a simple average of 0.65 for the 1990-2000 period to 1.82 for 2000-2005.

- **Countries with a PCR of between 50 and 80% in 1990/91**
(Average 1990-2000: **0.55**; average 2000-2004: **2.40**)

Out of all the countries that had what could be qualified as an intermediary completion level in 1990/91, Cape Verde is the only one to register an average annual fall of over 5 percentage points since 2000/01 (current PCR is 81%), following a period of high growth, which enabled an increase in PCR from 54% to 97% between 1990/91 and 2000/01 (average annual gain slightly over 3.5 percentage points). In the other countries, there is either a transition from a period of stagnation to a high increase in terms of completion (Congo, Gabon and Ghana), or an intensification in the annual increase registered since 1990/91: this is the case for Lesotho and Kenya, but also for Algeria and Tunisia. The last three countries had a PCR close to 100% in 2004/05.

The global trend for this group of countries was also for a sharp change in rate of increase in PCR insofar as the average annual increase registered was multiplied by 4 after 2000/01, rising from 0.55 for the 1990-2000 period to 2.4 between 2000 and 2004.

- **Countries with a PCR of over 80% in 1990/91**
(Average 1990-2000: **-0.08**; average 2000-2004: **-0.06**)

The six countries with a high primary completion level in 1990/91 have recently followed a variety of trends. Three countries do, however, stand out due to the unexpected trend observed from 2000-2004. Egypt and above all South Africa first of all, with completion levels of over 90% in 2000/01, have seen a rise in their annual increase (multiplied respectively by 1.5 for Egypt and 4 for South Africa), enabling them to reach the symbolic threshold of 100%. For South Africa, this represented a total increase of 10 percentage points between 2000/01 and 2004/05, which is equivalent to the total growth for the 1990-2000 period. On the other hand, a country like Namibia, which was at the same level as South Africa in 2000/01, underwent a fall in its PCR of around 15 percentage points between 2000/01 and 2000/05 (from 90% to 75%).

The simple observations that have just been made regarding the average annual increases at completion level show that these have been, globally, more substantial since 2000/01. Some groups of countries have experienced a considerable change of pace, with their average increase multiplied by 3 or 4. Finally it is noted that the group of countries with a low completion level in 1990/91 has registered the highest average increase (3.03) over the recent period.

¹⁵ Connected, for Rwanda and Burundi, to the socio-political events that these two countries have been through in the 1990's.

2.4 A word on repetition

We have just seen then that the quantitative expansion of the African education systems has brought about substantial increases in intake and completion, with an upward trend for these indicators at a more sustained pace starting 2000/01 (or closest year), for a variety of PCR and AIR levels initially. It is interesting to note that on a parallel with this progress, there has been a general decrease in repetition since 1990/91. This is what is suggested by graphs 2.7 and 2.8 setting out the percentages of repeaters observed on the African continent in 1990/91, 2000/01 and 2004/05 or closest years.

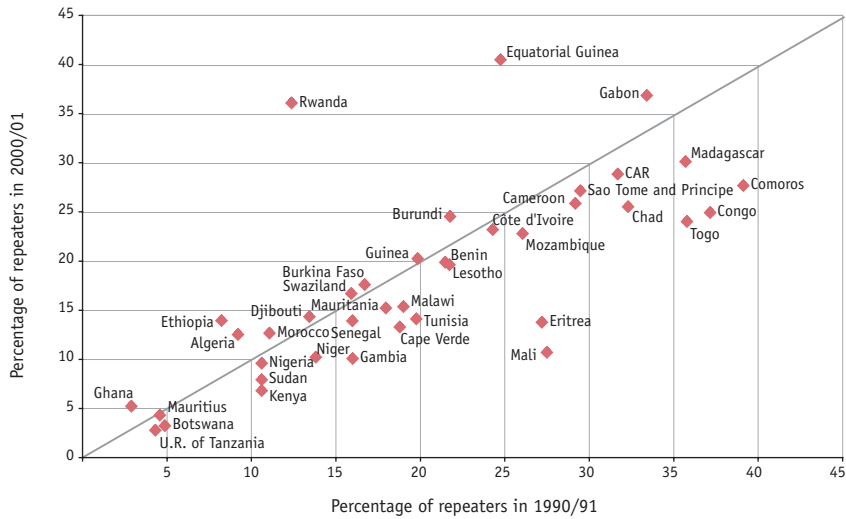


© UNESCO BREDA - Mario Bels

Over and above the average and continual decrease suggested, it is interesting to notice that amongst the countries with a higher percentage of repeaters in 2004/05 than in 2000/01, there are:

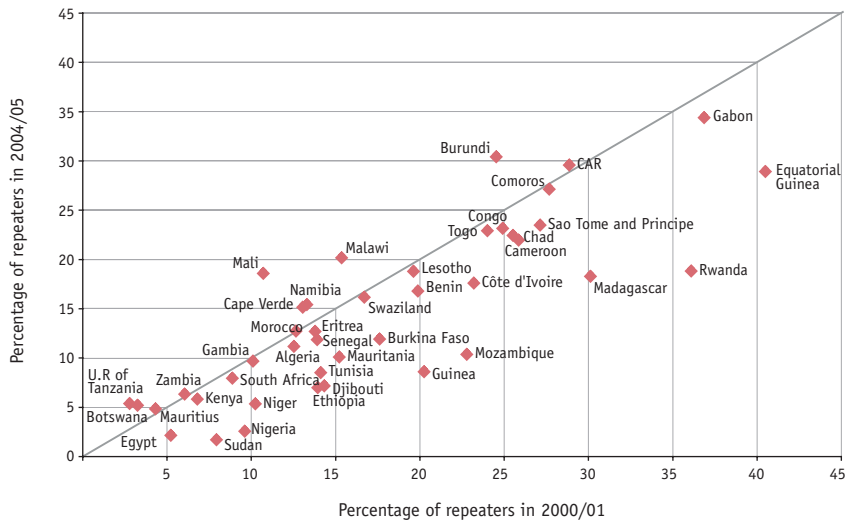
- Countries with a 2004/05 completion level lower than in 2000/01 (Central African Republic, Togo, Malawi, Cape Verde and Namibia);
- Countries where the PCR growth rate has slowed down over the 2000-2004 period (Mali and to a lesser extent Botswana);
- Countries where the trend accumulated since 1990/91 has led either to a stagnation in completion (Comoros) or to a fall in completion (Burundi, United Republic of Tanzania and Zambia).

Graph 2.7: Percentage of repeaters in 1990/91 and 2000/01 (or closest years)



Source: Authors' calculations based on UIS and national data

Graph 2.8: Percentage of repeaters in 2000/01 and 2004/05 (or closest years)

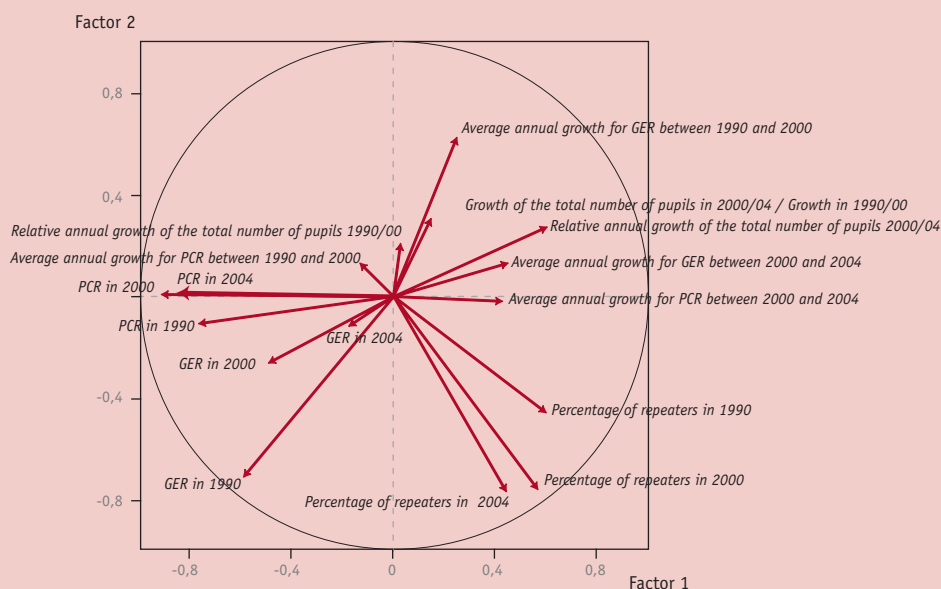


Source: Authors' calculations based on UIS and national data

Box 2.1 compares these results with the intake and completion trends observed by using more complex statistical techniques.

Box 2.1: The global description of the evolution in primary enrolments

Using factorial techniques, it is possible to examine globally the evolution in primary enrolments for the two periods 1990-2000 and 2000-2004, for all the African countries.



The graph above summarizes the features characterizing the evolution of primary enrolment in Africa between 1990/91 and 2004/05. On this graph, the variables represented explain 45% of the variance observed. The indicators near the circle (correlation circle), on the one hand, are those that bring in the most differences between countries. On the other hand, the differences between countries according to the indicators situated close to the centre of the circle are smaller.

First of all, a progressive convergence in terms of primary intake can be observed. Indeed, although there were very marked differences between countries according to the AIR level in 1990/91, these have been progressively reduced, and appear to be much less marked at the present time. The opposition between the 1990/91 AIR and the average annual increase in intake between 1990/91 and 2000/01 confirms this trend: countries that have made the most progress are those with a low level of access in 1990/91. **Finally, it is to be noted that structural efforts are a condition of evolution in access :** countries with a high AIR in 2000/01 and 2004/05 are either those that already had high access in 1990/91 or else those which made the most progress between 1990/91 and 2000/01.

From a point of view of primary completion, the differences between countries in 2000/01 and 2004/05 are seen to be just as distinct as in 1990/91. There is therefore not the same convergence as on access. **This indicates that in average, retention deteriorated in the countries where access increased the most, over the 1990-2004 period.**

Finally, concerning the level of repetition, an initial observation is that the differences between countries appear to be structural. Countries with the highest levels of repetition in 1990/91 are also those where repetition was the most frequent in 2000/01 and 2004/05. Moreover, the relationship between primary completion and the level of repetition is negative: countries with the highest completion levels are on average those with the least repetition.

3. Looking back at the projections regarding the perspectives of reaching universal education by 2015

This section looks back at the projections made in 2005¹⁶ for primary completion on the horizon of the 2014/15 school year, and which it is appropriate to update in the light of the latest school statistics¹⁷. The method used here is quite different from the one used in 2005 as it is based on the most recent possible (2004/05 or closest year) schooling conditions (intake, completion and survival), as far as the information is available¹⁸.

Next, this is a simpler method (cf. box 2.2). It is just as sensitive to short term evolution with regard to both intake and survival, which results in some extensive differences as it will be seen later on.

The only countries not included in the present exercise are those for which information in terms of intake, survival and/or completion fluctuates too much from one year to another, or is simply not available: Angola, Guinea-Bissau, Equatorial Guinea, Liberia, Uganda, Democratic Republic of Congo, Sierra Leone, Somalia, Rwanda and Libya.

The exercise was thus conducted on 43 countries, including those that could be considered close to UPE, i.e. with a primary completion rate of over 90%¹⁹ in 2004/05. Indeed, the hypothesis by which those countries close to UPE can be considered as having durably reached the Dakar goal has shown its limits in the specific case of some countries like Namibia for example.

Box 2.2: A simplified method of projection

This takes into account a full course of primary education, of d duration, in an attempt to forecast the access rate to the last grade on the horizon of 2014/15, on the basis of the most recent schooling conditions.

The method used is based on:

- primary completion rate in 2004/05, or closest year ($PCR_{2004/05}$)
- primary apparent (gross) intake rate in 2004/05, or closest year ($AIR_{2004/05}$)
- the most recent survival rate (SR) calculated using the pseudo-longitudinal method²⁰.

$$SR_{t,t+1} = \prod_{i=\text{second grade of primary education}}^{\text{last grade of primary education}} \frac{\text{New entrants in a given grade } i, \text{ school year } t,t+1}{\text{New entrants in previous grade } (i-1), \text{ previous year } (t-1,t)}$$

Once the survival rate has been calculated, it is applied to the apparent (gross) intake rate, to provide an initial estimate of the access rate to the last grade of primary education for the base year + the duration of that level of education (for example, if the latest AIR available is the one for 2002/03 and the full course of primary education lasts 6 years, this gives an estimate of the PCR for 2007/08):

$$PCR_{2004/05+d-1} \approx AIR_{2004/05} \times SR$$

The estimated progression between this basic year and the first projected year is then applied (in a linear manner) to the remaining period up to 2014/15:

$$PCR_{2014/15} = PCR_{2004/05+d-1} + (2014 - (2004+d-1)) \times \left[\frac{PCR_{2004/05+d-1} - PCR_{2004/05}}{2004+d-1 - 2004} \right]$$

This relatively basic method proves however to be extremely sensitive to the variations in intake and survival rates in the short term.

16 Cf. UNESCO BREDIA Dakar +5 Report (2005).

17 Data used was for 2002/03, or closest school year.

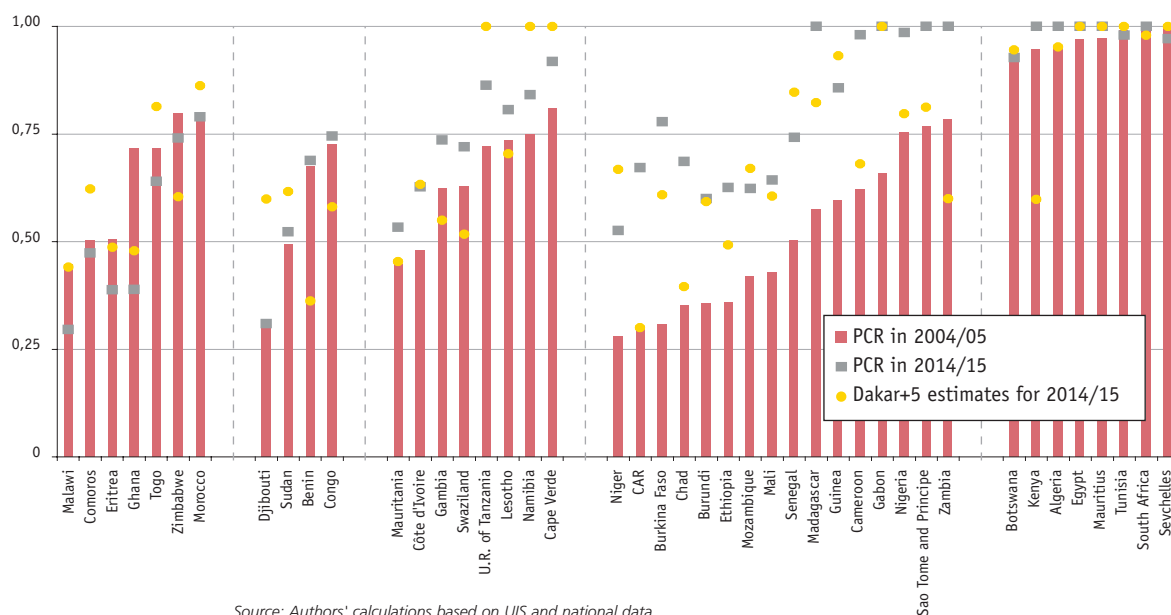
18 The method employed in the Dakar +5 Report used the average survival conditions, in favour thus of countries where a drop in survival was noted in primary education, and at the disadvantage of countries where substantial progress had been made in terms of survival.

19 The hypothesis by which countries with over 90% completion could be considered as having reached UPE has shown its limits, particularly in the case of Namibia: this country was considered as close to the goal in 2005, but has experienced a marked fall in terms of completion between 2002/03 and 2004/05.

20 For more information, cf. Reuge (2004b).

The results are shown in graph 2.9 and compared with the projections made in 2005. We shall revert to the differences between these two estimates later.

Graph 2.9: Primary completion rate on the 2014/15 horizon, revised estimates



Source: Authors' calculations based on UIS and national data

Four groups are obtained by ranking countries as to expected trends in evolution. However, as countries with a PCR of over 90% have to be handled differently, we have chosen to rank them in five groups:

- Countries where a fall is expected in completion rate, seeming to lead them away from the goal of UPE by 2014/15: this trend has been confirmed for Zimbabwe, Ghana and Malawi. Countries for which this trend was not expected in 2005 are also to be found in this group: Comoros, Togo, Eritrea and Morocco; for the latter two countries, it is more a question of stagnation rather than a downward trend;
- Countries where there is very little evolution (under five percentage points between now and 2014/15), with the situation therefore virtually stagnating between now and 2014/15. This is cause for concern insofar as this group's current completion level is under 75%. The scenario does appear more optimistic, in spite of everything, for Benin and Congo than it was in the projections made in 2005;
- Countries with an increase of between 5 and 15 percentage points, insufficient for all countries in the group to reach the Dakar goal by 2014/15. The current scenario is more optimistic for all countries in the group, with the exception of Cape Verde and the United Republic of Tanzania, which have experienced a large drop in their AIR levels in recent years: for example, in the United Republic of Tanzania it fell from 129% in 2002/03 to 110% in 2005/06, with no significant improvement in retention;



© UNESCO BREDA - Mario Bels

- Countries where the increase is expected *a priori* to be high, over 15 percentage points, allowing some of them to reach the goal by 2014/15. This is the case, for example, for Zambia, Cameroon or Madagascar, where the scenario is more optimistic than in the earlier report due to a substantial increase in their intake level in recent years. It can be noted that while the trends in countries such as Niger, CAR, Chad or Burkina Faso will probably not enable them to be on time for the Dakar goal, the pace of their evolution should enable them, by then, to multiply their current primary completion level by two, which obviously represents considerable progress ;
- Countries with a PCR of over 90% and which should theoretically all be on time for the 2015 goal, as previously forecast, with however the exception of Kenya²¹.

Table 2.4 also indicates the differences observed between the 2005 projections and current projections. It can be observed that:

- for 12 countries, the gap between the two projection dates is relatively small, below 5 percentage points in absolute value: most countries where the PCR is currently over 90% are to be found here. The case of Côte d'Ivoire is peculiar in that the information structure has not changed since 2002/03. For the other countries, trends in evolution remain modest, upward or downward, both in terms of intake and survival;
- 17 countries, on the one hand, show more optimistic primary completion levels in 2014/15 than forecast in 2005. For the most part, this can be explained mainly by a very high increase in intake since 2002/03 (Madagascar + 30 percentage points, Burkina Faso + 20 points, Mauritania + 10 points, Chad + 15 points), with no significant modification to survival over the same period²².
- 14 countries, on the other hand, now show less optimistic trends than those envisaged in 2005. In most cases, this is the result of a deterioration in intake indicators (Cape Verde and United Republic of Tanzania) or survival indicators like for example Senegal, Guinea or Niger. The case of the latter three countries well illustrates the fact that progress in terms of intake is not enough and that it is necessary to identify the conditions of optimum retention in order to be able to achieve the UPE goal.

21 The difference in projections can be explained in this case by a purely technical criterion insofar as in 2005, the international classification indicated duration of seven years for a full course of primary education in Kenya, whereas duration of six years is more appropriate.

22 The differences noticed for the Central African Republic, and to a lesser extent Congo, can be partially explained by a better knowledge of the sector and an adjustment in administrative statistics conducted in the framework of the CSR exercises finalized early 2007.

Table 2.4: Comparison in projections 2005 and 2007

	Number of countries	Countries (in brackets, projection gaps in absolute percentage point values)
Projection 2007 = Projection 2005	12	Côte d'Ivoire (1), Burundi (1), Mozambique (5), Mali (4), Gabon(0), Botswana (2), Algeria (5), Egypt (0), Mauritius (0), Tunisia (2), South Africa (2), Seychelles (3)
Projection 2007 > Projection 2005	17	Mauritania (8), Lesotho (10), Ethiopia (13), Zimbabwe (14), Congo (16), Burkina Faso (17), Madagascar (18), Gambia (19), Swaziland (19), Sao Tome and Principe (19), Nigeria (19), Chad (29), Cameroon (30), Benin (33), Central African Republic (37), Zambia (40) Kenya (40),
Projection 2007 < Projection 2005	14	Morocco (7), Guinea (7), Cape Verde (8), Sudan (9), Ghana (9), Eritrea (10), Senegal (11), United Republic of Tanzania (14), Niger (14), Malawi (15), Comoros (15), Namibia (16), Togo (17), Djibouti (29)
	43	Absolute gap simple average = 5

Source: Author's calculations based on UIS and national data

Finally, it is noted that, according to current projections, 28 out of the 43 countries for which data is available may not manage to reach UPE on the horizon of 2015 (their PCR would still be under 90% in 2014/15), with 22 showing particularly low completion levels (under 75%). These projections are however more optimistic than those made in 2005, when it was forecast that 31 countries would not be on time for the 2014/15 goal (cf. table 2.5).

Table 2.5: Situation of African countries with regard to the 2014/15 UPE goal

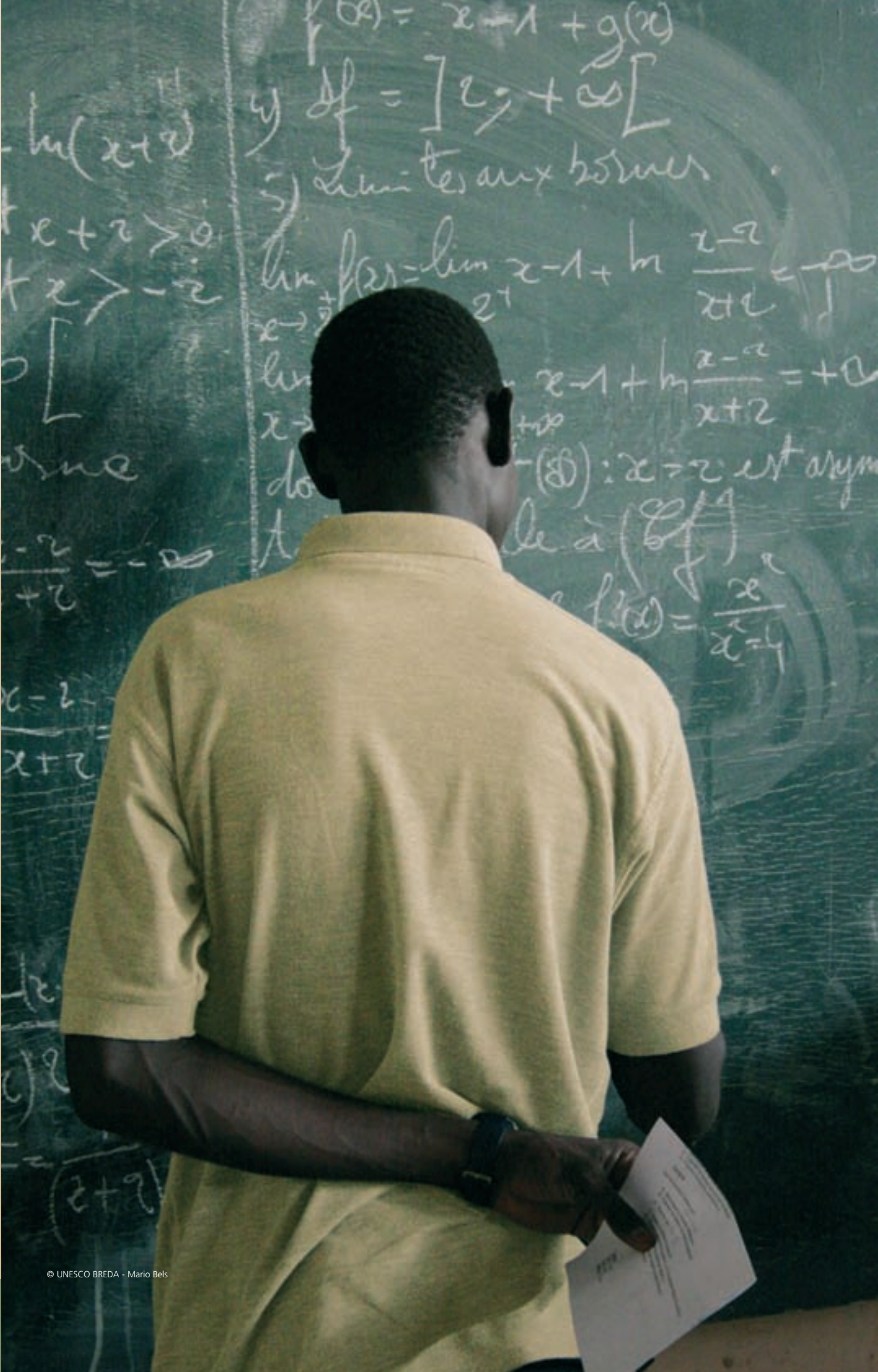
		Projections based on 2004/05 data or closest year			
		PCR 2014/15 over 90%	PCR 2014/15 between 75% and 90%	PCR 2014/15 under 75%	Number of countries
Projections based on 2002/03 data or closest year	PCR 2014/15 over 90%	Cape Verde, Gabon, Botswana, Egypt, Algeria, Mauritius, Tunisia, South Africa, Seychelles	United Republic of Tanzania, Namibia, Guinea		12
	PCR 2014/15 between 75 and 90%	Madagascar, Nigeria, Sao Tome and Principe	Morocco	Togo, Senegal	6
	PCR 2014/15 under 75%	Zambia, Cameroon, Kenya	Lesotho, Burkina Faso	Comoros, Eritrea, Ghana, Zimbabwe, Djibouti, Sudan, Benin, Congo, Mauritania, Côte d'Ivoire, Malawi, Gambia, Swaziland, Niger, Central African Republic, Chad, Burundi, Mozambique, Mali Ethiopia	25
	Number of countries	15	6	22	43

Source: Author's calculations based on UIS and national data

4. Conclusion

Intake capacity in primary education varies tremendously throughout Africa and even when there are sufficient places - 28 countries had a GER of over 100% in 2004/05 - many children are not able to attend a full course of primary education. Africa therefore still has some distance to cover in order to reach UPE, with progress necessary both in terms of intake and, above all, in managing pupil flow (repetition and survival). Data on recent evolution suggests better dynamics since 2000/01 for both primary intake and completion: some countries have even made considerable progress, as a result of effective mobilization towards the Dakar goal. However, these dynamics will not suffice for achieving UPE: indeed, if current schooling conditions continue, both in terms of intake and survival, then it is estimated that 27 countries will have a primary completion rate of below 90% in 2014/15 and 21 would even be under the threshold of 75%. These projections are, due to recent trends, more optimistic than the 2005 projections insofar as it was estimated that 31 African countries would be under the 90% completion mark. They are nonetheless cause for concern as they mean that at least 25% of children belonging to the official age group for the final grade of primary school will be unable to complete primary education. These projections are valid however under current schooling conditions: there is therefore some possible leeway and improvements in terms of intake and survival could act as a springboard for Africa to reach more optimistic scenarios.





$f(x) = x - 1 + g(x)$
 $y) df = [2; +\infty[$
 5) limites aux bornes.
 $x + 2 > 0$
 $x > -2$
 $\lim_{x \rightarrow +\infty} f(x) = \lim_{x \rightarrow +\infty} x - 1 + \ln \frac{x-2}{x+2} = +\infty$
 $\lim_{x \rightarrow -2^+} f(x) = \lim_{x \rightarrow -2^+} x - 1 + \ln \frac{x-2}{x+2} = +\infty$
 $\lim_{x \rightarrow -2^-} f(x) = \lim_{x \rightarrow -2^-} x - 1 + \ln \frac{x-2}{x+2} = -\infty$
 do $(\mathcal{D}) : x = 2$ est asym
 le $a(\mathcal{D})$
 $f(x) = \frac{x}{x-4}$

DAKAR +7
EDUCATION FOR ALL IN AFRICA

C H A P T E R 3

Post-primary levels and enrolment dynamics¹

Focussing on Universal Primary Education has partly overshadowed structured thinking on secondary education; now, seven years on from Dakar 2000, due to the significant progress in primary completion registered by the African countries, there is a question mark on the future of these children, and interrogations, as to the relevance for them to continue on in large numbers into general and technical secondary education. What is the current situation of post-primary education? Are growth dynamics in secondary enrolments cause for concern? This chapter intends to address these issues by putting the accent on the wide diversity of situations throughout the continent; it therefore promotes sector-wide policies in line with national contexts.

1 NB: only countries, for which data is available, subsequent to the 2003/04 school year, are taken into account in this chapter. Angola, Gabon, Guinea-Bissau, Equatorial Guinea, Liberia, Libya, Democratic Republic of Congo, Seychelles, Somalia and Zimbabwe are therefore excluded from most analysis.

Chapter 2 illustrated the undeniable progress made by Africa in terms of primary enrolment, even though some doubts may subsist regarding the capacity of a still significant number of countries to achieve primary education completion for all by 2015. The progress made is therefore very encouraging, but these dynamics do give rise to questions as to what will become of the pupils completing primary education today, questions which may have been overshadowed by the priority granted to UPE (a priority which is obviously necessary and which must continue in those countries still far from the goal).

It is therefore very necessary to give consideration to post-primary education and, firstly, to look into the current development of these levels of education and their dynamics. What type of education is provided to children completing primary education today and what proportion of children continue their schooling? What is the level of development of post-primary education? Do the fast development of primary education and the progress made in primary completion generate every increasing flow of pupils entering secondary education? Is the impression of a sudden massive arrival of pupils in secondary education founded?

The first section of this chapter will outline the situation of post-primary education, looking at coverage, flows and internal effectiveness of the different levels without neglecting the issue of gender disparities or teaching conditions. The second section will analyze post-primary dynamics by giving consideration essentially to general secondary education, in order to discover if there is growing pressure to enter this sub-sector and to what extent this results from the expansion of primary education.



1. Current status: many different situations throughout the continent

1.1 Post-primary coverage

Post-primary education refers to three types and levels of education; these are general secondary, technical and vocational education and training (TVET), and tertiary education. This section will examine schooling at each of these levels, data permitting.

1.1.1 General secondary: situations ranging from very marginal access to almost universal access

Institutional aspects

Each country has its own education system organization. In the previous chapter, among the differences already noted in primary education, there was duration. General secondary education is often longer than primary education and broken down into two levels, lower and upper secondary, resulting in an even greater number of configurations.

With the exception of Ethiopia, Kenya and Malawi², to be handled separately (see box 3.1), general secondary education consists in two levels everywhere, each level varying in duration from 2 to 4 years. Table 3.1 provides a distribution of the different countries according to the duration of each secondary level.

Table 3.1: Breakdown of countries as to the duration of each level of general secondary education

		Duration of lower secondary		
		2 years	3 years	4 years
Duration of upper secondary	2 years		Botswana, Lesotho, Mozambique, Namibia, Swaziland	Uganda, U.R. of Tanzania
	3 years	South Africa, Sao Tome and Principe, Sudan, Zambia	Algeria, Egypt, Gambia, Ghana, Mali, Morocco, Nigeria, Sierra Leone	Benin, Burkina Faso, Burundi, Cameroon, Comoros, Congo, Côte d'Ivoire, Djibouti, Guinea, Madagascar, Mauritania, Niger, CAR, Senegal, Chad, Togo
	4 years	Cape Verde	Eritrea, Mauritius, Tunisia	

Source: Authors' calculations based on UIS data

Enrolments

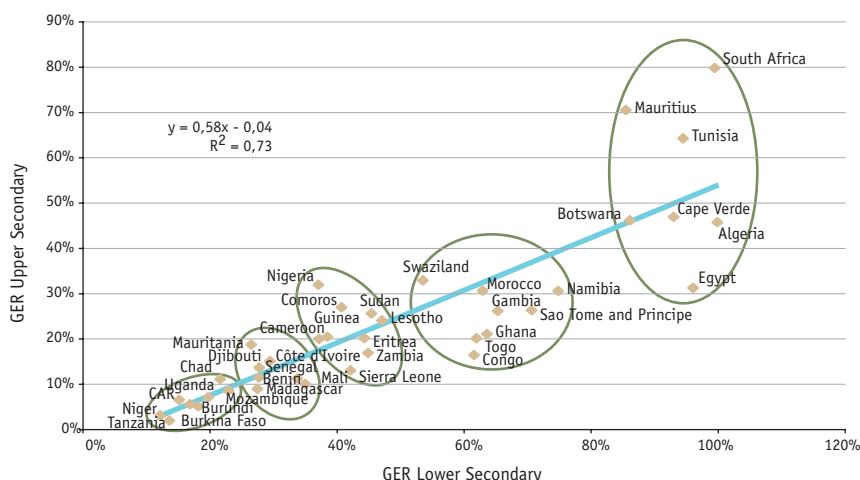
In 2005 in Africa, one out of two children on average³ has access to lower secondary education and more than one out of three completed that level, whilst one out of four children reaches upper secondary education. The average gross enrolment rate (GER) in Africa is 49% for lower secondary and 24% for upper secondary, with access rates of 48% and 24% respectively and completion rates of 37% and 17% respectively.

² Ethiopia, Kenya and Malawi have specific structures, which do not allow comparing them with other countries. Indeed, in these three countries, primary education lasts eight years and is followed by secondary education lasting four years (2+2 for Malawi). While the last years of primary education can be put in the same category as lower secondary education curricula-wise, the fact that the eight years are incorporated in one course of education and so in a single school produces very different transition mechanisms and makes comparison delicate.

³ Country averages.

This situation conceals huge disparities: graph 3.1 shows the cloud of points for 39 countries according to the GER in the two levels of general secondary education. The correlation between the developments of the two levels is obvious, with consistently less coverage in upper secondary than in lower secondary.

Graph 3.1: GER in the two levels of secondary education in 2004/05 (or closest year)



Source: Authors' calculations based on sectoral analysis and UIS data

According to the levels of GER, five more or less homogeneous groups can be differentiated:

- Group 1: very low development of secondary education (Burkina Faso, Burundi, Mozambique, Niger, Uganda, CAR, Tanzania and Chad)

All these countries are characterized by the low development of their secondary education: on average, one in five children have access to this level of education and under one in 20 complete upper secondary education. The GERs are very low, between 12% and 25% for lower secondary and 2% and 11% for upper secondary : they result from particularly low access rates and very low survival rates (under 50%), with the exception of Mozambique and Uganda.

	Lower Sec.	Upper Sec.
GER	18%	6%
Access	20%	6%
Completion	10%	4%

- Group 2: low development of secondary education (Benin, Côte d'Ivoire, Djibouti, Madagascar, Mali, Mauritania and Senegal)

The second group is made up of countries with a low development of secondary education but with access and survival rates 10 points higher than group 1 in lower secondary education and twice as high in upper secondary. One child in every three has access to lower secondary education and survival is better overall than in group 1 (two-thirds of pupils entering lower secondary education complete that level).

	Lower Sec.	Upper Sec.
GER	30%	13%
Access	31%	12%
Completion	20%	10%

- Group 3: moderate development of secondary education (Cameroon, Comoros, Eritrea, Guinea, Lesotho, Nigeria, Sierra Leone, Sudan and Zambia)

The third group includes countries where secondary education has already taken on a certain importance, with average access and completion rates 10 points higher than the previous category. In all cases, access rates to lower secondary are around 40%, but development of upper secondary varies considerably, with GERs between 13% for Sierra Leone and 32% for Nigeria.

	Lower Sec.	Upper Sec.
GER	42%	22%
Access	43%	22%
Completion	33%	19%

- Group 4: fairly well developed secondary education, especially lower secondary (Congo, Gambia, Ghana, Morocco, Namibia, Sao Tome and Principe, Swaziland and Togo)

This group comprises countries where over one child out of two has access to secondary education. When compared to lower secondary, upper secondary is little developed in that group, with the exception of Swaziland : GERs and access rates for upper secondary are very close to those in the previous group, while values for lower secondary are considerably higher.

	Lower Sec.	Upper Sec.
GER	64%	26%
Access	63%	26%
Completion	46%	19%

- Group 5: highly developed secondary education (South Africa, Algeria, Botswana, Cape Verde, Egypt, Mauritius and Tunisia)

The last group is clearly apart from the other countries, with a GER close to 100% in lower secondary. However, there are major disparities in the development of upper secondary, with, on one hand, a high development of this level of education in South Africa, Tunisia and Mauritius, and, on the other hand, four countries where upper secondary GERs and access rates are under 50%.

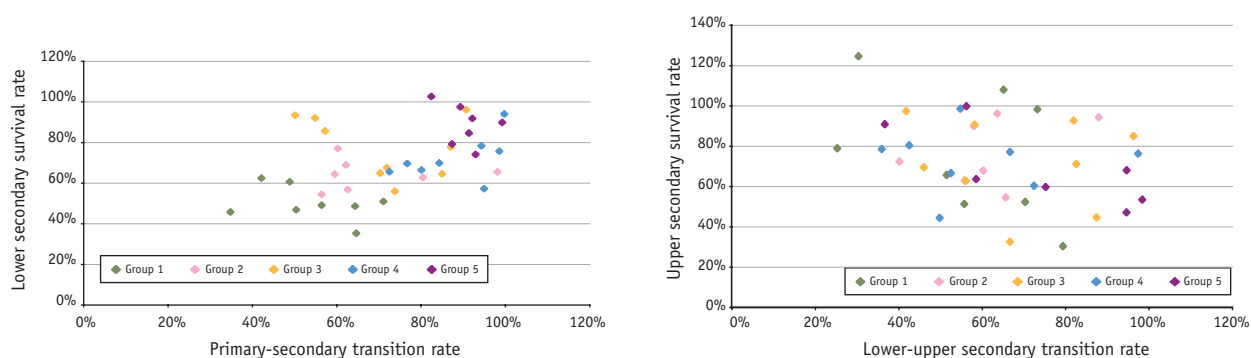
	Lower Sec.	Upper Sec.
GER	94%	55%
Access	88%	57%
Completion	78%	37%

Pupil flows

The previous classification, while giving a good indication of disparities in terms of GER and access to secondary education, does not give any information on flow indicators and regulation, whether deliberate or not. In fact, no significant correlation is observed either between flow indicators (transition between levels and survival within levels) and stock indicators or between flow indicators themselves. In Zambia, for example, transition between primary education and lower secondary education is low (one in two children completing primary education move on to secondary education) while survival within the level is very high, since virtually all children reaching lower secondary education complete it: this is a typical case of deliberate regulation. On the opposite, in Swaziland, transition between primary and secondary education is universal while survival in secondary education is low (one child in two entering lower secondary education completes that level). In the same way, high transition or survival rates do not necessarily go along with high access rates.

Graphs 3.2 and 3.3 indicate transition rates and survival rates for each level of secondary education in 2005, and the group to which the country belongs.

Graph 3.2 and 3.3: Transition and survival rates in lower and upper general secondary education in 2004/05 (or closest year)



Source: Authors' calculations based on sector analysis and UIS data

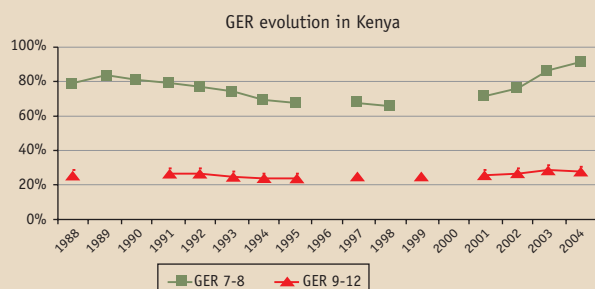
While some coherence can be seen between the two flow indicators (transition rate and survival rate) and the level of development for lower secondary education (countries in the same group are represented by points more or less close together on graph 3.2), this is not the case for upper secondary. As a result, the typology established, although informing on the different levels of development of the system, masks the extreme variability of transition and survival rates, especially in upper general secondary education.



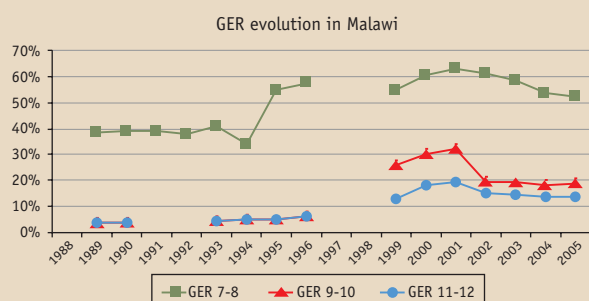
© UNESCO BREDA - By Reg'

Box 3.1: Cases of Ethiopia, Kenya and Malawi

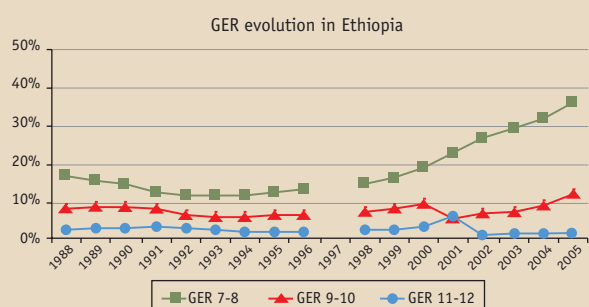
In Ethiopia, Kenya and Malawi, primary education lasts eight years and leads on to a four-year course of secondary education. With regard to curricula and in order to comply with international standards, these eight years are often divided up into 6+2 years, the last two years corresponding to lower secondary. Here, we shall therefore look at schooling in the last two years of primary education and in secondary education. In addition, unlike Kenya, secondary education in Ethiopia and Malawi is subdivided into two levels each lasting two years. Finally, Malawi introduced free primary education in 1994, which directly resulted in a sudden rise in pupil numbers and of enrolment rates is therefore very different in each of the three countries.



In Kenya, the GER in the two last years of primary education declined and then stagnated for the whole 1990 decade, before distinctly rising to reach 90%. As for general secondary education, while there has been a slight increase in the number of pupils since 2000, the GER has stagnated around 28%: since 1988, it remains between 25% and 28%.



The introduction of free primary education in Malawi, in 1994, resulted in a massive pupil influx and a sudden rise in GER in the last two years of primary education; this had repercussions on GER in lower secondary education three years later; the early 2000's marked a general drop in GERs. The question is to know whether this downward trend will be confirmed in the coming years or if it is just the consequence of the sudden increases noted in the mid 1990's.



As for Ethiopia, a regular increase in enrolment rates is observed in the last two years of primary education, but also stagnation, even a fall, in these rates in the four years of secondary education, levelling off at 15% and 2%: the increase in primary enrolment has therefore not resulted in acceleration in access to secondary education.

Finally, the development of primary schooling has been very different in each of these three countries but they all show a relative stagnation of schooling in secondary education.

Source: Authors' calculations based on UIS and national data

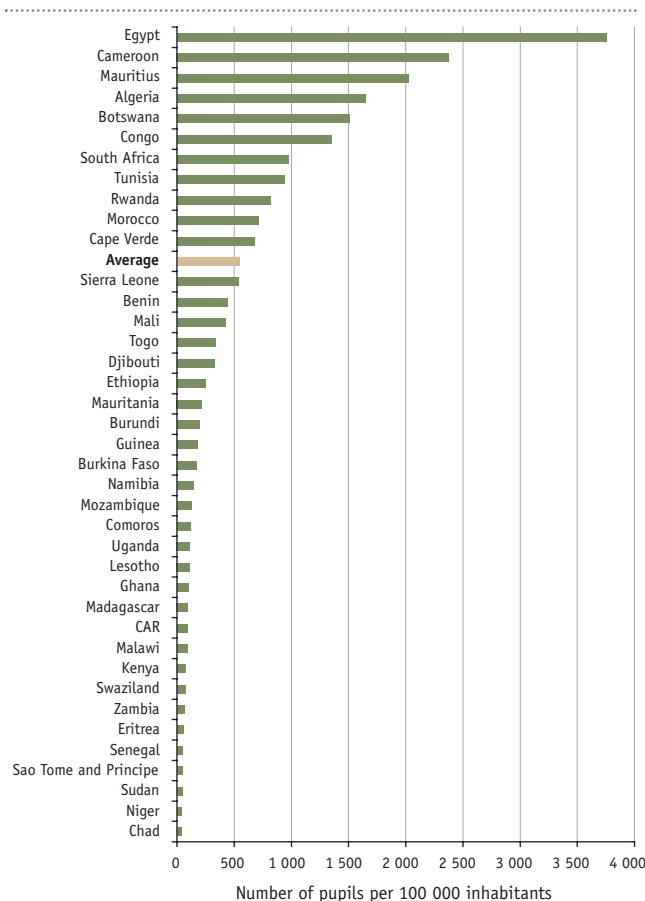
Repetition, practised in very different ways

The issue of repetition is often raised at primary school level. The different studies made on this subject show that it curbs UPE by encouraging dropping out. Repetition is both costly and very much contested in terms of educational effectiveness. It has been analyzed much less in secondary education although the stakes are just as important. Therefore, in order to report on the internal effectiveness of African countries in post-primary education, an evaluation of the scope of repetition in secondary education seems appropriate.

Repetition practices in secondary education vary greatly: in 2004/05, the percentage of repeaters extended, in lower secondary education, from under 1% (Botswana) to over 34% (Sao Tome and Principe), and in upper secondary education from under 1% (Namibia, Tanzania and Botswana) to 31% (Sao Tome and Principe).

Generally speaking, several countries (Algeria, Benin, Burkina Faso, Burundi, Cameroon, Cape Verde, CAR, Congo and Chad) still had a high percentage of repeaters in 2004/05 (over 20%), reducing their capacity to receive a higher number of pupils. Indeed, with a given budget constraint, repeaters fill places at the expense of new entrants, entailing a reallocation of expenditure in order to face up to classroom over-enrolment and needs in material, human and financial resources.

Graph 3.4: TVET coverage in 2004/05 (or closest year)



1.1.2 Technical and vocational education and training (TVET): very different policy choices

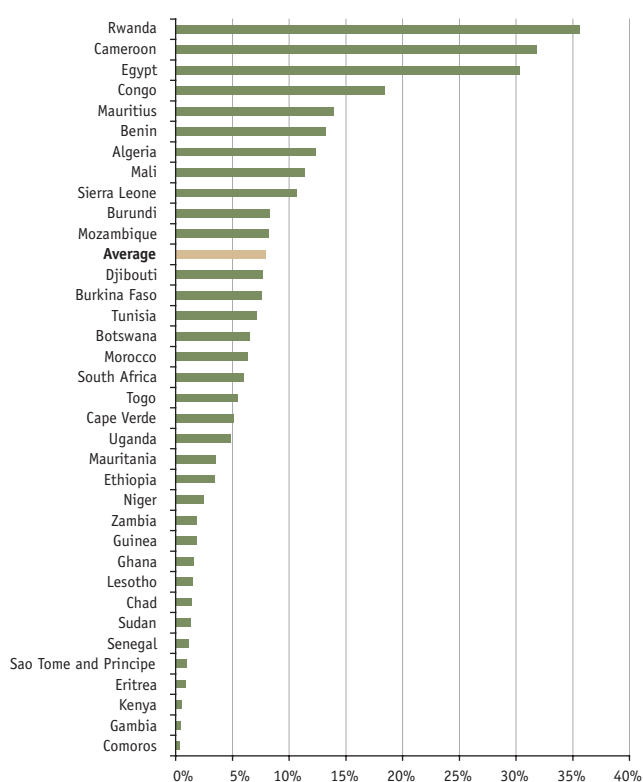
However, at continent level, taking the weighted average per the countries' demographic weight, coverage rises to 871 pupils per 100 000 inhabitants. The difference here reveals the variety of situations observed between countries where recent data is available. Some countries have less than 100 pupils in TVET for 100 000 inhabitants (Chad, Niger, Sudan, Sao Tome and Principe, Senegal and Eritrea) while others have over 1 000 pupils (Congo, Botswana, Algeria, Mauritius, Cameroon and Egypt).

Source: Authors' calculations based on sector analysis and UIS data

TVET coverage results from a policy choice to give more or less importance to this secondary education sub-sector; it is therefore important to complete the earlier description by examining the share represented by TVET at secondary level for each country. The country average is 8% but at the level of the continent, 14% of pupils enrolled in secondary education are in technical and vocational sections. The share of technical and vocational pupils varies widely, reflecting very different priorities granted to this type of education: while not exceeding 2% in ten countries (Comoros, Sao Tome and Principe, Kenya, Eritrea, Sudan, Senegal, Ghana, Guinea, Zambia and Namibia), it is over 30% in Egypt, Cameroon and Rwanda, where it reaches 36%.

Graph 3.5 shows, for countries where information is available, the variety of situations observed as to the share of TVET pupils in secondary education in 2004/05.

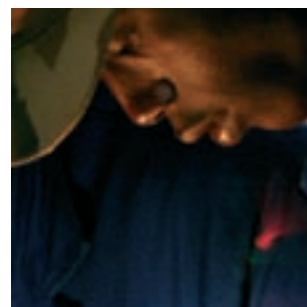
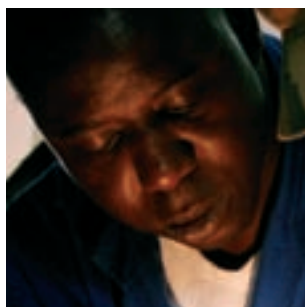
Graph 3.5: Share of TVET pupils in secondary education for 2004/05 (or closest year)



There is no clear relationship between the development of general secondary education and the share of technical and vocational secondary education. Some countries may have a fairly high (Ghana) or high (Egypt) general secondary GER and a low (Ghana) or high (Egypt) share of TVET; on the contrary, some countries where general secondary education is not very well developed may have a high (Benin) or low (Senegal) share of TVET. This highlights the independence of these two sub-sectors, which can occupy very different places in the elaboration of sectoral strategies depending upon the country.

Data available for TVET does not allow refining the analysis in this sub-sector, in particular for the issues of repetition and transition.

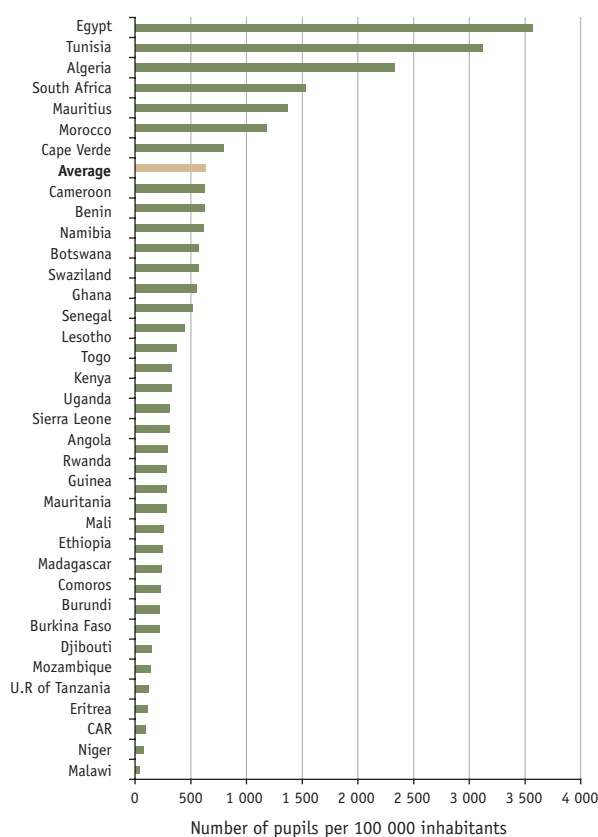
Source: Authors' calculations based on sector analysis and UIS data



1.1.3 Tertiary education

As for TVET, tertiary education coverage is evaluated in numbers of students per 100 000 inhabitants. Students are calculated at 985 per 100 000 African inhabitants; but if North Africa, where tertiary education is much more widely developed than on the rest of the continent, is excluded from that calculation, then the average for sub-Saharan Africa registers at 400 students per 100 000 inhabitants, and there again the averages hide a wide variety of situations depending upon the country. Out of the 37 countries where recent data is available (2004/05 or closest year), 23 count under 500 students per 100 000 inhabitants, 8 countries have between 500 and 1 000 students per 100 000 inhabitants and 6 countries over 1 000. In most African countries, there is therefore little development of tertiary education.

Graph 3.6: Tertiary education coverage in 2004/05 (or closest year)



Source: Authors' calculations based on sector analysis and UIS data

This last observation does not mean that tertiary education is insufficiently developed, but simply that in Africa, there are relatively few students; the relevance of more extensive tertiary education will be examined further in chapter 7.

The lack of finer data does not enable more detailed information on these observations, concerning, for example, subjects studied (science, arts) or type of institution (school, university). This is unfortunate as one of the characteristics of tertiary education, as opposed to primary education, and to a lesser extent general secondary, is that it is protean: tertiary education covers many different situations which cannot be apprehended by a simple quantitative description.



© UNESCO BREDA - By Reg'

Thus in 2004/05, there was a large variety of situations concerning the development of post-primary education whether in general secondary, TVET or tertiary education and it is impossible to generalize on these levels of education in Africa. The following section strives to analyze gender disparities in these levels of education.

1.2 Gender disparities are still significant

Generally speaking, in the same way as there are still well-known disparities between girls and boys in primary education, girls are in the minority in post-primary education.

All over Africa, girls represent less than half (45% on average) of the pupils in general secondary education. There again, there are profound differences: the share of girls in general secondary education extends from 24% in Chad to over 55% in Lesotho.

Graph 3.7 illustrates this diversity. In five countries, there are twice as few girls as boys whereas in nine countries there are more girls than boys.

Graph 3.7: Share of girls in general secondary education in 2004/05 (or closest year)



Source: Authors' calculations based on sector analysis and UIS data

It is important to underline that, while there is some relationship between the scope of the disparities and the development of secondary education, the correlation is far from perfect. In countries where general secondary education is highly developed, no disparity to the disadvantage of girls is noted, on the contrary: for eight countries with a GER in secondary education of over 60%, the share of girls is equal to or over 50%. In countries where secondary education is less extensively developed, a great variety of situations exists. The most striking example is no doubt that of Madagascar and Chad: while they have very similar secondary GERs (18% and 20% respectively), the share of girls is 50% in Madagascar compared to 24% in Chad.

In TVET, the share of girls is slightly lower and equal to 42%. It should be borne in mind that the share of girls in this level of education will very much depend on the courses of study on offer. Some courses of study may be designed more for females and others more for males: the diversity of what is on offer may thus explain to some extent why situations are extremely varied. In some countries, there are five to ten times fewer girls than boys (Comoros and Zambia) and in others there are just as many, even more (Burkina Faso, Lesotho and Ghana). Even so, it should be highlighted that girls are less numerous than boys in the great majority of countries.

In tertiary education, girls represent 40% (simple average) to 44% (weighted average) of the total number of students. For this level of education, the situation is more or less the same as it is for general education, although much more accentuated. Countries with few girls in tertiary education are the ones with an imbalance already in secondary education (Chad and Eritrea), just as parity is maintained in countries having achieved it in secondary education. Out of 31 countries where gender data is available for tertiary education, 12 countries show twice as few female students as male students, while seven countries show more.

In general, gender inequalities are more pronounced the higher the level of education, since they are accentuated between the two secondary levels (45% to 42% simple average), then between secondary and tertiary education (42% to 40% simple average). On the opposite, although gender inequalities in secondary education are high in many African countries, analysis of the evolution in these disparities since 2000 can lead to relative optimism. On simple average, the share of girls in general secondary education has risen from 42.5% to 44% and in almost all countries, the share of girls has stagnated or slightly increased, with the notable exception of Eritrea (and some countries where the share of girls was and remains higher than 50%).



© UNESCO BREDA - By Reg'

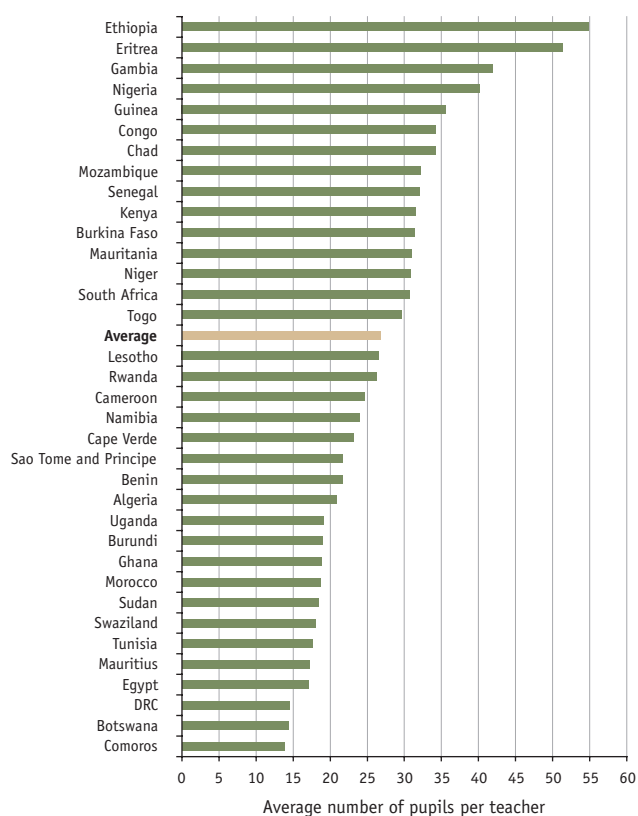
1.3 Pupil-teacher ratios

This section will look at pupil-teacher ratios for 2004/05 in secondary education (general and technical)⁴ and in tertiary education, in order to understand what the countries' policies are in terms of allocation of human resources.

Pupil-teacher ratio is to be understood as the number of pupils per teacher. Contrary to primary education where this indicator is interpreted without ambiguity, since each pupil has only one teacher, there will be question of more reserve here. Indeed, the indicator that could inform directly on teaching conditions in post-primary education would be the ratio of pupils per group of teachers; however, this indicator is only available for a limited number of African countries. This said, the pupil-teacher ratio does provide useful information on teaching conditions in post-primary education, particularly as it shows how the countries have managed the increase in post-primary pupil numbers at human resources level.

Graph 3.8 indicates the pupil-teacher ratios in secondary education.

Graph 3.8: Pupil-teacher ratio in secondary education (general and TVET) in 2004/05 (or closest year)



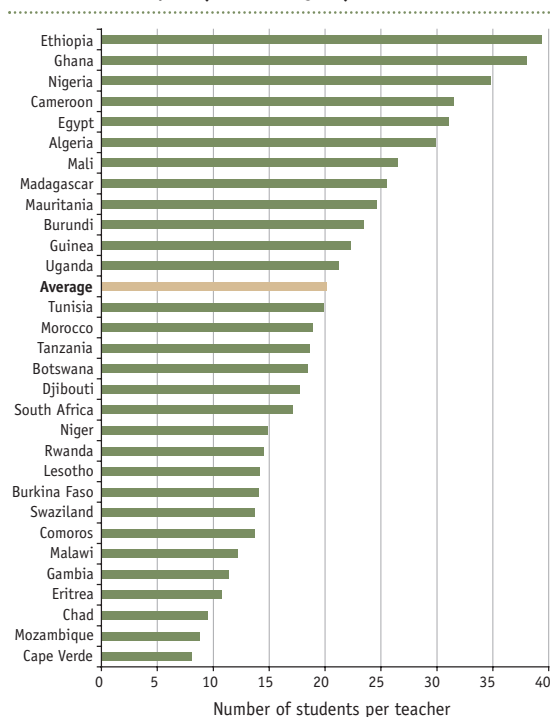
Graph 3.8 shows the huge difference in pupil-teacher policies in secondary education in Africa. Thus, countries like Comoros and Botswana have less than 15 pupils per teacher while Eritrea and Ethiopia have over 50. The average for the countries, taken as a whole, is around 27 pupils per teacher.

Source: Authors' calculations based on sector analysis and UIS data

⁴ Data available does not make it possible to separate general secondary from TVET.

Graph 3.9 indicates the student-teacher ratios in tertiary education in 2004/05 for several African countries

Graph 3.9: Student-teacher ratio in tertiary education in 2004/05 (or closest year)



Significant differences can also be seen in student-teacher ratios in tertiary education: thus, Cape Verde, Mozambique and Chad have student-teacher ratios lower than 10 whilst Egypt, Cameroon, Nigeria, Ghana and Ethiopia have ratios of over 30. The average for the countries presented, as a whole, is around 20 students per teacher.

Source: Authors' calculations based on sector analysis and UIS data

Analysis of post-primary education in 2004/05 (or closest year) shows that there are strong differences on the African continent, both in terms of coverage, and also in terms of educational policy choices illustrated by the share of TVET in secondary education as a whole and the pupil-teacher ratios in the different types and levels of education. The following section will deal with growth dynamics for the post-primary levels, placing the accent on the evolution of general secondary education to see if increased pressure has been noted at the entrance to secondary education as a result of UPE.



© UNESCO BREDA - By Reg'

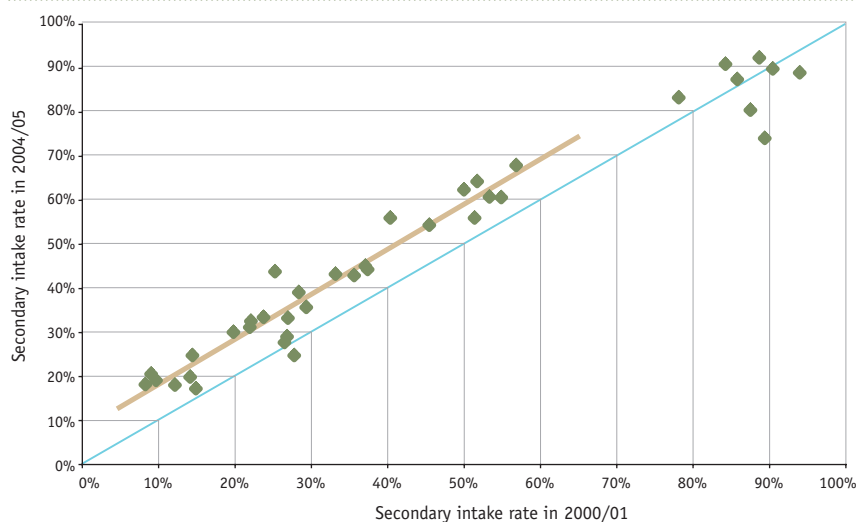
2. Enrolment dynamics at work⁵

2.1 How has post-primary education developed since 2000?

2.1.1 General secondary education

In 2000, GERs⁶ in lower and upper general secondary education were 43% and 20%: four years after, these rates have risen to 49% and 24% respectively. It is interesting to note that the increase in lower secondary arises from a large increase in access, in almost all countries, except for those with an already high access rate (South Africa, Namibia, Mauritius and Uganda). Graph 3.10 indicates access rates in 2000/01 and 2004/05 for lower secondary education.

Graph 3.10: Access rates in 2000/01 and 2004/05 to lower secondary education (or closest years)



Source: Authors' calculations based on sector analysis and UIS data

It clearly appears on the graph that if the eight countries⁷ with a high access rate in 2000/01 (over 70%) are excluded, then the access rate to lower secondary education has increased by around 10% for the countries as a whole, whatever the starting point. This represents a rapid increase, perhaps voluntary perhaps not, and which can therefore give rise to questioning: the rest of this chapter will try to reveal whether this increase has been more rapid since 2000.

⁵ Nigeria is not taken into account in this section, as data for around 2000 is not available.

⁶ Average per country.

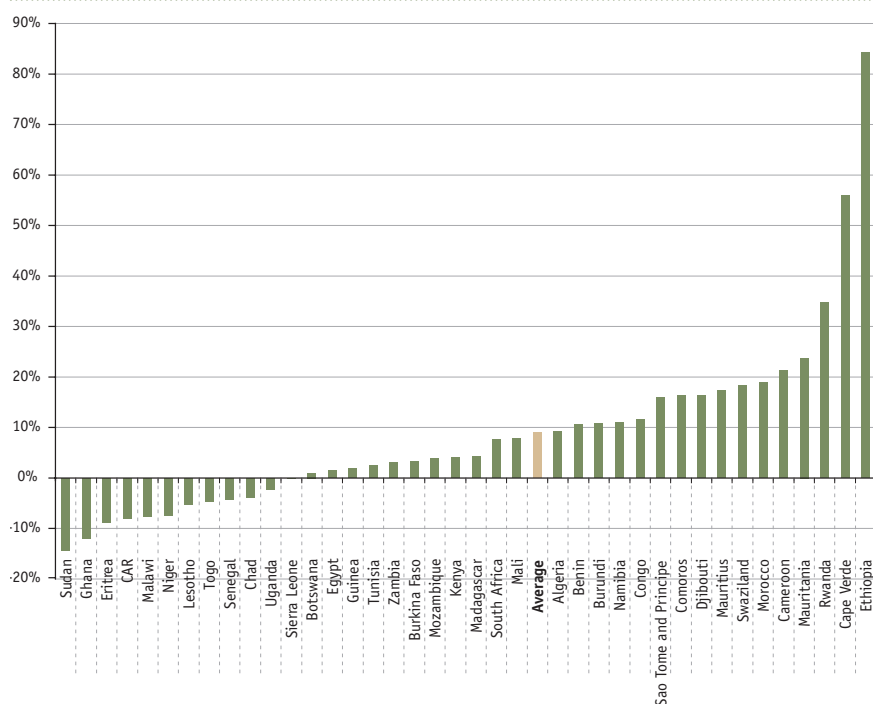
⁷ Algeria, Botswana, Cape Verde, Egypt, Mauritius, Namibia and South Africa.

2.1.2 Technical and vocational education and training

TVET coverage has increased in Africa: the average for the countries as a whole⁸ rose from 402 to 549 pupils per 100 000 inhabitants between 2000/01 and 2004/05, i.e. an increase of 27% on the period and an average annual increase of 9%.

Unlike general secondary education, where there is an almost general increase, the development of TVET varies greatly from one country to another as shown in graph 3.11, revealing a great diversity in policy choices for this sub-sector between 2000/01 and 2004/05. While coverage has fallen in some countries (e.g. Ghana), it has progressed considerably in other countries where average annual rates of increase in coverage have exceeded 20%: this is the case for Cameroon (21%), Mauritania (24%), Rwanda (35%), Cape Verde (56%) and Ethiopia (84%).

Graph 3.11: Average annual rate of increase in TVET coverage between 2000/01 and 2004/05 (or closest years)



Source: Authors' calculations based on sector analysis and UIS data

2.1.3 Tertiary education

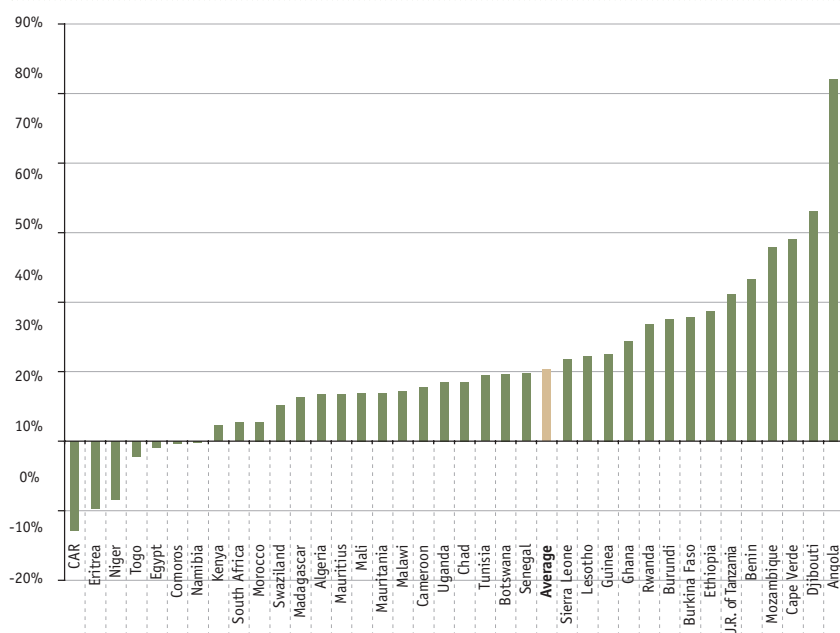
In recent years, tertiary education in Africa has been characterized by a strong expansion: with the average number of students⁹ per 100 000 inhabitants rising from 496 in 2000/01 to 630 in 2004/05, i.e. an average annual increase in tertiary education coverage of 10.3% on the period.

Dynamics in tertiary education vary significantly depending upon the country: there has been, on one hand, a considerable increase in coverage in some countries, particularly in Tanzania, Benin, Mozambique, Cape Verde, Djibouti or Angola and, on the other hand, a decrease in the coverage of others such as CAR, Eritrea, Niger and Togo (cf. graph 3.12).

⁸ Data available for 39 countries represented in graph 3.11.

⁹ Average on the 37 countries represented in graph 3.12.

Graph 3.12: Average annual rate of increase in tertiary education coverage between 2000/01 and 2004/05 (or closest years)



Source: Authors' calculations based on sector analysis and UIS data

2.1.4 Evolution in post-primary pupil-teacher ratios

In terms of unit expenditure in the education sector, the pupil-teacher variable is known to be an adjustment parameter insofar as teacher salaries remain relatively stable. In general, pupil-teacher ratios in secondary and tertiary education deteriorated between 2000/01 and 2004/05: in this respect, there has been an increase in pupil/student numbers in secondary and tertiary education but this has not been accompanied by an adjustment in teacher numbers. For example, in Ethiopia, the GER rose from 21% in 2000/01 to 31.3% in 2004/05 for secondary education and the pupil-teacher ratio increased from 44 to 55 pupils per teacher. For tertiary education, there is the case of Ghana where coverage increased from 323 to 552 students per 100 000 inhabitants between 2000/01 and 2004/05 along with a student teacher ratio which increased from 18 to 39 students per teacher.

However, some exceptions do exist like Burkina Faso where coverage in tertiary education rose from 133 students per 100 000 inhabitants in 2000/01 to 218 students in 2004/05 while improving its student-teacher ratio, which went from 19 to 14 students per teacher.

2.2 Has focalisation on UPE goals mechanically increased the pressure of demand on general secondary education?

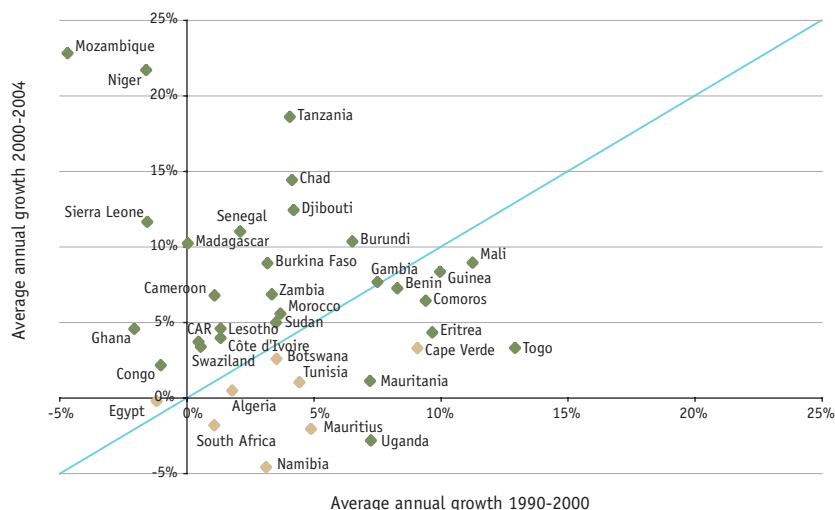
With priority on primary completion goals since 1990 and above all 2000, issues related to secondary education have often been left in the background: the future of pupils after primary completion is an issue, and it should be seen if there is growing pressure on access to secondary education due to efforts related to UPE. In other words, we wonder if those pupils whom we have striven to lead to the last year of primary education constitute a breeding ground for an every-growing demand for general secondary education.

2.2.1 Past trends and recent trends: comparison of growth rates

In order to compare the growth rates between 1990 and 2000 and between 2000 and 2004¹⁰, we have taken the average annual rates of increase which show the average increase in the indicator each year.

Graph 3.13 indicates these average annual growth rates for access to lower secondary education for the two periods. The first bisector represents all the points for which these growth rates are identical in the first and second periods: the points above this line represent countries for which the access rate has increased more rapidly between 2000 and 2004 than between 1990 and 2000; inversely, the points below the line represent countries where the access rate has grown less rapidly in the second period.

Graph 3.13: Average annual rate of increase in access to general secondary education between 1990 and 2000 and between 2000 and 2004



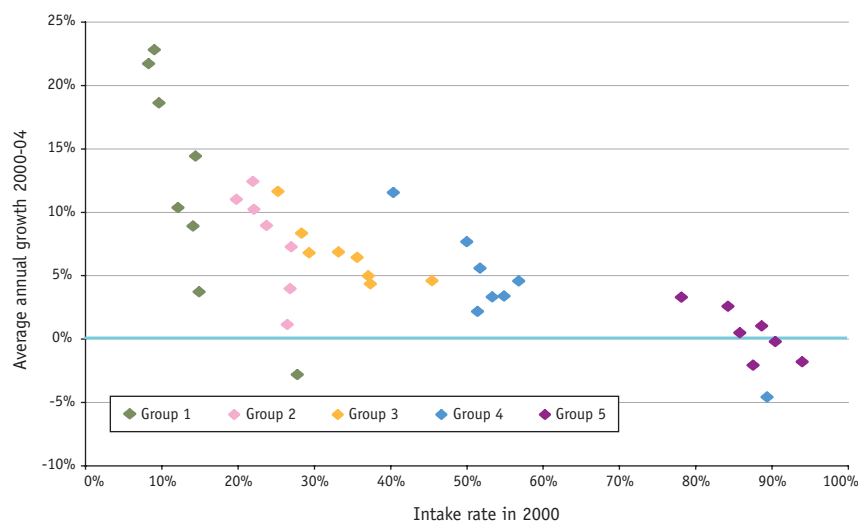
¹⁰ These periods correspond to 1990/91-2000/01 and 2000/01-2004/05 school years.

Source: Authors' calculations based on sector analysis and UIS data

No global acceleration of the growth in access rates to secondary education is noted when initially reading the graph. However, if we set aside the eight countries with an access to secondary education of over 60% in 2000, and consequently limited possibilities of growth in secondary education (Cape Verde, Botswana, Algeria, Mauritius, Tunisia, Namibia, Egypt and South Africa), it is noticed that for many countries, access to secondary education has increased on average more rapidly between 2000 and 2004 than between 1990 and 2000.

In addition, it must be highlighted that among the 22 countries with acceleration in their growth rate, 9 show average annual growth rates of over 10%, which seems very high, especially with regard to the level of development of secondary education in these countries: the cases of Niger, Mozambique, Chad and Tanzania are typical in this respect. These countries were in the first group in the previous section, i.e. they have particularly low levels of development in secondary education, and show very high rates of growth, over 20% per year on average for Niger and Mozambique. There is clearly an issue as to the sustainability of such a pace of expansion for these countries.

Graph 3.14: Access rate to general secondary education in 2000 and average annual growth rate in access between 2000 and 2004



Source: Authors' calculations based on sector analysis and UIS data

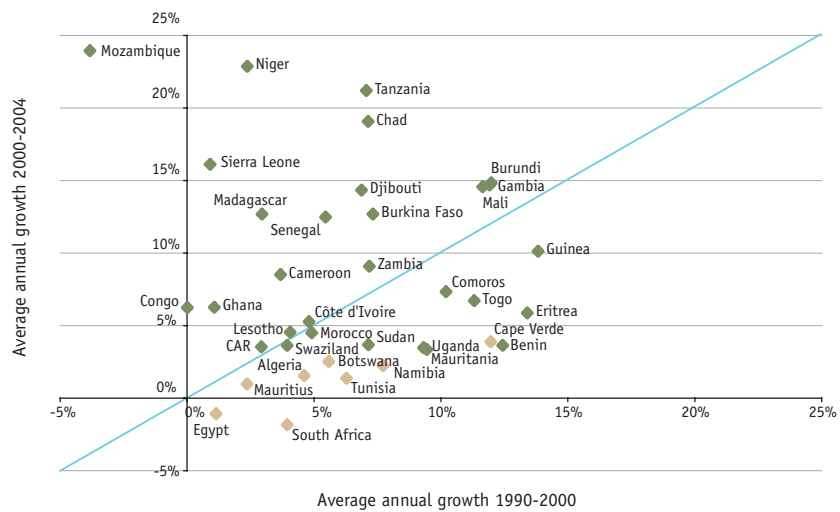
Graph 3.14 illustrates this issue well: it represents the access rate to secondary education in 2000 and the average annual growth rate between 2000 and 2004 for each country differentiating the group the country belonged to in 2004 (defined in 1.1.2 second paragraph). It is clear that the highest growth rates are to be seen amongst countries with the lowest access rates.



© UNESCO BREDA - Mario Bels

Very much the same observations are made when looking at growth in pupil totals (see graph 3.15): for countries where access to secondary education was already high, the growth rates are low and often lower than those observed over the 1990-2000 period. For the others, 10 countries show a decrease in the rate of growth in pupil numbers compared to 20 countries where this has increased over the 2000-2004 period. There are even 13 countries with average annual growth rates in pupil numbers of over 10% between 2000 and 2004, and even over 20% for Mozambique, Niger and Tanzania.

Graph 3.15: Average annual rate of increase in pupil numbers in the first grade of general secondary education between 1990 and 2000 and between 2000 and 2004



Source: Authors' calculations based on sector analysis and UIS data

All in all, if only those countries with access of below 60% in 2000 are taken into account, then two-thirds have registered acceleration in growth rates in terms of pupil numbers or of access to secondary education: this is particularly marked for Chad, Niger, Mozambique and United Republic of Tanzania. For around ten countries with access of under 60% in 2000, there has been a slow down in growth rates which remain high in spite of everything. The following section attempts to differentiate the different paces of growth by studying the mechanical effects involved in the growth in pupil numbers and in access rates.

2.2.2 Breakdown: where does the growth observed in access to lower secondary education come from?

Before gaining access to secondary education, a pupil must have entered primary school, completed his/her primary schooling and moved from primary to secondary education: access to secondary education therefore results from three factors, i.e. access to primary, survival in primary and transition between primary and secondary education. Here, we shall attempt to provide the breakdown of growth in access rates to secondary education as the sum of the evolution of these three components.

The following box indicates the method used to arrive at such a breakdown.

Box 3.2: Breakdown by log-linearization of the growth observed in access to lower secondary education

When taking into consideration the access rates and completion rates of the different levels of education (primary, lower secondary and upper secondary), the following relationships can be established:

The access and completion rates are noted AR and CR respectively, indexed by the different levels, and the apparent survival and transition rates SR and TR respectively.

$$CR_{prim}^t = AR_{prim}^t \times SR_{prim}^t$$

$$AR_{LS}^t = CR_{prim}^t \times TR_{prim-LS}^t = AR_{prim}^t \times SR_{prim}^t \times TR_{prim-LS}^t$$

$$CR_{LS}^t = AR_{LS}^t \times SR_{LS}^t = CR_{prim}^t \times TR_{prim-LS}^t \times SR_{LS}^t$$

To express the growth rates between two instants t_1 and t_2 , this will be noted as follows:

$$\frac{AR_{cycle}^{t_2}}{AR_{cycle}^{t_1}} = ar^{t_1-t_2}_{cycle}$$

$$\frac{CR_{cycle}^{t_2}}{CR_{cycle}^{t_1}} = cr^{t_1-t_2}_{cycle}$$

$$\frac{SR_{cycle}^{t_2}}{SR_{cycle}^{t_1}} = sr^{t_1-t_2}_{cycle}$$

$$\frac{TR_{cycle}^{t_2}}{TR_{cycle}^{t_1}} = tr^{t_1-t_2}_{cycle}$$

Consequently, growth in lower secondary access or completion can be broken down in terms corresponding to the growth in primary access, primary survival, transition between primary and secondary and survival in secondary education.

Using the logarithmic function enables breakdown of growth of the interest indicator as a sum of growth of other related indicators.

If we are trying to break down the growth in lower secondary access rates between 2000 and 2004,

i.e. we wish to express $\frac{AR_{LS}^{2004}}{AR_{LS}^{2000}} = ar^{00-04}_{LS}$

This gives:

$$ar^{00-04}_{LS} = \frac{AR_{LS}^{2004}}{AR_{LS}^{2000}} = \frac{AR_{prim}^{2004} \times SR_{prim}^{2004} \times TR_{prim-LS}^{2004}}{AR_{prim}^{2000} \times SR_{prim}^{2000} \times TR_{prim-LS}^{2000}} = ar^{00-04}_{prim} \times sr^{00-04}_{prim} \times tr^{00-04}_{prim-LS}$$

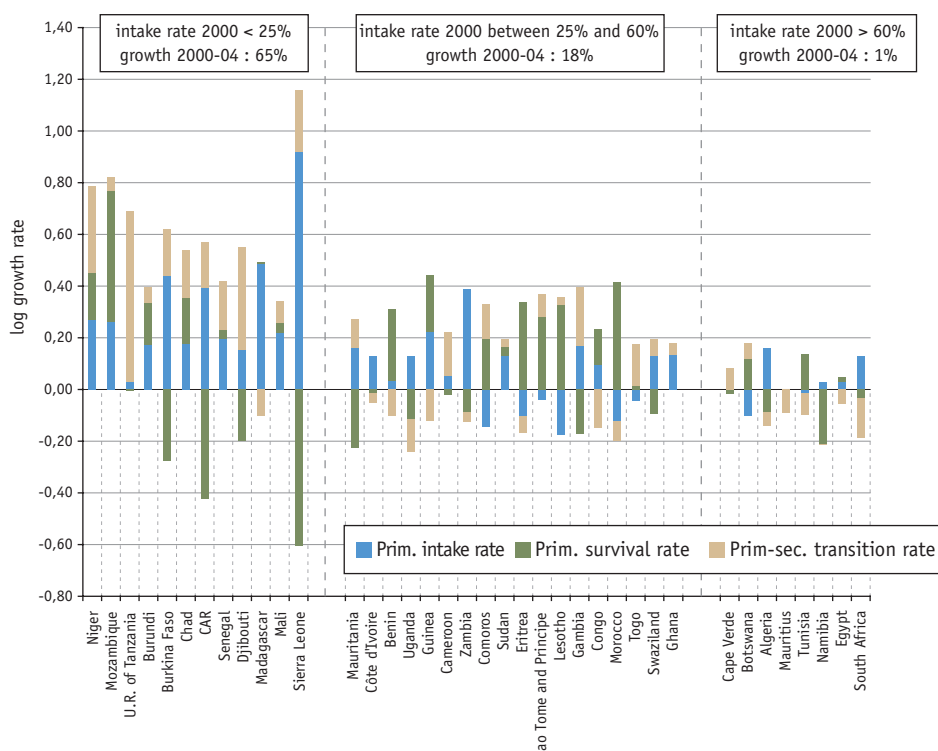
And log-linearization gives:

$$\ln ar^{00-04}_{LS} = \ln ar^{00-04}_{prim} + \ln sr^{00-04}_{prim} + \ln tr^{00-04}_{prim-LS}$$

Thus, the increase observed in secondary access can be considered as the sum of the evolutions in primary access, apparent primary survival and apparent transition between the last grade of primary and the first grade of secondary education.

The evolution observed in secondary access can therefore be considered as the sum of three elements: evolution in primary access, evolution in apparent survival in primary education and evolution of the transition between primary and secondary education. It is difficult to see a trend from these elements common for the countries as a whole; this seems normal in view of the extensive variety of situations highlighted throughout the chapter. On the opposite, if the countries are classified according to access level in 2000, we can distinguish schematically three different groups.

Graph 3.16: Breakdown of the improvement in access to lower secondary education between 2000 and 2004



Source: Authors' calculations based on sector analysis and UIS data

Amongst the countries with an access rate of under 25% in 2000, the rise in access can generally be explained by the combined rise in primary access, primary survival and transition. For most countries, the important rise in primary access is combined with a rise in survival, except for four countries (Burkina Faso, Djibouti and CAR and Sierra Leone which are both post-conflict countries) where survival in primary education has decreased quite significantly and therefore weighs negatively on the evolution of the access rate to secondary education. In the same way, the rise in access to secondary education can be partially explained everywhere by a significant rise in transition (with the exception of Madagascar). Finally, the rise in access to primary education contributes in all cases mechanically to the rise in access to secondary education.

In the countries where access to secondary education was between 25% and 60% in 2000, transition can be seen to have changed little, either upward or downward, and the rise in access to primary education, far from being general, does not contribute very much, on the one hand, to the increase in access to secondary education except in Zambia. On the other hand, the improvement in survival contributes significantly to the evolution in access to secondary education for Benin, Guinea, Comoros, Eritrea, Sao Tome and Principe, Lesotho, Congo and Morocco. It can also be noted that, unlike the countries analyzed above, there is

not an accumulation in most cases (14 countries out of 18) of a rise in primary access and survival: if access increases, survival decreases or vice versa.

For countries where access was over 60% in 2000, it was seen earlier that this had changed little since 2000. This could be explained either by much contrasted developments in primary access, survival and transition or by a stagnation of these three indicators. The latter clearly appears to be the case, since for all these countries where there were already high access rates to secondary education, there has been little progression either upward or downward.

In the end, what do these breakdowns show? Once again, the variety of situations makes it impossible to outline country profile types. However, a number of elements do emerge. Firstly, the highest increases in secondary access are noted in the 12 countries with a low rate of access in 2000, and which had therefore plenty of leeway for making rapid progress; it is also in those countries where the primary access rates have progressed the most since 2000. It is important to underline the fact that in these countries, the rise in access to primary education has not been compensated for by a drop in survival or transition, quite the contrary: all the rates combine and therefore there is an absence of flow regulation. The situation is very different for the other countries where the access rate to secondary education was already a little higher in 2000 : for countries in the second group, it can be noted that the survival rate observed is a determining factor, even if it sometimes moves upward and sometimes downward, and does not enable a specific trend to be defined. In the great majority of cases, it compensates for the rise (or fall) in access to primary education, whilst there is little evolution in transition between primary and secondary education. Finally, for the last group, all the indicators seem to have been stabilized since there are very few variations in the different elements. Without over interpreting the results, the following assumption can be put forward: in cases of low development of secondary education, expansion is rapid and can result in a combined improvement in primary access and survival, and in transition between primary and secondary education. The growth that ensues is much more regulated; and finally, once a certain level has been reached, this results in a stabilization of the indicators.



4. Conclusion

This chapter has shown, throughout, the extent of the diversity in post-primary education in Africa today and the dynamics which surround it. Countries with very marginal access to secondary education, and even more so to tertiary education, go side by side with countries where secondary access is virtually universal, even if in general, these levels are undergoing expansion, whether for general secondary education, technical and vocational education or tertiary education. The extent of this diversity does not make it possible to draw conclusions or make general recommendations; however, it is now possible to answer a number of questions raised at the start of the chapter. For countries with low secondary access, an acceleration of growth rates can generally be noted, both in terms of pupil numbers and access, with average annual growth rates of over 10%. For the other countries, most advanced ones, there does not appear to have been any significant increase in pressure since 2000.

Two points must therefore be highlighted: first of all, there are a number of countries where the strong rise in growth rates observed can give rise to questioning and concern for the future, even more so as these are countries with currently low intake capacity and for which the question of sustainability and the relevance of such a pace must be addressed. Secondly, growth dynamics were already at work and fairly prolonged during the 1990 decade and there are ever-increasing flows of pupils arriving at secondary level. A number of issues emerge from these observations and will be tackled in the following chapters. The continual growth in secondary pupil numbers raises the question as to physical, economic and financial sustainability, especially for some countries. In other words, to what extent can the rates of growth observed today be maintained in the coming years?

In addition, promoting UPE has greatly overshadowed secondary education and it is important to give consideration to the future of pupils completing primary education and to the systems the most adapted to the environment in each country. If this general observation seems to be shared by all today, the great variety of situations observed militates in favour of individual consideration being given to each country, as to the form and content of post-primary education. In this respect, technical and vocational education and training, which has been the subject of renewed interest for the last one or two years, will not be in itself a solution, without in-depth appropriate consideration being given to adapt it to the economic context. Data is lacking at this level as for tertiary education, while these are the two most protean types of education: the wide range of courses of study and special fields enables a high adaptability of these levels of education, which is far from being taken advantage of at the present time, but which also requires much finer analysis than made possible by the current data situation.



© UNESCO BREDA - Mario Bels



Measures, evolution and management of the quality of learning

Primary schooling in Africa has a bad reputation, as concerns the quality of education and the academic level of pupils at the outcome. However, school learning achievements are indeed the ultimate aim of Universal Primary Education. Although a survey on the scale of the continent is lacking, this chapter makes the most of all available data to draw up a panorama of quality in Africa, and to question the argument often put forward of an exclusive choice between quantity and quality. This argument does not stand up to analysis, since it turns out that some countries have managed to cope with the rise in enrolments, while guaranteeing the same, or even a higher level of quality. This chapter also sheds light on the very significant disparities characterising the education systems, where excellence goes side by side with the absence of knowledge, highlighting the failings in terms of management and steering of the systems.

The quality of learning has become an issue of major concern in the debate on education in Africa. And pessimism is prevalent. Who has never heard that the quality of education was deteriorating? That children learn less today than in the past? These common impressions conceal formidable methodological issues for the analyst. It is indeed not so simple to compare the quality of education over time. First of all, measuring quality is in itself delicate and has to be renewed over time. Next, the goals of education systems have changed and assessing education systems today in the light of the characteristics of education systems 30 or 40 years ago is hardly relevant. What would be the justification of comparing an elitist school, where the main purpose was to train administrative officials, and which had, as such, very few pupils, with a school which aims at being democratic, open to all, and for which the central goal is to contribute to the economic and social development of the African nations?

Great care must therefore be taken when looking at comparisons made, between countries and also over time, even if these are essential for the appreciation of the different national situations. Data comparability constitutes a major challenge for assessing the quality of learning. However, satisfactory data for different periods and in several countries in Africa is still very much lacking. Nevertheless, considerable progress has been made in this respect over the last two decades, through the participation by some countries in international surveys, the development of regional evaluation programmes like PASEC¹ and SACMEQ², and by incorporating measures of literacy in household surveys³, which are now widespread on the continent. The first part of this chapter will draw on different data sources in an attempt to present a panorama of the situation related to the quality of learning on the continent.

An important aspect in the debate on African education focuses on the relationship between quantity and quality. In this respect, the argument, often put forward, is that deterioration in learning quality is the price to be paid for expansion in enrolment. That schooling, in the perspective of Education for All, must enable pupils to acquire basic skills and knowledge, in addition to enrolling all children in primary education goes without saying. In order to give a fuller picture of the evolution of the education systems, it is necessary to connect recent trends in school enrolments to school learning achievements. The purpose of the second part of this chapter is therefore to provide information on this aspect, using once again different data sources.

One of the peculiarities of African education systems lies in the fact that an important share of the differences in school learning achievements can be attributed to schools. The great disparities between schools will be extensively highlighted and discussed in the third section of this chapter. Analyses show that reducing these disparities is one of the major challenges of any policy for improving the quality of education. The significant disparities between schools emphasize the problems of education system management related to the quality of learning.

1 PASEC: CONFEMEN (Conference of Ministers of Education in countries sharing the French language) Programme for the Analysis of Education Systems.

2 SACMEQ: Southern and Eastern Africa Consortium for Monitoring Educational Quality.

3 Examples from MICSS or DHS surveys (cf. box 4.1).



1. Panorama of the quality of learning in basic education in Africa

When attempting to draw up a panorama of the quality of learning in Africa, it is essential to look at this from a double viewpoint. Situating the level of performance in terms of quality of learning in African countries consists, first of all, in making comparisons with other countries in the World. Secondly, it involves comparing African countries with each other in order to determine the variety of situations existing on the continent. These investigations require comparable international data. Two types of data from different sources can be used to this end.

- International survey results constitute the commonest measure in this respect, even if they are not to be interpreted too hastily. These surveys have proliferated and are considered to be the reference in many countries; this is notably the case for PISA⁴ in the OECD countries and also for the TIMSS⁵ and PIRLS⁶ surveys. However, African countries are far from participating sufficiently in these large surveys. The results of the few countries which have participated are all the more interesting as they represent a reference for further comparisons. In addition, the existence of regional learning evaluation programmes like PASEC and SACMEQ makes it possible to compare a number of African countries with each other and to complete the information available.
- A second type of data, little used to present, can be capitalized on; that is literacy data collected more and more regularly in household surveys being developed worldwide (cf. box 4.1). While this is a limited measure, it does however correspond to what is considered an essential dimension of basic education. It is therefore very interesting to determine the relative performances of education systems in terms of literacy. This represents very useful complementary information for a panorama of the quality of learning in Africa.

1.1 The positioning of African countries in international surveys

African countries have only very timidly participated in the large international surveys, as recalled by Kellaghan and Greaney (2004). Very few countries have ventured into this type of exercise and it is therefore not possible to make large-scale comparisons between African countries from this data. However, the results registered do constitute an indispensable reference point for anyone wishing to evaluate the performance of African education systems in terms of school learning achievements.

As a whole, it must be admitted that the results obtained are very modest with regard to those of other countries. African countries rank far behind the industrialized countries but are also often out-distanced by other developing countries. Concerning PISA, which is the most recent large international programme, only Tunisia participated, in 2003 and 2006⁷. Unlike other international programmes, PISA does not target one particular level of the education system but a given pupil age⁸. It strives thus to evaluate pupil learning achievements for 15-year-olds in Reading, Mathematics and Science in the 30 OECD member countries and in many partner countries. The aim of PISA is to assess what students have acquired in terms of knowledge and skills essential for everyday life towards the end of compulsory education. In 2003, Tunisia ranked systematically in the last two or three countries out of 40 countries in the three areas and was very much below the performance of OECD countries (OECD, 2004). By way of example, Tunisian pupils obtained an average score of 359 in Mathematics while the 20 countries performing the best had average scores of over 500: the gap is therefore quite considerable.

4 PISA: Programme for International Student Assessment.

5 TIMSS : Third International Mathematics and Science Study then Trends in International Mathematics and Science Study.

6 PIRLS: Progress in International Literacy Study.

7 The first PISA data collection took place in 2000. Following data collections took place in 2003 and in 2006. The next one is planned for 2009. Only 2003 results are currently available.

8 This implies having individual information on pupils, which is rarely available in educational data bases in African countries.

Tunisia also participated in the TIMSS survey in 2003 with four more African countries: South Africa, Botswana, Ghana and Morocco. This survey aimed at assessing learning achievements in Mathematics and Science after four and eight years schooling. In the 8th grade, Tunisian pupils were 14.8 years old on average, i.e. virtually the same age as the PISA test pupils. One of the noticeable results was that Tunisia, in spite of very modest results, which somehow tie in with the PISA results, came out ahead of the four other countries in Mathematics and Science. In terms of average scores, the gaps were particularly significant with South Africa and Ghana which both had very poor results (cf. table 4.1). The African countries therefore rank at the bottom of the list in this evaluation, with scores relatively far from the international average and which reflect very modest performance. There is however quite a wide range of results depending upon the country.

Table 4.1: The performance of African countries in the TIMSS 2002 survey (8th grade)

	Average score in Mathematics	Rank	Average score in Science	Rank
South Africa	264 (5.5)	45/45	244 (6.7)	45/45
Botswana	366 (2.6)	42/45	365 (2.8)	43/45
Ghana	276 (4.7)	44/45	255 (5.9)	44/45
Morocco	387 (2.5)	40/45	396 (2.5)	40/45
Tunisia	410 (2.2)	35/45	398 (4)	38/45
Countries overall	467 (0.5)	/	474 (0.6)	/

Source : Martin M.O. et al. (2004a and 2004b)

These results, at the outcome of eight years schooling, represent learning achievements in Mathematics and Science, corresponding to what is usually considered as basic education. At the time of this evaluation, Mathematics and Science tests were also handed out in the 4th grade, i.e. at primary school, in 25 countries, but only Morocco and Tunisia participated amongst the African countries. These two countries were once again at the bottom of the list and, again, far behind the international average.

As far as other subjects are concerned such as Reading or Writing ability, there has been no survey where several African countries have participated as for TIMSS. In addition to Tunisia with PISA, there was the participation of Morocco in PIRLS 2001 on Reading ability in 4th grade. Once again, the results were very far from the international average of 500 with Morocco showing a score of only 350 and ranking 34th out of 35 countries.

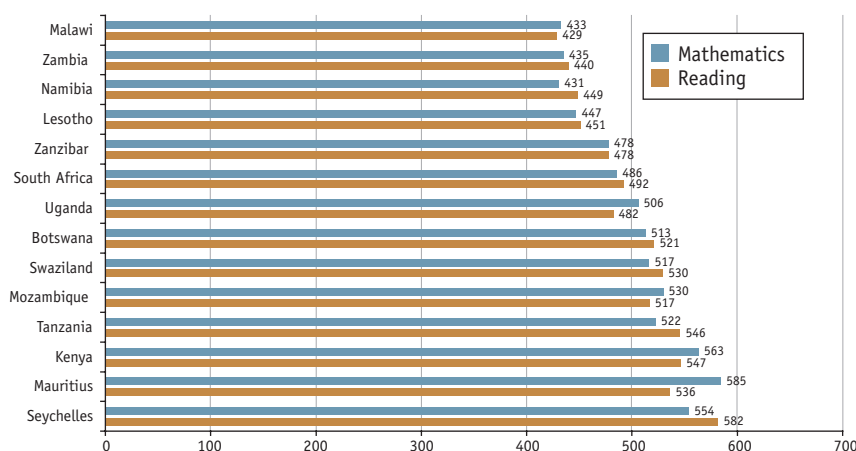
The results indicated do of course need to be put into perspective, particularly as these international surveys were designed mainly for developed countries and that they have been carried out in very different contexts. In spite of all, they do provide very interesting indications on the situation of African countries compared to international standards in terms of school achievements. Two significant observations can be made. Firstly, the performance of African countries in the surveys mentioned is very far from the international average and, secondly, results greatly vary amongst the five African countries taken into consideration. Overall, this provides a partial view of the situation in terms of quality of learning in African countries and needs to be enhanced with other data.

1.2 Major disparities

South Africa and Botswana also participated in a regional survey conducted by SACMEQ between 2000 and 2002 in 6th grade of primary education in 14 Southern and Eastern African countries. The tests covered English and Mathematics. This survey has the advantage of putting the results of these two countries, for which other data is available, into perspective with other African countries.

When looking at graph 4.1, it is immediately obvious that the results are similar to those in the TIMSS survey since Botswana is ahead of South Africa. Moreover, these countries do not appear at all atypical compared to the other African countries. Botswana appears to be somewhat over the average, which is set at 500, both in English and in Mathematics, while South Africa is below average in both subjects. This shows that the previous results gave quite a good picture of the average situation in African countries, namely a very modest average level of learning quality.

Graph 4.1: Scores in SACMEQ II Mathematics and Reading tests



Source: SACMEQ

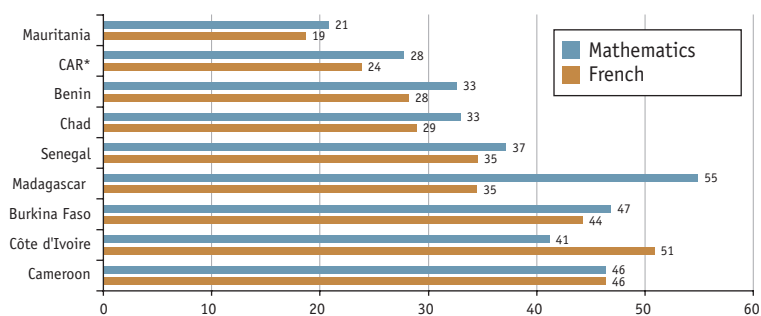
Another significant aspect is the scope of diversity between countries. Considerable gaps are to be observed between countries like Kenya or Tanzania on the one hand, and Namibia, Zambia and Malawi on the other hand, with a whole range of intermediary situations.

Similar information is available for some French-speaking countries through the results of the PASEC programme, which evaluates pupil learning in French and Mathematics in 2nd and 5th grade of primary education (cf. graph 4.2). The results of evaluations carried out in 1996 and 2005⁹ in 5th grade of primary school are indicated here. In the same way as the SACMEQ results, there are major differences between countries, with particularly modest results in Mauritania¹⁰, Central African Republic (CAR), Benin and Chad. Even if these results cannot be connected to those of international surveys as before, they do outline a situation fairly similar to that of English-speaking countries, characterized by fairly modest average scores overall and significant differences between countries.

⁹ With the exception of the Central African Republic where the evaluation was conducted in 2006 by the Pôle de Dakar, using PASEC survey instruments and procedures.

¹⁰ Mauritania differs from the other countries, due to its bilingualism (Arab-French) and this must be taken into account as the PASEC tests are in French.

Graph 4.2: Scores in PASEC Mathematics and French tests in 5th grade (Score out of 100)



Source: PASEC and the Pôle de Dakar for CAR

It should be recalled here that the average score obtained in the knowledge tests is fairly superficial, as it does not take into account, for example, the different situations within the countries. Table 4.2 highlights this diversity for the PASEC results in French and Mathematics, indicating the standard deviation and the variation ratio¹¹. It can be noted that the variation ratio is quite high and ranges from 29% in Côte d'Ivoire to 65% in Mauritania¹². The heterogeneity in pupil results appears therefore to be quite considerable and this is all the more so as the average country score is low. This illustrates the fact that even when a country has a very low average score, this can hide very significant differences in learning achievements between pupils.

Table 4.2: Disparities within countries

Country	Standard deviation	Variation ratio
Burkina Faso	13.9	30%
Côte d'Ivoire	13.3	29%
Senegal	15.4	43%
Mauritania	12.8	65%
Chad	14.1	46%
Benin	15.9	52%
Cameroon	15.7	34%
Madagascar	13.0	29%
CAR	14.1	54%

Source: PASEC and the Pôle de Dakar

Generally speaking, in the African education systems, pupils with incomparable learning levels are to be found side by side. If we take the example of Cameroon in Mathematics, it can be seen that a little over 6% of pupils had such low scores that they are below or equal to the score they could have obtained on average if they had replied at random to the tests, while 5% of pupils had scores of over 80 out of 100, i.e. a question of excellence¹³.

The situation of African countries is illustrated well by the example of Cameroon and shows that one must beware of the simplistic picture whereby all pupils would have an extremely poor level. In reality, pupil results show considerable diversity, suggesting a complex situation and perhaps the existence of significant leeway for the improvement of the quality of learning.

11 The standard deviation reports on the dispersion of the results; however, the variation ratio (standard deviation divided by the average) helps to put the dispersion into perspective according to the average. Thus, Mauritania, which has the lowest standard deviation, has the highest variation ratio indicating in fact more significant relative dispersion.

12 This concerns information collected in 1996 for Côte d'Ivoire and 2004 for Mauritania.

13 By way of comparison, Bourdon (2007) obtained an average score of 61 in the PASEC tests given out to French classes selected as being close to the national average.

1.3 Literacy as a measure of the quality of learning in primary school

Literacy appears to be very much at stake in the first years of schooling and, as such, acts as a particularly interesting indicator of the quality of learning. The more extensive use of household surveys means that literacy data is available for a large number of countries (cf. box 4.1). For these countries, it is possible to connect the fact of being literate or not with the number of years study (Brossard and Foko, 2007). One of the advantages of the literacy data is to benefit from a wider comparative base for the African countries than from the schooling surveys, while opening the way for comparisons with other regions in the world. However, this data does have a number of limits, which are to be kept in mind when reading the results. Besides the rudimentary measure of literacy provided¹⁴, it must be mentioned that other important learning dimensions are not taken into account, such as capacity in Maths for example. Finally, the data is collected in the adult population and reflects the situation of the education systems at the time these adults were in school. Thus, the results for 22 year-olds taken into consideration in the following analyses provide information on the situation of education systems in the early 1990's.

Graph 4.3 indicates the probability of literacy for individuals who left school after the 6th grade (CM2) and for individuals who have never attended school. The difference between these two probabilities constitutes what can be called the added value of primary school compared to other factors contributing to literacy¹⁵. If the African countries are looked at initially, then a very great diversity of situations can be observed. Thus, an adult who has benefited from six years schooling has 26 chances in 100 of being literate in Democratic Republic of Congo (DRC) and 98 chances in 100 in Rwanda. The African average registers at 68%, with an added value for six years primary schooling of 60% while the probability of literacy with no schooling registers at 8%. The probability of literacy without attending school also fluctuates enormously, from 0% in DRC to 37% in Mauritania. This gap is connected to the existence and effectiveness of literacy programmes (cf. chapter 5) and/or of types of traditional education as in Mauritania. Naturally, the results must be looked at in the national context, particularly in cases of conflict as for DRC.

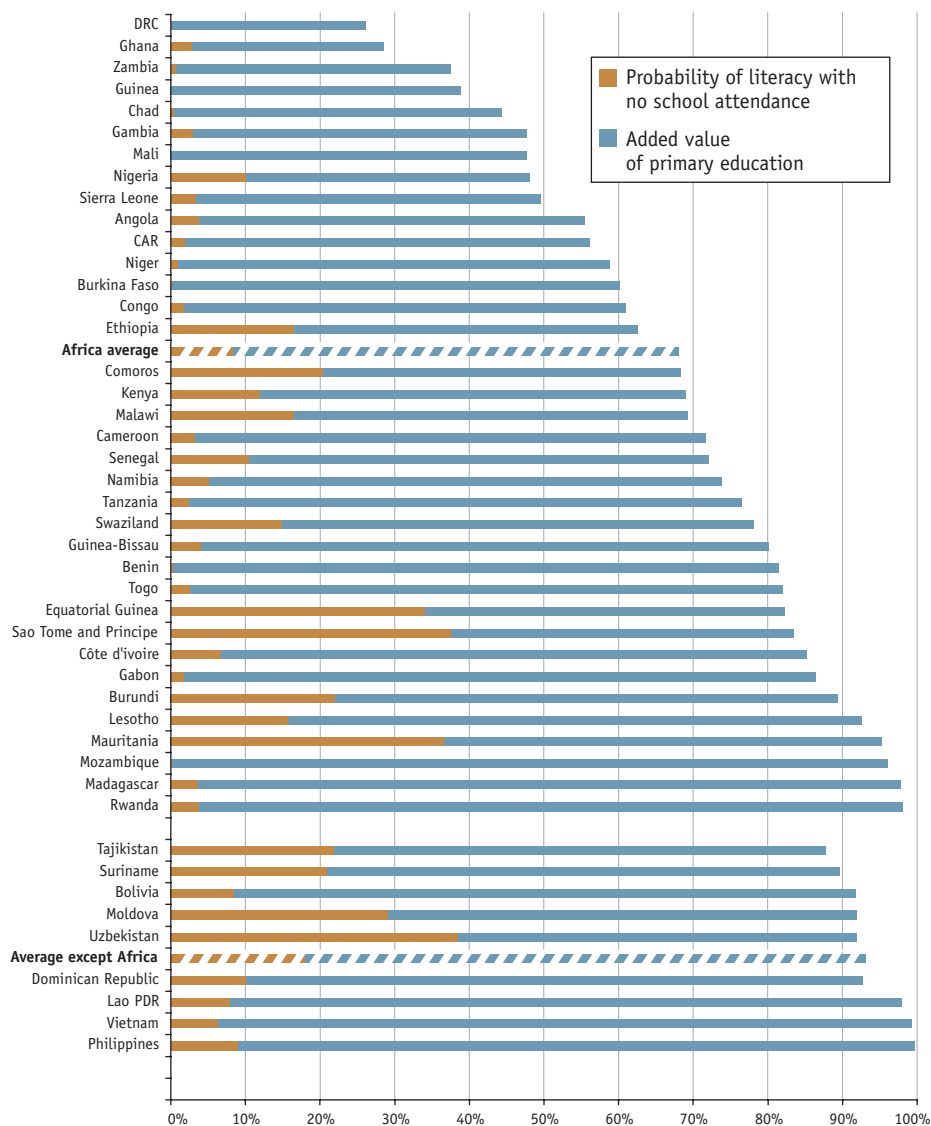


© UNESCO BREDA - Mario Bels

14 As recalled in box 4.1, according to the surveys, this is founded on the declarations made by individuals or on a simple reading test where the individual must read a few lines. There exist much finer measures such as those developed by the LAMP programme.

15 The added value of school is the difference between the probability of literacy after 6 years schooling and the probability of literacy after no school attendance at all.

Graph 4.3: Measure of literacy after 6 years of primary schooling



The same estimates have been made for nine developing countries belonging to other World regions: the average global probability of literacy registers at 93%, i.e. 25 points higher than the African average. There is also much less variability around this average than in the African countries. However, if only the added value of primary education is taken into account, then the gap seems less at 75% compared to 60% in African countries. In spite of all, this reflects a lesser average effectiveness of the African school than that of the other developing countries taken into consideration here. A much higher probability of literacy without attending school is also noted in the non-African countries, 18% compared to 8%. Part of the gap observed on the global probability of literacy is therefore explained by contextual factors other than the quality of formal education.

Overall, the average effectiveness of primary school in African countries judging from the literacy measure appears lower than that observed in other developing countries. In the early 1990's, the probability of literacy after reaching the 6th grade of primary education was estimated at around 68% in African countries, which means that around one in three pupils was not literate at the outcome of primary education, while this estimation reached 93% in the nine non-African countries taken into consideration. However, the most distinctive feature in Africa is above all the wide variety of situations, which underlines the necessity of taking the situations at country level into account. As a whole, results are relatively coherent with those of the surveys on pupil learning achievements.

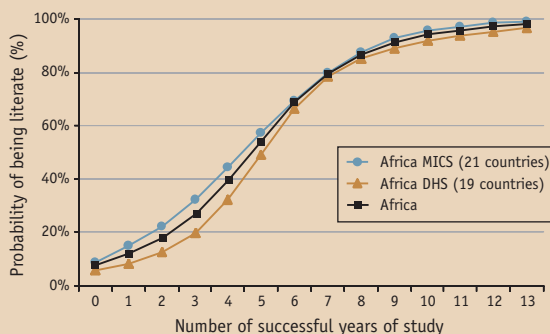
Box 4.1: Measuring literacy in «household surveys»

Three categories of « household surveys » are used in this chapter to estimate the probability of literacy for individuals according to the level of education reached : (i) demographic health surveys (DHS) carried out in over 80 countries with the support of USAID, (ii) multiple indicator cluster surveys (MICS) designed to evaluate progress towards the goals set at the World Summit for Children in 1990 and conducted in around 60 countries with the support of UNICEF and (iii) surveys on basic indicators of well-being (QUIBB) initiated by the World Bank and aimed at collecting indicators of well-being for the analysis and monitoring of poverty in African countries.

These surveys, which aim at collecting information on the social and/or economic environment of individuals, are carried out on large national samples representative of the population. For African countries where data is available, they cover a sample of 6 500 households and 38 000 individuals on average per country for the MICS, 9 000 households and 45 000 individuals for the DHS and 10 800 households and 58 000 individuals for the QUIBB.

The literacy measure results, on the one hand, from declarations made by the individuals in the QUIBB and MICS surveys. On the other hand, for the DHS at country level, the individual undergoes a fairly simple reading test. So, it is expected that the evaluation of the degree of literacy for individuals in the QUIBB and MICS surveys will be biased (upward). This point is checked to ensure that it is within a reasonable limit, when data from different surveys is available for the same country. Moreover, as around forty data bases have been used for Africa (21 MICS, 19 DHS and 3 QUIBB), it has been possible to compare the evolution in the individual probability of literacy according to the number of years of study, depending on the type of measure used. The graph below illustrates the comparison of the average results obtained from MICS and DHS data. It shows that the assessment of the average performance on the continent, in terms of probability of literacy according to the number of years of study, leads to similar results whether DHS or MICS data is used.

Comparison of the probability of literacy according to the number of years of study for adults aged 22-44.



In conclusion, drawing up a panorama of the quality of learning comes up against two major obstacles, which are the complexity of the notion of the quality of learning and the flagrant lack of data on this aspect. We have gathered together here the different information that exists and made new analysis: the fact of putting together information related to international assessments, regional and household surveys, results in a heterogeneous whole which, in the absence of finer analysis, does however make it possible to appreciate the prominent features in terms of learning quality. Indeed, some convergence between the different sources of information can be observed, which tends to bestow a certain degree of reliability on the results. Two major conclusions can be drawn from the different analysis. First of all, when compared with the rest of the world, the average performance of African countries, whatever the measure of learning applied, appears very much poorer than elsewhere. That a problem exists, as to the quality of learning in African education systems, is therefore relatively well supported by the facts, even if the outline is still somewhat imprecise. And for good reason, as indicated by the second observation: there is a wide variety of situations according to the country and this certainly covers very different realities from country to country. Besides, there is also great diversity within the countries. Simplistic conclusions are therefore to be avoided, such as the level of all pupils in African education systems is low; on the contrary, excellence often goes side by side with an absence of elementary knowledge. This observation highlights the major equity problems within the education sector but it also brings hope in that it shows that it is possible to provide quality education in the contexts studied.



2. Expansion of primary enrolment and quality of learning: far from the generally accepted ideas

The general situation of the quality of learning outlined in the previous section shows that African countries are confronted with notable difficulties in this area. This is of particular concern in some countries. These results tend therefore to confirm the widespread idea that the quality of education in Africa is poor, even if it has been shown that this idea very much deserves to be qualified. This observation contributes to fuelling talk on the deterioration of the quality of education which is moreover not the prerogative of African countries. However, in Africa, this supposed decline in education standards is often put down to the massive growth in pupil numbers. The issue of a trade-off between quantity and quality emerges here, with the simple idea that necessarily a choice must be made between quality education and generalized access to school.

Since the early 1960's, the scale of African education systems has undeniably changed with considerable progress in terms of school coverage, even if major efforts must still be put in to reach Universal Primary Education, on the one hand. On the other hand, relatively little is known about the evolution in quality of learning, principally due to a lack of data on the issue. There are few factual studies on the relationship between the expansion of enrolment and the quality of learning. In order to shed light on this topic, at the heart of the issue of EFA, new analysis has been carried out based on two types of data used in the previous section, i.e. school learning achievement measures and information relating to literacy. These different measures of the quality of learning are compared with the enrolment indicators to test the hypothesis of a negative relationship between quantity and quality.

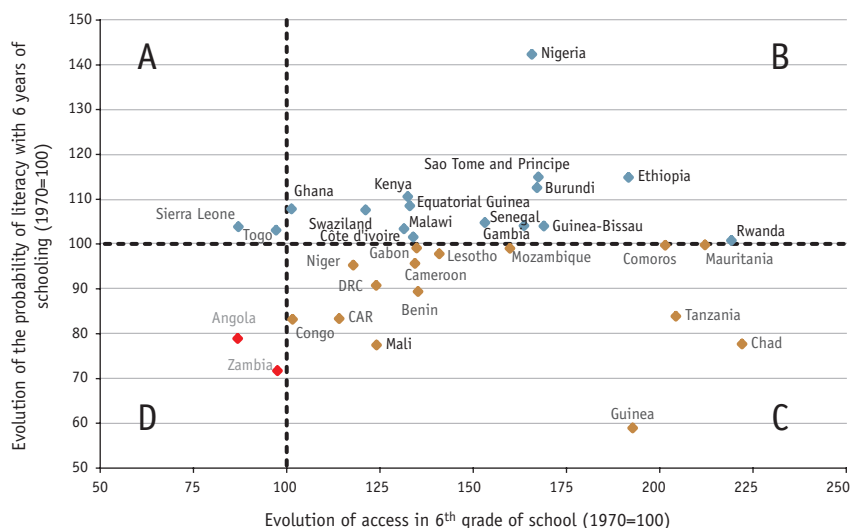
2.1 Dynamics in terms of enrolment and literacy between 1970 and 1990

Measuring literacy on individuals from several age groups, as in the household surveys available, provides information on the education systems at different times. Thus, individuals aged 22, questioned in the early 2000's, provide information on the education systems of the early 1990's when they were attending primary school. In the same way, individuals aged 42 reflect the education systems of the early 1970's. It is therefore possible, in a way, to go back in time and compare education systems 20 years apart on the basis of their capacity to provide pupils with sustainable literacy.

In graph 4.4, the evolution in the probability of literacy for those reaching 6th grade is related to the evolution in the access rate to 6th grade. The beginning of the 1970's, considered as base 100, is represented by two dotted lines. The intersection of the two corresponds to the situation of each country at the beginning of the 1970's so it is very easy on reading the graph to appreciate directly the trend for each country. Quadrant B corresponds to those countries that have progressed both quantitatively and qualitatively. It comes out that there are a fair number of countries in this case, the majority English-speaking, but if Nigeria is excluded, then progress in terms of literacy is much less distinct than that relating to access to 6th grade of primary school. This does show nevertheless, in an interesting way, that a significant number of countries have been able to enrol an increasing number of pupils while

improving the quality of education measured here by the propensity to create literacy. Countries situated in quadrant C progressed in enrolment but there has been a fall in the probability of literacy after six years in school. This time, French-speaking countries are in the majority. Again, there is a limited variety in the evolution of the probability of literacy. Finally, quadrants A and D indicate the rare countries that have regressed in terms of enrolment and have shown a variety of trends in terms of literacy during the period. It should however be noted that many countries are situated very close to the horizontal line measuring the probability of literacy at the beginning of the 1970's. Changes at this level have therefore been quite limited unlike access to 6th grade where notable progress has been accomplished in the vast majority of countries (cf. chapter 2).

Graph 4.4: Relationship between quantitative and qualitative progress over the 1970-1990 period



Sources: DHS, MICS and QUIBB data, 2000 or closest year and authors' calculations

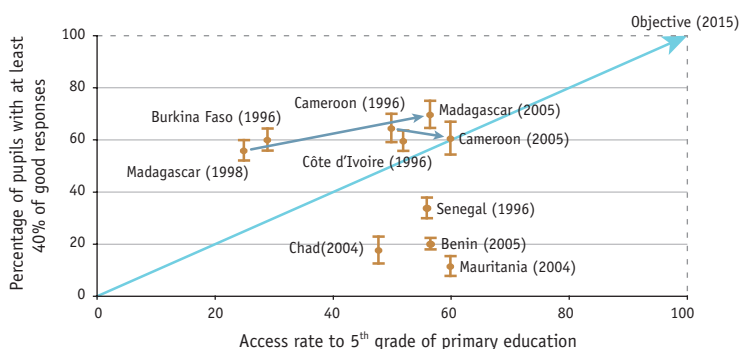
These results clearly indicate that the idea according to which any growth in enrolment would inevitably bring about deterioration in the quality of education is unacceptable. Over the period from the beginning of the 1970's to the early 1990's, characterized by a high growth in enrolment (access rate to 6th grade grew by 34%), trends in the quality of learning can be seen to have been moderate, sometimes positive, sometimes negative, depending upon the country. This observation distinctly differs from generally accepted ideas on this issue. Of course, it may be objected that the measure of literacy available is too imprecise, that this aspect of learning constitutes the minimum requisite in learning achievements in primary education and that other learning dimensions should be taken into account. In addition, this data corresponds to a fairly long period of time and is already out of date. It is therefore of interest to complete these results with more recent data, corresponding to EFA dynamics, and also more accurate in measuring learning achievements.

2.2 Recent dynamics

Measures of school learning achievements made in the PASEC and SACMEQ programmes provide both more precise and more complete information on the quality of learning, but concern a more limited number of countries and more restricted periods of time.

PASEC, drawing inspiration from Michaelowa's work (2001), strives to take both qualitative and quantitative dimensions of the education systems into account. To do so, it relates the proportion of individuals with a level of achievement deemed satisfactory in the PASEC French and Maths tests (at least 40% correct answers) to the proportion of an age-group cohort reaching the 5th grade of primary education¹⁶, the level at which the tests are administered. The combination of the two gives an interesting indicator of the effectiveness of an education system, since it takes into account both quality and quantity¹⁷. Graph 4.5 illustrates this approach and shows the trend over time¹⁸ for two countries: Cameroon and Madagascar.

Graph 4.5: Learning achievements and access to 5th grade of primary education in the perspective of Universal Primary Education by 2015



Source: PASEC

While the goal of good-quality UPE requires meeting 100% of the two dimensions on the 2015 horizon, it is to be noted that no one country is close to this goal. A group of four countries (Benin, Mauritania, Chad and Senegal) are seen to present particularly poor results at learning achievement level. Even if it is necessary to update data for Senegal which dates back to 1996¹⁹ and that the bilingualism of the Mauritanian system must be taken into account, the situation of these countries is of concern. Regarding access to 5th grade, the results seem relatively modest, as the highest rates amongst these countries are around 60%. This shows the extent of progress still to be made, in order to reach enrolment for all children through to the 6th grade of primary school and to attain a higher level of quality.

As for the temporal perspective, one must point out the remarkable evolution of Madagascar between 1998 and 2005 where the access rate to 5th grade rose from 25% to 56% and, at the same time, the proportion of pupils obtaining at least 40% of correct answers in the test rose from almost 56% to almost 70%. This shows that significant progress can be made simultaneously in the qualitative and quantitative dimensions²⁰. The case of Cameroon appears less spectacular but the progress registered in terms of access to 5th grade is appreciable since it rose from around 50% to around 60% between 1996 and 2005 without any significant effect on pupil learning achievements²¹.

¹⁶ This is the access rate in 5th grade calculated from school data and population data.

¹⁷ It estimates the proportion of individuals from an age-group cohort that reach a minimum level of learning achievements.

¹⁸ The tests used in the two waves of evaluations only differed in some exercises; comparable scores have therefore been calculated on the common part of the tests.

¹⁹ A new PASEC evaluation is ongoing for the year 2006/2007.

²⁰ If we had only taken into account the average score at national level, we could have arrived at different conclusions as this score decreased between 1998 and 2005 whilst the proportion of pupils reaching a minimum desired level of learning grew; this tends to underline the importance of the learning quality indicator taken into consideration for calculating evolution, the average score not being the most appropriate.

²¹ The slight drop on the graph is not statistically significant.

In these trends, it is important to underline that democratisation in school access allows for greater intake of children from underprivileged backgrounds. Table 4.3 gives an idea of the wider access to school for children from underprivileged backgrounds in Cameroon and Madagascar, where a comparison over time is available regarding access and the quality of learning. In this way, the proportion of children who declared they did not have running water at home rose from 61% to 81% in Cameroon and from 78% to 88% in Madagascar.

Table 4.3: % of pupils in 5th grade not benefiting from specific facilities or not owning specific durable goods at home

	Cameroon		Madagascar	
	1995/96	2004/05	1997/98	2004/05
Running water (tap at home)	61%	81%	78%	88%
Refrigerator	59%	85%	87%	95%
Television	45%	68%	69%	75%

Source: PASEC

The same tendency is observed for ownership of durable goods such as refrigerators or televisions. These results clearly show a modification in the composition of pupils and in particular that there are more and more children from underprivileged segments of the population who have access to school in these countries. Indeed, increasing pupil numbers does not only have quantitative effects, it also implies taking in different populations who did not attend school before. Most of the time, this means children faced with difficult living conditions, including malnutrition, no assistance with homework at home and very much in demand for different domestic and/or productive chores. In this context, a fall in the quality of learning is to be expected, which makes the performance of countries like Cameroon and Madagascar all the more remarkable.

We have been able to follow a comparable procedure for some countries having participated in SACMEQ surveys. Indeed, SACMEQ carried out two waves of evaluations between 1995-1998 and 2000-2002²² in five English-speaking countries. It is therefore possible to compare quantitative and qualitative evolution of the education systems for these countries. For the qualitative dimension, tests in English were administered, made up of eight reading levels. The quality indicator taken here is the proportion of pupils reaching 4th grade²³, which can be considered as the desired minimum for all pupils²⁴.

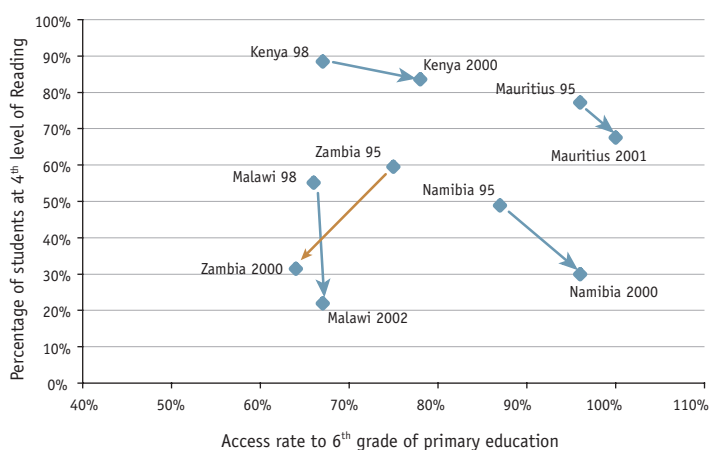
While performance in terms of school coverage is distinctly higher than that of the French-speaking countries studied by PASEC, the trends in the quality of learning (graph 4.6) are of some concern, since all countries have registered a fall in performance. It can be noted, however, that Kenya which shows the highest increase in rate of access to 6th grade has obtained relatively stable results for reading performance, but it is true that the performance was measured only two years apart (compared to four to six years for the other countries) which limits any possible evolution. Here, it would be necessary to take a longer period of time into consideration to see if the slight downward trend continues or not.

22 A third wave is ongoing on writing this report.

23 This corresponds to pupils who read and are capable of connecting pieces of information to be found in different parts of the text and also of interpreting it (cf. Murimba, 2003).

24 Although the procedure is similar, this indicator cannot be directly compared to the one taken for the PASEC countries.

Graph 4.6: Pupil learning achievements and access to 6th grade of primary education



Source: SACMEQ, UIS and the Pôle de Dakar

Countries like Zambia, Namibia and Malawi are seen to experience marked drops with 32%, 22% and 30% of pupils respectively reaching the 4th reading level in the early 2000's, which corresponds to very modest levels of learning. In addition, the access rate to 6th grade has dropped from 75% to 64% in Zambia. This country seems therefore to have been faced with a particularly difficult educational situation during this period, since performances, in terms of school coverage and quality of learning, have both significantly fallen. However, the latest available figures for 2004 seem to indicate that this trend has not continued as the access rate to 6th grade has risen to 67%. As for Malawi, pupil numbers have exploded with the introduction of free schooling in 1994. The education system has had to accept over one million extra pupils, i.e. an increase of 70% in pupil numbers in the space of two years (World Bank, 2004). The drop in performance observed is therefore to do with this sudden increase in pupil numbers²⁵, which has obviously greatly disturbed the education system and seems to have had an effect on the quality of learning. The potential consequences of a massive influx of pupils into an insufficiently prepared education system must be underlined here. Whilst the connection between growth in school coverage and quality of learning has appeared much more complex than usually supposed, the example of Malawi shows that an uncontrolled increase in pupil numbers can have harmful consequences on the quality of learning.

The different data available on the quality of learning have again been mobilized to question the quantitative and qualitative evolution of the African education systems. Although this data is still insufficient in some aspects, it is however a source of important lessons. Firstly, the procedure used here highlights the need to take into account both the dimensions of school coverage and quality of learning to arrive at a more complete picture of the performance of education systems. Secondly, trends have been relatively varied depending upon the country, which tends to question the idea that an increase in pupil numbers inevitably leads to deterioration in the quality of learning. We have seen, for example, countries like Madagascar where significant progress has been made, both in terms of school coverage and quality of learning. Even if the growth in pupil numbers puts undeniable pressure on the education systems, depending upon the policies implemented, this pressure does not necessarily result in a deterioration in the quality of learning. The case of Malawi is there to remind us that an explosion in numbers can have dramatic consequences on the quality of learning. However, recent trends in English-speaking countries, which have higher levels of enrolment than French-speaking countries, raise the question of the growing difficulty in ensuring satisfactory quality of learning when approaching UPE. In this respect,

²⁵ Increase previous to 1998 and so not visible on the graph.

it is important to take into account the change in pupil population that goes along with the increase in enrolment. Children, from the most underprivileged backgrounds, are going to school in ever-increasing numbers, which has repercussions on the context of education. A moderate fall in the average level of pupils is therefore not synonymous of deterioration in the quality of education but corresponds to a greater proportion of children from the poorest families in the classrooms. One of the major challenges of EFA is to lead all pupils to a satisfactory level of learning achievement and not only elite as it was the case in the past.

In addition, the need to observe the performances of the education systems over sufficiently long periods of time is also clear, in order to have a better view of their evolution. In this respect, the increasing number of evaluations initiated in the SACMEQ and PASEC programmes, already mobilized here, will provide valuable information on the evolution of the education systems over time, should the number of countries concerned be extended. This goes hand in hand with the development of national assessments, which should also be encouraged.



© UNESCO BREDA - Mario Bels

3. Disparities between schools and between classes at the heart of the problem of the quality of learning

The results of the earlier section show that with the expansion in enrolment, results in terms of quality of learning are relatively varied from country to country. Above all, it is to be noted that a drop in the level of pupil learning is not inevitable with the democratisation of access to school. From this observation, it transpires that other factors are at work and it is therefore necessary to identify them. The many scientific studies devoted to this issue have not always made it possible to reach such clear and definite conclusions as desired. Some results are nevertheless of particular interest in the African context and it is timely to take these into account here. Thus, the differences in performances between classes and between schools appear very significant in the African context and deserve to be given special attention, particularly in a perspective of comparison. Their impact on the average level of school learning raises the unavoidable question of management in the debate for improving the quality of learning.

3.1 The weight of the different factors in the learning process in African schools

Since the Coleman report (1966) was published in the United States, much research has been conducted with the aim of identifying the factors that can contribute decisively to improving the quality of education. It must be noted that the great majority of these studies were carried out on developed countries and mainly on the USA. However, since the early 1980's, a number of studies have been conducted on developing countries. One of the distinctive features is the diversity in results depending upon the studies²⁶ made. It is therefore not easy to draw operational conclusions for educational policy from this very rich whole. Thus, to the question «which factors should be privileged in educational policy in order to improve the quality of education?», there is no single answer and the most rigorous of researchers will emphasize the importance of the context²⁷. So, the results of these studies show that there is no single infallible recipe for the improvement of educational quality in all countries. A multitude of factors have to be taken into account and vary according to the context; it is therefore essential to benefit from studies made at country level to fuel the considerations being given to education.

These studies, even if they are still rare, have been carried out more extensively during the past decades on the African continent and enable a number of lessons to be learned. The purpose of this chapter is not to review all the results, which would be redundant with other summaries, including the one carried out by the Association for the Development of Education in Africa (ADEA) in 2005, in line with its 2003 biennial. Like elsewhere, it is hardly possible in Africa to generalize the results to several countries with only few rare exceptions. Thus, Jarousse and Mingat's pioneer research (1993) in Togo placed the accent on the importance of school textbooks and this was confirmed later by many studies, including the PASEC studies (Behaghel, Coustère and Lepla, 1999). Results relating to repetition are also very similar from country to country²⁸ (Bernard, Simon and Vianou, 2005) and highlight the educational ineffectiveness of this measure and its unfairness. Other than these, analysis of the other different factors (teacher training, class size, etc.) gives relatively varied results, depending upon the contexts which hardly allow for generalization. It should be underlined that if the results are varied, it is also very often because countries realities are very different. For example, professional training for teachers is not identical from a country to another and it is quite possible that these differences in training result in unequal performances.

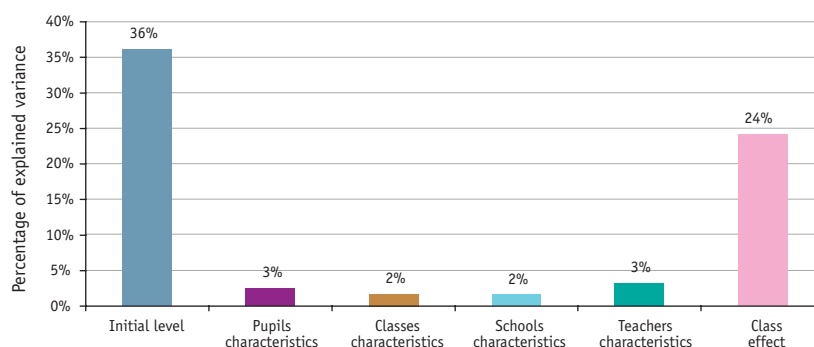
²⁶ Which has led to scientific controversy (Hanushek, 1995, 1997, 2003; Kremer, 1995; Krueger, 2003).

²⁷ He will also mention the necessity of developing more precise measures with new methodology (cf. Duflo, 2005; Kremer, 2003; Glewwe, 2002).

²⁸ They are also the subject of general consensus amongst researchers.

In an attempt to reach an overall view, it is useful to group the factors together in several categories and to measure the share of differences in pupil results that each category can explain. In graph 4.7, six major categories of variables have been looked at. The contribution of these to explain pupil scores over the school year were calculated in 2nd and 5th grade for 10 countries having participated in a PASEC evaluation. It is noted that the level of the pupils, at the start of the year, is the most significant element in explaining the differences in results between pupils at year-end (explaining 36% of these differences). This is obviously not very surprising insofar, as this variable incorporates the pupil's schooling history as well as a share of his/her personal characteristics (including his/her intellectual capacities). However, the other pupil characteristics (gender, standard of living, age, repetition, etc.) are seen to explain a more limited share of the score variances (2%). This observation is also valid for the characteristics of the classes (2%) and the schools (2%) and, more surprisingly, for those of the teachers (3%). One should beware of considering that these categories play an insignificant role; simply, their contribution to the quality of learning is more modest than what one might have thought and, above all, other dimensions are more massively involved. This is particularly disconcerting with regard to teachers whose professional training, status and experience are generally put forward as determining characteristics in the quality of learning. Now, on average, these characteristics, as a whole, account for only 3% of the differences in results between pupils. It is clear that the teacher effect is not limited to these characteristics and that there are other contributing factors. This is in part the interpretation on observing the class effect²⁹ on graph 4.7 (24% of the explained variance). This effect indicates that the fact of being in one class rather than another, with identical pupil and context characteristics, results in very significant differences in school learning achievements. This result highlights the strong inequalities running through the education systems, which is not without raising sensitive questions for educational policy.

Graph 4.7: The weight of the different categories of factors in the school learning process in 10 sub-Saharan African countries³⁰



Source: PASEC

It remains to be seen what this class effect conceals. The predominant hypothesis is that this effect should be attributed essentially to the teacher. Since this result is observed, although the principal characteristics of the teacher are checked in the analysis (professional training, experience, etc.), the greater part of this class effect could depend upon characteristics not noted, such as the teacher's motivation, charisma or teaching ability. In fact, in primary education, there is usually only one teacher per class, so it is the teacher, above all, that changes from one class to another. Besides, the literature often mentions the teacher effect for this type of measure. However, some authors challenge the idea that the class effect would be purely a teacher effect and put forward other factors involved at class level (Bressoux, 2000). This questioning is even more acute in the African context where the effect

²⁹ Technically, this effect is measured by the introduction in the statistical model of indicational variables identifying each class.

³⁰ Burkina Faso, Cameroon, Côte d'Ivoire, Guinea, Madagascar, Mali, Mauritania, Niger, Senegal and Togo.

observed seems particularly significant and distinctly higher than what is observed in developed countries³¹.

3.2 The extent of the disparities between classes and schools

The above results indicate that there are important differences between classes in terms of school learning achievements, even after the effects of the characteristics of the pupils and the context have been neutralized. This seems to imply a specificity which could have important consequences in terms of educational policy. To confirm the above results, a comparative analysis was carried out on developed countries and on African countries. This analysis looked into the share of variance of the results at learning tests to be explained by the differences between classes³². For the developed countries, the TIMSS 2003 data in Mathematics for the 4th grade were used. The share of variance that can be attributed to the differences between classes for the 11 countries studied was 23%. However, when looking at the African countries that participated in this survey, i.e. Morocco and Tunisia, it is noticed that the figure is around 35% for these two countries. In order to extend the comparison, similar analysis was made, in Mathematics once again, on PASEC and SACMEQ³³ data, i.e. a total of 23 countries. These results converge with over 37% variance of Maths scores attributed to differences between classes. The disparities between classes, and especially the existence of classes, where the level of learning is abnormally low, may explain a significant share of the low average levels of learning observed in African countries

3.3 Disparities between classes and performance of the education systems

The observation of high disparities between classes is a distinctive feature of African education systems. As recalled by Bernard, Nkengne Nkengne and Robert (2007), in most countries, classes where pupils learn very little coexist with high-performance classes.

Table 4.4: Comparison of minimum and maximum average scores in PASEC French tests in 5th grade of primary school

	Average score in the class	
	minimum	maximum
Burkina Faso	19.2	84.7
Cameroon	31.4	87.3
Côte d'Ivoire	31.6	80.2
Madagascar	22.3	89.4
Mauritania	3.2	61.2
Senegal	17.5	76.3
Chad	11.1	79

Source: Bernard, Nkengne Nkengne and Robert (2007)

31 Rowan, Correnti and Miller (2002) find teacher effects of between 4% and 18% in the USA; Bressoux (2000) indicates that class effects explain between 19% and 14% of variance at elementary school in France.

32 In the absence of control variables, as for earlier results, this is therefore a gross class effect.

33 These are tests corresponding to the 4th grade of primary school for PASEC and 6th grade for SACMEQ.

Different simulations have been carried out based on PASEC data, in order to study the consequences of these disparities. The idea was to identify schools showing results very much below the average³⁴ and to estimate the impact of these schools on the average level of pupils in a given country. To do so, new scores were estimated for the pupils in these schools, taking into account their personal characteristics (including their level at the start of the year) but assigning them an average class effect. In fact, an econometric estimate was made of the scores these pupils would have obtained if they had been enrolled in a class with somewhat average results rather than in a poor performance class. It was therefore possible to appreciate the impact of the low performance classes on the overall performance of the education system. In this respect, one looks at both the evolution of the average score but also the proportion of pupils who obtained at least 40% of correct answers in the tests (cf. table 4.5).

Table 4.5: Impact of low performance classes on the quality of learning within the education systems

		Average score (out of 100)		Proportion of pupils with at least 40% of correct answers	
		real	simulated	real	simulated
Mauritania	French	20.9	23.3	10%	10%
	Mathematics	22.9	26.1	16%	17%
Madagascar	French	31.4	32.8	22%	22%
	Mathematics	51.3	53.4	77%	84%
Cameroon	French	45.1	48.8	60%	72%
	Mathematics	46.4	50.9	64%	77%
Chad	French	28.8	32.8	22%	24%
	Mathematics	32.6	37.7	31%	46%
Average increase	French	2.9		3.8%	
	Mathematics	3.7		9.1%	

Sources: PASEC data and authors' calculations

The simulations made arrive at an average increase in the test scores for the four countries of almost three points in French and almost four in Mathematics. As for the proportion of pupils who reach the threshold of 40% of correct answers in the test, i.e. the threshold deemed to be desirable for all pupils, there is an increase of almost 4 percentage points in French and slightly over 9 percentage points in Mathematics. Even if there is seen to be a slight variation according to the countries and the indicator used³⁵, overall, the estimates provided by the simulations leave no doubt as to the impact of these deviant schools on the quality of learning at country level. Aside from the serious problems of equity raised by the existence of schools with performances far below average, this is also seen to penalize the average performance of the education systems. It therefore appears that special attention should be given to this issue in the running of the education systems.

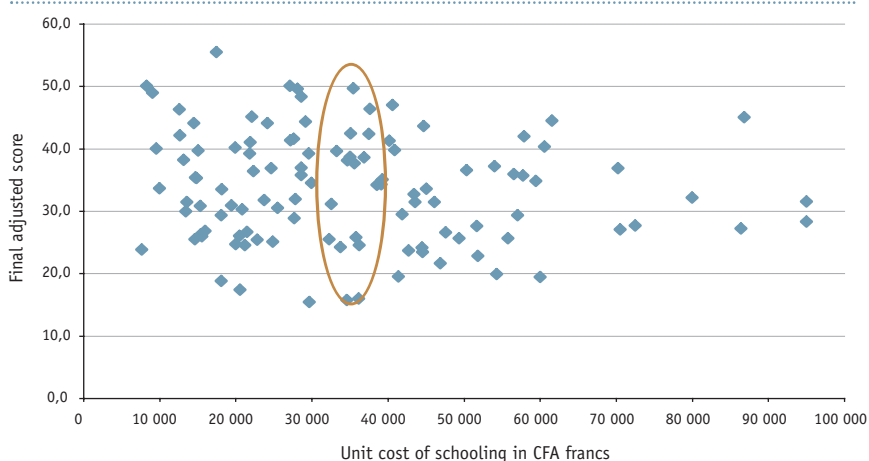
34 The criterion was an average class score under the average pupil score by at least 0.75 standard deviation. That represents between 10% and 20% of the schools in the sample according to the country.

35 Thus, for Mauritania, a fairly distinct effect is noted on the average score but very little effect on the proportion of pupils reaching the threshold of 40% of correct answers, which is explained by the pupils' generally poor level.

3.4 How can disparities between classes be reduced?

One of the first reasons that comes to mind, in order to explain the considerable disparities observed, is that of resources available at school level. Indeed, problems of allocation of resources to the different schools are well recognized just as the differences in resources between public and private schools. However, this being said, most studies devoted to this issue highlight the low relationship established between resources and results. Graph 4.8 is in line with the earlier analysis. It illustrates, through the example of Cameroon, this observation which is common to the African countries.

Graph 4.8: The differences in performances within an education system with identical resources: the example of Cameroon in 5th grade (French-speaking sub-system)



Source: PASEC

Firstly, one can observe a problem of allocation of resources with some schools showing an average expenditure per pupil of below 20 000 CFA francs while for others it is over 50 000 CFA francs and can in extreme cases be in the neighbourhood of 100 000 CFA francs. Therefore, schools are not all treated in the same way, and disparities can even be said to be acute. However, the ellipse on the graph shows that in a group of classes disposing of comparable resources, the same pupil can see his/her score vary considerably at the end of the school year, as a result of being in one class rather than in another³⁶. This shows that beyond the problem of resources available at local level, the effective and efficient use of these resources is of just as much concern. This is a major observation for most African countries: **quality of learning is not confined to a question of resources; it is also closely linked to the way these resources are managed.** What needs questioning is the capacity of the schools to transform allocated resources into school results.

The sometimes considerable and continuing performance gaps between schools are not, or almost not, taken into account in the management methods of education systems at the present time. The short-sightedness of the education systems speaks in favour of a change in school management. Local management should become a priority, where results in terms of access to school, survival and learning achievements would be the principal management concerns. Identifying schools with major difficulties and giving priority to supporting them does not seem out of reach for the African school administration and it would have massive

³⁶ Each dot represents the score that the average pupil in Cameroon would obtain in a class in a given school by controlling the characteristics of the pupil and the school context.

impacts on enrolment, quality of learning and also on equity. That implies, on the one hand, redefining and clarifying the roles and responsibilities of the different stakeholders of the education system and, on the other hand, providing those concerned with the tools necessary for this meticulous job³⁷. With this in view, using the national exams for a system of evaluation could be a relatively simple solution to implement.

The principal levers to be given priority with a view to improving the quality of learning still need to be identified. The results presented above highlight the fact that traditional factors, such as the professional training of teachers, their experience, pupil textbooks, etc. do not provide the explanation for most of the performance gaps between schools. Although these factors must not be neglected, it does seem timely to look for other levers. It is true that there are few factual elements in the different studies to draw upon. However, there is one lead to be prioritized, although not yet well documented, which concerns the basic ingredient of any educational process, i.e. total number of teaching hours or time spent in school³⁸. Indeed, many observations in the field converge towards the fact that actual teaching time is distinctly insufficient in African schools but also unevenly distributed between schools and classes (cf. box 4.2). This factor, far from perfectly measured in the studies available, could explain a large part of the very significant differences in results between classes, as it is fundamental for learning. In an evaluation carried out in India, Duflo and Hanna (2005) have shown the positive relationship between the length of time the teacher is present and learning achievements.

Although complementary studies are still necessary for a better understanding of this dimension, field observations do give us an idea of the extent of the problems related to the time spent in school. From now on, this must be taken into account as a major challenge for African education systems. **Indeed, one can hardly hope to improve significantly the quality of learning in basic education in Africa today if pupils are not ensured of benefiting from a number of teaching hours comparable to that of pupils in developed countries.**

However, a solution to the problem of teaching hours will only be found if those in charge of education look into both the length and adaptation of the school calendar, as well as, teacher absenteeism. Difficult socioeconomic conditions often place strong constraints on the populations and there is little hope that they will manage to break out of these in order to respond to school requirements. It therefore appears clear that, in this type of situation, school must adapt as much as possible to its environment. These simple observations give rise to the idea of introducing some flexibility into the school calendars, in order to adapt them to the local contexts. This would however need to be run effectively at local level and would involve working together with the communities. Finally, teacher absenteeism, which is particularly high in Africa and has multiple causes (health, administrative reasons, etc.), should also be considered a priority in view of its potentially very negative impact on school learning achievements. In fact, **the priority for the authorities should be to ensure that the recommended volume of hours is applied in each school**, which implies developing specific tools for measuring the number of school hours.

37 The AGEPA Initiative, also called IEMAC/AGEPA (Improving Education Management in African Countries Initiative) has been working on these issues since 2003 in several African countries including Benin, Madagascar, Mauritania, Niger and Senegal.

38 This point has also been highlighted in researches conducted in developed countries (cf. Bressoux, 2000).

Box 4.2: Time spent in school: a major factor in the quality of learning

While international norms recommend 900 hours teaching time per year for primary school (OECD, 2002), an increasing number of obstacles prevent many African schools from providing their pupils with such a time volume.

One factor is of general order and has to do with the way the school year is organized. The school calendar cannot be envisaged in the same way throughout a country's territory. It is still common to have a single school calendar in African countries although there are often distinct local differences. Thus, all pupils are supposed to start the school year at the same time. Now, field observations have revealed that this is in practice rarely the case. Some areas, for different reasons (climate, accessibility, etc.), cannot start school at the projected date. In addition, in rural areas, there are problems connected to harvests or transhumance of livestock, often requiring children to help their family. This results in pronounced pupil absenteeism at these periods if they do not coincide with school holidays. These examples show that the length of the school year is not the same for everyone and that this varies greatly within the different education systems. Thus, schools, which start one month late and have high pupil absenteeism and/or an «early» end of school year, may have a deficit of 200 to 300 teaching hours per year compared to schools that respect the official calendar. It is easy to imagine the massive consequences such differences can have on pupil learning.

Another point to be taken into consideration is teacher absenteeism which is relatively high³⁹ and has multiple causes. Naturally, there are many health reasons on the continent where pandemics are common, HIV/AIDS of course, but malaria is also one of the biggest reasons for absence. Strikes should also be mentioned as these can take on considerable proportions in some countries. There are other less justifiable reasons such as problems connected to payment of salaries, which sometimes oblige teachers to be absent for several days, or absence for no acceptable reason. Whatever the causes, the difficulty lies in the incapacity of most African education systems to lessen the impact of teacher absence. On the one hand, it is not usual to replace absent teachers and, on the other hand, for short-term absences, it is very unusual for the teacher to catch up on the lessons missed. It should be borne in mind that if a primary school teacher is off two days a month on average throughout the school year and does not catch up on the lessons missed, and is not replaced, this is the equivalent of a reduction of around one hundred hours learning time for the pupils over the year.

When the different elements are joined together, we rapidly reach two conclusions: (i) actual teaching time over the school year is globally insufficient, and (ii) there are major inequalities in school time within the education systems. In fact, in most cases, African pupils benefit from a total teaching time that is very far from the international norm of 900 hours of lessons per year at primary school. For some classes, with combined difficulties, teaching time can be estimated at hardly more than 400 hours, i.e. the equivalent of half-time school, whilst pupils in the highest performance schools will benefit from 800 to 900 hours of lessons.

³⁹ In the PASEC surveys, teachers have declared from two to four days of absence per month, depending upon the country.

4. Conclusion

In the framework of EFA, it is essential to grant equal importance to school access and survival and to what pupils actually learn in school, as learning is the ultimate aim of all education. However, it is difficult to have an objective view of the situation regarding the quality of learning in Africa due, first of all, to the lack of adequate data. The poor participation by African countries in international surveys on the assessment of learning achievements, such as PISA or TIMSS, and the absence of such a survey at continental level, as well as the lack of national evaluations all contribute to hindering diagnosis. It is therefore essential to expand the exercise of measuring the quality of learning on the African continent, especially for measures enabling comparisons between countries.

The overall low level of performance of the African education systems and the very significant disparities between and within countries, sway in favour of placing greater importance on managing the quality of learning. The situation is complex, with excellence often going side by side with an absence of basic learning in the same education system; school management must tackle this very distinct heterogeneousness. This will only be possible if current management methods change, in order to incorporate in their common practice, performance in terms of enrolment, quality of learning and equity of schools. One of the direct consequences would be to redefine the roles and responsibilities of the different stakeholders in the educational chain. **Local management should be at the heart of the issue of the quality of learning and, beyond that, of the improved running of education systems.**

The major lesson learned from the variety of situations observed on the continent is that nothing is inevitable but that it is the policies implemented that make the difference.



© UNESCO BREDA - Mario Bels



Vendredi, 08 juin 2007

- I'm sorry, to not respect what you told me last time.
- Can you remember, did you met me for the first time? I don't remember where I met you for the first time!
- But, I only forgot about your name.
- Now, I will tell you my name for the last time. And I hope you will not forget it.
- I promise you this time!
- It's not finish, can you also give me your telephone Number?

←

What strategy for non-formal education in the current panorama of education for all?

Literacy and non-formal education constitute a sub-sector that seems to be neglected, both at government and donor level, although the needs they address are still very important: more than one adult in three is illiterate in Africa today. This chapter is an opportunity to come back to the «poor relation» to education, by analysing the benefits of existing programmes in terms of literacy and of the social externalities often associated with literacy, in countries where this sub-sector is sufficiently represented. It also brings to light, through the example of Morocco, the cruel lack of professionalization of the sector and of programme assessments, two indispensable elements to give advocacy for literacy a chance to be heard and to finally obtain positive repercussions.

Along with the mobilization in favour of Universal Primary Education, the fight against illiteracy is increasingly focused on formal education. Today, the financing of non-formal education programmes for illiterate adults and for youngsters with poor or non-existent schooling has become an even more acute issue. In the past, literacy and non-formal education were sectors that received little financial support from governments and external partners and, today, they seem to be further marginalized even though the needs they specifically answer have not totally disappeared. By giving priority to formal education, the authorities are clearly making a choice of generation and hope to restrict the specific recourse to literacy programmes to well-targeted populations in the medium term, as it is the case in most countries that have reached UPE. However, the potential needs are still important: in most sub-Saharan African countries, there is still a relatively high number of illiterate adult populations. In this respect, it can be recalled that the rate of literacy concerning the over 15s, calculated for the 2000-2004 period for the whole of sub-Saharan Africa, registered at only 61%. This incurs obvious problems of attitudes (health, education...), but also of productivity, especially with regard to producers of the informal economy who are increasingly expected to be active partners in the training and insertion of young people (cf. Chapter 7). Also, the road leading to UPE, although well underway, is still accompanied by significant dropping out before completion, which in the coming years will continue to fuel the number of young people who, due to a lack of sufficient schooling, have not acquired the basics for sustainable literacy.

It is clear that the marginalization of non-formal education is not connected to a weakness in the needs that it is designed to cover. This is more certainly explained by the lack of professionalization of the sector and notably by the near absence of relevant knowledge on the efficiency of programmes already implemented. The mobilization for UPE owes a lot to the multiplication of assessment programmes which, little by little, have made it possible to understand that, from the different modes of organization and results studied, it was possible to bring to light more efficient organization methods, i.e. those most cost-effective in reaching the best possible results. Progressively, a corpus of sound scientific results, reinforced by the Fast Track Initiative indicative framework, has proven that, in primary education, the way in which the available resources are used is just as important as the level of resources allocated. There is nothing to make us believe that the situation of non-formal education (but also of other levels and types of education) differs significantly from that of primary education. In fact, while national and external resources available for literacy (widely speaking) are limited, the competition between formal education where reliable benchmarks exist, making it possible to combine higher pupil intake and quality of results and non-formal education, where such data is lacking, is clearly to the advantage of the former.

Advocacy developing today around the issue of non-formal education (*see in particular the EFA Global Monitoring Report 2006: Literacy for Life*) has little chance of being heard if it does not also promote the implementation of reliable programme evaluations allowing the foundations to be laid for efficient management of the sub-sector. This chapter intends to illustrate what could be done in this respect while providing some (rare) information on the relevance of non-formal education and adult literacy programmes. The first section takes a global look at the relevance of non-formal education, through the results of household surveys widely available in sub-Saharan countries today. The second section, drawing on two examples of research carried out in Morocco, shows that it is possible to apply similar forms of evaluation to adult literacy programmes, as those used in the past to gain a better understanding of the determining factors of the quality of learning in formal education.

1. Comparison of the social effects of formal and non-formal education in the African context

In the absence of direct measures of the effectiveness of specific non-formal education programmes, it is interesting to study, or at least explore, their impact on a number of social dimensions and to compare this to those associated, in the same areas, with the absence of education or with the benefits of formal education. The data sources used, as for some sections of the previous chapter on the quality of primary education (cf. Chapter 4), are the MICS household surveys conducted by UNICEF between 2000 and 2002. In these surveys, non-formal education is not broken down into its different components and covers, without distinction, adult literacy activities and complementary (for specific populations) or substitute (for a school-age population) non-formal education as well as formal education structures.

While literacy has for long been the main objective of non-formal education, other dimensions deserve consideration: integration into the job market, life skills, changes in attitudes (especially for women) in terms of reproductive health and child health, etc. The MICS surveys allow the measurement, at an individual level, of some of these dimensions and to connect them to the level of education (absence of education, non-formal education, time spent in formal education). In concrete terms, it is then possible to estimate how having attended non-formal education can represent a benefit compared to the absence of education, on the different social dimensions mentioned above. To qualify this advantage, it is then possible to transform it into an «equivalent years of formal education» by estimating how many years of formal education are necessary to obtain an equivalent effect.

Following a brief analysis of the place of non-formal education in the different countries where a MICS survey is available, and a presentation of the principal characteristics of its beneficiaries, an analysis will be made of the effects of non-formal education on the sub-sample of countries where this type of education exists.

1.1 The extent of non-formal education greatly varies from country to country

The following table indicates the relative weight of the participation in non-formal education by the 15-49 years old segment of the population for the 21 sub-Saharan African countries where a MICS survey is available. This weight is relatively low on average since it concerns only 3.5% of the age group taken into consideration. Above all, it varies from one country to another, close to zero in most countries where formal education is well developed and ranging from a minimum of 0.3% to a maximum of 26.7% for the other countries, where attendance in formal education represents practically less than half of the different types of education for the 15-49 age group. **Quite clearly, among the countries where access to formal education is rare, recourse to non-formal education is not a systematic policy and is still very marginal in many cases.** In Côte d'Ivoire, for example, where only 51.6% of 15-49 years old segment have had formal education, the proportion of the same population to have benefited from non-formal education does not exceed 2.2%. This is also the case for Guinea-Bissau, Comoros and Sierra Leone (table 5.1). In opposition, other countries, where the proportion of formal education is low, show much higher than average proportions for those benefiting from non-formal education (Burundi 26.7%, Niger 14.7%, Gambia 13.7%, Chad 7.5% and Senegal 6.5%).

Table 5.1: Distribution of the 15-49 years old segment of the population according to the type of education (%)

Countries	No education	Non-formal	Formal	Overall
Angola	24.4	0.0	75.6	100
Botswana	13.1	0.0	86.9	100
Burundi	25.7	26.7	47.6	100
Cameroon	20.9	0.2	78.9	100
Côte d'Ivoire	46.1	2.2	51.6	100
Comoros	52.1	1.7	46.2	100
Gambia	48.0	13.7	38.3	100
Equatorial Guinea	12.6	0.0	87.4	100
Guinea-Bissau	59.1	0.5	40.4	100
Kenya	11.9	0.2	87.9	100
Lesotho	11.6	0.3	88.1	100
Niger	65.2	14.7	20.1	100
CAR	40.6	0.2	59.2	100
DRC	18.3	0.8	80.9	100
Rwanda	26.7	0.1	73.2	100
Sao Tome and Principe	12.1	0.0	87.9	100
Senegal	54.5	6.5	39.0	100
Sierra Leone	68.9	0.3	30.9	100
Swaziland	16.2	0.7	83.1	100
Chad	59.3	7.5	33.2	100
Zambia	17.7	0.0	82.3	100
Average	33.7	3.5	62.8	-
Minimum	11.6	0.0	20.1	-
Maximum	68.9	26.7	88.1	-

Source: Calculations based on MICS surveys

In this section, the analysis of the impact of non-formal education in terms of sustainable literacy will cover all countries where it is represented. Its effects on attitudes will only be analysed for the seven countries listed in bold type in the table, where non-formal education is sufficiently represented to allow for finer category analysis.



© UNESCO BREDA - By Reg'

1.2 Beneficiaries of non-formal education

The population benefiting from non-formal education over the seven countries is relatively distinctive. It most often concerns men (60%) and rural areas (73.9%). The beneficiaries according to the income of the head of the family are, somewhat unexpectedly, quite evenly distributed between the income quintiles (table 5.2). Attending non-formal education is therefore not typical of being poor.

Table 5.2: Distribution of those trained in non-formal education according to individual and social characteristics (%)

	Burundi	Côte d'Ivoire	Comoros	Gambia	Niger	Senegal	Chad	Average
Gender								
Men	40.4	70.1	43.2	57.1	70.2	60.9	78.0	60.0
Women	59.6	29.9	56.8	42.9	29.8	39.1	22.0	40.0
Location								
Urban	3.2	82.8	9.4	28.5	9.7	22.2	27.1	26.1
Rural	96.8	17.2	90.6	71.5	90.3	77.8	72.9	73.9
Income								
20 % + poorest	18.9	7.4	21.9	27.3	21.6	25.9	28.3	21.6
Q2	20.7	10.7	21.6	15.7	15.2	25.7	17.7	18.2
Q3	21.5	19.0	19.0	24.3	23.3	18.4	18.0	20.5
Q4	23.4	27.8	22.7	18.2	20.7	15.8	14.5	20.5
20 % richest	15.5	35.1	14.8	14.5	19.3	14.1	21.4	19.2

Source: Calculations based on MICS surveys

Attendance according to gender varies depending upon the country: women are in the majority in Burundi and Comoros. On the other hand, beneficiaries are most systematically located in rural areas with the notable exception of Côte d'Ivoire where almost 83% are from an urban environment. This specific situation is reflected in the distribution according to the level of wealth, which is somewhat biased upwards in this country.

1.3 Measuring the social effects of non-formal education

The effect of the type of education received on different social dimensions (sustainable literacy, attitude in terms of reproduction and of health) is measured through statistical models in which these attitudes are associated with the different types of education. The models estimated¹ differ according to the nature of the variable being studied (quantitative when to do with the AIDS knowledge index, age of first birth, average time span between births, number of children; qualitative when to do with situations like the declaration of literacy, of birth registration, etc.).

¹ The models are estimated on populations for which the variable is relevant. Thus, sustainable literacy covers all adults aged 22 to 49 whilst the analysis of attitudes in terms of demography, health and reproduction, child health, is limited to women aged 15 to 49. Finally, the level of knowledge on AIDS transmittal is estimated on the whole population aged 15 to 49.

On the basis of these models, the values of the different social variables can be simulated according to the individuals' level of education (no education, non-formal education, formal education, number of years of study). These effects are measured by controlling a number of variables available in the survey, connected to the education received, and liable to affect the variables explained: the standard of living and the geographical location which, if omitted in the model, would lead to overestimating the effect of education, as well as age in order to limit possible generational effects.

The impact of non-formal education on sustainable literacy

The benefit of sustainable literacy constitutes the first and, of course, the most immediate dimension of the effect of non-formal education that can be studied. The results given in table 5.3 show that this dimension is indeed a real output of the programmes. First of all, in almost all countries, the chances of literacy are much higher when people have had non-formal education than when they have benefited from no education at all (in Burundi, for example, the proportion of those having received non-formal education who declare to be sustainably literate is 8.4 times higher than the proportion of sustainably literate individuals who have had no education). The very high value observed for some countries (notably Chad, DRC) reflects the low proportion of people sustainably literate who have had no education whatsoever. Having said that, the reference to literate people among those who have not benefited from any education can obviously create problems in reflecting specific situations and to mistakes in declarations, over which we have no control.

A more reliable measure of the impact of non-formal education in terms of literacy, which in addition makes it possible to "qualify" this benefit, is the number of years of formal studies that would be necessary to obtain the same literacy results as a complete non-formal course of study. Statistical models produced for each country provide an estimation of the number of years, entitled "equivalent years of formal education". The results are shown in the second column of table 5.3. In Burundi, the proportion of sustainably literate people among those who have received non-formal education is equivalent to what could be observed in a population having followed one and a half years of formal education. This result is amongst the lowest observed, along with Côte d'Ivoire, CAR and Guinea-Bissau suggesting a poor

quality of non-formal education. In the other countries studied, values are relatively high and range from 3 to over 6 years. In terms of literacy, this means that, in some cases, the benefit of non-formal education compares favourably with that associated with a complete course of primary education.

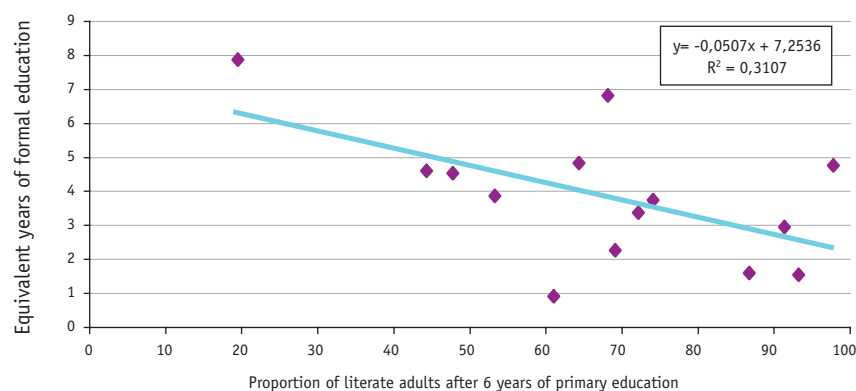
Table 5.3: Impact of non-formal education in terms of literacy

Country	% literacy non-formal / % literacy with no education	Equivalent years of formal education
Burundi	8.4	1.6
Cameroon	3.2	3.4
Côte d'Ivoire	4.6	1.6
Comoros	3.0	6.8
Gambia	8.6	4.6
Guinea-Bissau	4.8	2.3
Kenya	5.5	4.8
Lesotho	3.6	3.0
Niger	17.9	3.9
CAR	1.0	0.9
DRC	40.6	7.9
Rwanda	14.3	4.8
Senegal	4.0	3.8
Chad	166.2	4.6
Average	20.4	3.9

Source: Calculations based on MICS surveys

The latter result is however to be interpreted in the light of the information given on graph 5.1, which shows the relationship between the value «equivalent years of formal education» of the benefit of non-formal education in terms of literacy, and the performance of formal education in the same area. Even if the statistical relationship is modest, it can be noted on average, that it is rather when the formal system is itself of poor quality in terms of sustainable literacy (low proportion of literate adults after 6 years of primary education) that the benefit of non-formal education appears high.

Graph 5.1: Results of non-formal education and formal education in terms of literacy



Source: MICS surveys and authors' calculations

The impact of non-formal education upon other social areas

The same analysis as presented earlier was conducted on a set of attitudes and knowledge listed in the MICS surveys, which are generally influenced in a positive way by education. There is thus reasonably detailed declarative information available, concerning practices as regards birth control and preventive health for mother and child; information on practices in terms of birth registration and knowledge of HIV/AIDS and its transmittal is also available.

Once the impact of non-formal education has been assessed in the different social areas studied, this is compared to that of not having had access to any type of education, by establishing the relationship between the two.

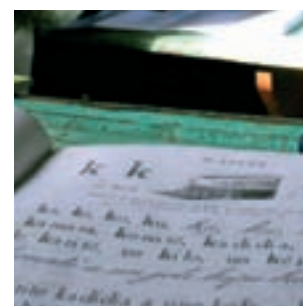
A brief glance at table 5.4 shows that the values of the different relationships are generally close to the unit. **The practices of those who have benefited from non-formal education do not therefore differ significantly from those who have had no education at all on the different areas taken into consideration.** When there is an effect, it is often country-specific and undoubtedly reflects the variability in content of non-formal education, from one country to another. Surprisingly, some of these relationships are even below the unit indicating that beneficiaries of non-formal education have, on some scores, less positive practices than people who have received no education. This does not necessarily mean that non-formal education has a negative effect: it can be thought that beneficiaries of this education have different characteristics from those who have never been to school, which are not controlled by the models and are associated with less positive practices.

Table 5.4: Effects of non-formal education compared to absence of education

	Burundi	Côte d'Ivoire	Comoros	Gambia	Niger	Senegal	Chad
Registered births	1.1	1.0	1.0	0.6	1.2	1.0	-
AIDS	1.1	1.4	1.0	1.1	1.0	1.1	0.6
Demography							
Use of contraceptives	1.8	-	2.5	1.0	1.0	-	0.5
Time span between births	1.0	-	1.0	1.0	1.0	-	1.0
Maternal health							
Antenatal check ups	-	0.8	1.0	1.0	1.4	1.0	0.6
Tetanus vaccine	1.0	1.0	1.0	1.1	1.4	1.0	1.0
Vitamin A intake	1.0	-	1.0	-	1.0	0.9	1.0
Assisted birth	1.5	1.0	1.2	1.0	1.7	1.0	0.4
Child health							
Child weight	1.0	-	1.0	-	1.0	1.0	-
Child height	1.0	-	1.1	-	1.0	1.0	-
Complete vaccination	1.2	1.4	1.0	1.0	1.2	-	-
Vitamin A intake	1.2	1.0	2.4	1.1	1.1	1.4	-

Source: MICS surveys and authors' calculations
 Note: The symbol - indicates that the estimation has not been made.

The data used in this section, although obviously too rough for assessing such a complex and varied sector as non-formal education, do prove to be instructive. It is clearly observed that non-formal education enables access to literacy without, however, guaranteeing some of the externalities generally associated with it. The value of this literacy is sometimes far from insignificant, if compared with the benefits from formal education, and this is undoubtedly a very encouraging result. The effect on attitudes, with regard to birth control and healthcare, is low overall but can sometimes be high. What is predominant on rapidly viewing the sector is the variety of results undoubtedly corresponding to the variety of programmes, goals, organization methods, contexts and in all likelihood populations. There is therefore room in the non-formal education sector for the same type of assessments, as those conducted in primary education and which have progressively enabled to separate the specific effect of different factors on the results obtained. The following section, dealing only with Morocco, will provide a more direct application.



© UNESCO BREDA - By Reg'

2. Determining factors in the quality and sustainability of adult literacy in Morocco

An exploratory analysis of the decisive factors in the quality of learning in literacy programmes was conducted in Morocco in 2004. It has been extended today as part of a more ambitious research programme, which, in addition to the initial objective, also deals directly with student survival and proposes deferred measures of the sustainability of benefits.

2.1 Adult literacy activities in Morocco

The campaign against illiteracy is underway in Morocco, firstly through the efforts made in terms of school access but also, more directly, by the intensification of activities specifically designed for illiterate adult populations. The programme as announced is ambitious: while the proportion of illiterate adults has dropped from 61% in 1990 to 50% in 2001, the goal set by the National Charter on Education and Training (the programme which sets orientations for education in Morocco) is to bring the illiteracy rate down to 20% by 2010. The strategy adopted, to achieve this goal, represents a significant break with former activities that were part of a single programme handled by the Ministry of National Education. It is based on three central components: the mobilization of new operators (public operators, businesses and above all NGOs), the launch of an educational reform (functional programmes adapted to the characteristics of the targeted populations and answering their needs, revision of duration of sessions and training of trainers) and the implementation of supportive actions (awareness campaigns, promoting income generating activities to facilitate the literacy programmes). Evaluating the activities underway is clearly the core of this new strategy, which is intended to adapt supply to the different populations and contexts, and above all provide a framework for new external operators, mostly NGOs under contract.



© UNESCO BREDA - By Reg

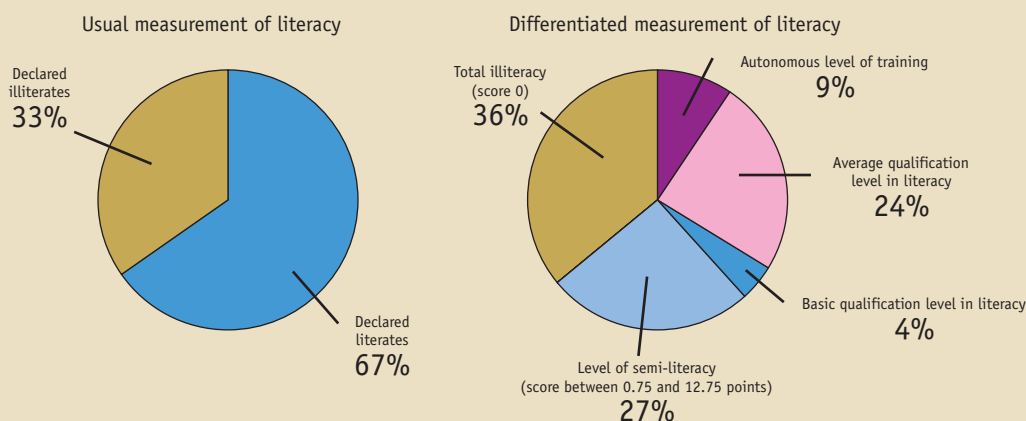
Box 5.1: Literacy Assessment and Monitoring Programme (LAMP): a cornerstone of the LIFE initiative

Context:

In November 2005 UNESCO launched the Literacy Initiative for Empowerment, (LIFE). This initiative must contribute to achieving the Dakar goals, particularly goal 4 (a 50% improvement in levels of adult literacy) and goal 5 (achieving gender equality in education). The purpose of LIFE is to support the EFA goals in the field of literacy. This initiative is designed, as a global strategic framework, to enable all stakeholders significantly increase their efforts for literacy. Countries, with a high rate of illiteracy² or where the rate of literacy is under 50%³, will be given priority for the implementation of LIFE.

There is, of course, consensus of opinion on the fact that literacy is essential for economic prosperity, health, cultural identity, community involvement and tolerance, and for the capacity of individuals to use their full potential in increasingly knowledge dependent societies. Measuring literacy in all its dimensions therefore becomes *de facto* a functional and institutional necessity. For this reason, UNESCO considers LAMP as an essential tool to develop and implement policies deriving from the LIFE initiative, for it is true that the data «measuring» literacy in developing countries are fragmented and mainly originate from indirect assessments⁴.

It is important to understand the distribution of literacy throughout the population, in order to define adapted development policies. Measuring literacy does not only mean determining who can or who cannot read, since there are diverse levels of literacy skills ranging from knowing how to write one's name on a form to understanding the instructions on a medicine label or being able to learn from written texts.



The LAMP programme attempts to answer these needs by providing the different countries with the methodological and technical instruments for a survey aimed at measuring a wide range of literacy levels going from basic reading and writing to higher levels of literacy needed to fully participate in a society where learning fills an increasingly important place.

LAMP Methodology:

LAMP was developed to collect better quality literacy data through new household surveys conducted on a five or ten year cycle. The instruments have been validated in 6 countries including 3 African countries⁵. The data collected within the LAMP framework will be used to develop and implement national action plans and better define adult literacy programmes.

LAMP is implemented in the different countries through a partnership grouping together national expertise⁶, UIS expertise⁷ and literacy assessment experts coming from Statistics Canada and ETS (USA).

LAMP's conceptual framework, which enables a comparative assessment of adult literacy, is adapted from the Adult Literacy and Life Skills Survey (ALL). LAMP measures five levels of literacy (i) Level 1: for people who have very poor skills (e.g. those who are unable to determine the correct amount of medicine from the label on a package) (ii) Level 2: People who can only deal with simple, clearly laid-out tasks (iii) Level 3: considered a suitable minimum for dealing with daily life: this skill level is generally required to successfully complete secondary education (iv) Levels 4 and 5: Respondents demonstrate command of higher-order information processing skills.

The results of LAMP are expected to contribute to the political debate and at the same time fuel research on such questions as (i) How are skills distributed throughout the different sub-groups of the population and what are the consequences in terms of mobilization of resources? (ii) What is the relationship between illiteracy and social participation and /or economic integration? (iii) What impact do adult education policies have on the degree of literacy in the populations? (iv) What is the effectiveness of formal education? LAMP data is intended to serve a wide range of users, from civil society to policy decision-makers and civil servants in the ministries.

² Over 10 million people.

³ 35 countries including 18 in sub-Saharan Africa.

⁴ From DHS, MICS surveys etc.

⁵ On a sample representative of the geographical and linguistic national diversity.

⁶ Morocco, Niger and Kenya.

⁷ LAMP national team.

⁸ Head office and regional.

2.2 The exploratory survey and principal findings⁹

The analysis of the factors of success of adult literacy courses is based on the results obtained by the trainees at the end of session knowledge tests in Arabic and Arithmetic adapted to the programme. This concerned 725 beneficiaries and 24 trainers overall for the four programmes implemented in Morocco. The principle of the analysis is a breakdown of the variance in scores, according to the individual and contextual characteristics (programmes, trainers). The sample studied only covers participants in the second and third level of the literacy programmes, made up of three levels. Women are in the majority (88% of beneficiaries). Those surveyed are young (average age of 31) and half of them are married. The working population (employed or unemployed) is little represented (under 16% of beneficiaries).

Analysis of the success per group of items¹⁰, presented in table 5.5, shows that the beneficiaries who had all passed the first literacy level, experienced difficulty with the items here. On the one hand, the proportion of beneficiaries capable of succeeding in more than five items out of the seven making up the test at level 1 is, at the most, 69.3% (programme/operator 2.2¹¹) and only exceeds 50% in three cases out of seven. On the other hand, this proportion is lower or equal to only 30% in four out of the seven programmes/operators taken into consideration. Success in items at the second level (success in three to four items out of the four making up the test) is 69.5% at the most (programme/operator 3.2). The percentages of success observed at the two levels seem positively connected, thus establishing a clear hierarchy between the different operators.

Table 5.5: Combined percentage of success in the different items according to the operators

	Level 1 (7 items)			Level 2 (4 items)	Level 3 (5 items)
	0 to 2 items	3 to 4 items	Over 5	3 to 4 items	At least 1
Operator 1	11.2	56.1	32.6	33.6	7.4
Operator 2.1	2.7	43.7	53.6	59.9	12.5
Operator 2.2	0	30.6	69.3	53.1	4.1
Operator 3.1	27.4	49.1	23.6	20.8	23.6
Operator 3.2	6.6	27.1	66.3	69.5	11.9
Operator 3.3	15.2	55.6	29.2	56.3	21.9
Operator 4	22.4	57.2	20.4	16.3	0

Source: Cerbelle, S. and Jarousse, J.P. (2004)

This situation obviously raises questions, as to the sustainability of literacy, and justifies the attention given to this issue in the ongoing research programme. Moreover, it can be seen that results differ distinctly depending upon the programmes and the operators within each programme.

Models explaining success factors confirm the variability in results, according to the programmes/operators, and with comparable individual student characteristics (earlier schooling and literacy level in particular). Breakdown of the variance in learning achievements, that has obviously only an indicative value here, due to the low number of

⁹ Cerbelle, S. and Jarousse, J.P. (2004), *Une évaluation des activités d'alphabétisation des adultes au Maroc*, CREFEME, University Mohammed V Rabat-Souissi.

¹⁰ Each item was made up of several exercises derived from the literacy programme.

¹¹ Due to the exploratory nature of the study, it has been chosen not to name the different programmes and operators.

contextual observations, highlights the importance of the operators and above all of the trainers in differentiating results, especially in Mathematics.

As opposed to what is noted in primary education (cf. Chapter 4), the variance in learning achievements depends fairly little here upon individual student characteristics, especially due to the fact that some students had partially attended formal education in the past (table 5.6). In Arabic, individual characteristics contribute to around 10% of the variance in learning achievements, the programme attended for about 12% (22.3-9.9), the operators for a little less than 11% and the trainers for almost 17%; in Mathematics, the teacher effect is even more clearly predominant with near to 33% for the variance in learning achievements compared to under 20% for individual dimensions and overall programmes/operators combined.

Table 5.6: Variance in learning (%) associated to the different groups of variables

Group of explanatory variables	Arabic	Mathematics
Individual characteristics	9.9	6.2
Individual characteristics, programmes	22.3	15.3
Individual characteristics, programmes, operators	33.0	19.0
Individual characteristics, programmes, operators, trainers	49.7	51.9

Source: *Cerbelle, S. and Jarousse, J.P. (2004)*

A priori, it should have been possible to determine, by using statistical models, the characteristics of the trainers most able to explain the major differences in teaching effectiveness observed. In fact, when either their personal characteristics or their professional characteristics (initial training, experience, benefiting from specific literacy training) were collected, no single element appeared to be significantly connected to the gaps observed¹². This implies that the differences have, undoubtedly, a somewhat strong personal dimension (teacher's personal qualities and also his/her level of involvement) ; taking into account the teacher effect in the beneficiaries' achievements, this would justify more active regulation (inspections/assessments, greater transparency in terms of results,...) and even more rigorous selection (possibly a posteriori in the case of annual contracts), which could constitute a more effective strategy than specific literacy training for trainers, widely favoured so far.



¹² Due to the limited number of observations, analysis was restricted to examining the correlations with each of the available variables.

© UNESCO BREDA - By Reg'

2.3 Current research¹³

Ongoing research on literacy in Morocco is more ambitious than previously, while adopting the same conception and methodological objectives. It comes under the framework of the LIFE project developed by UNESCO and is based at Caddy Ayyad University in Marrakech. Through action-oriented researches, it aims to cover the main interrogations related to adult literacy activities, with a special focus on quality. The «quality» of literacy is looked at from several angles: it is measured, more particularly, by course attendance and by learning achievements, but also by the benefits perceived and by literacy sustainability for the beneficiaries. Research covers a sample of 1 650 trainees from the Académie of Marrakech, representative of the beneficiaries of the four literacy programmes implemented. It concerns:

- Course attendance:

Trainee assiduity and survival will be monitored regularly throughout 2007. This will enable a precise analysis of survival (a major failing of this type of training) to be developed and then to be connected to success at individual level and at the level of the different programmes. Success will be assessed with regard to student results in three standard tests: an initial positioning test, two tests on learning achievements, one half-way through and the other at the end of the course. These two tests comprise Writing/Reading/Arithmetic exercises related to the programmes, and exercises related to the use of knowledge in daily life (filling in a form, reading a map, coping with everyday events...).

- Benefits and sustainable literacy for the participants:

Aside from analysis on success and survival, the research will aim at making a more qualitative assessment of the trainees' perception of the benefits gained from the different literacy programmes, on the basis of semi-directive interviews carried out on a sub-sample representative of those enrolled on the programmes. This qualitative analysis will be extended to earlier beneficiaries who will testify to the possible changes that have resulted from their participation in the literacy programmes. These former beneficiaries will also be given a simplified test designed to directly measure literacy sustainability.

- Cost-effective analysis of the determining factors as to survival and success:

Transversally, the results of the previous activities (particularly quality of learning and survival) will be used with a view to defining «good practices» and seeking cost-effectiveness by looking at the actions conducted alongside the public and private resources committed to each.

¹³ For further information on this research, contact the UNESCO Office in Rabat, Morocco: (s.tawil@unesco.org.ma or sophiecerb@yahoo.fr)

3. Conclusion

The ad hoc examples used in this chapter clearly show that the results of the activities of non-formal education are not guaranteed. These programmes give priority to literacy and, even in this one area, « quality » is seen to be very unequal. Results, in terms of birth control and healthcare, are much less significant than what could have been expected, but the effect of some programmes was seen to be somewhat positive. It is to be remembered that these first conclusions would deserve to be explored more in depth and that the non-formal education and literacy sector, like the other education sectors, covers a variety of situations and contexts, which can partially explain the very variable quality in results. A more systematic assessment of these results connected to the contexts and modes of organization, while controlling trainee characteristics, could help to pinpoint the best practices and contribute to repositioning this activity within more global trade-offs at education policy definition and funding level. The example of the study devoted to literacy in Morocco is very eloquent in this respect. Studying the factors differentiating the beneficiaries' results shows that the characteristics of the programmes, although very different in spirit and organization, explain a lesser share of the differences in results than the characteristics of the trainers. This clearly opens up ways to improve the effectiveness of the actions undertaken. Research ongoing in Morocco should obviously permit to progress still further in this direction, by going deeper into the issue of survival in the programmes (which is another element to be taken into account when evaluating their effectiveness and which could possibly modify the results observed in the exploratory survey as to those who completed the course) and also, more essentially, the issue of sustainable literacy ; an overall view of the latter was given here when using household survey data.

The results set out in this analysis, which is once again an exploratory analysis, should not serve as a justification for governments and donors indifference for literacy and non-formal education, even if it constitutes a hazardous bet, which is all the more appalling as available resources are scarce and intended *a priori* for other competing sectors. Professionalization of the sector, and especially the implementation of sound assessments, appears to be the prerequisite for defining education policies in which non-formal education could find a true place to the benefit of those specifically excluded from formal education.



© UNESCO BREDÁ - By Reg'



Financial sustainability in the development of secondary and tertiary education

The growth in enrolments in secondary and tertiary education gives rise to the very concrete issue of the physical and financial sustainability of scaling up post-primary education. In an attempt to address this issue, this chapter puts forward different simulations, making it possible to appreciate the probable evolution in enrolments at these two levels of education and what this would represent for the public budget. There are very few African governments that will be in a position to cover this new expenditure with their own resources. For the 29 countries considered in the simulations, a universal schooling of nine or ten years by 2020 would alone imply the multiplication of the lower secondary schooling supply by 6 before then, and would be far beyond the public financing possibilities of the great majority of countries. Some economies are conceivable, as well as the mobilization of other sources of funding, and, particularly, increasing participation by the families. The present situation of these levels of education would rather justify a reduction in quantity and greater promotion of the quality of education.

A growing demand for secondary and tertiary education ill-adapted to the possibilities of most countries today

The increasing number of pupils completing primary education today and their desire to continue education beyond this level¹ combine to place mechanical pressure on post-primary education that few African countries are sufficiently prepared for today. Indeed, most African countries experienced an upward trend in enrolments in secondary and tertiary education, after primary completion, towards the end of the 1990's, but this was not accompanied by the construction of more classrooms and lecture halls and the recruitment of new teachers on the same scale at these levels of education. This has resulted in conditions deteriorating in these levels of education². In addition, the (quite legitimate) accent placed on attaining Universal Primary Education (UPE) has been accompanied in some African countries by poor anticipation of the consequences of the massification of primary schooling on post-primary levels in sectoral programming and/or in the implementation of educational strategies in some sub-Saharan countries.

Today, many arguments are put forward to justify, not only an expansion in universal education to nine or ten years, but also the access of more young people to tertiary education in Africa. Regarding universal education of nine or ten years, some of the arguments, related to the constitution of human capital and economic development, are similar to those expressed several years ago to justify the promotion of UPE insofar, as the social effects after six years of schooling are further enhanced and consolidated with ten years schooling (cf. chapter 7). At the same time, some observers consider that UPE could, in time, carry the seeds of its «own destruction», thus putting the development of the educational pyramid as a whole at risk if it were to turn out that many young people could not go beyond primary education. In addition, today's society, based on information and knowledge, requires each country to have a critical mass of qualified human resources in order to ensure its development. Indeed, tertiary education produces fundamental expertise for the key development sectors (health, education, governance, private sector development, research development ...).

¹ On average 80% of pupils completing primary education accessed lower secondary education in 2005, compared to hardly 60% in 1990.

² The average GER in secondary education rose from 25% in 1998 to 35% in 2005 while the pupil-teacher ratio rose from 24% to 26% for the same period.

Will post-primary education in Africa be able to respond positively to a large share of this potential demand as it has done so far? In other words, are these rates of expansion (especially in upper secondary and in tertiary education) appropriate (considering the already unsatisfactory conditions of education and of supervision of students in many countries), realistic as to the economy (considering the low job opportunities available in the productive sectors³ on the one hand, and national development priorities on the other hand), and financially sustainable and possible in real terms (considering the number of places to be created and of teaching staff to be recruited and trained) even if the financial resources were to be available? Such are the questions that this chapter tries to answer.

This chapter draws on earlier work carried out by the Pôle de Dakar⁴ with the intention, further to other publications⁵ that have already tackled the issue, of providing factual information based on the latest available data on rates of expansion in post-primary education and the financial consequences of same per country, in order to enlighten national policy decision-makers as to relevant choices to be made in programming development policies for their education system. The different questions will be broached in turn for general secondary education⁶ in the first part of this chapter and for tertiary education in the second part.

3 Cf. chapter 7.

4 Cf. Amelewonou and Brossard (2005) and Brossard and Foko (2007).

5 Caillods and Lewin (2001), Mingat (2004), Lewin (2006), World Bank SEIA (2007). The results of the Mingat estimates have been used by Amelewonou and Brossard (2005) and by SEIA (Secondary Education in Africa).

6 Due to lack of disaggregated data per year of study in technical and vocational education at country level.



1. The case of general secondary education

1.1. Memorandum of elements related to context and to educational policy for the countries analysed

This section is comprised of two parts: the first concerns the projection of enrolments in secondary education, taking into account the progress made toward UPE and the assumptions for the development of secondary education; the second part estimates, on the basis of current unit costs of schooling, the financial consequences of these projections. This estimation is to be taken as an illustration and is limited to current expenditure⁷ of the system only.

Secondary education (general and technical/vocational) in Africa, as seen in chapter 3, is organized in two successive levels and can take on different forms, particularly in terms of duration and organisational mode. It is the connector between primary and tertiary education and it lasts from four to seven years, depending upon the country and the duration of primary education. **Analysis has been carried out for countries with a primary completion rate (PCR) of under 75% when complete data (2005 or closest years) is available for primary education and for both levels of general secondary education, i.e. a total of 29 countries⁸ in sub-Saharan Africa.**

The countries studied in the framework of this analysis, although having in common a low level of development of primary education, do not make up a homogeneous group as far as their demographic and economic context and the key parameters of their educational policy are concerned. Moreover, depending upon the level of development of their education system (particularly primary education) and their capacity to mobilize resources for it in general and more particularly for secondary education, the challenge to be faced for the expansion of the latter will differ from country to country. Before going into the issues related to rates of expansion, it is therefore useful to take another look at some elements of context and of educational policies, which are characteristic of the current situation of secondary education in these countries.

Table 6.1 shows the disparities between countries on these different elements compared to the average African situation⁹.

A very wide variation in primary completion and low secondary education coverage are characteristic of the countries studied

Primary completion rate in the group varies from 28% minimum to 74% maximum, with an average registering at 48% compared to 64% on the continent. The level of secondary education coverage being logically connected to primary coverage, the access and completion rates of the two levels of general secondary education register at 36% and 25% respectively for lower secondary and at 15% and 10% for upper secondary, which are very much below continental averages. It seems immediately clear that for some countries, where over one in two children do not complete primary education, it would not be reasonable to consider expansion of secondary education before making significant progress in terms of primary completion.

⁷ Investment expenditure is not considered here within logic of recurrent functioning of the system in a medium and long term perspective.

⁸ Out of the 37 countries with a primary completion rate lower than 75% in 2005 or closest years, Angola, Democratic Republic of Congo, Equatorial Guinea, Gabon, Guinea-Bissau, Liberia, Rwanda and Somalia were excluded from the analysis due to lack of data.

⁹ All average figures relating to the coverage indicators are population-weighted averages.

A low level of income per capita and low State capacity for appropriation of a part of national wealth

With the exception of Cameroon, Congo, Côte d'Ivoire, Djibouti, Lesotho and Swaziland, which have a GDP per capita of over 800 USD (the first three due to oil revenues, which have increased significantly over the past years, and the last three due to the high contribution from services and industry in the GDP), the other 23 countries in the group have a GDP per capita of under 600 USD. The average is under 300 USD, while the African average registers at just over 900 USD¹⁰. In these countries, the capacity of the State to mobilize a part of the national wealth varies from 8% to 25% of GDP with an average of 19% (17% excluding Lesotho and Swaziland which have an exceptionally high rate) while the continental average registers at 22% of GDP. In most of these countries, there is a predominating informal sector¹¹, which explains, at least partially, the difficulty for the State to appropriate a large share of the wealth created at country level.

...Combined with a strong demographic constraint weighing on secondary expansion

The demographic constraint is slightly stronger in the group of countries with low primary completion than on average on the continent. Indeed, the secondary school age group (12 to 18 year olds for most countries in the group) represents 17% of the total population on average for an African average of 16%. Out of the 29 countries, only Lesotho and Swaziland will see a significant reduction in the proportion of 12-18 year olds by 2015. However, for the other countries, the proportion of this age group will continue rising at more or less the same pace as the total population, which does not of course represent an advantage for the increase in school coverage in this level of education. In seven countries in this group, the demographic constraint will be extremely strong with annual growth rates of around 3%, while the average is 2% for the group as a whole. In some countries, the number of young people will even increase by over half between 2005 and 2020. Uganda and Niger are in top place with an average annual growth of over 3.5% for the coming 15 years.



© UNESCO BREDIA - By Reg'

10 This is a population-weighted average per country.

11 Cf. chapter 7 on the social sustainability of post-primary education.

Table 6.1: Main context and policy indicators in secondary education in the countries studied, comparison with the African average

	Africa	Countries studied		
	Average	Average	Interval of variation	Number of countries
Macroeconomic and demographic context				
GDP per capita	923	269 ^a	90 - 673 ^a	23 ^a
State revenue (excluding donations) in % of GDP	22	19 (17)	8 - 28	29
Share of 12-18 year olds in total population (%)	16	17	15 - 20	29
Results (in %)				
Primary completion rate (PCR)	64	48	28 - 74	29
Lower secondary coverage				
Access rate to 1 st year	51	32	17 - 68	29
Access rate to last year	39	23	6 - 59	29
Gross enrolment rate	49	29	12 - 65	29
Upper secondary coverage				
Access rate to 1 st year	28	14	2 - 34	29
Access rate to last year	19	8	2 - 26	29
Gross enrolment rate	24	12	2 - 33	29
Key parameters of educational policy				
Current expenditure on education as % of State resources	18	20	8 - 30	29
Current expenditure devoted to secondary education (duration adjusted to 7 years) as % of current expenditure on education	36	34	35 - 99	23
Unit cost as % of GDP per capita				
Secondary as a whole including technical education	30	34	14 - 65	23
Lower general secondary	-	29	11 - 60	17
Upper general secondary	-	61	18 - 157	17
Transition rate (transversal) primary - lower general secondary (as a %)	80	68	19 - 52	29
Transition rate (transversal) between the 2 general secondary levels (as a %)	72	61	19 - 97	29
Percentage of repeaters (%)				
Lower general secondary	16	13	2 - 26	29
Upper general secondary	16	14	1 - 29	29
Share of private sector (%)				
Lower general secondary	20	21	5 - 43	17
Upper general secondary	22	24	8 - 47	17

Notes:

a/ calculations do not include Cameroon, Congo, Côte d'Ivoire, Djibouti, Lesotho and Swaziland. The value of the GDP is a population-weighted average.

b/ the figure in brackets does not take into account Lesotho and Swaziland, where the share of public revenue in the GDP is exceptionally high.

Source: Authors' calculations based on sector analysis and UIS data.

More budget priority to education than on average in African countries

The countries studied devote more resources to the education sector than countries on the continent on average: 20% of public revenue on average compared to 18% average on the continent. Depending upon the country, this share varies from under 10% to 30% of State revenue. As for the share of secondary education¹² (general and technical/vocational) in public current expenditure on education, this varies from 19% to 52% with an average of 34% compared to an average in Africa of 36%. This result is quite justified insofar as secondary education is less well developed in these countries compared to the average situation observed on the continent. In addition, on a sample of 17 countries where data is available, analysis of the share of the budget granted to secondary education per type of education (lower general, upper general and technical/vocational) shows that 56% of the budget for secondary education is devoted to lower general secondary¹³, 28% to upper general secondary and 16% to technical and vocational education and training (TVET). These proportions vary substantially from one country to another: from 37% to 66% in lower general secondary, from 14% to 45% in upper general secondary and from 3% to 32% in TVET.

Concerning the other factors related to educational policies, unit costs available for a sample of 17 countries vary between 10% and 60% of GDP/capita in lower general secondary education (average of 29%) and 18% and 157% of GDP/capita in upper general secondary education (average of 61%).

1.2. Different scenarios for rates of expansion in general secondary education

According to the projections made in chapter 2 of this report, only Cameroon and Madagascar, among the 29 countries studied here, will reach UPE by 2015 if their schooling conditions (repetitions and dropping out) observed in primary education in recent years remain unchanged over the next 10 years¹⁴. Aside from these two countries, Guinea and Lesotho will reach a primary completion level of over 80% by 2015, and the other countries will still have completion rates lower than 75% at the same date. Even if most countries have initiated reforms in their education systems that should contribute to significantly improving primary access and survival in the medium term, this result is nevertheless taken into account, as a working hypothesis, in the framework of the simulations. Two series of simulations are thus presented (box 6.1): the first, for the 27 countries where there is a risk of not reaching UPE, are based on the anticipated completion level estimated in chapter 2 and the second, carried out this time for all the countries, are based on the hypothesis that they will all have achieved UPE (a completion rate of 100% in 2015). Sierra Leone is not included in the first series of simulations due to significant fluctuations observed in primary access and survival in recent years (cf. chapter 2).

12 Due to lack of sufficient data on pre-school, literacy and non-formal education, the budget shares allocated to these sub-sectors (low compared to the other levels of education) are not taken into account here and the primary-secondary-tertiary education total has been set at 100% to compare countries. Moreover, as the gross figures do not enable country comparison insofar, as the duration of the levels of education varies from country to country, percentages have been adjusted to fit the commonest duration structure for primary and general secondary education in Africa (6 years for primary education and 7 years for general secondary education).

13 Just as for the share of expenditure allocated to secondary education as a whole, to enable comparability between countries, the figures have been adjusted in line with the most frequently observed durations for these levels of education on the continent : 4 years for lower secondary and 3 years for upper secondary.

14 Projected primary completion level for each country, based on access and survival rates observed over recent years.

Box 6.1. Method of calculation and hypothesis for expansion of secondary education

Projections made in this chapter are based on the number of pupils who will complete primary education in 2015, using the following two hypotheses: first, that this is the total obtained from projections on completion rates in 2015 made in chapter 2 (case 1 below) and second, that all children complete primary education, i.e. considering that all countries will have reached UPE in 2015 (case 2 below). On the basis of this total and the rate of transition between primary and lower secondary education, the number of pupils, who access lower secondary education is estimated among those who complete primary education. Then, the number of children reaching the last year of lower secondary and the total number to be enrolled in lower secondary education are estimated on the bases of the values of repetition and survival rates in the level. The same process is used for secondary education, but starting this time from the number of pupils who complete lower secondary education and the transition rate between lower and upper secondary education. In order to allow for country specificities in the simulations, the projections are made separately for each country on the basis of a simulation model per country; this is the same process as used by Mingat in 2004 in his study on the issues of financial sustainability in the development of secondary education.

In both cases, only three scenarios are presented although many scenarios are possible.

Case 1 : simulations based on the anticipated level of primary completion rate in 2015

Hypothesis for expansion of lower secondary education

- Scenario A1: status quo of all the parameters in lower secondary education on the period i.e. primary → secondary transition, survival and repetition maintained at their 2005 value.
- Scenario B1: progressive increase in transition rate from its 2005 value to 100% by 2015 and survival and repetition maintained at their 2005 values.
- Scenario C1: progressive increase in transition rate to 100% by 2015 along with an improvement in survival. 80% survival in 2015 for countries below that value in 2005 and this value being maintained in the opposite case and reduction in repetition to reach 10% in countries with a higher value in 2005 and this value being maintained for the other countries.

Hypothesis for expansion of upper secondary education

Several scenarios can be derived from the three envisaged for lower secondary education, but only three are selected here, the first stipulating a status quo and the other two aiming at improved internal effectiveness.

- Scenario A2: A1+ status quo on the other parameters of the level.
- Scenario B2: B1 + transition between the two levels to be maintained, survival to be improved. 80% survival in 2015 (for countries below that value in 2005 and this value being maintained otherwise; reduction in repetition to reach 10% in countries with a higher value in 2005 and this value being maintained for the other countries.
- Scenario C2: C1 + transition between the two secondary levels to be maintained, survival to be improved. 80% survival in 2015 for countries below that value in 2005 and this value being maintained reduction in repetition to reach 10% in countries with a higher value in 2005 and this value being maintained for the other countries.

Case 2 : simulations based on the achievement of UPE

Hypothesis for expansion of lower secondary education

- Scenario A1 : status quo on all parameters in lower secondary education
- Scenario B1: progressive increase in transition rate to 100% by 2015 and status quo on survival and repetition.
- Scenario C1 : universal enrolment of nine or ten years duration (depending upon the duration of primary and lower secondary education), primary → secondary transition of 100% in 2015, survival of 100% in 2020¹⁵ along with a reduction in repetition to reach 10% in countries with a higher value in 2005 and this value being maintained otherwise.

Hypothesis for expansion of upper secondary education

- Scenario A2: A1 + status quo on the other parameters of upper secondary.
- Scenario B2: B1 + transition between the two levels maintained, improved survival. 80% survival in 2015 for countries below that value in 2005 and this value being maintained reduction in repetition to 10% in countries with a higher value in 2005 and this value being maintained otherwise.
- Scenario C2: C1 + transition between the two secondary levels maintained, improved survival. 80% survival in 2020, for countries below that value in 2005 and this value being maintained otherwise; reduction in repetition to 10% in countries with a higher value in 2005 and this value to be maintained otherwise.

15 Considering that primary completion is scheduled for 2015 and that the duration of lower secondary education must be allowed for 100% access in 2015 in lower secondary (due to primary-secondary transition set at 100% in 2015) and 100% lower secondary completion in 2020.

When the duration of primary education and lower secondary education are combined, a pupil, completing lower secondary in the countries studied, spends between seven and eleven years in school, if he never repeats. In order to facilitate comparison between the growth rates according to the different scenarios, the results are presented per group of countries, according to the duration of study (cf. table 6.2).

Table 6.2: Countries grouped as to the theoretical number of years necessary to complete lower secondary education

11 yrs (2 countries)	10 yrs (18 countries)	9 yrs (7 countries)	7 or 8 yrs (2 countries)
Uganda, Tanzania	Benin, Burkina Faso, Burundi, Cameroon, Comoros, Congo, Côte d'Ivoire, Djibouti, Guinea, Niger, Central African Republic, Senegal, Chad, Togo, Lesotho, Ethiopia, Malawi, Swaziland	Gambia, Ghana, Mali, Madagascar, Mauritania, Mozambique, Sierra Leone	Sudan (8 yrs) Eritrea (7 yrs)

Source: Grouping based on UIS and national data

Even in the hypothesis of not achieving UPE in 2015 (case 1), some countries will have to multiply their secondary capacity by at least two by then, in order to enrol their pupils in the same conditions as in 2005.

Supposing that some countries do not reach UPE by 2015 and that the primary to secondary transition rate and current schooling conditions in lower secondary education are maintained (scenario A1), the number of enrolments at this level of education for all 26¹⁶ countries would rise from 7.8 millions in 2005 to 13.5 millions in 2015. Supposing a progressive increase in transition between the two levels of education targeting 100% in 2015, and maintaining constant values in survival rates and in the proportion of repeaters at the 2005 level (scenario B1), the number of enrolments in lower secondary would rise to 21.3 millions, i.e. multiplied by 2.7 compared to 1.7 in the first scenario. The multiplication factor would rise to 3.0 in the case of scenario C1, i.e. in case of an improvement in survival (on average at least 80% of pupils accessing first grade reach final grade) and a reduction in repetitions (at the most 10% of repeaters per country). The total number of pupils in this scenario would register at 23.6 millions for the 26 countries as a whole on the horizon of 2015.

In upper secondary education, according to the different scenarios derived from the three hypothesis for the development of lower secondary education, the number of enrolments would rise respectively from 2.4 millions in 2005 to 4.1 millions (status quo in the two levels of education), 6.6 millions (transition of 100% in lower secondary, status quo on survival and repetition in lower secondary and on all parameters of upper secondary) and 9.1 millions (in the case of 100% transition in 2015 between primary and secondary and a significant improvement in internal effectiveness of lower and upper secondary education). The latter hypothesis supposes an increase in survival (at least 80% of pupils accessing the first grade reach the final grade) and a decrease in the proportion of repeaters (at the most 10% of repeaters per level) in the two levels.

¹⁶ According to the projections made in chapter 2, only Cameroon and Madagascar will reach UPE by 2015 out of the 29 countries studied. Sierra Leone was not included in these initial simulations.

Table 6.3: Multiplication factor of secondary enrolments in 2015 per group of countries according to 3 reference scenarios on the hypothesis of non-attainment of UPE

	Total pupils in secondary education in 2005 (or closest year) (000's)		Multiplication factor of total secondary enrolments					
	lower	upper	lower secondary			upper secondary		
			A1	B1	C1	A2	B2	C2
Group 1 (2 countries)	1 114	138	1.7	4.5	5.1	1.7	4.4	6.4
Group 2 (17 countries) ^a	4 165	1 024	1.9	2.8	3.2	1.8	2.8	4.0
Group 3 (5 countries) ^b	1 640	555	1.6	2.2	2.4	1.7	2.5	3.0
Group 4 (2 countries)	890	677	1.1	1.3	1.2	1.1	1.4	1.3
Overall (26 countries)	7 810	2 395	1.7	2.7	3.0	1.7	2.7	3.8

- Group 1: 11 years of schooling (primary + lower secondary)
- Group 2 : 10 years of schooling (primary + lower secondary)
- Group 3 : 9 years of schooling (primary + lower secondary)
- Group 4 : 8 years of schooling in Sudan and 7 years in Eritrea

a) Except Cameroon, country that will reach UPE by 2015 according to the projections.

b) Except Madagascar, which will reach UPE by 2015 according to the projections and Sierra Leone, due to fluctuations in basic data.

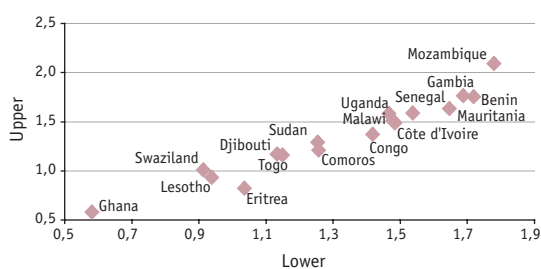
Source: Authors' calculations based on sector analysis, UIS data and population data from the United Nations population division.

At country level (cf. appendix 6.1), the growth rates can be seen to vary greatly, according to the different scenarios. Even in the hypothesis of non-attainment of UPE, with a constant transition rate and supposing a constant value for the key parameters of the two levels of education over the whole period, 9 out of the 26 countries (graph 6.2) in the group will have to multiply their schooling supply by at least two in secondary education by 2015, in order to answer the schooling demand at this level of education. Burkina Faso, Niger and Chad will have to multiply their schooling supply by three. Knowing that on average the schooling conditions, in terms of available places and pupil-teacher ratio, are not currently very satisfactory, this result constitutes an important element to be taken into account when giving consideration to the possibilities of expansion in secondary education. In the same scenario, Ghana, Lesotho and Swaziland show the lowest increases (multiplication factor less than 1), due to a fall in the number of pupils completing primary education and, therefore, to be enrolled in secondary education compared to 2005. For Ghana, this drop is the result of an estimated fall in PCR in 2015 compared to 2005 (cf. chapter 2) and, for Lesotho and Swaziland, of the beginning of demographic transition while anticipated completion rates are higher than in 2005.

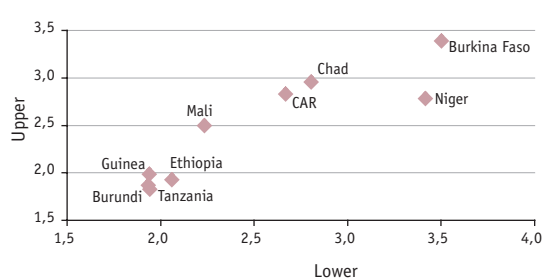


© UNESCO BREDA - By Reg'

Graph 6.1: Multiplication factor of under 2 for enrolments in secondary education - hypothesis of not reaching UPE and status quo on secondary parameters.



Graph 6.2: Multiplication factor of over 2 for enrolments in secondary education - hypothesis of not reaching UPE and status quo on secondary parameters.



Source: Authors' calculations based on sector analysis and UIS data.

Universal education of nine or ten years on the 2020 horizon would imply a six-fold increase in schooling supply in lower secondary education on average in the 29 countries.

Supposing that UPE would be achieved by 2015, that transition rates between primary and secondary, and survival rates and the proportion of repeaters all maintained at 2005 values, then the number of enrolments in lower secondary education for all 29 countries would rise from 9.1 millions in 2005 to 25 millions in 2015, i.e. multiplied by 2.8. If transition between primary and lower secondary education was then progressively increased, in order to reach 100% by 2015, and survival rate and the proportion of repeaters maintained at constant values, the number of enrolments in lower secondary would be 38.8 millions, which would imply on average a four-fold increase of current supply. Finally, the number of enrolments in this level of education is estimated at 52.6 millions supposing that universal education of nine or ten years is achieved by 2020. The last scenario would imply multiplying the number of pupils in lower secondary by 6 on average by 2020 in the countries overall.

Allowing for the specificity of the different groups, in the hypothesis of universal lower secondary completion, the growth in the number of enrolments in that level compared to 2005, would vary on average by a factor 5 (for schooling of nine or ten years) to around 9 (for eleven years of universal schooling). At country level, the multiplication factor ranges from 1.6 in Swaziland to 17.3 in Niger.

The countries to be confronted with a spectacular increase in enrolments, based on this hypothesis (cf. graph 6.5), started out from quite a low primary completion level in 2005. With the exception of Benin, Senegal, Uganda and Tanzania, less than one child in two completed primary education in these countries in 2005. On the one hand, Burkina Faso (31% PCR in 2005), Burundi (36%), Central African Republic (31%), Chad (35%) and Niger (28%) should enrol ten times more pupils on average in 2020 than in 2005, in order to ensure universal secondary education for their populations. On the other hand, less effort (from a two to three-fold increase in their present schooling supply) will be needed for countries like Swaziland, Ghana, Gambia, Lesotho and Togo to ensure universal secondary education for their populations.

Table 6.4: Multiplication factor of secondary enrolments in 2015 and 2020 per group of countries according to three reference scenarios on the hypothesis of attainment of UPE

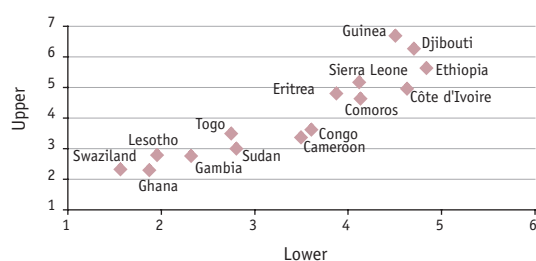
	Total pupils in secondary education in 2005 or nearest year (in 000's)		Multiplication factor of secondary enrolments					
	lower	upper	lower secondary			upper secondary		
			A1	B1	C1	A2	B2	C2
Group 1 (2 countries)	1 114	138	2.3	6.0	8.6	2.3	5.9	11.6
Group 2 (18 countries)	3 065	955	2.2	3.5	4.6	2.2	3.5	5.9
Group 3 (7 countries)	2 282	707	2.5	3.7	4.9	2.6	4.0	7.0
Group 4 (2 countries)	890	677	2.5	2.9	3.3	2.3	3.0	3.9
Overall (29 countries)	9 087	2 774	2.8	4.3	5.8	2.7	4.3	8.0

Source: Authors' calculations based on sector analysis, UIS data and population data from the United Nations population division

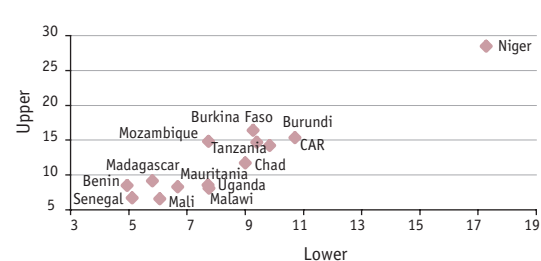
For upper secondary education, according to scenarios A2 (status quo) and B2 (improvement in the internal effectiveness of this level), both derived from scenarios A1 and B1, the needs in number of places, compared to what is available today in this level, should be multiplied on average by 2.8 and 4.3 respectively. However, supposing universal completion of lower secondary and an improvement of internal effectiveness of upper secondary, with transition between the two levels maintained, then it would be necessary to enrol 8.0 times more pupils on average in 2020 than in 2005. The latter scenario would imply enrolling 22.2 millions of pupils on average in 2020 in this level of education compared to 2.8 millions in 2005.

For some countries, especially those in graph 6.4, there is an obvious risk of constraints connected to the physical feasibility of previous rates of expansion (construction of equipped classrooms, recruitment and training of teachers), even if resources were available.

Graph 6.3: Multiplication factor of under 5 for enrolments in secondary education - hypothesis of achieving universal education of nine or ten years



Graph 6.4: Multiplication factor of over 5 for enrolments in secondary education - hypothesis of achieving universal education of nine or ten years



Source: Authors' calculations based on sector analysis, UIS data and population data from the United Nations population division

1.3. Suchlike rates of expansion will have high financial consequences

Earlier studies¹⁷ have all reached the conclusion that the current modes of organization and of provision of education services in the public sector, at both levels of secondary education, would not enable a significant increase in enrolment at these levels. These conclusions, which were reached on the hypothesis of achieving UPE by 2015, and confirmed by Amelewonou and Brossard (2005) and by the World Bank (SEIA 2007), are accepted unanimously today at country level and also by technical and financial partners. The financial implications of the scenarios presented above, once again, confirm these results.

Scenarios A2 (hypothesis of not reaching universal completion and status quo on the parameters of the two levels of secondary education) and C2 (universal completion of lower secondary, transition between the two levels of education maintained and improvement in internal effectiveness of upper secondary education) are used for estimating current expenditure for each level. This only takes into account 17 countries where recent data is available on the share of current expenditure on education in State resources and on public expenditure per pupil (unit costs) in public education, for the two levels of secondary education. Estimated current expenditure for each level is expressed as a percentage of current public expenditure liable to be mobilized for the sector.

Again, several different scenarios can be explored on the basis of possible evolution:

- i) of macroeconomic aggregates (GDP and State's own resources);
- ii) of the share of current expenditure on education in the State's own resources and of the share of secondary education in current expenditure on the education sector;
- iii) of the modes of organization, financing and provision of education services (public expenditure per pupil in the public sector, proportion of pupils enrolled in private education, etc.).

The hypothesis concerning the evolution of macroeconomic aggregates is derived from a macroeconomic frame per country, on the following hypotheses. Depending upon the country, the average annual GDP growth rate is situated between 4 and 6% over the whole period; as for internal State resources, these are improved or maintained constant compared to their 2005 value. The share of education in State resources is set at 20% on the 2015 horizon for countries allocating less than that value in 2005 and maintained at the current value otherwise. As for expenditure per pupil and the proportion of pupils enrolled in the private sector¹⁸, the respective values are also maintained at the 2005 values in both levels of education. The absence of a reference framework as for primary education (Fast Track Initiative indicative framework) limits the possibility of proposing unit costs here, which could be connected to what would be considered an optimum situation by the different countries¹⁹, although Mingat (2004) and Amelewonou and Brossard (2005) have put forward possible trends for the unit costs of education. In addition, supposing that the countries involved would want to further improve the quality of education in upper secondary education (in order to prepare pupils for quality tertiary education) by improving the scientific and technological courses of study, it cannot be excluded that supplementary costs would arise for restoration of the system and the necessary equipment (laboratories, computer facilities, ...). Looking for scenarios to bring about a reduction or an increase in expenditure per pupil can be multiplied to infinity but the job of identifying quantitative and qualitative goals must take place first and foremost at country level, on the basis of a dialogue aimed at defining what is socially desirable and financially realistic for the country.

17 Cf. Lewin (2006), Mingat (2004) and Caillods (2001).

18 In concrete terms, this proportion would have had to be reduced insofar as the extension of secondary education will take place through the extension in supply to rural areas, where parents do not have the means to enrol their children in private structures.

19 The World Bank and the Agence Française de Développement are in the process of working together, in order to arrive at setting up a reference framework in secondary education.

Table 6.5. Current expenditure in secondary education as a percentage of resources available for education, according to two scenarios

Country	Current unit costs (% of GDP/capita)		Non-achievement of UPE and status quo on all parameters of secondary education			Universal lower secondary completion by 2020, transition between the two levels maintained and an improvement in internal effectiveness in upper secondary education		
	lower	upper	lower	upper	overall	lower	upper	overall
Benin	16	56	22%	19%	41%	52%	74%	125%
Burkina Faso	39	84	80%	34%	114%	165%	129%	295%
Burundi	60	96	317%	98%	415%	1404%	671%	2074%
Cameroon ^a	32	-	-	-	43%	47%	20%	66%
CAR	11	37	25%	27%	52%	122%	175%	298%
Chad	27	36	76%	38%	114%	195%	121%	315%
Congo	11	37	15%	13%	28%	35%	31%	66%
Côte d'Ivoire	35	72	14%	9%	23%	33%	24%	58%
Ethiopia	28	47	143%	28%	171%	264%	65%	329%
Guinea	13	18	42%	19%	61%	70%	46%	116%
Madagascar	27	64	85%	43%	128%	164%	126%	290%
Mali	36	124	64%	42%	106%	139%	99%	238%
Mauritania	40	34	30%	16%	46%	95%	62%	156%
Niger	49	157	143%	52%	194%	588%	430%	1018%
Senegal	15	70	11%	16%	27%	26%	47%	72%
Sierra Leone	27	29	95%	28%	122%	140%	53%	193%
Togo ^b	22	34	-	-	-	111%	52%	164%

a) Not concerned by this simulation.

b) Figures not presented due to the drop in total enrolments in secondary education further to a fall in primary completion rate as per projections in chapter 2.

Source: Authors' calculations based on sector analysis data

Whatever configuration is envisaged for the development of secondary education, the estimated results show that the financial consequences for each country are far beyond what is sustainable with public financing.



© UNESCO BREDA - By Reg'

2. The case of tertiary education

Chapter 3 demonstrated that tertiary education, just like secondary education, is undergoing remarkable expansion in Africa. It appears very likely that due to the expansion of secondary education, as can be anticipated on different hypotheses (cf. previous section), the number of potential candidates for enrolment in tertiary education will considerably increase in the coming decade.

This section, in three parts, begins by examining the current quantitative expansion of tertiary education in Africa and, on the basis of the trends observed, provides an estimation of the number of students on the 2015 horizon. The second section examines the implications for public finances, taking into account current modes of organization and of provision of education services. Finally, the last section tackles the sustainability of current rates of expansion on physical and logistical levels (increase in the intake capacity of training structures, decentralization of existing institutions, recruitment and training of teaching staff, etc.).

2.1. There is growing demand for tertiary education in Africa and this trend could continue

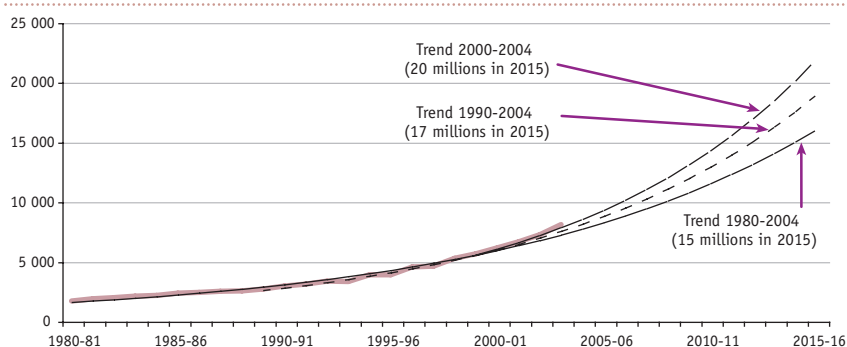
On the continent as a whole, the number of students in tertiary education increased from 5.6 millions in 2000 to 8 millions in 2004, i.e. an annual average increase of 9.5%, compared to only 7.8% per year between 1990 and 2000 (tertiary education in Africa only accounted for 2.6 millions of students in 1990). Thus, there is clearly a significant rise in demand for tertiary education, which was addressed so far by the present structures «absorbing» each year a rising number of students. That said, the rate of expansion of tertiary education, although greater over the recent period, has not been homogeneous in each country. Between 2000 and 2004, it varied from 3 to over 15% per year depending upon the country. It is on the basis of these initial conditions, obviously specific to each country, that the perspectives of evolution in the demand for tertiary education can be envisaged in Africa for the coming 10 or 15 years.

Following the example of the simulations made for secondary education in the previous section, several «models» for the expansion of tertiary education supply can be considered. One option would consist in taking more or less into account, for each country, technical, economical, financial and political factors likely to be favourable to or restrict the quantitative expansion of tertiary education. It is known for example that in a given context, the demand for highly qualified labour (and thus the demand for graduates) increases as the economy develops and becomes more diversified. In this way, human resources planning models were developed on the perspectives of development at country level and the needs for qualified and unqualified labour.

Another option would be to simulate the future evolution in enrolments, based on ongoing dynamics both in upper secondary education (total enrolled in the last grade of this level, total successfully completing secondary education) and in tertiary education itself (access rate to tertiary education, number of students, number of leavers, etc.). Such an approach supposes that two key parameters are known regarding the transition between upper secondary and tertiary education, but which are only available for a limited number of countries in the region: transition rate to tertiary education and the number of tertiary education graduates and dropouts (or complementarily, the survival rate in tertiary education).

In the absence of this data, it is nevertheless possible to use the rates of growth in enrolments in tertiary education over the current period or in the recent past, as a reference for projections. In this way, three projections, as to the demand for tertiary education in 2015, have been produced. They were conducted separately for each country (in order to take into account the initial conditions of each country) then aggregated for the countries as a whole.

Graph 6.5: Number of students in tertiary education in Africa between 1980 and 2004 (in thousands) and projections in 2015 according to three scenarios.



Source: Calculations based on sector analysis, UIS and World Bank data

The first, based on a hypothesis of low growth in enrolments, i.e. the average observed during the last 25 years (between 1980 and 2004), suggests that around 15 million potential students will knock on the doors of tertiary education in Africa in 2015. This figure is however underestimated since it does not take into account the increase in the growth rate in enrolments since 1990. The second projection is based on trends observed since 1990, but also underestimates the potential demand insofar, as it is known that the actual number of students has in fact increased more since 2000 than between 1990 and 2005. The last projection is based on the most recent rates of expansion (since 2000) observed in the different countries. There is undoubtedly a strong probability of it being close to «potential demand» for tertiary education in 2015. This is why we shall examine this projection further. It suggests that if the expansion of tertiary education continues at the current pace, the number of students will more than double (multiplication by a factor 2.5) between 2004 and 2015. In other words, in these conditions, **around 20 millions of students could knock on the doors of tertiary education in Africa in 2015** (including 9.4 millions in the poorest countries²⁰ of the region), compared to around 8 millions actually enrolled in 2004 (including 3.1 millions in the poorest countries).

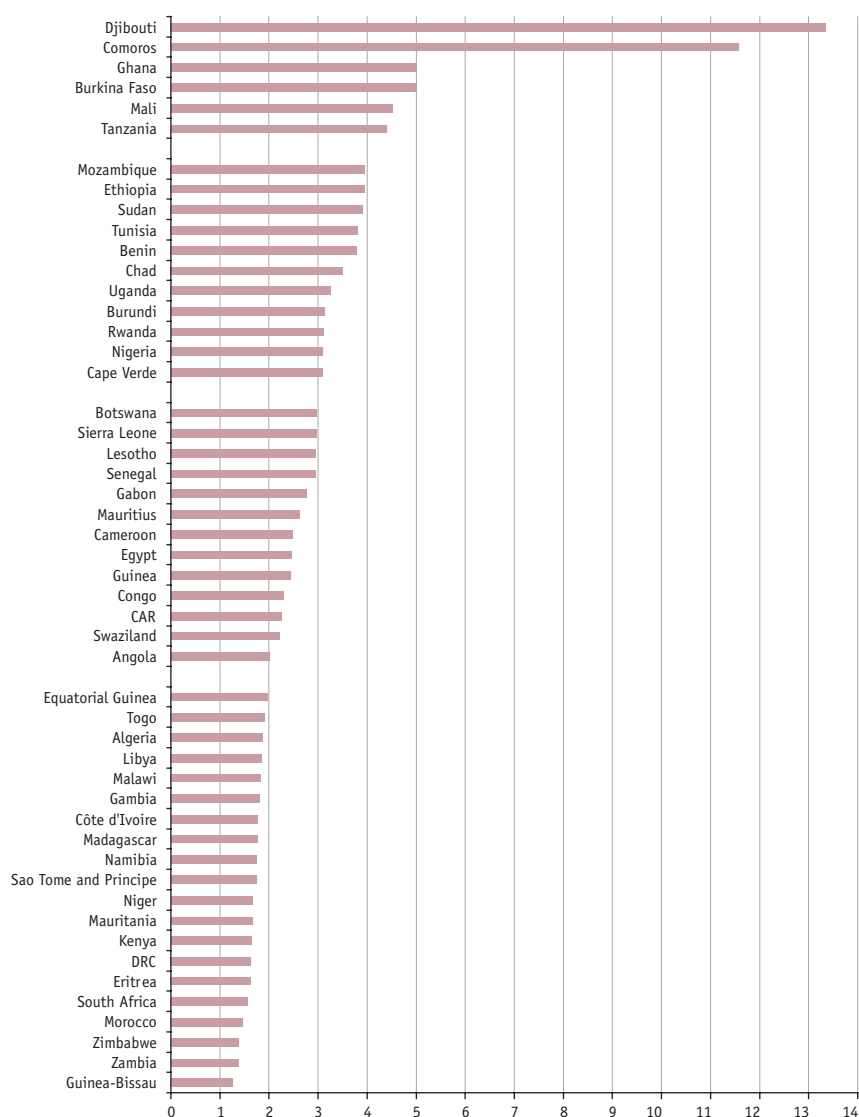
The outcome of the latter projection varies greatly on average from country to country. In half of the countries where the projections have been made, growth rates in potential demand are expected to be far beyond the average trends on the continent as a whole. Thus, for the 50 countries for which projections have been made, graph 6.6 indicates a need for almost double the number of places in tertiary education in 2015 than at present in 20 countries. Included here are countries with high student populations (Algeria, South Africa, Morocco and Libya) but also countries with lower populations that have taken steps to regulate access to tertiary education (case of Niger) or, with a still embryonic tertiary education system, awarding grants to a large share of their students abroad (case of Guinea-Bissau in particular).

For 13 countries, the need is estimated at between 2 and 3 times the number of places available today whilst for the 17 remaining countries, the potential demand for tertiary education should be even higher if current trends were to continue: the number of students in 2015 could be 3 times higher than it is today. For these countries, should current paces of growth be maintained, this would lead to a true «explosion» of the social demand for tertiary education.

²⁰ The classification of countries, according to their level of income, is the one used in a recent World Bank publication (cf. World Bank, 2005b).

The different countries must anticipate the consequences of this strong increase in demand for tertiary education, as to the internal functioning of the tertiary education system (intake capacity, teaching conditions, students supervision and quality of education), its external effectiveness (relevance to the needs of the job market) and financing to mention but these three aspects²¹. Insofar as the State is the main provider of services in tertiary education (and therefore the main source of financing for education and research) in most countries in the region, only the physical and financial consequences of such an expansion for the national public finances are analysed here.

Graph 6.6: Multiplication factor of increase in enrolments in tertiary education in Africa between 2004 and 2015, taking into account current rates of expansion (simulations)



Source: Appendix 6.3

²¹ The issue of the economic and social relevance of this expansion will be dealt with in chapter 7.

2.2. The current rates of expansion will not be financially sustainable in many countries

Simulations have been made in order to propose a rapid assessment of the financial viability of the perspectives of expansion in tertiary education in Africa. The process is the same as the one used by Brossard and Foko (2007), who have carried out a similar study in French-speaking African countries. Globally, this process is based on hypothesis related, on the one hand, to national public resources liable to be mobilized for tertiary education and, on the other hand, to total costs (current and investment) necessary for the expansion of the systems. Hypothesis can also be made on the volume of international aid in favour of tertiary education, policies for allocation of grants to students abroad, and financial aid granted to the private education sector. Factual information for the most recent year is provided in table 6.6.

2.2.1. A glance at the current financing structure

The issue of the financial viability of expansion projects for the sub-sector (it is also valid for the other levels of education) makes sense when reasoning is based on public resources generated locally (public resources excluding donations). All African countries must seek the financial sustainability of development in tertiary education (taking into account the quantitative dynamics mentioned earlier) but it is especially crucial for the poorest countries insofar, as they have a narrow tax base and, as a result, more constrained public resources. In these countries, public revenue only represented 16% of GDP on average in the recent period, compared to 28% in middle-income African countries (table 6.6). This indicator is very much dependent on the taxation potential and national macroeconomic performance.

Aside from this tax base, public resources allocated to tertiary education vary according to the priority granted to education in the budget trade-offs within education, in the priority granted to tertiary education. In the low-income African countries, the education sector benefited from around 18% of public revenue in the most recent years (a figure varying from 5 to 30% depending upon the country) and tertiary education from 22% of public current expenditure on education (depending upon the country, this figure varies from under 10 to over 30%).



© UNESCO BREDA - Mario Bels

Table 6.6: Parameters affecting the mobilization of public resources and current expenditure for tertiary education, African countries, 2004 (or closest year)

	Africa	Middle-income African countries	Low-income African countries		
			Average	Interval of variation	Number of countries
Government revenue (excluding donations) as % of GDP	21.7	28.3	16.4 ^a	8 - 26 ^a	33 ^a
Current public expenditure on education as % of public revenue ^b	17.7	15.5	18.4	5 - 34	37
Current expenditure for tertiary education as a % of current public expenditure on education	21.3	20.0	21.7	8 - 40	33
Public expenditure per student in public tertiary education as a % of GDP per capita	305	99	374	57 - 1 489	30
Share of students in public tertiary education (%)	73	58	79	57 - 96	26
Number of students per 100 000 inhabitants ^b	911	2 278	486	34 - 1 040	38

Note: *a/* Does not take into account Congo, Nigeria, Lesotho and Angola, where the share of public revenue in the GDP is exceptionally high (around 40%). The average would be 19.3% if these countries were taken into account. *b/* Weighted average.

Source: Authors' calculations based on sector analysis, UIS, World Bank and the Pôle de Dakar data

Public current expenditure for tertiary education, expressed as a percentage of GDP, ranges from 0.3 to 1.2% in low-income countries in Africa, for an average of 0.72%. This wide variation (of factor 1 to 4) between countries is due to the differences in public expenditure per student and the number of students in the public sector. In the present situation, public expenditure per student is estimated at around 3.7 times the GDP per capita on average in low-income African countries but varies from less than once the GDP per capita in Cameroon or in Democratic Republic of Congo to over 7 times the GDP per capita in countries such as Rwanda, Burundi, Mozambique, Ethiopia or Malawi. Finally, it is estimated that around 20% of students in these countries were registered in private institutions in 2004, and this ranges from 4 to 43% depending upon the country.

2.2.2. It will be difficult to sustain rates of expansion in African tertiary education at current pace and costs and there is a call for urgent reforms in order to safeguard the quality of the education service

Four scenarios have been tested, in order to assess the financial sustainability of expansion in tertiary education in Africa at present pace and costs. **Thus, they are all based on the hypothesis that provision in education would positively address the potential demand estimated earlier** (the third projection). The issue here is to know if the public budget resources for tertiary education will cover the needs in financing incurred, taking into account the current modes of organization of the education services (courses of study offered, role of distance learning and volume of private education supply, etc.), the average study conditions provided to students and the quality of services (access to documentary resources, availability of resources for research and in-service teacher training, etc.).

While the hypothesis concerning the potential demand for education is not questioned at this point in the analysis, it is still possible to **envisage several hypotheses as to the public budget effort for the education sector in general and for tertiary education in particular** and/or methods of providing services in tertiary education (e.g. the share of private supply) and the level of average public expenditure per student. Only hypothesis related to the public budget effort for education and tertiary education have been taken into

consideration. In other words, it has been supposed that the level of public expenditure per student in proportion to the GDP per capita and the share of students in the private sector are maintained²².

To summarize, four financing scenarios have been simulated (cf. box 6.2) but are limited to the 30 low-income African countries for which sufficiently recent financial data (for 2004 in most cases) was available for use. The results of the four simulations are shown in table 6.7.

Box 6.2: The four scenarios tested in the financial simulations for expansion in tertiary education

The **first scenario** supposes that there will be no change in policies both in the production of education services and in the mobilization of public resources for tertiary education between 2004 and 2015. **This is the status quo scenario.**

The other three scenarios introduce alternative hypotheses of mobilization of public resources, at macroeconomic level and at sectoral and sub-sector levels.

In **scenario 2**, the rate of tax pressure (owned public revenue as a proportion of GDP) progressively increases²³.

Apart from the hypothesis concerning the evolution of the rate of tax pressure, two more hypotheses affecting budget priority for tertiary education within education have been tested.

In **scenario 3**, the share allocated to tertiary education in 2015 has been modulated taking into account (i) its present level (according to whether it is below 15% of public current expenditure on education, in the 15 to 25% range or over 25%) and (ii) the country's level of progression towards UPE (with the idea of taking more or less into account the needs of post-primary education, including tertiary education). Should the primary completion rate be initially below 75%, (i) then if the share of tertiary education is over 25% of current expenditure on education, the target is set at 25%; (ii) if it is between 15 and 25%, the target is set at 20%; if it is below 15%, the target is 15%. For countries with a PCR of over 75%, (i) if the share of tertiary education exceeds 25%, the target is set at 25%, (ii) if it is between 20 and 25%, the current level is maintained, (iii) if this share is initially under 20%, the target is set at 20%.

Public budget priority for education in 2015 has been solely determined according to its current level, with the idea that while a currently low priority could be increased, a currently high priority (share for tertiary education over 25% of public resources) could not easily be sustained in time, taking into account the competitive demands for other public services.

In **scenario 4**, the budget share for tertiary education was fixed homogeneously at 20% for all countries. Indeed, the Fast Track Initiative indicative framework, which proposes budget trade-offs enabling to accelerate progress towards UPE, schedules on average 50% of current expenditure on education for primary education, for the countries lagging behind on UPE; this leaves 50% for the other levels of education as a whole. Insofar, as the shares allocated respectively to pre-school and secondary (general and technical-vocational) education should at least be maintained, we have put forward the hypothesis whereby tertiary education could negotiate at the most a share equal to 20% of current expenditure on education (average value for all developing countries). This value is used in scenario 4 even if in some countries (like Senegal, Congo, DRC, Lesotho and Rwanda) the budget share for tertiary education is currently well over 25%, while in others, it is well under (Comoros, Kenya, Niger and Cameroon), at below 15%.

22 Maintaining the expenditure per student in GDP units per capita at its current level does not necessarily mean a decrease in actual expenditure per student in constant monetary units, insofar as better macroeconomic perspectives are anticipated for the coming decade than at present. Thus, if the GDP per capita rises, the actual expenditure per student will increase to the same extent

23 Around 14% in 2015 if it is initially lower, 16% if it is initially between 14 and 16%, 18% if initially between 16 and 18%, but maintained at its present level if it is already over 18%. These hypotheses have been chosen following an approach similar to that used for calculating the cost of Universal Primary Education by Bruns, Mingat and Rakotomalala (2003).

Table 6.7: Financing needs on current public expenditure on tertiary education in 2015 as per different scenarios, for 30 low-income African countries

Policy scenario	Tertiary education coverage in 2015	Public expenditure per student 2015	Measures concerning financing in 2015 ^a				Financing needs for 2005-2015 (in millions USD) 2004	
			Public revenue		Tertiary education as a % of current expenditure on education	% of students in private sector	Total	Annual average
			As a % of GDP	% for education				
Status quo	Trend	2004	2004	2004	2004	2004	6 416	583
Scenario 2	Trend	2004	14-16-18	2004	2004	2004	6 131	557
Scenario 3	Trend	2004	14-16-18	15-20-25	15-20-25 ^c	2004	5 664	515
Scenario 4	Trend	2004	14-16-18	20	20	2004	5 663	515

Note :

a/ Numbers of students per 100 000 inhabitants. «Tendency» means that the expansion of tertiary education follows its current progression.

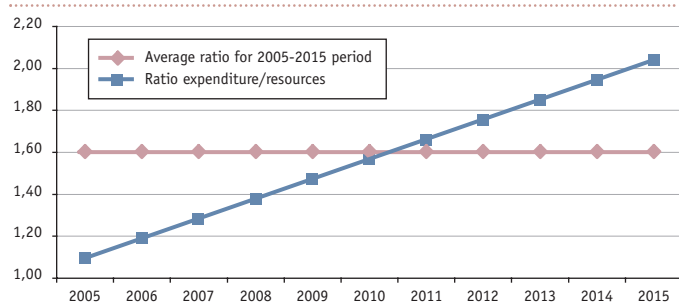
b/ See box 6.3 for more details.

c/ This rate for 2015 is calibrated according to its current level and the country's level of progression towards UPE.

Source: Authors' calculations.

These simulations show that **maintaining the current pace of expansion will represent a huge challenge for most countries**. The average annual financing need for the 30 countries overall varies between 515 and 583 millions US dollars per year between 2005 and 2015, according to the modalities of financing. This shows that on the scale of 30 countries, as a whole, **the alternative hypotheses concerning the mobilization of public resources for tertiary education have a limited influence on the financial gap**. Indeed, this only decreases by 12% between the status quo scenario (status quo in budget trade-offs, in modes of organization and provision of services) and scenario 4 (alternative scenario for mobilizing resources, which tries to «secure» the budget necessary for achieving UPE in the countries furthest behind at this level). In the status quo scenario, the large increase in enrolments would lead to a level of cumulative current expenditure, which would exceed by 60% the volume of public resources liable to be mobilized for tertiary education. But as could be expected, the financing need is progressively accentuated, along with the expansion of the systems: the necessary current expenditure would be 50% over mobilized public resources by 2009 and 75% over by 2012 (cf. graph 6.7).

Graph 6.7: Evolution in the relationship between current expenditure and public resources for tertiary education for the 30 countries, status quo scenario, 2005-2015



Source: Authors' calculations



© UNESCO BREDA - By Reg'

The extent of the financing need encourages thinking on other financing alternatives and/or giving consideration to other models of expansion. The financial leeway will however be tight in many countries. Tertiary education is indeed in competition with the other levels of education in public resources appropriation and, for certain levels, the needs generated by the necessary progress towards UPE will lead to curbing, and even to reducing, the relative priority for tertiary education in countries where this is relatively high. This said, the relative priority for tertiary education can still be increased in some countries (case of scenario 3) but the financing gap will only be slightly reduced.

These global results are quite different according to the country, as shown by the results presented in appendix 6.3. Generally speaking, there are very few countries that can be satisfied with the status quo and current rates of expansion²⁵. This suggests that the different countries should pursue very ambitious policies, in order to prevent deterioration in study conditions and in the quality of service in tertiary education. While not exhaustive, five complementary directions could be envisaged, although they will not be described in detail in this chapter. They concern (i) controlling enrolments by quantitative flow management on entering and within the tertiary education system, (ii) controlling production costs of services to bring them progressively down to levels compatible with the global financial possibilities of the different countries and, without this, having negative effects upon the quality of the services provided²⁶. In addition, (iii) incorporation of the private education sector in the global strategy for development of the systems (by way of different incentive measures on a contractual basis, in exchange for quality control on services), (iv) transferring part of the costs to the students (financing by the families for a good quality public service) and (v) setting up incentive measures authorizing public institutions to develop income-generating activities, constitute three more levers to be explored.

International experience shows that a more or less equitable variety of possibilities does exist for making progress in the different directions. None of these levers has to be given priority (Brossard and Foko 2007, Gioan 2007) insofar, as they have neither the same taxation implications nor the same degree of political acceptability (Johnstone 2003).

2.3. Physical sustainability is also to be taken into consideration

Apart from the budget needs required in order to run the structures, the significant increase in enrolments will also require a very high number of qualified teachers to be trained and considerable investments. With regard to the needs in teaching staff, it is estimated that, on the basis of a constant average student-teacher ratio of 1 teacher for 23 students (average value for a sample of 23 African countries in 2003)²⁷, needs in teachers should rise from around 56 000 to 142 000 between 2004 and 2015 for the 30 low-income countries as a whole, for which financial simulations have been made. This implies that in these countries, 103 000 new teachers should be recruited and trained over the period if departures on retirement and other defections, estimated at 30%, are taken into account. In other words, it will be necessary to train twice as many teachers between 2004 and 2015 than between 1990 and 2004. This raises the question as to the actual capacity of the countries to recruit and train so many teachers, even if the necessary financial resources were available.

25 Given the constraints in the financial dimension, but also, as to be seen in chapter 7, the constraints in the economic dimension.

26 The Brossard and Foko study (2007) showed that tertiary education in Africa is quite costly on average and that in many countries, particularly in French-speaking Africa, the structure of expenditure is biased in favour of social expenditure (in some countries, it absorbs more than 50% of the budgets), leaving few resources for academic expenditure and for research and teacher training, which are nevertheless crucial for quality.

27 See Brossard and Foko (2007).

This «physical» constraint is still underestimated for at least two essential reasons. The first is that the student-teacher ratios are already, in many countries, unfavourable to quality teaching. For example, while there are on average 23 students per teacher in those countries where data is available, there are around 15 per teacher in the OECD countries (OECD 2006). In some countries, student-teacher ratios reach record levels: this is the case notably in Benin, Mali, Senegal and Togo, where they are over 40.

Besides the issue of the number of teachers, there are acute needs in many countries for higher-ranking teaching staff. The latter are responsible for ensuring the academic leadership and answering for the quality of education. In an international context of tertiary education, both quality and effective research are necessary in contributing to the countries' position in international competition (cf. box 6.3).

Box 6.3: There will also be considerable needs for higher ranking teaching staffs

In many African countries, teaching staffs in tertiary education are neither sufficiently qualified to train high level executives for a public sector of good quality and for a competitive private sector, nor for the replacement of present staff and the promotion of research. In Madagascar and in DRC, for example, civil servant teaching staffs that have the rank of professors only represent 17% of the teaching profession. In Rwanda, hardly 25% of the teaching profession has a doctorate thesis (around half at the most has the level of a master degree). In Senegal, in the two major public universities (Cheikh Anta Diop in Dakar and Gaston Berger in Saint-Louis), hardly 10 % of teaching staff has the rank of professor. In Gabon, «junior lecturers» represent almost two-thirds of teaching staff in the public sector while higher ranking teaching staffs (professors or senior lecturers) only represent 12 %. In Benin, in the principal public university, Abomey-Calavi University, with 87 % of public sector students in 2006, higher ranking teaching staffs represent around 17 % of the teaching staff, lecturers 18 %, junior lecturers 49 % and other teaching categories 16 %. It must be emphasized that, complementarily, 38 % of teaching staff in this university did not have a doctorate in 2004.

Source: Brossard and Foko (2007), Mignot (2002), Coignard (2006).

Expansion of the systems will require considerable investment with a view to increasing intake capacity in the existing educational establishments (lecture rooms, libraries, laboratories, workshops, lecture halls ...) or to decentralize them (build and equip new educational and administrative structures). The cost and extent of such investments must not be neglected²⁸, particularly in countries already well in excess of intake capacity. In DRC, for example, the number of students in public educational establishments in Kinshasa in 2000 (89 000) was more than twice the theoretical capacity (estimated at 40 000 places at the time). In Benin, the Abomey-Calavi University campus was already over the theoretical capacity by 1985 (there were 50% students more), i.e. fifteen years on from its coming into being (Coignard, 2006). In 2006, there were between 500 and 600 students for 100 places. The situation in the second public university in Benin, Parakou University, was even more unsatisfactory, with an intake capacity ten times less than the number of students (400 places for 5 300 students).

²⁸ Investment expenditure has not been systematically taken into account in the financial simulations because this was only available for a few countries.

3. Conclusion

The results obtained in this chapter show that the high increase in potential demand for post-primary education is the source of tremendous physical and financial challenges to be faced by many countries in the region, especially the poorest countries where significant progress is expected towards UPE.

The future perspectives of expansion of post-primary education are high, but very different between countries and hardly sustainable financially

Total enrolments growth, in post-primary education of most countries has occurred so far at the expense of schooling and study conditions. In secondary education, the results of the different estimations show that the needs are so great that most countries will not be able to achieve universal lower secondary completion by 2020. For example, in countries where supply should be multiplied by 10, in order to reach this goal while maintaining the same schooling conditions as today (same number of pupils per class), this would imply building every year on average 350 schools with six classes in Burundi, 220 in Chad, 80 in Central African Republic. Needs related to recruitment and training of teaching staff for these pupils must be added to that. Even on the hypothesis of non-achievement of UPE by 2015 and supposing that the transition rate between primary and secondary, as well as survival and repetition, are maintained at today's values, needs would still be high for some countries like

Burkina Faso, Niger and Chad, where three times more pupils would have to be enrolled than today.



© UNESCO BREDA - By Reg'

In tertiary education, demand remains high and is growing; simulations show that the number of students should more than double in 30 of the 50 countries analysed. These countries could not make do with maintaining current growth rates at the risk of further deteriorating conditions of education and quality. Now, the fall in the quality of educational services can only contribute to pulling Africa back as regards international competition. This competition will require, in coming years that priority is given to quality education and to promoting education that is relevant for local and regional economy.

The scale of such a pace of expansion questions the physical feasibility and the actual implementation of very ambitious post-primary expansion programmes, beyond even knowing if financial resources (public and private national and external) can be mobilized. In this respect, the simulations made show that this expansion will be constrained by huge financial difficulties, which accumulate for secondary and tertiary education.

Potential levers exist but none of which is to be given priority and the combination of levers must be adapted to the specific situation of each country

Faced with the different constraints, several levers are available for building sustainable and socially realistic post-primary education systems. The main ones are the control of pupils/students flows and considering alternative modes of providing educational services.

Alternative modes of organization and provision of service are to be explored

To reach universal lower secondary completion in the countries studied (even if the date of same has to still be defined in each country), the major challenge is of course to reduce the unit cost of education without reducing its quality, in those countries where this cost is very high. With this in mind, merging it with primary education (to form a block of basic education) with polyvalent teachers is one of the possible directions now very often put forward. This practice already exists in some English-speaking countries, which have a longer course of primary education, with the last two years being considered as «higher basic education». Other countries are considering adopting this solution²⁹. Repetition could also be reduced in countries where it is high. Finally, encouraging state-controlled private education (which can be implemented through a public financial incentive) could also contribute to addressing the challenge.

Also, for tertiary education, we could mention the need to improve governance and encourage increased effectiveness in terms of reducing running costs, controlling grants and social expenditure, promoting the diversification of financing sources, especially with a higher contribution from students and their family, and encouraging the development of better-regulated private tertiary education.

Flow regulation: a sector-wide challenge

While merging primary and lower secondary education will hardly be effective in the coming years, even if the different countries start moving in this direction, pupil flow regulation on entering secondary education will certainly be unavoidable for many of them. This seems necessary, at least in the medium term for countries lagging far behind in terms of primary completion and where schooling conditions (and undoubtedly quality) have deteriorated in that level³⁰. For many countries, it seems even more necessary at the entrance to upper secondary education, in order to safeguard quality (upper secondary education's purpose being to prepare pupils for quality tertiary education) and also to control the flow of entrants into tertiary education with reference to the needs of the modern sector of the economy. In tertiary education, additional measures could be envisaged, particularly concerning selection on entrance to some universities and improved management of registration.

Obviously, for the flow regulation policy to be socially accepted, it must be accompanied by measures to prepare insertion on the job market for a large share of primary or lower secondary school leavers, who will not continue their studies in general secondary education. The biggest challenge for technical and vocational education and training in the coming decade is thus to develop short vocationally oriented training schemes for those concerned by the selection process on entrance to general secondary education or between lower and upper secondary. This represents a considerable challenge as these alternative courses of study, bound to be developed massively, are little or non-existent at the present time. This increasingly selective process must also incorporate an equity criterion to give everyone an equal chance in continuing their education beyond primary school (cf. chapter 8, section 4).

²⁹ See World Bank (SEIA 2007, p. 140).

³⁰ Even so, this regulation must not consist in reducing enrolments at this level. On the contrary, in many countries, pressure on secondary education incurred by UPE will be such that selection on access to secondary education level is compatible with a higher number of enrolments.

Appendix 6.1: Multiplication factor of secondary enrolments per country in 2015 according to three reference scenarios on the hypothesis of non-attainment of UPE

Countries	Total pupils in secondary education in 2004 or closest year (in 000's)		Multiplication factor of secondary enrolments					
			lower			upper		
	lower	upper	A1	B1	C1	A2	B2	C2
Group 1	1 114	138	1.7	4.5	5.2	1.7	4.4	6.4
Uganda	623	105	1.5	3.5	3.5	1.5	3.5	3.5
Tanzania	491	33	1.9	5.6	6.9	1.9	5.4	9.4
Group 2	4 165	1 024	1.9	2.8	3.2	1.8	2.8	4.0
Swaziland	49	19	0.9	1.0	1.1	1.0	1.1	1.5
Lesotho	69	24	0.9	1.3	1.5	0.9	1.3	1.9
Djibouti	21	7	1.1	1.2	1.3	1.2	1.2	1.5
Togo	364	81	1.1	1.4	1.4	1.2	1.4	1.6
Comoros	29	14	1.3	1.5	1.6	1.2	1.2	1.5
Congo	192	34	1.4	1.9	2.1	1.4	1.6	1.8
Côte d'Ivoire	521	187	1.5	2.5	2.5	1.5	2.3	2.4
Senegal	312	89	1.7	2.9	3.2	1.8	3.0	3.7
Benin	624	60	1.7	2.7	2.7	1.8	3.0	4.3
Guinea	324	112	1.9	2.8	3.0	2.0	3.2	3.9
Burundi	129	30	1.9	3.9	4.7	1.8	4.0	6.8
Malawi	178	78	1.5	3.5	3.2	1.6	3.5	2.6
Ethiopia	1 083	138	2.1	2.5	2.5	1.9	2.5	2.6
CAR	60	18	2.7	4.7	5.7	2.8	4.5	7.3
Chad	191	65	2.8	3.9	4.7	3.0	3.5	5.5
Niger	151	26	3.4	5.3	7.0	2.8	4.4	10.0
Burkina Faso	230	43	3.5	5.4	5.6	3.4	5.5	9.0
Group 3	1 640	555	1.6	2.2	2.4	1.7	2.5	3.0
Ghana	1 010	319	0.6	0.6	0.6	0.6	0.6	0.7
Gambia	62	23	1.5	1.5	1.4	1.6	1.7	1.5
Mauritania	54	35	1.6	2.6	2.8	1.6	2.5	3.1
Mozambique	187	93	1.8	3.6	4.1	2.1	5.3	7.0
Mali	326	85	2.2	2.8	3.1	2.5	2.3	2.9
Group 4	890	677	1.1	1.3	1.2	1.1	1.4	1.3
Eritrea	139	76	1.0	1.2	1.2	0.8	1.3	1.3
Sudan	751	601	1.3	1.4	1.3	1.3	1.4	1.2
Overall	7 810	2 395	1.7	2.7	3.0	1.7	2.7	3.8

* Except Cameroon and Madagascar, the only countries in the group who will attain UPE by 2015, according to the projections. Source: Authors' estimation based on sector analysis, UIS and population data from the UN population division

Appendix 6.2: Multiplication factor of secondary enrolments in 2015 per country according to three reference scenarios on the hypothesis of attainment of UPE

Countries	Total pupils in secondary education in 2004 or closest year (in 000's)		Multiplication factor of secondary enrolments					
			lower			upper		
	lower	upper	A1	B1	C1	A2	B2	C2
Group 1	1 114	138	2.3	6.0	8.6	2.3	5.9	11.6
Tanzania	491	33	2.2	6.4	9.4	2.2	6.2	14.7
Uganda	623	105	2.4	5.6	7.7	2.4	5.6	8.5
Group 1	3 065	955	2.2	3.5	4.6	2.2	3.5	5.9
Lesotho	69	24	1.2	1.6	2.0	1.2	1.6	2.8
Swaziland	49	19	1.3	1.3	1.6	1.4	1.5	2.3
Cameroon	595	221	1.8	3.1	3.5	1.7	2.7	3.4
Togo	364	81	1.8	2.1	2.8	1.8	2.2	3.5
Congo	233	41	2.0	2.6	3.6	1.9	2.1	3.6
Guinea	324	112	2.3	3.3	4.5	2.4	3.8	6.7
Côte d'Ivoire	521	187	2.4	3.9	4.6	2.4	3.6	5.0
Senegal	312	89	2.3	3.9	5.1	2.4	4.0	6.7
Benin	262	60	2.5	3.9	4.9	2.6	4.4	8.5
Comoros	29	14	2.7	3.1	4.1	2.6	2.6	4.6
Malawi	178	78	3.0	7.1	7.7	3.2	7.1	8.1
Burundi	129	30	3.2	6.4	10.7	3.0	6.7	15.4
Ethiopia	1 083	138	3.6	3.9	4.3	3.4	4.0	4.4
Djibouti	21	7	3.7	3.7	4.7	3.8	3.8	6.3
CAR	60	18	4.0	7.0	9.8	4.2	6.7	14.2
Chad	191	65	4.1	5.8	9.0	4.3	5.1	11.7
Burkina Faso	230	43	4.5	7.0	9.3	4.4	7.0	16.4
Niger	151	26	6.5	10.1	17.3	5.3	8.4	28.5
Group 3	2 282	707	2.5	3.7	4.9	2.6	4.0	7.0
Ghana	1 010	319	1.5	1.6	1.9	1.5	1.7	2.3
Gambia	62	23	2.1	2.1	2.3	2.2	2.3	2.8
Madagascar	486	107	2.3	4.2	5.8	2.4	4.6	9.1
Sierra Leone	155	45	2.1	3.0	4.0	2.0	3.0	5.0
Mozambique	187	93	2.9	5.8	7.7	3.4	8.5	14.9
Mauritania	54	35	3.1	5.0	6.7	3.1	4.6	8.3
Mali	326	85	3.5	4.3	6.1	3.5	3.6	6.6
Group 4	890	677	2.5	2.9	3.3	2.3	3.0	3.9
Eritrea	139	76	2.7	3.1	3.9	2.1	3.3	4.8
Sudan	751	601	2.4	2.7	2.8	2.5	2.7	3.0
Overall	9 087	2 774	2.8	4.3	5.8	2.7	4.3	8.0

* Results of scenario C (1 and 2) are estimated for 2020 insofar, as universal lower secondary completion is scheduled for that date.
Source: Authors' estimation based on sector analysis, UIS and population data from the UN population division

Appendix 6.3: Current level and projection of expenditure and public resources for running tertiary education in Africa, annual average (status quo scenario, 2004 USD in millions)

	2004		Projections, status quo scenario				
			Number of students 2015		Annual average 2005-2015		
	Students	Current expenditure*	Total	Factor 2015/2004	Resources	Expenditure	Gap
Benin	40 698	22	154 000	3.8	28	56	28
Burkina Faso	24 975	17	125 000	5.0	22	54	33
Burundi	15 251	7	48 000	3.1	8	16	8
Cameroon	85 790	43	212 000	2.5	55	92	36
Comoros	1 779	1	21 000	11.6	1	6	5
Congo	10 631	22	24 000	2.3	29	40	11
Côte d'Ivoire	159 917	71	282 000	1.8	90	112	22
Eritrea	4 612	4	7 000	1.6	5	6	0
Ethiopia	172 111	74	678 000	3.9	100	227	127
Gambia	15 30	3	3 000	1.8	4	4	0
Guinea-Bissau	503*	1	1 000	1.3	1	1	0
Guinea	22 223	21	54 000	2.4	27	40	13
Kenya	108 407	76	179 000	1.7	97	121	24
Lesotho	6 457*	39	19 000	3.0	49	83	33
Madagascar	42 143	18	74 000	1.8	23	28	4
Malawi	5 089	13	9 000	1.8	16	21	4
Mali	33 591	14	152 000	4.5	20	44	25
Mauritania	11 045	6	18 000	1.7	7	8	1
Mozambique	22 256	33	88 000	3.9	41	96	55
Niger	8 774	7	15 000	1.7	10	10	1
Dem. Rep. of Congo	193 908*	9	317 000	1.6	11	12	1
CAR	8 828	3	20 000	2.2	4	7	2
Rwanda	25 233	20	78 000	3.1	31	59	28
Senegal	52 282	58	154 000	2.9	74	124	50
Sierra Leone	14 097*	8	42 000	3.0	10	18	8
Chad	10 075	6	35 000	3.7	9	16	8
Togo	18 690	9	35 000	1.9	12	13	1
Uganda	88 360	47	287 000	3.2	60	98	38
Zambia	28 100*	15	39 000	1.4	23	25	3
Zimbabwe	61 353*	78	84 000	1.4	99	114	15
South Africa	760 426		1 185 000	1.6			
Algeria	716 452		1 344 000	1.9			
Angola	13 398*		27 000	2.0			
Botswana	13 221		39 000	3.0			
Cape Verde	2 732		8 000	3.1			
Djibouti	1 134		15 000	13.4			
Egypt	2 334 603*		5 726 000	2.5			
Gabon	7 804		22 000	2.8			
Ghana	69 968		350 000	5.0			
Equatorial Guinea	1 281		3 000	2.0			
Libya	395 481*		728 000	1.8			
Mauritius	17 781		47 000	2.6			
Morocco	343 599		501 000	1.5			
Namibia	15 004		26 000	1.7			
Nigeria	1 289 656		3 982 000	3.1			
Sao Tome and Principe	202*		350	1.7			
Sudan	349 442*		1 401 000	3.9			
Swaziland	6 594		15 000	2.2			
Tanzania	42 948		189 000	4.4			
Tunisia	284 264*		1 081 000	3.8			

* Authors' estimations.

Source: Authors' calculations based on UIS, World Bank and the Pôle de Dakar data



Social and economic sustainability in the development of post-primary education

As a counterpart to the previous chapter, the social and economic sustainability of the expansion of post-primary education is analysed here. An additional effort on public financing would be justified for post-primary education, within the constraints mentioned in chapter 6, in view of the behavioural and the economic benefits that society could gain from it. Regarding behaviour, it is observed that a large share of the changes, associated to the level of schooling, is already accounted for by primary schooling and consolidated with lower secondary completion. The very real social benefits gained from the expansion of post-primary education are nevertheless limited. Economically, the benefits for society are very much dependent upon the labour market situation and on the integration opportunities for education system leavers. In many countries, the significant imbalance already registered, particularly for the most qualified, would justify flow regulation.

The question of the social and economic sustainability of post-primary education is closely linked to the individual and social returns to this type of education. Recognition of primary education as a basic right and of the high social benefits (the economists' *positive externalities*) it generates, guarantees the convergence of individual interests and the interests of society in pursuing Universal Primary Education (UPE). At post-primary level, this convergence is not necessarily evident : the social externalities associated with a higher level of education are largely marginal compared to those already associated with primary enrolment ; as for the economic benefits, they depend crucially upon the integration of school leavers in the job market and therefore upon the adjustment, in quantity and in quality, of the number of those qualifying from the different levels and courses of study to the needs of the economy. Such an adjustment is difficult to achieve: projections in this area are somewhat unreliable and individual behaviour patterns do not systematically guarantee reaching community goals. Finally, the embodiment of human capital, and the high mobility resulting from this, adds yet another risk of imbalance between the two orders of interest, all the more so as one takes into consideration levels of education which are of value (and often of greater value) outside the national market alone.

Supporting the development of post-primary education is not therefore automatic. Before defining the forms and intensity of this support, it is necessary to analyse the expected economic and social returns and to develop a relatively detailed sector-wide strategy focusing on definition of the forms and types of education to be promoted and considerations on content and on modes of regulation. This chapter concentrates on the first point, assembling different pieces of information in order to comprehend the current situation. The question of the short and long-term policies to be implemented and their possible development in the longer term will be handled in the following chapter.

Section 1 is devoted to providing a short theoretical reminder of the determining factors in the demand for education and of their implications in terms of labour market balance and of public funding of the education system. Section 2 gives precisions on the expected social benefits of the development of post-primary education. The following sections handle measurement of the economic benefits. This cannot be established in a simple and definitive way and is rather the result of mobilizing and putting into perspective a whole range of elements, which may converge to outline this necessarily imprecise measure. Section 3 covers, first of all, the present situation in terms of job perspectives and structure of the labour markets and goes on to measure the existing imbalance (job access indicators for education system leavers, job balance). An estimation of growth models (section 4) will complete the analysis of the quantitative balance between supply and demand in qualifications, by enabling a better grasp of the impact of the different levels of post-primary education compared with the national development contexts.



© UNESCO BREDA - By Reg'

1. Characteristics of educational investment, its consequences on demand and financing of education

Economic theories on education still provide a useful theoretical framework for discussion regarding the evolution of public education policies today, especially in developing countries where the weight of financial constraints must lead to the greatest possible vigilance as to the management of public activities. Far removed from the traditional conception of an «education market» naturally balancing out after a period of crisis, these theories announce the possibility of lasting imbalance and the development of diploma inflation dynamics, the reality and scale of which are uncontested today in many countries. This situation leads necessarily to thinking of ways of absorbing this imbalance and of the role that public financing of education can play in this respect. The embodiment of education by the person, which is the specific predominant feature of education, makes these considerations even more necessary. Education, once embodied, is fundamentally a private, mobile, inalienable good which only justifies financing as long as it answers the community needs, which are themselves dependent on variable economic circumstances in time and space.

These theories assert that education is an investment that the individual makes in himself/herself by comparing the costs incurred (direct costs, income foregone during the period of study also known as opportunity costs) and the benefits he/she expects to get out of it in the future, generally measured by the additional income associated with the rise in the level of education. The individual decision of investing in education reflects, in this paradigm, the comparison of expected returns to education with those from alternative investments. The private nature of educational investment by no means excludes public funding of a part of the cost since education brings benefits to society, exceeding the simple total sum of individual benefits. The externalities of individual investment in education concern many areas where education contributes to the positive evolution of attitudes that have a strong community value (health, birth control, civic responsibility, etc.). They also concern the capacity of the nation in terms of economic growth.

On the surface, the rationality of individual behaviour and the convergence of individual and community interests seem to guarantee the balance between demand for education and job opportunities. Economic theories on demand for education announce, in fact, that this rationality in individual behaviour can go up against the satisfaction of community goals. Indeed, for the same expected benefits, returns to education can vary significantly since individuals are faced with different costs: financing capacities for the direct costs of education are not equal between rich and poor people, opportunity costs differ between urban and rural areas, between boys and girls, etc. For obvious equity reasons, society may not be satisfied with these situations and may decide to adjust its aid accordingly, in order to partially compensate for a part of the costs at the charge of individuals belonging to the different groups. Public support to groups, whose returns to education are lower than others, may also be justified in terms of social effectiveness if it is proven that the economic growth or social benefits to society increase, when this population has more access to education.

There are other situations in which rationality in attitudes does not guarantee the convergence of individual and community interests. Return to education is a relative measure depending upon both earnings perspectives and also earnings to be foregone during the time of study. In this frame, a deteriorating job situation does not automatically bring about a drop in demand for education, and thus a rapid return to a good balance if this deterioration affects the least qualified as it is often the case. Individual returns to educational investment can even increase and so fuel further studies and an inflation of diplomas that is of little benefit to society. Thus, individual returns to post-primary education can be high, as shown in the literature on private returns to education in Africa (cf. box 7.1), without however increasing social returns¹.

¹ For a more precise definition of the distinction between private and social returns, cf. UNESCO BREDA 2005, p. 47.

Box 7.1: Private returns to education in Africa

According to the theory of human capital, private returns to education correspond to the salary difference generated by an additional endowment in human capital. The estimation of private returns is often based on the Mincer earnings model (1974) even if this model has changed significantly since that time, further to much criticism.

Principal results on private returns to education in Africa

The last assessment made at regional level on private returns to education (Psacharopoulos and Patrinos 2004) shows that these returns are high in Africa (one additional year of schooling corresponds to an increase of 11.7% in salary in Africa, compared to 9.7% elsewhere in the world) and that they are higher at primary education level than at secondary or tertiary education levels (one additional year in primary education enables an increase of 37.6% in salary compared to 24.6% for secondary and 27.8% for tertiary education). The study also highlights the decrease in returns the higher the level of education gets (concave returns) and shows that for a given level of education, returns decrease with the level of development.

However, the methodology followed by Psacharopoulos and Patrinos, and consequently their results, have since been very strongly questioned by different authors (Bennell, 1996a, 1996b; Glewwe, 1996). For example, Schultz (2004) shows that in six sub-Saharan African countries, individual returns are higher at secondary and tertiary levels than at primary level. Kuepie et al. (2006) find that private returns to education are convex in seven West African capitals (Abidjan, Bamako, Cotonou, Dakar, Lomé, Ouagadougou and Niamey), i.e. that the effect of education on wages in the urban labour markets grows along with the rising level of education starting from a specific threshold. Convexity has already been observed in English-speaking African countries, such as Kenya and Tanzania (Söderbom et al. 2006), as well as Ghana (Schultz 2004).

This analysis on the structure of private earnings corresponding to the different levels of education should not systematically serve as a basis for education policies in favour of long studies, insofar as it is limited to the employed working population and does not take into account labour market imbalance, whether to do with unemployment or underemployment of the most qualified individuals observed on this same data. In any case, it does go to prove that there is a strong individual motivation for following a long course of study in such unbalanced situations.

Differentiating returns according to the different sectors of the labour market

Although many studies on private returns in Africa highlight the fact that the existence of segmented labour markets can have major implications on private returns to education, few of them have estimated these returns by differentiating the different segments². Kuepie, Nordman and Roubaud (2006) have estimated the private returns to education in the informal sector for the seven West African capitals already mentioned. It transpires that for five of these cities, the public sector gives the most value to education. The private modern sector follows (with the exception of Niamey and Lomé) and only then the informal sector (except in Ouagadougou where the informal sector is ahead of the private formal sector).

Private returns to education in the agricultural sector

While there is no doubt as to the fact that education leads to improved wages in the modern sector, the effect of education on productivity in the agricultural sector is much more doubtful and is the subject of much debate. The often-mentioned study by Jamison and Lau (1982), which reviews the results of over 35 studies on the measure of returns to education for farm workers in developing countries, shows that education has a positive effect on farm production but that this effect is often hardly significant. This review does not make it possible in particular to say that returns to education are positive in Africa.

This result is confirmed by the Glewwe study (1990), according to which the impact of education in rural areas is rather low in Côte d'Ivoire. The absence of a significant effect from education in the agricultural sector in Africa is often attributed to the low technological level of production or to the absence of technological change. Foster and Rosenzweig (1996) show that technological changes increase returns to education. However, Deaton and Benjamin (1988) find no effect from education in the use of modern techniques in the production of cocoa and coffee in Côte d'Ivoire. Jolliffe (1998) shows a positive effect for cognitive skills on household revenue in Ghana, but this impact is not significant on the income specifically connected to farming activities. More recently, Cogneau et al. (2006) studied agricultural production for Côte d'Ivoire, Ghana, Guinea, Madagascar and Uganda and found that the level of education of the head of the household has an effect on agricultural productivity, only in the cases of Madagascar and Uganda.

Source: DIAL, Paris

2 Cf. Lassibille and Tan (2005) for Rwanda, Casero and Seshan (2006) for Djibouti and Kazianga (2004) for the public and private modern sector in Burkina Faso.

When society covers part of the cost of education (free education, grants partially compensating for opportunity costs, etc.), this also affects returns and therefore behaviour. In many African countries, the growing scarcity of public job opportunities has affected the effectiveness of some courses of study in tertiary education and these have only remained attractive due to the advantage of holding a degree in the queue for job vacancies and even sometimes only due to the advantages of student status itself (which grants the equivalent of a salary, medical coverage, accommodation, transport and meals highly subsidized). The strategy of some students who look for ways to stay in university as long as possible, by totally and judiciously taking advantage of the rules on authorized repetition, highlights the caricature of the possible gulf between individual rationality and the interests of society as a whole.

The embodiment of human capital obviously constitutes another element to be taken into account for public financing of educational investment. One of the consequences of this embodiment is mobility, which is expressed when there are better opportunities outside the national market. The «brain drain» (box 7.2) is the most visible illustration of this but the situation also concerns holders of professional qualifications, particularly scarce in the region due to the low development of technical and vocational education in many African countries.



© UNESCO BREDA - By Reg'

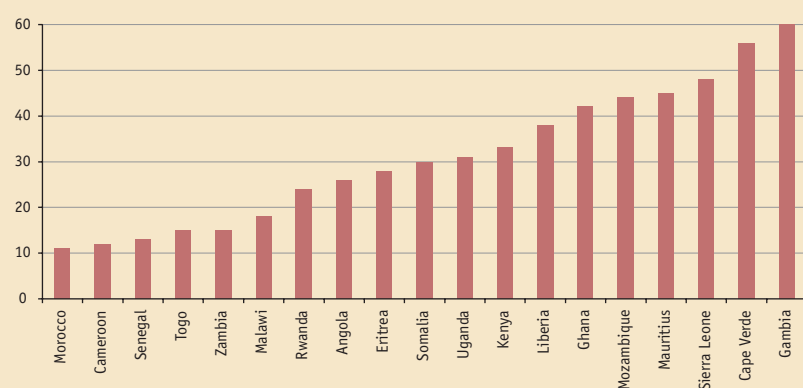
Box 7.2: The brain drain constitutes more of a handicap than an advantage for the development of the poorest African countries

The brain drain, or exodus of skills or of skilled workers, has a negative connotation. This is clear through the word “drain”. In addition, many theoretical and empirical studies tend to show that this phenomenon is detrimental to the country of departure of these “brains”. Indeed, when skilled workers leave their country, they are exporting, not only their individual productivity abroad, but also the underlying externalities (know-how that they would have passed on to their fellow countrymen). To these losses, must be added the cost borne by the community for financing their training and the tax loss on their income. For these reasons, the brain drain has a high social cost and generates negative effects on long-term economic growth and on the well-being of the residents of their country of departure (Docquier and Marfouk, 2006, Docquier, 2006).

The migration of skilled workers does not present only negative aspects for the migrants' economy of origin. Four positive effects can be identified (Docquier and Marfouk, 2006, Docquier, 2006, Beine, Docquier and Rapoport, 2006). First of all, migrant workers transfer a substantial share of the income earned abroad to their country of origin. Secondly, for an economy where the research sector is hardly effective, it may be best to let part of the skilled labour force emigrate, if the economy can retrieve some of the technological advances made in the receiving country by an imitation process, by investments or transfer of technology. Thirdly, if skilled migrants return to their country of origin, this constitutes a possible transfer of competence, knowledge and expertise acquired abroad. The authors put forward one last element, specifying that the perspective of qualified migration encourages young people to get training even if there is no guarantee for them to migrate in the future. Clearly, this may be an advantage for the country when the demand is somewhat low in spite of the corresponding job potential, but this may also fuel the inflation of diplomas and imbalance on the local labour market.

However, all in all, a high rate of migration by the highest skilled labour force curbs development in the country of origin (Beine, Docquier and Rapoport, 2006 - the individuals they studied had benefited from at least 13 years education in their country of origin). These authors showed that Africa is the World region with the highest rate of migration towards OECD countries (10.4% on average, distributed as follows: 13.1% in sub-Saharan Africa and 7.3% in North Africa). These rates are estimated at 3.3% in America, 5.5% in Asia, 6.8% in Oceania and 7.0% in Europe. In the specific case of low-income countries, they have, in addition, shown that a rate of migration exceeding 15 or 20% constitutes more of a handicap than an advantage for development. Many African countries are however well over this threshold, as shown in the following graph.

Percentage of highly skilled labour force having emigrated to an OECD country, according to the country of origin, 2000



*Note: The rate of migration is only calculated for individuals at least 22 years old on leaving their country of origin.
Source: Docquier (2006).*

The average rates conceal significant disparities, according to the special fields (computer scientists, doctors, finance managers, university professors, head managers, etc.). For example, the migration of doctors is more pronounced in some countries, particularly in Cape Verde, Sao Tome and Principe, Liberia, Ethiopia, Somalia, Ghana, Uganda, Malawi, Zimbabwe, Gambia, Zambia, Togo and in South Africa (Docquier et Bhargava, 2006, mentioned by Docquier, 2006).

Sources: Docquier (2006), Docquier and Marfouk (2006), Beine, Docquier and Rapoport (2006)

The different examples clearly show that regulation of the imbalance on the «education market» does not happen automatically and that it may require an adjustment of public funding. This is the case when promoting equity between the different groups by compensating for the differences in opportunity costs or in case of direct financing of studies which are an obstacle to universal enrolment; this is also the case when the labour market situation (greater deterioration for lower levels of skills) or the existence of a strong descriptive component in educational investment³ fuel the inflation of diplomas, which is detrimental to society. The mobility of human capital also means that there is a risk of financing the training of professionals and executives to the advantage of other countries.

These general considerations on the financing of educational investment must be qualified with regard to the level and the type of education. The consensus on the public funding of primary education and the promotion of UPE is based on the recognition of positive externalities expected at this level of education (satisfaction of a fundamental right, effects on social attitudes, threshold effect - to be reached for growth to take place ...). This is also justified by the fact that the command of basic skills increases individual productivity in a wide spectrum of productive activities. Public funding of education beyond basic education must take more into account the labour market situation and the measure of social benefits specifically related to it. It is clearly of no advantage to society to finance studies in areas where many, who are qualified, are unemployed or occupy massively underqualified positions. Public funding at this level of education must maintain or retrieve its role as a regulation instrument, by encouraging individuals to choose the most useful fields and forms of study for society as a whole and leaving them the responsibility for choices that individual interest alone justifies.

Reference to the characteristics of educational investment only defines the general orientation and directions, which when translated into concrete actions, concerning the type and level of financing and the levels and fields of studies to be promoted, remain very much open. This operationalization can (and undoubtedly must) remain very pragmatic and be the subject of experiment. On the actual financing level, there is a vast catalogue of actions ranging from direct aid to loans through tax aid, the advantages and disadvantages of which differ as to the goal targeted and also the population concerned.

Reservations concerning public funding of post-compulsory levels of education are not only to do with their greater sensitivity to the state of the national market. They also concern the possibilities for enhancing the value of human capital outside the national territory, which rise with the level of education. Managing this problem is delicate insofar, as this type of mobility most often concerns very useful skills for the country, which can as such justify additional support. It is therefore necessary to develop flexible solutions depending upon the choice of activities in the country or abroad, like, for example, guaranteed loans intended to cover the cost of study for which repayment would be reduced or even cancelled for those who qualify and work on the national territory.

The search for equity obviously leads to qualifying the previous elements and to justifying payment of the cost of study and disbursements for financing educational investment, as long as these actions are limited to the most underprivileged individuals or groups. Beneficiaries must be precisely targeted to ensure that this policy corresponds to that of cost-effectiveness and is coherent with its orientations. While the promotion of an equitable education system justifies that public aid to beneficiaries should concern all levels and types of education, on the one hand, it is hardly conceivable that this aid would enable individuals to follow lines of study that society is, on the other hand, trying to cut back.

More globally, economic theories on education make public funding of education itself an investment, which, in this respect, enters into competition with the other collective actions contributing to development and growth. In this perspective, the social or community effectiveness of education is also defined in comparison with the sacrifices it leads to, due to

³ Filter theory vs. human capital theory (Dakar+5 Report UNESCO BREDA 2005).

the fact of the undeniable existence of a global financing constraint. These sacrifices may affect the content and quality of education; they can also concern investments enabling more direct stimulation of growth and job creation. Within educational policy, it is important to maintain a balance between the quality of education provided, which is increasingly seen to play a role in growth, and its cost for individuals. When access to the education system is financed to the detriment of its quality, which is far from constituting an exemplary hypothesis in many countries, an absurd situation is reached where none of the community objectives of education (effectiveness and equity) can be attained. On the contrary, this leads to the development of a parallel private system and to the reinforcement of inequalities.

In the same way, to invest in education without worrying about the other public investments contributing to growth (infrastructure, market structuring, health and development of the financial sector...) would be just as criticisable. There again, the difficulty resides in finding a balance, concerning this time the formation of human capital and the development of favourable job opportunities to use it fully. The fact that finding this balance is delicate is not enough to justify the situation observed in many countries today, where massive lasting unemployment of qualified individuals coexists with wide public funding of education and chronic underinvestment in the other factors of growth. Worse, the individual and community rationale, whereby education answers (or at least is adjusted to) the needs in

terms of employment, is sometimes inversed when public jobs are created artificially in order to absorb the overproduction of qualified individuals⁴ and temporarily defuse the social and political problem it incurs.



© UNESCO BREDA - Mario Bels

4 Keller and Nabli (2002) have carried out a very enlightening study on the different aspects concerning the employment situation and use of the fruits of growth in the Middle East & North African region.

2. What are the specific social effects of post-primary education?

The social effects of education can concern a variety of dimensions such as health, mortality, civic life (more educated individuals can better participate in organized community life), political choices or reproductive health (spacing out births, use of contraception, etc.). Delinquency, prejudice, and attitude towards ecology are all variables that can be related to the level of education at the levels of the individual and of society (Baudelot and Leclercq, 2005). Some can be measured easily, others not. Topics such as prejudice, political choices and participation in community life are complex and very difficult to measure synthetically (for example, participation in society can include attitudes such as voting, belonging to a political party or its funding, public expression of one's opinions, public demonstrations, strikes, etc.). It is nevertheless possible to explore the different dimensions for which data is available (at individual or society level) in order to have an idea of the specific contribution of each level of education socially.

In the African context, the MICS (*Multiple Indicators Cluster Survey*) and DHS (*Demographic Health Survey*) surveys are an interesting basis for analysing the social effects of education on individual data. In addition to the level of education and the number of years during which the individuals have studied, they provide information on individual literacy, birth control, antenatal and postnatal maternal attitudes, attention given to child health, sending children to school, etc.

This type of data has already been presented in the report published by BREDA in 2005, concerning sustainable literacy and maternal attitudes in terms of health and birth control⁵. They clearly show that positive attitudes in the different areas were connected to the level of education and particularly that, on average, educated women married and had children later, and adopted attitudes putting their own and their children's health less at risk. On reading these results, it could be seen that the effects grow with the level of education but, above all, that many of the effects were only present when the mother had benefited from a full course of primary education. The specific effect of post-primary education on adopting attitudes of a high social value appeared limited in many aspects, with the notable exception of the proportion of births attended by medical personnel, which was significantly higher amongst women who had benefited from 12 years of schooling than amongst those who had only attended primary school.

These results were obtained allowing for the existence of probable interaction between the length of study and other variables that are connected and are also liable to have a direct influence on attitudes: geographical location of the household and level of income⁶. The most educated individuals are found in urban areas and they benefit, on average, from higher income and provision of services more favourable to adopting some of the attitudes taken into consideration. Going back to the exception indicated above, it is clear that recourse to medical assistance on giving birth supposes that medical assistance is accessible and that households have the financial means to use it. In order to take into account the statistical liaisons between variables explaining attitudes, the simplest solution is to measure the impact of education in econometric models controlling the effect of geographical location and household income. The example of Mali completes the results presented in the BREDA report in 2005. The results are indicated in the following table, in the form of marginal effects observed between two successive levels of education.

In order to highlight the contribution of each level of education to each social attitude or result analysed, it is practical to break down (into percentage) the difference between the probabilities of occurrence of an attitude for the most educated (those who have attended tertiary education) and for the least educated (who have received no education at all).

⁵ The data, here, concern Cameroon, Côte d'Ivoire, Guinea, Niger and Chad.

⁶ Other variables would have deserved being taken into account but could not be observed.

Table 7.1: Consolidated measure of the social impact for adults of the different levels of education on a variety of social dimensions in Mali

Area of impact	Gap between no instruction and complete primary education	Gap between complete primary and complete lower secondary education	Gap between complete lower secondary and complete upper secondary education	Gap between complete upper secondary and tertiary education	Total
Literacy	46	49	5	0	100
Risk of relative poverty	38	32	22	8	100
Access of children to school	53	21	16	10	100
Population	28	21	24	27	100
Age of first birth	16	20	28	36	100
Spacing out births	40	20	20	20	100
Use of method of contraception	41	23	21	15	100
Total number of births	16	20	28	36	100
Maternal health	52	20	16	12	100
Antenatal check-ups	66	18	10	6	100
Vaccination before delivery	50	21	17	12	100
Assisted birth-modern personnel	40	23	20	17	100
Child health and mortality	52	18	16	14	100
Complete vaccinations	35	20	22	23	100
Vitamin A intake	94	6	0	0	100
Under-5 mortality	26	27	27	20	100
Overall score	43	23	18	16	100

Source: The Pôle de Dakar based on DHS survey, 2001

For example, the gap between the probability of literacy between someone who has attended primary education and another who has had no education at all corresponds to 46% of the gap in the probability of literacy observed between someone qualifying from tertiary education and someone with no education. Reaching lower secondary education corresponds to 95% of this gap, 46% for primary attendance and 49% specifically associated with lower secondary attendance. Higher secondary attendance adds little to this situation (5%) and tertiary education does not contribute significantly.

The initial observation is that the marginal effects of the different levels of education vary significantly, according to the different social dimensions. Regarding maternal health or the fact of sending children to school, the principal effect of education is obtained by the end of primary education. On the opposite, in the area of demographic variables, the effects of education are substantial through to tertiary education.

However, if we consider all the social dimensions tackled here and give them identical importance, it is seen, roughly, that primary education is the level of education generating the most obvious social impacts. All in all, a little over 50% of the social effects of education are already obtained with the six years of primary education. This figure is higher for health variables (over 60%) and a little less for the impact on population variables (a little under 40%). Aside from this, pursuing lower secondary education contributes positively but of lower intensity (around 25 percentage points); upper secondary education does of course accentuate the social impacts but finally to a relatively lesser extent (around 20 points).

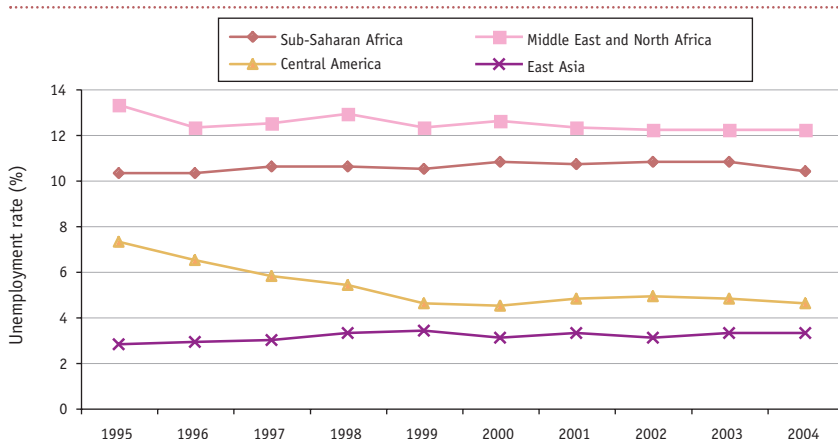
3. Access to employment for education system leavers in Africa

The needs of the economy, in qualified or highly qualified labour force, depend upon its structure, and particularly the relative importance of the rural, informal and modern sectors and of how dynamic each of these sectors is. It therefore appears essential to take into account the national employment context⁷ in defining educational policies, as this context sets the constraint in terms of job possibilities for education system leavers. However, sufficient data is lacking for precise analysis of the employment situation in African countries. A relatively patchy set of still incomplete information can be processed to apprehend the global characteristics of the employment context or the specific situation of young people, which suggests that there is a deep rift, both in quantitative and qualitative terms, between the number of leavers from the highest levels of education and the absorption capacity of the economies of a large number of African countries.

3.1 The global employment context and market structure

In Africa, the rate of unemployment is high on average, indicating a relative scarcity in job vacancies. In 2004, the International Labour Organization (ILO) estimated the rate of unemployment at 10.9% in sub-Saharan Africa and at 10.4% in Northern Africa. For the 1995-2004 period, it remained between 10.3% and 10.9% in sub-Saharan Africa, indicating a strong inflexibility (Tarantino 2003). Unemployment is therefore structurally high in Africa and there is little probability of a significant drop in this respect in coming years.

Graph 7.1: Rate of unemployment in sub-Saharan Africa, 1995-2004 (%)



Source: Tarantino 2004

However, for the reasons set out in box 7.3, the rate of unemployment is a very imprecise indicator of the imbalance on the labour markets in Africa and considerably underestimates the difficulties encountered by members of the working population to integrate the labour market.

⁷ It also appears essential to possibly take into account regional employment, especially for those qualifying from tertiary education.

Box 7.3: Underemployment as a measure of the imbalance of the labour market in Africa

Unemployment figures observed in African countries (an average of 11.4% for the WAEMU capitals⁸) seem low judging from the importance given to the employment problem in public debate and to household impressions⁹. The gap largely results from the fact that the unemployment indicator does not sufficiently report on the specificities of the African labour markets. Thus, a low unemployment rate is far from corresponding to a reality of full employment. It generally results from a forced transfer of labour towards self-employment in a hardly productive informal sector, or from traditional work patterns, common in many rural communities, where the available chores are absorbed by the community as a whole, at the risk of reducing the total hours worked and the income of all the members of the community¹⁰. Thus, many people work less, earn less, and use their skills below capacity.

In addition, the only measure of unemployment, as applied in developed countries (job seeker not working during the period of reference, actively seeking a job and available to fill it), is quite insufficient for grasping the difficulties of the labour market as a whole in Africa. The African labour market is indeed characterised by the absence of unemployment coverage, predominant family and social networks in seeking a job, the large proportion of self-employment, of child labour and unpaid family labour, the difficult distinction between productive and non-productive labour, problems connected to the period of reference and to seasonal work. Most workers find a job thanks to family and social networks (and to a lesser extent through individual search for salaried employment), and the absence of job search is often explained by the need to look for funds in the case of self-employed workers. Similarly, some workers do not actively look for a job because they have the impression that there are no opportunities («discouraged» workers). Direct application of the International Labour Organization (ILO) indicators could lead to considering them as part of the «non-working population» and thus play down the scale of employment problems.

These peculiarities result in a vast distortion between the low value of the ILO rate of unemployment and the permanent reality of the difficulties in labour market integration for the African work force. Thus, once the «discouraged» workers are included in the unemployment figures, the rate of unemployment rises to almost 50% on average for the West African capitals (ranging from 11.4 to 15.9%), with a high peak for Niamey and Dakar (+78% and +62% respectively). These wider rates of unemployment would thus be considerably higher than those corresponding to a more restricted definition.

Moreover, the adjustment of the labour market by the variation in the number of people working according to vacancies seems to be less than the adjustment via the quality of employment. The employment problem is indeed more qualitative than quantitative. The notion of underemployment better and more completely summarizes the different forms of distortion on the labour market, caused by the poor distribution of labour resources or a basic imbalance between work and the other factors of production, raising the question of the local underusage of the labour force: underemployment is to the labour force what underusage of capital is to business. According to the ILO, underemployment exists «when the duration and productivity of a person's job are inadequate, compared to another possible job that this person is willing to fill and capable of filling». This underemployment of labour was used to be called «disguised unemployment»¹¹. Underemployment is therefore the inadequate use of the labour supply, by a productive system that has a weak level of capital, organisation or technology.

Source: DIAL, Paris

8 ILO rate of unemployment in 7 out of the 8 West African Economic and Monetary Union (WAEMU) capitals (Abidjan, Bamako, Cotonou, Dakar, Lomé, Niamey, Ouagadougou ; PARSTAT Project, DIAL Surveys 1-2-3, AFRISTAT, European Union, 2001-2003).

9 Lack of employment is mentioned by the population as the country's major problem in the household replies to the «Governance» module, Surveys 1-2-3, PARSTAT Project », Razafindrakoto & Roubaud, 2005.

10 Haritchelhar, 1980 and ILO, 1998.

11 Robinson, 1937.

In order to better figure out the global employment context in Africa, it is therefore necessary to have recourse to the idea of underemployment. There are generally two types of underemployment, visible and invisible. Visible underemployment concerns members of the labour force working involuntarily part-time, due to reasons connected to the employer or to a poor economic situation. On the one hand, it concerns people working part-time¹² wishing to work more and available to do so (whether actively seeking an extra job or not), and on the other hand, those working full-time, but who worked less than usual during a reference week due to a slow down in business, a reduction in seasonal activity, bad weather, etc. The volume of working hours enables to quantify the extent of visible underemployment. Surveys 1-2-3 on the economic capitals of the WAEMU countries show that all those who work less than 35 hours involuntarily represent 14.3% of the employed working population, and thus indicate massive underemployment. The rate of visible underemployment is fairly homogeneous from one city to another, ranging from 10.6% in Ouagadougou to 17.1% in Bamako and Lomé. On the one hand, visible underemployment is highest in the informal sector, reaching 15.5%. On the other hand, the other sectors are relatively unaffected, with a rate of around 10%.

Invisible underemployment is more difficult to measure. It corresponds to the case of the worker who is underpaid compared to his profession. Thus, an individual who earns an hourly wage that is below an adequate standard of income for his/her level of qualifications and experience, is in a situation of invisible underemployment, in the same way as an individual who earns an hourly wage under the legal minimum. However, legal standards of minimum pay are generally irrelevant in sub-Saharan Africa, as they are not regularly updated¹³ and do not take into account the level of qualification and supposed productivity of the worker.

The existence of very long working hours may coincide with a situation of underemployment when this is made necessary by productivity or by an abnormally low hourly wage. The informal sector is the principal provider of employment in Africa but also the one that pays the least: while half the employed working population in the informal sector works more than 48 hours per week in the West African capitals¹⁴, two-thirds of this working population have earnings of under the minimum legal wage (invisible underemployment)¹⁵ compared to one-quarter of the working population in the private formal sector, and only 5% in the public sector. Segmentation of the labour market in Africa can also be observed through the contrasted levels of underemployment between the major institutional sectors. When workers in the informal sector desire, and are capable of, working more productively than at present, they are in a similar situation to those working part-time and who wish to work more¹⁶.

Table 7.2 shows the principal underemployment indicators in West Africa. If the different components of underemployment (unemployment, visible underemployment and invisible underemployment) are aggregated to obtain a synthetic underemployment indicator, a global underemployment rate of 67.1% is obtained for the seven large cities studied, i.e. around 2.7 millions of people out of more than 4 millions making up the working population.



© UNESCO BREDA - By Reg'

12 The normal working duration, for the activity taken into consideration, is defined in terms of legal hours or usual or normal hours completed by full-time workers. Most countries use a conventional uniform norm which may vary greatly in value, from 25 hours in Malaysia to 35 hours in West Africa, and up to 47 hours in Costa Rica (ILO, DIAL).

13 Moreover, a change in legislation or in its application can bring about a change in the number of people underemployed, which does not necessarily reflect a real change in the level of underemployment. In addition, legal norms are not of importance neither to all countries, nor for the workers, for example in the informal sector.

14 PARSTAT Project 2001-2003

15 The minimum salary must be considered more like a social norm connected to a national context, than like a universal and absolute referent (physiological minimum for subsistence for example): Brilleau, Roubaud, Torelli, Stateco n°99, 2005.

16 Hecker, 1992.

Table 7.2: Measure of the different components of underemployment in the West African capitals

	Cotonou	Ouagadougou	Abidjan	Bamako	Niamey	Dakar	Lomé	Overall
ILO rate of unemployment	5.5	15.4	13.5	7.1	13.1	11.7	8.2	11.4
Rate of unemployment in the wider sense	6.8	22.4	15.8	12.5	23.3	18.9	11.2	15.9
Visible underemployment % of weekly work under 35 hours	13.4	10.6	12.6	17.1	16.0	16.2	17.1	14.3
Invisible underemployment % of employed working population with an hourly wage below the minimum legal salary	61.1	66.5	53.2	45.4	51.1	57.8	55.8	55.2
Invisible underemployment % of employed working population with a monthly salary below the guaranteed minimum wage	54.9	61.3	49.9	43.9	45.3	53.6	49.0	51.1
Minimum monthly income in CFA francs	25 000	27 080	36 000	22 000	22 000	39 000	13 800	

Sources: PARSTAT project 1-2-3 surveys, 2001-2003; DIAL, AFRISTAT, European Union, National Institutes of Statistics, DIAL calculations

The different indicators therefore suggest considerable employment difficulties on the continent, which are in no way explained by overly high salary requirements, as shown in box 7.4.

Box 7.4 The issue of salary requirements

It is generally put forward that individuals are out of work because their salary requirements are higher than wages available on the job market. The results of the 1-2-3 surveys enable analysis, as to what extent this hypothesis can be confirmed for the largest cities in some African countries. In these surveys, the reservation wage of the unemployed is known, i.e. the minimum salary they declare to be ready to accept. In order to analyse the compatibility between the salary demands of the unemployed and salaries practised on the labour market, the average unemployed reservation wage is compared to the average worker's wage. In 7 out of the 11 cities, the reservation wage is significantly higher than the average worker's salary. Ouagadougou, Niamey, Yaoundé and Antananarivo differ from the other cities with a reservation wage close to the average wage, and even lower. A priori, salary demands of the unemployed would thus be higher on average to what is offered on the job market. However, most of the unemployed (52%) are looking for a salaried job, and so modern rather than informal. The modern sector seems therefore to be a better reference than the labour market as a whole for analysing salary appropriateness. With this new reference, the reservation wage is seen to be under or equal to the average salary of workers in the modern sector, in 7 out of the 11 cities. On this basis, the salary requirements mentioned would not therefore be systematically a curb to their integration in the labour market.

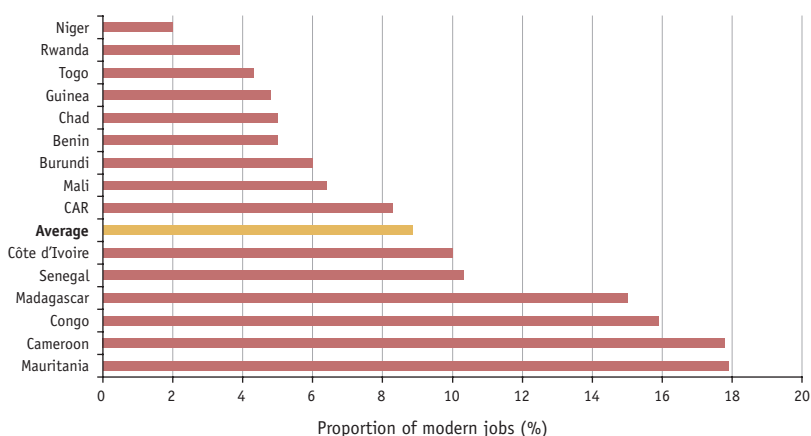
Relationship between average reserve salary and average salary in the different institutional sectors for the 25-34 age group

	Modern sector	Informal sector	Overall
Dakar 2002	1.02	2.23	1.74
Lomé 2001	1.11	2.84	2.24
Cotonou 2001	1.03	1.94	1.66
Bamako 2001	0.74	1.39	1.16
Ouagadougou 2001	0.74	1.82	1.26
Abidjan 2002	0.99	2.70	1.84
Niamey 2002	0.77	1.38	1.09
Kinshasa 2004	6.66	3.66	4.07
Yaoundé 2005	0.71	1.43	0.98
Douala 2005	0.93	1.75	1.26
Antananarivo 2004	0.73	1.15	1.07

Sources: AFRISTAT and DIAL 1-2-3 surveys

In other respects, information available on the structure of existing jobs shows that the principal characteristic of African labour markets is the narrowness of the modern sector. ILO (2002) estimates that the share of formal jobs amongst non-agricultural jobs was of 38%, for the period 1994 to 2000. Now, in a large number of countries, the agricultural sector predominates (with over 60% of jobs) and is, to a great extent, informal. It is therefore very likely that the modern sector of the economy is even narrower if jobs are considered overall. In a sample of about fifteen countries, where recent data is available, the share of the modern sector in overall jobs is estimated at around 10% on average (graph 7.2). This figure is therefore very low compared to the share of informal jobs, representing an average of 90% of national jobs.

Graph 7.2: Proportion of modern jobs in a sample of African countries



Sources: *The Pôle de Dakar* and *CSR*, 1999 to 2005

Thus, the global context of the labour market, wherein the connection between education and the economic sphere and that of the relevance of the development of post-primary levels of education must be analysed, is thus characterised by two structural constraints: one related to the availability of jobs and the other to the narrowness of the modern sector of the economy. A priori, this situation appears globally unfavourable to the employment of highly qualified individuals, adapted to the modern sector. However, this assertion needs to be confirmed by facts. Generally, it can be asked if the chances of successful labour market integration¹⁷ differ according to the level of education and the field of study chosen.

3.2 The situation of post-primary school leavers on the labour market

While analysis of the situation, with regard to employment per level of education which is more particularly the subject of this section, is complex, it is even more so when it aims at being comparative. Data collected in the framework of national sector-wide analysis will be referred to here, concerning the overall territory of the countries studied, as well as AFRISTAT and DIAL 1-2-3 survey data, which is restricted to 11 African French-speaking capital cities but provides comparable data.

¹⁷ Successful integration means both the individual chances of finding a job and the probability for individuals to use their qualifications to the fullest in the job they may have found.

Paradoxically, the integration difficulties affecting young people in Africa concern, more particularly, those with the most qualifications. For all the countries in table 7.3, unemployment is seen to be higher for individuals who have reached the highest levels of education, although the limits already mentioned must be taken into account when looking at this indicator. When the same country is represented in both data sources, the level of unemployment is seen to be significantly lower in the capital cities than in the rest of the country, but the superiority of the rate of unemployment for the highest levels of education is confirmed in both contexts. The relationship between unemployment rates for the most educated and the least educated is often very high and is over two in six countries (Guinea, CAR, and also Lomé, Cotonou, Bamako and Abidjan).

Table 7.3: Unemployment rate for the 25-34 age group (%)

	Individuals who have reached the low part of the education system (below upper secondary) [1]	Individuals who have reached the high part of the education system (above lower secondary) [2]	Ratio [2] / [1]
The Pôle de Dakar or CSR data			
Cameroon	16.1	29.4	1.8
Congo	26.5	37.9	1.4
Guinea	13.8	35.1	2.5
Mali	17.8	30.4	1.7
Mauritania	35.8	33.8	0.9
CAR	7.4	20.0	2.7
Senegal	31.3	33.5	1.1
1-2-3 Data			
Dakar	14.4	21.8	1.5
Lomé	5.8	20.0	3.4
Cotonou	5.9	14.7	2.5
Bamako	7.7	19.7	2.6
Ouagadougou	14.7	25.0	1.7
Abidjan	13.4	27.0	2.0
Niamey	11.9	13.8	1.2
Kinshasa	13.3	22.2	1.7
Yaoundé	11.9	18.2	1.5
Douala	14.6	17.5	1.2
Antananarivo	6.3	9.3	1.5

Sources: The Pôle de Dakar : Cameroon : ECAM 2001, Congo : ECOM 2005, Guinea : QUIBB 2002, Mali : EPAM 2004, CAR : RGPH 2003, Senegal : QUID 2001; CSR : Mauritania 2005; DIAL : PARSTAT project for 7 out of the 8 WAEMU capitals(2001-2003), Survey on Employment and Informal Sector (EESI) in Cameroon (2005), 1-2-3 in Kinshasa (2004), 1-2-3 survey in Madagascar (Madio Project, 2006).



© UNESCO BREDA - Mario Bels

More subject to unemployment, the most educated young working population is not systematically employed in the formal sector (table 7.4). In the seven countries, for which the Pôle de Dakar has obtained detailed data on the structure of jobs filled according to the level of education, it is seen that on average almost 50% of young educated workers (higher level than lower secondary education) are employed in the informal sector. In Congo and Guinea, less than 40% of the most educated young workers fill a job in the formal sector. The same situation is observed on the urban market in the capital cities studied by AFRISTAT and DIAL. In this particular context, where formal jobs are concentrated, often more than one-third of the most educated young workers are employed in a job in the informal sector (with the exception of Niamey and Ouagadougou with a proportion of only 27%).

Table 7.4: Distribution of the most educated workers in the 25-34 age group¹⁸ according to the institutional sector

%	Modern jobs		Non-agricultural informal	Agro-pastoral jobs	Modern jobs	Informal & agro-pastoral jobs
	Public	Private				
The Pôle de Dakar or CSR data						
Cameroon	17.9	34.2	31.5	16.3	52.1	47.9
Congo	16.5	22.4	48.7	12.4	38.9	61.1
Guinea	23.2	9.0	61.6	6.2	32.2	67.8
Mali	24.3	24.8	47.6	3.4	49.1	50.9
Mauritania	62.6		33.4	4.0	62.6	37.4
CAR	25.7	26.8	33.5	14.0	52.5	47.5
Senegal	32.4	31.0	30.9	5.7	63.4	36.6
Average	-	-	41.0	8.9	50.1	49.9
1-2-3 Data						
Dakar	18	37.1	43.8	1.1	55.1	44.9
Lomé	15.6	26.7	57.0	0.7	42.3	57.7
Cotonou	21.2	36.5	42.1	0.2	57.7	42.3
Bamako	26.5	35.4	37.0	1.1	61.9	38.1
Ouagadougou	39.8	33	27.1	0.1	72.8	27.2
Abidjan	17.4	39.8	41.1	1.7	57.2	42.8
Niamey	46.7	25.9	26.9	0.5	72.7	27.3
Kinshasa	14	11.9	74.0	0.1	25.9	74.1
Yaoundé	21.9	33.4	43.5	1.2	55.4	44.6
Douala	8.9	45.6	44.9	0.6	54.5	45.5
Antananarivo	11.8	52.4	34.4	1.4	64.2	35.8
Average	22.0	34.3	42.9	0.8	56.3	43.7

Source: Ditto table 7.3

In addition, participation by the most educated young workers in the modern sector is not systematically associated with filling a qualified job. Data on table 7.5 shows indeed that while the proportion of educated young workers occupying a non-qualified job in the modern sector is low in Mali and Cameroon, it reaches 31.9 and 46.7% respectively in Congo and Central African Republic. Those qualifying from tertiary education are better protected from this risk than those qualifying from general and technical secondary education. As far as the modern labour markets in the capitals covered by the AFRISTAT and DIAL surveys are concerned, the share of educated young workers filling a non-qualified job varies from 17.6% in Bamako to 61.3% in Kinshasa, and is over 25% (i.e. the most educated quarter of the modern sector) in 7 of the 11 cities. Again, the situation for those from tertiary education is somewhat better on average from this point of view than for those qualifying from general and technical secondary education even if, almost systematically, around 10%

¹⁸ This group comprises working population having reached upper general secondary, technical and vocational or tertiary education.

Table 7.5: Distribution of the most educated workers in the 25-34 age group according to the type of job in the modern sector (%)

	Type of job	Upper general secondary	Technical secondary	Tertiary education	Overall
Cameroon	Executives	33.2	27.6	67.9	43.3
	Other qualified modern jobs	48.5	48.5	25.0	40.8
	Non-qualified modern jobs	18.3	23.9	7.1	15.9
Congo	Executives	23.6	44.0	62.3	25.7
	Other qualified modern jobs	39.7	43.6	25.1	40.3
	Non-qualified modern jobs	36.7	12.4	12.6	31.9
CAR	Executives	16.1	21.7	38.9	9.2
	Other qualified modern jobs	57.0	46.1	31.5	44.1
	Non-qualified modern jobs	26.9	32.3	29.6	46.7
Dakar	Executives	12.3	0.0	43.2	23.1
	Other qualified modern jobs	45.8	41.2	42.0	44.4
	Non-qualified modern jobs	41.9	58.8	14.8	32.5
Lomé	Executives	16.3	13.4	40.4	23.3
	Other qualified modern jobs	54.1	52.4	35.3	48.2
	Non-qualified modern jobs	29.6	34.2	24.3	28.5
Cotonou	Executives	20.1	25.7	67.2	40.7
	Other qualified modern jobs	50.9	51.8	21.8	38.9
	Non-qualified modern jobs	29.0	22.4	11.0	20.4
Bamako	Executives	32.3	65.1	76.5	54.3
	Other qualified modern jobs	43.9	20.7	10.8	27.8
	Non-qualified modern jobs	23.8	14.2	12.7	17.9
Ouagadougou	Executives	25.1	25.5	74.5	39.9
	Other qualified modern jobs	40.1	36.7	21.5	34.1
	Non-qualified modern jobs	34.8	37.8	4.0	26.0
Abidjan	Executives	17.3	4.5	55.0	34.1
	Other qualified modern jobs	38.5	41.2	28.1	33.7
	Non-qualified modern jobs	44.2	54.3	16.9	32.1
Niamey	Executives	45.1	52.0	25.6	60.4
	Other qualified modern jobs	29.3	18.8	29.2	18.9
	Non-qualified modern jobs	25.6	8.4	13.6	20.7
Kinshasa	Executives	9.1	24.2	51.5	26.7
	Other qualified modern jobs	14.1	12.6	8.0	12.0
	Non-qualified modern jobs	76.8	62.2	40.5	61.3
Yaoundé	Executives	15.4	11.6	65.1	28.1
	Other qualified modern jobs	49.6	40.0	16.8	37.1
	Non-qualified modern jobs	35	48.4	18.1	34.8
Douala	Executives	9.3	8.3	43.8	16.1
	Other qualified modern jobs	42.5	37.9	29.1	37.8
	Non-qualified modern jobs	48.2	53.8	27.0	46.1
Antananarivo	Executives	7.7	17.9	38.4	21.5
	Other qualified modern jobs	63.9	71.9	50.9	58.9
	Non-qualified modern jobs	28.4	10.2	10.7	19.6

Source: Ditto table 7.3

of those qualifying from tertiary education fill a non-qualified job. With only a few exceptions (Bamako, Niamey), holding a technical certificate rather than a general secondary certificate does not guarantee more frequent access to qualified jobs in the modern sector.

It is possible to have another idea of this downgrade by building a measure of the appropriateness of the job¹⁹ filled to the level of education reached (table 7.6). In Congo, in 2005, 80% of the working population in the 25 to 34 age group who had been through tertiary education was over-qualified compared to the job filled. This overqualification leads to a downgrade that affects the national labour market as a whole insofar, as those trained in tertiary education that have a job and are overqualified tend to compete with those trained in upper secondary education, depriving the latter de facto from jobs corresponding more to their level of studies.

Table 7.6: Distribution of workers in the 25-34 age group according to the qualification in relation to the job filled (%)

		Upper secondary	Technical & vocational	Tertiary	Overall
Cameroon	Undereducated	0.0	0.4	0.0	0.1
	Appropriately educated	35.9	45.7	30.4	37.9
	Overeducated	64.1	53.9	69.6	61.9
Congo	Undereducated	0.0	2.2	0.0	0.7
	Appropriately educated	33.7	70.8	18.8	42.1
	Overeducated	66.3	27.0	81.2	57.2
CAR	Undereducated	2.3	0.0	0.0	0.7
	Appropriately educated	16.6	40.3	67.6	37.3
	Overeducated	81.0	59.7	32.4	61.9

Sources: Ditto table 7.3 for these three countries and authors' calculations

These different pieces of information illustrate the serious imbalance on the labour market as far as those qualifying from post-primary education are concerned and who are sometimes well in excess of job possibilities. Comparison of the stocks of jobs and the education system leavers per level of education illustrates this imbalance and offers a different picture of it. DIAL survey data makes it possible to compare the number of executives employed in the markets of the different capitals studied and the number of primo job seekers with tertiary education qualifications (table 7.7). In four capitals out of six, the number of primo job seekers qualified from tertiary education is the equivalent of at least a quarter of the stock of executive jobs. This proportion rises to 54.1% in Lomé and reaches 70.4% in Abidjan where current year leavers (primo job seekers declaring less than one year unemployment) represent 15.9 and 22.8% of the stock of executive jobs respectively.



© UNESCO BREDA - By Reg'

¹⁹ A worker is «appropriately educated» when the number of years he/she has studied is between more or less one standard deviation around the average number of years of study of workers in the same socio-professional category; he/she is «overeducated» or «undereducated» when the number of years of study is respectively higher or lower by at least a standard deviation to this average.

Tableau 7.7: Comparison of the number of executive job vacancies with the number of primo job seekers with qualifications from tertiary education

	Senior or middle executive [A]	Primo job seekers with qualifications from tertiary education [B]	Length of unemployment (year)						[C] / [A] (%)	[B] / [A] (%)
			0 [C]	1	2	3	4	≥ 5		
Cotonou	9 677	2 351	885	234	527	495	103	107	9.1	24.5
Ouagadougou	12 349	1 796	458	189	452	78	154	465	3.7	14.5
Abidjan	31 059	21 876	7 091	7 445	3 391	1 896	1 280	773	22.8	70.4
Niamey	11 800	1 149	344	372	174	94	48	117	2.9	9.7
Dakar	11 420	2 834	585	305	386	400	230	631	5.1	24.8
Lomé	5 160	2 794	820	724	390	603	163	94	15.9	54.1

Sources: 1-2-3 surveys, the Pôle de Dakar and DIAL calculations

The imbalance between supply and demand for skilled work has been measured quantitatively, through the rates of unemployment and the level of qualifications of the employed working population. It has also been shown that this imbalance resulted as much from the scarcity of jobs as from the existence of a supply of a surplus of very qualified work compared to job possibilities. Although these results have been highlighted on the basis of the analysis of French-speaking countries, Al-Samarrai and Bennell's study (2006) corroborates them, on the one hand, for four English-speaking countries (Malawi, Uganda, Tanzania and Zimbabwe), as far as secondary school leavers are concerned. For tertiary education, on the other hand, the authors' observations are less clear-cut but largely result from the methodology used by them (box 7.5).



© UNESCO BREDA - Mario Bels

Box 7.5 : The future of qualified secondary and tertiary education leavers in four English-speaking African countries

By following the professional path of 5000 secondary and tertiary education leavers in **Malawi, Tanzania, Zimbabwe** and **Uganda** from the time they completed their studies, Al-Samarrai and Bennell (2006) describe in depth the professional and salary opportunities offered to these young people. This study, conducted in 2001, is original in that it has traced most of those («tracer survey») previously selected with the aim of constituting a sample representative of secondary and tertiary education qualified leavers five to twenty years on from the end of their studies²⁰.

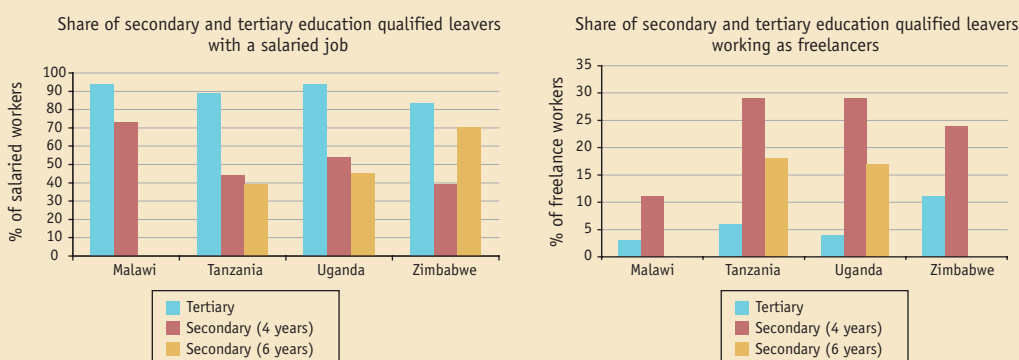
The young people, who stopped studying after secondary school, met with considerable integration difficulties: only half of them managed to find a salaried job²¹ and this proportion is still weaker for the most recent generations. Thus, for a higher and higher proportion of these young people, the only way to secure integration on the labour market is to create their own job. However, the study shows that these jobs are often insecure, require few qualifications and constitute second best choices that young people are forced to accept while hoping for stable salaried jobs. Besides, it seems that the salaried jobs filled by secondary leavers have depreciated since those obtained by the most recent generations are less well paid and demand fewer qualifications than those of their elders.

The students from the university faculties taken into account do not seem to have encountered integration problems: they are practically unaffected by unemployment and for the most part hold a salaried job, requiring the skills for which they were trained. Moreover, individual return to tertiary education is high since the income of those who have qualified from tertiary education is almost triple that of secondary leavers (it is six times higher in Uganda). However, the analysis is biased by the fact that the representativeness of the sample of tertiary education students is only partial as the graduates were selected amongst the most flourishing State university faculties on the labour market, i.e. engineering, medical and agriculture and two faculties for commerce, economy, accounting or education. Students from other faculties are not represented although they are representative of most students in African universities and the courses on offer are often more general and less profession-oriented.

Another result of this study is that the young people questioned in these four countries, whether having followed secondary or tertiary education, do not contribute to making the private sector more dynamic as very few of them start their own business and when they do, the company is very small and scarcely productive.

In conclusion, this study pinpoints the difficulty for young people to be integrated into the labour market upon secondary completion. The observation of the low external effectiveness of secondary education delivered in the early 1990's at economic level raises doubts as to the future of those currently leaving this level of education. This is because, since the 1990's, these countries have experienced a considerable increase in secondary enrolments²² without any consistent development in opportunities on the labour market. It also comes out of this study that investment in tertiary education enabling the acquisition of specific skills in line with the labour market, as is the case here for students in agriculture and engineering or medical students, is very beneficial both at individual level and at the level of the society, on the one hand. On the other hand, this study does not make it possible to come to a conclusion on the external effectiveness of tertiary education as a whole as nothing is said on the future of students from more general courses of study, which do however train the mass of students.

Distribution of secondary and tertiary education leavers according to their professional occupation



Source: Based on Al-Samarrai and Bennell (2006)

20 The young people interviewed completed their studies in 1990 and 1995 for secondary education, and in 1980, 1987, 1994 and 1999 for tertiary education.

21 With the exception of Malawi where this proportion is 70%.

22 Pupil numbers in general secondary have been multiplied by nine in Malawi, by three in Tanzania and in Uganda between 1990 and 2005.

4. The contribution of the different levels of education to economic growth

Public funding of educational investment is justified by its contribution to the human, economic and social development of the nation. To decide upon possible intra-sector trade-offs, it is therefore appropriate to analyse the marginal contribution of each level of education to growth and development. To do so, comparative international data must be assembled, in order to measure over a sufficiently long period of time the contribution of education and of each level of education to the economic development of the countries. The economic development indicator generally used is the growth rate in GDP or in GDP per capita.

Some studies have shown that the contribution of education to economic growth might vary, according to the context and to country characteristics, specific, or not, to their education system (Dessus 2000). Others have even mentioned the possibility of differentiated effects of the different levels of the education systems, depending upon the stage of economic development of the different countries (Mingat and Tan 1996, Aghion and Cohen 2004) or the degree of urbanisation and the productive structure of the countries (Ambert and Chapelle 2003). For example, Aghion and Cohen show that the marginal return to one year of primary or secondary education tends to decrease (as opposed to that of tertiary education) as a country moves closer to the technological boundary (i.e. as it develops). Other studies show that the quality of education is also a key factor of economic growth (Hanushek and Kimko 2000, Hanushek and Woessmann 2007).



Mingat and Tan's analysis (1996) covered about one hundred countries observed between 1960 and 1985. Insofar as economic conditions have distinctly changed since that time, especially in African countries, it is crucial to know if the conclusions drawn from their work are still relevant. This is one of the issues tackled in a recent study by Foko and Brossard (2007), on the basis of a sample of about one hundred countries at varying stages of development, observed between 1970 and 2003. The methodology used by the authors is roughly outlined in box 7.6.

© UNESCO BREDA - By Reg'

23 Aghion and Cohen's analysis (2004) mainly concerns the OECD countries. Ambert and Chapelle's work (2003) concerns the principal States of the Indian Union observed between 1970 and 1993 (panels).

24 In particular, the economic situation in sub-Saharan Africa was favourable until the mid 1970's (for some countries until the mid 1980's). Most of these countries went into recession until the early 1990's. It must be noted that some middle-revenue countries experienced serious financial crises in the 1990's.

Box 7.6 : Methodology (outline) for testing the effect of the different levels of education on growth (Foko and Brossard 2007)

This study refers to the conditional convergence ratio similar to that estimated by Barro (1991), World Bank (1993), Berthélemy and Varoudakis (1995), Mingat and Tan (1996) or Mingat and Suchaut (2000) :

$$\ln(Y_{i,T}) - \ln(Y_{i,0}) = -(1 - e^{-\lambda T}) \ln(Y_{i,0}) + Z_i \quad (1)$$

where Y designates the real GDP per capita of the country i, λ is the speed of convergence towards the path to long-term growth during the period [0,T], Z_i is the real GDP per capita in long term. Z_i is under the influence of economic policies (and particularly education policies) or of different institutional factors. This study looks more particularly at the effect of human capital on growth (through Z_i). The investment ratio (Investment / GDP) is also included in the model, and is treated as control variable. The endogeneity of the investment ratio is controlling by using instrumental variables: the degree of openness of the economy and the degree of rationing of credit (share of private sector credits in the GDP). The indicators of human capital used refer (i) to the global coverage of education systems, measured by school life expectancy, or (ii) to the enrolment rates at the different levels of the system (primary, secondary - if possible differentiating lower and upper secondary, tertiary education). As for the investment in physical capital, this is measured by the average ratio of investment to GDP.

Basically, (1) is written as : $\Delta Y_{1970-2003} = F(ED_{1970}, \ln Y_{1970}, \overline{INV}, \Delta POP_{1970-2003}) \quad (2)$

where $\Delta Y_{1970-2003}$ designates the average annual growth rate of the real GDP per capita between 1970 and 2003 (real GDP per capita is measured here in 2000 US dollars); Y_{1970} the real GDP per capita in 1970 (taking it into account in the model enables to test the international convergence of the growth rates and to contextualise the effect of human capital on growth); ED_{1970} the variable(s) of human capital measured in 1970 ; \overline{INV} the average rate of investment over the period ; $\Delta POP_{1970-2003}$ is the average growth rate of the population; F designates a functional form.

The enrolment rates used come from the UNESCO Institute for Statistics; the other data are from the World Bank (World Development Indicators 2005). Some readjustments have been made on the basic data (reestimation of some enrolment rates based on UNESCO data and United Nations demographic tables). Different types of estimation have been conducted, according to whether the human capital indicator is used in its aggregate form (school life expectancy, average number of years study per worker) or disaggregate (enrolment rates per levels of education). In addition, following on from Mingat and Tan (1996), the hypothesis of a variability in the effectiveness of human capital (aggregate or not) according to the rate of development of the countries has been tested.

Enrolment rates turned out to be significantly correlated with each other. Tertiary education coverage in 1970 was significantly correlated to that of secondary education (correlation factor of +0,696), itself correlated to that of primary education (correlation of +0,527). It is therefore not easy to distinguish the effects on economic growth. To lift this vagueness on the effective contribution of the different educational levels, an «orthogonalization» of enrolment rates has been carried out based on the rationale of «sequential» development of the different levels of education. In this framework, for example, the secondary enrolment rate has been replaced by this rate's component, which is not systematically connected to the primary enrolment rate. Indeed, at comparable levels of primary coverage, secondary education is more or less well developed according to the country; it is this somehow «premature» or «deferred» development of secondary education compared to primary education which is taken into account through this new indicator. In the same way, an indicator of quantitative over- or under-dimensioning of tertiary education compared to primary and secondary levels has been built. As a result, the models take into account, in addition to primary enrolment rate, the indicators of over- or under-dimensioning of secondary education and tertiary education compared to the lower levels.

Source: Foko et Brossard 2007

In this study, the average level of education of the population at the beginning of the period and schooling coverage at the different levels of education was positively correlated to subsequent macroeconomic performance for all countries observed. For example, when other characteristics were comparable (especially the rate of investment in infrastructure and productive sectors), the countries where the working population had one year schooling more than the average in 1970 had 0.2 more points of real GDP growth per capita in the thirty ensuing years²⁵. In other words, when we compare two countries with the same level of income per inhabitant in 1970, the one where the population benefited from one year of study more than average at that date obtained an income of 6 to 7% higher on average per inhabitant in 2003.

When examining the specific contribution of the different levels of education to economic growth, it is noticed that this is statistically significant for primary and secondary education. The contribution of tertiary education is positive but not systematic, which suggests that a «premature» development of tertiary education is not necessarily an advantage for economic growth: there would be some countries, unlike others, where highly skilled labour has been assigned to low-production jobs. It therefore appears useful to take into account the context in which highly skilled labour is used (productive job opportunities, size of the structured sector, productive structure of the country, etc.).

Are these average results valid in all countries? The idea that human capital would have variable productivity according to the context in which it is used is not new. Work conducted by Schultz (1975)²⁶ or, in a microeconomic frame, by Foster and Rosenzweig (1996)²⁷ provided some initial insight into this issue. At macroeconomic level, the growth models known as innovation-imitation are based on the principle of education having a differentiated effect on economic growth, through innovation-research in rich countries and through poor countries catching up technologically. The stage of economic development of the different countries is therefore a high contextual variable²⁸.

Mingat and Tan (1996) and Foko and Brossard (2007) show in their work that it is the development of primary education that has been of advantage to economic growth in the poorest countries, that of secondary education in middle-income countries and that of tertiary education in the most advanced countries. At secondary level, Foko and Brossard show that the positive contribution to growth observed in middle-income countries has to do principally with the high contribution of lower secondary; the development of upper secondary (beyond projections made on account of the progress made at the lower levels, i.e. primary and lower secondary education) seems to have even acted as a curb to subsequent economic growth.

25 This result is relatively close to that obtained by Barro (2001), which is 0.44 points - but only for the average length of study time in secondary and tertiary education for male workers; Foko and Brossard (2007) deal in fact with the average duration of schooling, calculated on a pseudo-cohort of young people still in the education system. Aside from these conceptual differences, there is a temporal gap, more or less significant, according to the country (cf. earlier sections), between leaving the education sphere and gaining access to employment.

26 Stated by Gurgand (2000, p. 17). «Return to education would be all the higher as individuals find themselves in a highly unbalanced economic universe».

27 Stated by Gurgand (2000, p. 19): «The effect of education on agricultural profit is all the greater as the farmer is in a district of India where technical change has been faster».

28 This approach is followed by Mingat and Tan (1996). Other studies, on the other hand, test the variability of the impact of human capital according to the productive structure of the country (Ambert and Chapelle 2003) or parameters connected to the very functioning of the education systems such as resources, teaching/study conditions and the distribution of human capital in the population (Dessus 2000).

Table 7.8 provides a synthesis of the extent of the effects of human capital in the 1970's on subsequent economic growth.

Table 7.8: Qualitative appreciation of the impact of the initial level of education on economic growth between 1970 and 2003

Level of education in 1970	Level of income in 1970			Countries overall
	Low income	Middle income	High income	
Primary	+++	0	0	+++
Secondary	0	+++	0	+++
Tertiary	0	0	+++	+
Average education system coverage (School life expectancy)	++++	+++	++	++

A « + » sign indicates the existence of a positive marginal contribution to economic growth. Their number indicates the intensity of same. A « 0 » indicates a positive marginal contribution that is not significant. Source: Foko and Brossard (2007)

In order to pursue these interrogations, it is interesting to attempt to measure the relative weight of educational policies in the factors that can give an understanding of the dynamics of the countries' economic growth. Do these policies have an influence on the transition from a situation of a low-income country or middle-income country to a situation of a high-income country? Why do some countries remain under the low-income trap door (in the poverty trap)? These are questions that go beyond the scope of this report, which can even so contribute to the considerations to be given to these issues.

As shown in table 7.9, low-income countries have shown radically different and significantly lower performance than the other groups of countries taken into consideration here, both in terms of the average rate of investment and in economic growth itself. This said, some of them have experienced much better growth than others (low-income countries have registered a rate of growth varying from 0.4% to 2.5% on average since 1970, according to the classification used).

- In low-income countries showing lowest performance over the period analysed, the shortfall in «human capital», due above all to the fact that primary coverage, is far from universal, accounts three times more for the low growth rates registered than the deficit in terms of investment. In these countries, the primary enrolment rate was only 57% compared to 91% in initially low-income countries that have joined the «club» of middle-income countries at the end of the period. More than half of the countries, belonging to the category of countries that have remained amongst the poorest in the world, are to be found in sub-Saharan Africa (27 of the 45 countries in this category in the sample).
- In what were low-income countries initially now having joined the group of middle-income countries, there has of course been a relative abundance of «human capital» and physical capital (the average rate of investment was 25% compared to 21% in low-income countries as a whole in 1970). However, it is the extensive primary coverage which accounts the most²⁹ for the subsequent macroeconomic performance of these countries. Egypt, Swaziland and Tunisia are examples of this category of country.

²⁹ For economic growth, human capital made a contribution 8 times higher than the relative abundance in physical capital.

Table 7.9: Comparison in performance of the different groups of countries (1970-2003)

	Level of income in 1970					
	Low-income countries			Middle-income countries		Rich countries
	Overall	Still low income in 2003	Middle income in 2003	Overall	High income in 2003	
	55 countries	45 countries	10 countries	39 countries	7 countries	23 countries
Investment / GDP, average (%)	21	20	25	24	25	24
GDP per capita 2003 (000's of 2000 US\$)	0.7	0.5	1.8	7.5	18.7	25.9
SLE 1970 (years)	4.5	4.0	5.9	8.1	8.9	11.0
Primary GER 1970 (%)	62	57	91	100	99	100
Secondary GER 1970 (%)	13	11	21	29	46	60
Tertiary GER 1970 (%)	3	2	5	7	9	18
Growth GDP/capita. average (%)	0.8	0.4	2.5	1.9	3.0	1.7
Gap with average growth of the group	0	-0.4	1.7	0	1.1	0
Contribution to the gap observed, as multiple of the contribution of the investment differential a						
SLE	--	1.4	1.6	--	2.2	--
Primary GER	--	2.9	8.4	--	--	--
Secondary GER	--	--	--	--	1.6	--

Source: Foko and Brossard (2007)

The cells highlighted in yellow correspond to the educational variables which proved to have a positive impact on economic growth.

a/ Growth is broken down, based on the growth equations estimated separately for low-income countries and middle-income countries. Then the predicted growth for all low-income countries is compared with growth predicted for the sub-group of 45 countries which still have low income in 2003. In the first case, it is then possible (on the hypothesis that the factors explaining growth are little correlated) to calculate the contribution of the different factors to the gap between predicted growth for these 10 countries and that predicted for low-income countries as a whole. In the table, we have focused attention on the contribution of human capital variables, compared to that of another major determining factor of economic growth: the rate of accumulation of physical capital. It is then proceeded in the same way for the other 45 countries. As for middle-income countries that have become high-income countries, they are compared with all those countries with middle income in 1970.

No African country belongs to the group of countries that was initially in the middle-income group in 1970 and has now become high-income countries. For countries in this group where data is available (notably Spain, Hong Kong, Ireland, French Polynesia, Porto Rico and Singapore), the macroeconomic performance can be explained, first of all, by the high secondary school coverage in the early 1970's³⁰. In these countries, five in ten young people were enrolled in secondary education in 1970, compared to fewer than three in ten for middle-income countries as a whole. It is undoubtedly of use to point out that over an earlier period (between 1960 and 1985), the principal determining factor for economic growth in Hong Kong and Singapore was the high primary education coverage in the early 1960's (World Bank, 1993). It can be seen that the development of secondary education was one of the major determining factors in economic growth after that time (starting 1970). These results tend to confirm the idea that it is necessary to take the opportunities in the productive sectors into account when promoting levels of education.

³⁰ The contribution of secondary education to economic growth was 60% higher than the contribution of physical capital, which is one of the main determining factors of economic growth in these countries.

5. Conclusion

The development of post-primary education, and especially public funding of same, depends upon the assessment of the economic and social benefits that society is liable to gain from it, at a given period and in a given context, more than for primary education for which there is a consensus on public funding. The previous chapter showed the limits that could be encountered in many countries by funding post-primary education, if it were to continue growing at the current pace and the urgent need for a quantitative adjustment at least. This chapter highlights the need to take the marginal benefits the countries can expect on both social and economic levels into account in this adjustment.

Social benefits from education apply to the different levels of education but a large share of these benefits is acquired upon primary completion. For many countries where financing constraints still weigh on the attainment of UPE and its consolidation, particularly in terms of quality, the additional social benefits associated with a prolonged average length of schooling might not justify sacrificing other public actions, including urgent efforts to be made in order to improve the way labour markets work and the integration of young people.

Indeed, in this respect, there are already considerable integration difficulties for young post-primary leavers, especially those coming out of upper secondary and tertiary education, even if it situations greatly vary from one country to another. The limited data available on vocational and technical education show very varied situations from one country to another, in terms of integration and a need for careful steering of this sub-sector, some forms of which seems more effective than others. The proven cases of quantitative imbalance certainly go along with a qualitative one, which cannot be examined in more detail due to absence of data. Many observers criticise the curricula in force in secondary education, which grants little room for scientific and technological subjects due to lack of resources ; the same situation prevails in tertiary education, where many courses of study train a high number of students experiencing problems of integration on a wide scale.

The relative inappropriateness of post-primary education in terms of content, quality and flow is to be compared with the results of analysis exploring the impact of investment in the different levels of education in terms of growth. Very clearly, growth in low-income countries depends firstly upon the efforts put in towards primary education, and even to lower secondary, but it is not directly affected by the other levels of education. For these countries, which are amongst the poorest, it is urgent to reform post-primary education, which is questionable in its content and does not enable the vast majority of young leavers to be rapidly integrated; this question goes far beyond the issue of the intake of future primary school leavers. The reform must take into account the overall sector simultaneously, enable achievement of quality universal primary education, ensure the availability of a wide vocational training sector fulfilling the need to develop low value-added labour markets, and above all, give a new meaning to secondary and tertiary education, to be undoubtedly of more limited size, but based on international standards of governance.

The variety of country situations in terms of employment and growth, following on from that observed previously in terms of structure and dynamics of post-primary education (cf. chapter 3), provides justification for distinctly country-specific sector reforms, subject first of all to careful analysis of the leeway available in each country in terms of financing, as set out in chapter 6³¹.

31 Detailed analysis is ongoing under the aegis of the AFD and should be presented at the next ADEA biennial, focusing on post-primary education in 2008. On the basis of simulations inspired by national financing models concerning all education sub-sectors, the study should specify, for each of the 33 countries, the global leeway, in terms of financing, to allow for a new sector policy and, through country comparisons, identify benchmarks able to direct national policies towards the most efficient organization and regulation choices.



DAKAR +7
EDUCATION FOR ALL IN AFRICA

C H A P T E R 8

New benchmarks for action: top priority for integrated sector-wide policies

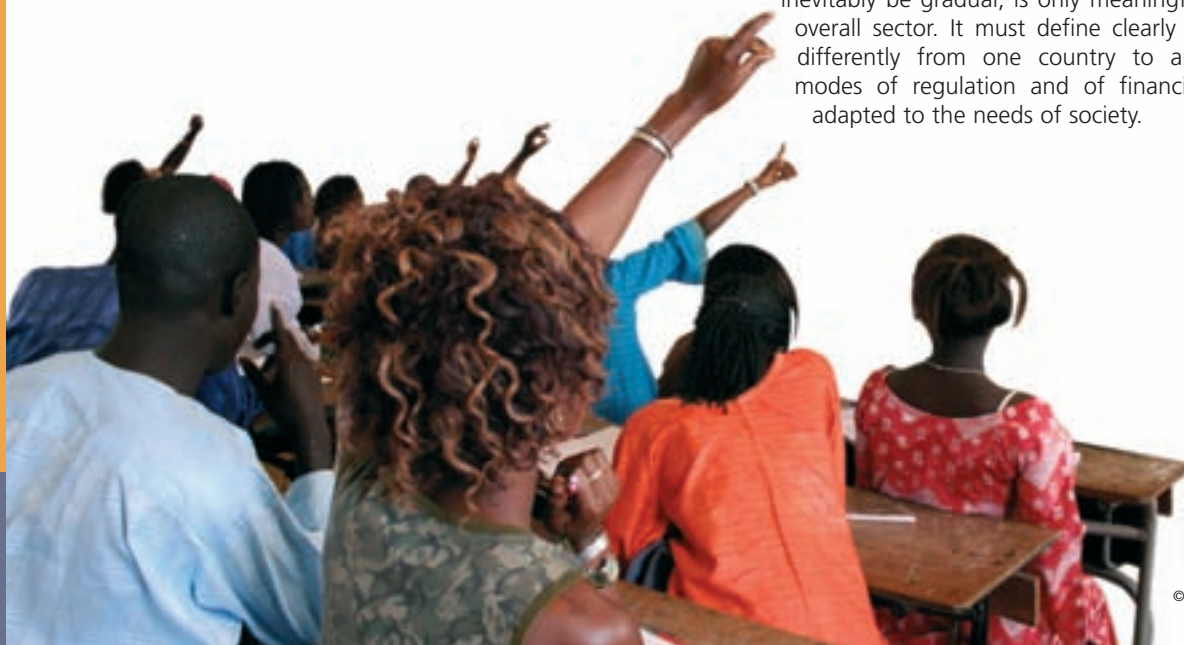
The previous seven chapters have provided the opportunity of putting forward the progress made since the Dakar Forum and the distance still to be covered, and of initiating and fuelling thinking on the questions raised by the development of post-primary education. Chapter 8 is an opportunity to suggest a global road map, which must necessarily be in line with national contexts. Indeed, it is important to stay mobilized around the Universal Primary Education (UPE) goal for those countries still far from it and to develop genuine sector-wide policies that will allow for national priorities and foster an in-depth reform of post-primary education, in order to reach a better balance with the labour market. This reform must also take into account major modifications to financing mechanisms at post-primary levels and will require the development of new, better-adapted management tools. It will only have a chance of succeeding if it is part of a genuine national dialogue to be fuelled and constant.

The updated and documented panorama of the situation of African education systems set out over the seven previous chapters, with all the care made necessary by the relative scarcity and the degree of quality of available data, brings to light true success stories but, at the same time, outlines new and important challenges to be taken up by governments and the international community in the coming years.

The mobilization that has ensued is to be highlighted as one of the successful outcomes of the Dakar Forum, which seems to have finally averted the misfortune of the many earlier summits and the sad litany of deadlines constantly pushed further back. The mobilization for EFA can be measured by the institutional changes characterising the period following the Forum. It is also illustrated by the financial mobilization by the governments and the initiatives of the international community, which have taken the Dakar commitment very seriously, and facilitated a profound change in the conception and modalities of international aid flagged by the emblematic Fast Track Initiative. In concrete terms, the development of primary education in the period following the Dakar Forum was spectacular, when compared to the ten previous years. **Success as such leads to new challenges necessitating the implementation of true sector-wide policies.**

Consolidating the now very real advance towards UPE is undoubtedly the first challenge to be taken up. This concerns, first of all, the road still to be covered for many countries on the way to the goal itself. It then implies the necessary improvement in the quality of learning achievements, considering the fact that African countries are lagging behind developed countries as a whole, but also behind other developing countries. The consolidation process concerns finally the extent and constancy of financial support from the international community, which, already behind schedule, appear most recently to be on a sharp downturn.

The second challenge facing African education systems is the necessary reform of post-primary education. More than by the pressure of the growing number of primary enrolments, this reform is justified, above all, by the low relevance of these levels of education at the present time and by the incapacity of most governments to finance future expansion at current pace and costs, while at the same time ensuring consolidation of UPE. At this stage, it is not meaningful to take post-primary education into consideration as a whole and it is important to distinguish (i) lower secondary education which is certainly bound to be progressively incorporated into a cycle of basic education, (ii) technical and vocational education and training (TVET), the forms and management modalities of which have to be defined in accordance with the priority to be given to the economic integration of young people, (iii) upper secondary education and (iv) tertiary education which is to be redefined with regard to international standards. Such a reform, all the more urgent as it will inevitably be gradual, is only meaningful if it covers the overall sector. It must define clearly and undoubtedly differently from one country to another, priorities, modes of regulation and of financing, and content adapted to the needs of society.



The issues of financing and of the modes of regulation in access to the different levels and forms of education are connected. Managing these two issues, within policies defined for the overall education sector, constitutes the third challenge facing African countries and the international community. Free primary education, and no doubt free basic education in due course, and the financing of actions more precisely targeted at supporting schooling for the poorest, are fully justified in view of the social and economic benefits the less developed countries can expect from same. For many countries, even with higher levels of development, reforming post-primary education funding is justified by the incapacity of the governments to provide full financing while maintaining appropriate levels of quality and relevance. It is also justified incentive-wise. The public education sector has an important role to play in restructuring the supply of education, in partnership with the private sector. However, the development of the private sector is not in itself an alternative to maintaining the provision of free public education. The reform on financing must also be accompanied by measures to promote equity: firstly, in the name of social justice, since it is important for such a reform not to exclude the poorest individuals from going on to longer courses of education when they have the necessary capacities to do so; secondly, in the name of effectiveness, since a reform in education financing that does not take equity into account is doomed to failure.

For all the aspects mentioned above: consolidation of UPE, reform of post-primary education, and reform of orientations and financing, it is obviously difficult to propose a unique framework for action for every country. Countries differ greatly in terms of structures and types of education, enrolment dynamics and situation of the labour market. This chapter intends, nevertheless, to suggest different alternatives and to outline what is involved in terms of strategy, defining and piloting the reforms. **Setting up true sector-wide policies, and probably multi-sector policies as far as technical and vocational education or tertiary education are concerned, will require new instruments and probably new frameworks for action. These will be dealt with in the conclusion of this chapter.**

1. Maintaining the priorities not already met

The analytical elements, tackled in chapter 2, highlight the variety of schooling coverage in primary education, and especially the fact that some countries are very much behind, as far as attaining the Dakar objectives is concerned. The goal of quality UPE must be reaffirmed as the development priority of the systems: a complete primary education is a necessary condition for sustainable literacy.

1.1 Confirmation and consolidation of the quantitative goals of UPE

We have seen in chapter 2 that, at current pace of intake and of survival, 28 African countries would not be in a position to reach the goal of universal primary completion on the 2015 horizon, and 22 out of those 28 countries could be well below 75% completion at that date. The 15 countries that look like reaching the 2015 deadline must stay on course. While most of them have solved intake problems within the cycle¹, some still have only moderate levels of survival. The education policies in these countries should therefore target actions aiming at improving conditions of pupil retention in the course of primary education. The 28 countries currently «off-track» for reaching the Dakar goal in terms of UPE, encounter diverse levels of intake and survival problems. Table 4.1 resumes the situation of these countries on these two aspects.

Table 8.1: Intake and survival in the 28 countries not likely to reach UPE in current enrolment conditions (2004/05 or closest year)

	Problem of intake (AIR of below 90%)	No intake problem (AIR over or equal to 90%)
Average survival (between 75% and 90%)	Côte d'Ivoire, Eritrea, Gambia, Mali, Sudan, Togo	Congo, Morocco, Namibia
Low survival (below 75%)	Burkina Faso, Burundi, Central African Republic, Comoros, Djibouti, Niger, Guinea	Ethiopia, Senegal, Ghana, Benin, Chad, Lesotho, Malawi, Mauritania, Mozambique, Swaziland, U.R. of Tanzania, Zimbabwe

Source: Authors' classification based on sector analysis and UIS data

For countries with an intake rate of over 90%², the efforts, aimed at increasing school coverage, should specifically target pupil survival until the end of primary education. For those countries still far from universal access, actions combining improvement in access and in survival must be envisaged.

It is only possible to target access and survival when the education systems and the issues of school supply and demand are thoroughly apprehended. Indeed, it must be asked why children are not attending school. Does school adequately address schooling demand or is school rapidly deserted by pupils for different reasons? CSR-type sector analysis has now participated in identifying these issues in a certain number of countries. A supply policy, aimed at bringing school physically closer, can certainly improve intake but additional efforts may be needed to incorporate the characteristics of the demand, in order to improve pupil survival and guarantee their schooling through to the last grade. Some of the time, the problem is directly to do with the demand from the families who show reluctance towards

1 In this group, only Cape Verde and Gabon show intake levels between 90 and 100% in 2004/05; the other countries are over the 100% mark.

2 Senegal is the only country in the group with an intake level close to the lower limit, all the other countries being over 95%.

the educational supply proposed³ (school considered to be of low performance and not immediately income-generating, of questionable morality, decrepit facilities, inadapted school year, etc.). When a policy of supply aimed at improving school coverage does not take into account the characteristics of the demand, this can lead to increasing the number of available places in school, without improving attendance.

The above suggests that educational policies must specifically grasp the characteristics of supply and demand and their consequences on intake and survival, in so far as there is no single model that can ensure quantitative improvement in school coverage, in all circumstances and in all contexts. It is also obvious that national solutions must be differentiated within the country, as there can be a wide variety in terms of supply and demand within the same territory. It therefore seems necessary to have recourse to sound sector diagnosis upstream before defining or revising sector policy and turning it into action plans.

Chapter 2 of this report has also shown that a change in dynamics, in terms of a higher level of primary completion, has been observed in many countries since 2000, even when this still remains very low. First and foremost, it is essential to pursue the efforts already put in with a view to ensuring regular expansion of the systems, before targeting more ambitious goals, which could be risky for the political and social sustainability of the measures already taken

1.2 Quality to be a priority

Would it be satisfactory if UPE were to neglect the quality of learning achievements? The answer to this question is clearly negative. If children go to school, it is for them to gain knowledge and skills defined by society, which will be of use to them in adult life and will enable them to contribute to the development of their country. The results, set out in chapter 4, remind us that school learning is at the core of the problems encountered by African education systems. Quantitative and qualitative goals therefore go hand in hand in the progression towards UPE.

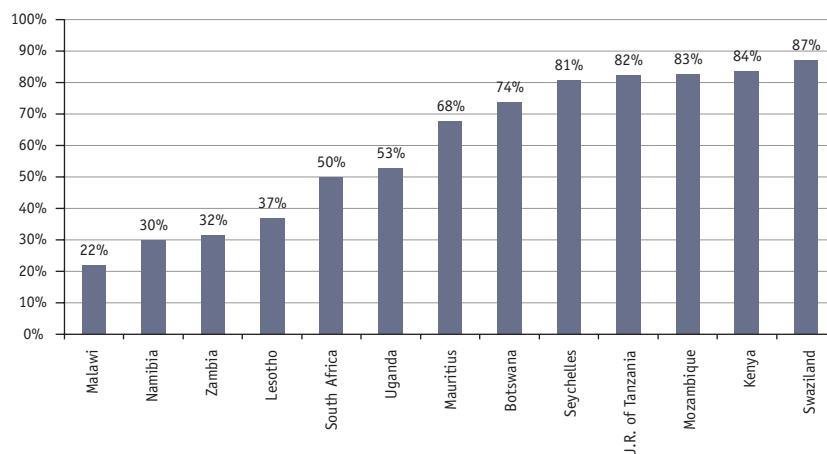
While indicators on school learning achievements are lacking, it is however possible to define thresholds corresponding to a minimum base of learning from data available in the PASEC and SACMEQ assessment programmes. The fact that the two programmes use different tests means that it is not possible to define a common threshold, but it is however possible to identify in each case the situation of a number of countries compared to the objective of quality primary education.

As far as the 13 countries for which SACMEQ data is available, there are several different possible levels of assessment as to the command of reading⁴. The selected threshold (level 4) corresponds to a desirable minimum for all pupils. This indicator makes it immediately obvious that some countries are very far from the desirable situation, including some countries that have achieved universal enrolment (cf. graph 8.1).

³ CREA (2003).

⁴ Out of the eight levels of Reading performance considered by SACMEQ, reaching level 4 is taken into account here (cf. chapter 4).

Graph 8.1: Proportion of 6th grade pupils reaching level 4 Reading in the SACMEQ II tests



Source: SACMEQ

For French-speaking countries that have participated in the PASEC assessments, the selected indicator is the proportion of pupils who obtained at least 40% of correct answers⁶ in the Maths and French tests⁷ (cf. chapter 4 graph 4.5). Once again, it is confirmed that a significant number of countries are very far from a desirable minimum of school learning achievements, after five to six years of schooling. Thus, **although the quantitative challenge to enrol all children is still a reality for many African countries, the qualitative challenge is facing all the countries.**

The issue of the quality of learning must therefore be the focus of future efforts in terms of Education for All. This issue has to be looked at through two components, i.e. international assessments and management of quality within the education systems⁸:

- the need for surveys enabling comparison between countries is no longer questioned. However, existing international surveys designed by and for developed countries do not necessarily address the needs of African countries and are not always adapted to contexts prevailing on the continent. Even so, the comparison between African countries and the rest of the World should not be excluded, as this alone makes it possible to situate the performance of their education systems internationally. There are two ways of responding to these demands: (i) direct participation by some African countries in international surveys, which should certainly be encouraged; (ii) incorporating exercises from other international surveys in tests specifically developed for the African countries. In the two scenarios mentioned, it is necessary to implement a survey covering all the African countries. At the present time, such a survey does not exist and one must make do with data which is not comparable, from two distinct programmes (PASEC and SACMEQ), covering in all only around twenty countries, to outline the situation of the quality of learning. These two programmes, which have different objectives, have been conducting assessments in Africa for over 10 years and have therefore built up experience and expertise that must be used today, in order to develop a survey on the scale of the continent which will address the needs of the African education systems. Setting up a survey of this type should constitute one of the priorities in terms of monitoring the quality of learning in the framework of EFA.

5 PASEC considers that 40% of correct answers correspond to the threshold of minimum knowledge.

6 And Arabic for Mauritania.

7 This should incorporate, as set out in chapter 5, a specific effort for the assessment of literacy and non-formal education.

- International surveys are only the visible part of the iceberg in terms of managing the quality of learning. Indeed, these surveys do not make it possible to ensure the day-to-day management of the quality of learning, due to their scarcity and above all the limited number of schools concerned⁸. As already highlighted, management at local level is all the more important for a national policy of improvement of the quality of learning⁹. In this respect, developing national assessment systems in line with international surveys should be encouraged. However, it raises many institutional and technical questions that it is appropriate to handle in each national context. At institutional level, the main problem is to reconcile the independence necessary for an objective assessment, with the necessary proximity of decision makers and stakeholders. At technical level, the most cost-effective solution would be to use the information provided by national exams. Although these data are generally produced by education systems, they are still difficult to process. More precise analysis would be conceivable if it were possible to use the marks obtained by pupils in each subject. In this respect, pupil identification is required, that would be common to the school and the examination centre. The development of national assessment systems must promote the evolution of information systems and grant particular attention to data related to the quality of learning. However, the production of information on the quality of learning is not sufficient in itself to change results. This information has to be used in the daily management of the education system, in order for things to change. The circulation of the information and its use therefore represent major challenges for local school administration. For example, schools, with results well below others, should be investigated as a priority by those in charge of supervising the schools.

1.3 The need to remobilize donor agencies in order to achieve quality UPE

As seen in the first chapter of this report, mobilization by the international community for UPE was more significant after the Dakar Forum than ever before and very important changes were registered in cooperation practices. However, in financing terms, promises have not been kept and a slowdown has even been noticed recently. It is therefore necessary to remobilize technical and financial partners and give consideration to the future of initiatives that have been taken, including the Fast Track Initiative, which in itself is the symbol of the new forms of aid. Again, as shown in chapter 1, the African education system context of change has been influenced by the Fast Track Initiative, which has experienced growing momentum since its launch in 2002: 20 African countries (from a total of 31) are partners today, with Africa as main beneficiary of the multi-donor funds set up in the FTI framework. The Initiative has therefore been a motor in the development of basic education in Africa, in an international context characterized by a dip in the share of Official Development Assistance (ODA) devoted to the continent. This leads to some suggestions for ensuring that it continues and maintains its role of mobilization around national sector-wide strategy.

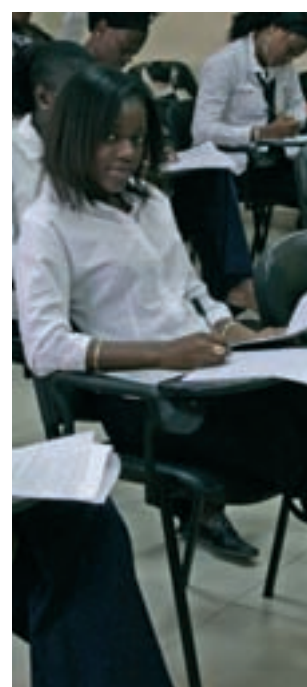
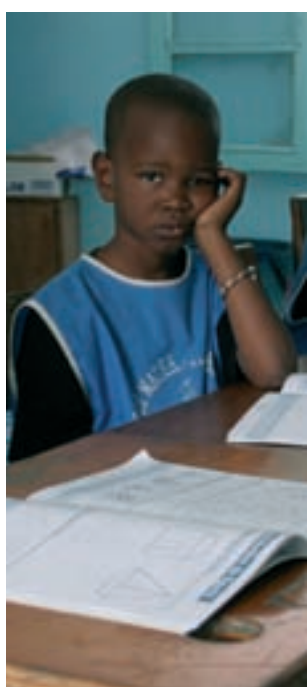
⁸ International surveys take place several years apart and only concern a limited sample of schools.

⁹ Several initiatives have been taken to contribute to improving the management of African education systems. The Improving Education Management in African countries (IEMAC) project focuses on primary education. It targets coherence in terms of deployment of teachers across schools and the transformation of resources into school results in the classroom. The project related to the management of school systems in French-speaking countries (CONFEMEN) aims at promoting committed leadership and good governance, improving and rationalising school management by focusing on the improvement of education system processes and performance, reinforce the mobilization of latent resources and their use and make management personnel more professional at all levels. The strategies, which enable to reach these goals, are the reinforcement of local dynamics, participatory management and partnership, the rationalisation and optimisation of resources, giving staff a sense of responsibility, capacity building and image-enhancement of personnel.

First of all, it is essential to (re)focus on primary education. FTI was launched to accelerate the achievement of UPE. The educational strategy endorsement procedure must therefore refer explicitly to this level of education, in order for the first beneficiaries to be indeed those most behind with the Dakar n°2 goal. That has not been systematic in the recent period. It appears essential to refer to the indicative framework. This does indeed make it possible to :

- determine the distance from the UPE goal, through reference to the primary completion rate.
- determine the principal elements of the sector's financing framework and those related to its operation.
- apprehend the level of government commitment to UPE, which is bound to reinforce the selection process in favour of countries showing the most will for change.

In this context, local coordination of the donors is essential. This comes in at the time of the endorsement proposal and their commitment to the programme will necessarily be a driving force to progress. The FTI is a partnership and, in this framework, mobilization efforts are not the sole responsibility of the beneficiary countries. Development agencies have the responsibility of ensuring that their local representatives are aware of the analysis of the national systems and of the trade-offs to be made. This is bound to contribute to making the endorsement process more credible, through more demanding requirements, commonly agreed upon, of course, with the national partners, on the content of sector documents submitted for endorsement. Beyond the election procedure, a «control» must be made *a posteriori* to guarantee that the policy, for which the country has been elected, has been effectively implemented. Logically, this should take into account considerations on how to handle the case of the endorsed policy not being the one effectively applied. One last question concerns the sustainability of the Catalytic Fund: with the modification in eligibility criteria and the extension of the financing period, a rapid rise in the number of beneficiary countries can be expected. Now, a decrease in contribution promises by donors is observed for the coming years. In this context, the Catalytic Fund might not stick to its ambitions. The responsibility of the contributing countries is at stake, just like the Initiative's credibility itself.



© UNESCO BREDA - Maio Bels & By Reg'

2. Developing true sector-wide policies incorporating in-depth reform of post-primary education

Chapters 2 and 3 showed that the progress towards UPE results in a rising demand for secondary education. Chapter 6 clearly showed that the different countries will not be able to finance the expansion of post-primary education at the same pace and, above all, at the same costs as those today. Finally, chapter 7 highlighted the fact that the content of post-primary education is ill adapted to the economic context and that there is a lack of opportunities for school leavers. It is therefore necessary to develop research on what post-primary education could be in the future, in line with national contexts. This implies in-depth analysis of the education systems and their specific realities, in order to give all pupils, completing primary education, training possibilities enabling integration in the labour market in the longer term.

This implies effective **global** education system **policies**. The envisaged reforms must enable achievement of quality UPE and guarantee the existence of a wide vocational training sector, addressing the need for integration young people into the labour market, and, above all, give new sense to (general) secondary and tertiary education, which are sometimes very far from international standards. The search for innovative strategies, based on experience of good practices, must be fostered. In this sense, developing the use of Information and Communication Technology (ICT) looks like a promising transversal strategy, even if for those who have a lot of practice of same, it is far from being a panacea in terms of reducing costs¹⁰.

It will be essential to **take the national context into account** in these education sector strategies as this sets the constraint, in terms of job possibilities, for those leaving the education systems. The needs of the economy do indeed depend upon its structure, and particularly the relative importance of the traditional and modern sectors. Through taking the national context into account, post-primary education sector policies must thereby define and incorporate efficient and equitable regulation of flow in the different branches and levels of education.

Education sector strategy must also be in line with the concept and the strategic goal of **Sustained Development**. The close connection with the education sector has been stated precisely for some years, particularly at the World Summit on Sustainable Development in Johannesburg in 2002¹¹, when it was reaffirmed that education was the cornerstone of sustainable development. Moreover, the United Nations decided, that same year, to set up the « Decade of Education for Sustainable Development¹²». This strategy is a conception of education that strives to reconcile economic development and cultural traditions, while respecting the planet's natural resources, with an emphasis on learning aspects that foster the transition to sustainability¹³.

While bearing in mind that there are a variety of country situations and that it is illusory, in this respect, to define a single sector strategy model to be generalized for all countries, we shall come back, first of all, to the goal of creating a cycle of basic education before going on to tackle the issue of form and ambitions for technical and vocational education and training (TVET). We will then have a lucid approach to tertiary education and strive to define an ambitious policy for upper general secondary education, leading to tertiary education in line with international standards of quality.

10 As summarized in her way by Diana Laurillard, Pro-Vice-Chancellor of the UK Open University, the choice of Open and Distance Learning rarely corresponds to a reduction of costs and, much more often, constitutes a solution in terms of quality of service and offer adapted to special contexts: «Don't let anyone tell you that ICT will reduce costs, as it is not possible. What ICT can do, is broaden the range of possibilities. It can improve education and make it more accessible».

11 And in an even more pronounced way for TVET with the «Bonn Declaration» (2004).

12 Adopted in 2002 and launched in 2005 for the period 2005-2014.

13 Education for tomorrow, education for citizenship, education for a culture of peace, gender equality and respect for human rights, health education, education in terms of population, education for the protection and management of natural resources and education for sustainable consumption.

2.1 Rethinking basic education a long-term strategic option

Progressively setting up basic education to link primary education and lower secondary education is a key strategic option, directly connected to the new sector policies for structuring post-primary education in the long term. This strategy goes further than simply lengthening the duration of primary education and implies the effective extension of learning. It might involve¹⁴, especially in lower secondary, a strong articulation between general secondary education and TVET, due to the fact that in most existing or emerging job positions, the principal qualities needed are often transversal. This implies a serious and difficult redefinition of curricula, which should enable the integration of basic education leavers into the world of work as a priority, through the acquisition of knowledge and skills enabling them to adapt to the changing conditions of the economy. The curricula must then offer a relevant knowledge base of everyday skills and essential generic competencies, not occupation-specific, and focus less on knowledge than on transversal attitudes and skills.

2.2 Ambitions for Technical and Vocational Education and Training

The report recalled the existence of considerable disparities on the African continent in terms of TVET, reflecting the variety of contexts and policy choices in the different countries. It also highlighted (particularly chapter 7) the urgent need to reform the sector¹⁵, assessing the non-adaptation of TVET in its formal and non-formal modes. The TVET reform must reconcile long-term objectives with a short-term strategy on training mechanisms. In the short term, it is important to devise a strategy for improvement or implementation of alternative, attractive and relevant mechanisms, for a wide general public, which will effectively participate in the integration of primary school leavers and effectively tackle exclusion. In the long term, with a view to basic education that will include lower secondary education, it is at the outcome of basic education that mechanisms should be set up to facilitate direct integration into the employment market, without however excluding the possibility of continuing studies in more specific TVET structures.

The integration of young people must be a central axis of the relevance of TVET mechanisms. This objective involves better steering of TVET and seeking appropriate training for the job vacancies, based on teachings adapted to the changing socioeconomic context. This points in particular to better steering and management of this sector, for which one of the elements to be developed by many African countries is that of the incorporation of reliable statistical information systems, in order to enable targeted actions through analysis of the employment situation and of the characteristics of integration for young people. From this angle, the notion of inappropriateness of the job filled, compared to the training received, is important when an imbalance is observed as to the status of the job filled (for example, a graduate from tertiary education who is working as a simple employee), and is less relevant when the imbalance observed is connected to content. When the job does not directly correspond to the speciality training received, it may mean that the said training allows access to a wide range of jobs, which could be confirmed if the individual has not been downgraded, in terms of status or salary compared to those corresponding exactly to the occupation for which he/she has been trained. On what are sometimes very small labour markets, striving for a perfect compatibility between training content and the job has little

14 UNESCO Reform of Secondary Education document (2005) «Towards a convergence of knowledge acquisition and skills development».

15 Particularly qualitatively and quantitatively for French-speaking and English-speaking countries : (i) a structurally high rate of unemployment, even if there are naturally variations according to the countries ; (ii) limited taking into account of the narrowness of the modern job sector ; (iii) significant integration difficulties for young people, especially for the most qualified, this in spite of very acceptable salary requirements ; (iv) an imbalance between supply and demand for skilled labour, due to an excess of qualified people compared to job possibilities ; (v) technical diplomas that do not guarantee access to skilled jobs in the modern sector (compared to diplomas from general secondary education).

meaning and may make the training supply excessively rigid. The information necessary for designing the supply of training should therefore in this case, and in particular for vocational training, enable to fill in on the judgment based on the simple observation of inappropriate content.

In terms of content of training precisely, many countries have embarked on the engineering approach to training over the past few years. If this strategy is to continue developing (both in initial training as in lifelong training, the strong TVET development lever) the countries must ensure the permanence of the structures, mechanisms and competencies that training engineering requires, and also the achievement of truly concrete results as to improvement of the quality on underlying processes, such as the skills approach for curricula. In the longer term, it is also important that the countries be vigilant in giving individuals the possibility for lifelong learning (indispensable with changing technology), and to promote civic attitudes and behaviour in those trained.

Several countries are judiciously injecting new energy into their strategy on effective structures in terms of integration, such as alternate school/business mechanisms. There are many initiatives in this respect on the different markets illustrating the relevance of a multi-sectoral approach of TVET at this level. Spotting and defining the needs, applying educational engineering techniques mentioned earlier, are facilitated by the prior structuring of the market stakeholder representatives (employer and employee syndicates), which become actively involved in the different stages of the definition and of the appreciation of the relevance of training. More globally, the necessary interaction between TVET and the labour market make it important to work on structuring the professional branches that are flourishing, in terms of job prospects. In Africa, the employment markets are not very structured, and this encourages neither their development nor the synergy with the education systems. Moreover, these coordination mechanisms must foster the emergence of new markets and the creation of businesses or self-employment in flourishing or innovative sectors. They go beyond the education sector framework itself, and give meaning to the need for developing multiple partnerships between all the stakeholders. In a multi-sectoral approach to adapting training to the socioeconomic context, the countries must acquire the institutional instruments necessary for the sector's coordination and financing mechanisms, and which effectively fill their role.

Aside from national initiatives, regional dynamics must be encouraged wherever possible. An improvement in integration must also include, at least in the short term, the development of relevant and attractive intermediate level training, also accessible to those excluded from primary education and to those not attending school, in the imperative respect of children's rights to which the countries have committed themselves. « Pre-vocational » training and traditional apprenticeship (for a much wider age-group and population) are both sectors that deserve more attention in this respect, on account of the current employment situation in Africa. Initiatives to promote these types of training must be encouraged, with a view to generalisation and to adapting their incorporation in current mechanisms. In this framework, relevant strategies must aim at reinforcing the link between the TVET and literacy systems. This is for example the case of the « Programme of skills development for youth and adults » (*Education qualifiante des jeunes et des adultes* - EQJA), which focuses on activities in the informal sector and is put forward as a promising initiative¹⁶.

¹⁶ This strategy is an educational and formative process, often part-time, that must enable youth and adults to complete their apprenticeship through the acquisition of further basic education, particularly in the area of communication and basic scientific skills related to professional know-how. It thus contributes to reaching the EFA goal n°3.

2.3 For an ambitious policy of redefinition of general secondary education clearly articulated with quality tertiary education

While lower secondary education is intended to be associated to primary education, in order to progressively constitute the base of a cycle of basic education benefiting from universal coverage, in the short and medium term, flow intake regulation appears inevitable in most low-income sub-Saharan African countries, for which primary completion is still a remote goal. As for upper secondary education, it is supposed to prepare pupils for tertiary education of international quality. Insofar as upper secondary and tertiary education should clearly train qualified executives addressing the economic needs of the countries, it is appropriate to adopt a strategy here that puts the accent on quality rather than quantity. That implies fundamentally reviewing its present configuration, in order to direct it towards more scientific

and technological courses of study, and providing libraries, computer facilities and equipped laboratories. It also implies defining acceptable principles of selection (cf. section 3).



The very variable performance of the African tertiary education systems is a curb to the circulation of skills. This is why the African Union wanted to be equipped with standardisation instruments and harmonisation frameworks at continental level, particularly through the Arusha Regional Convention, in 1981, on the recognition of tertiary education studies and certificates. However, this convention, which is being revised in order to allow for the huge changes in African tertiary education over the last 25 years, has only been signed by 20 countries, considerably limiting its scope. The African Union's new decade for education (2006-2015) recommends revitalization through the emergence of university institutions playing their role to the fullest, in the implementation of training and research addressing economic and social demands. However, a number of questions still have to be dealt with, in order to make up for the lack of relevant answers in relation to the vision formulated by the African Union for tertiary education. Several issues are to be taken into account and must be the subject of a clear political commitment and long-term investment.

First of all, it is important to define better criteria for student selection and guidance, in order to avoid the explosion of courses of study with low job opportunities, whilst the scientific branches and some technological branches are not attractive. This guidance may have an institutional base but will also involve improved communication about the courses of study offered (prerequisites, content, economic and social relevance, attractiveness on the labour market, etc.) and on job opportunities. Alongside the renovation of public education, the success of such reforms will imply setting up and reinforcing authorisation and certification procedures for private institutes, in order for them to comply with recognized and validated national standards. Successful control of tertiary education

© UNESCO BREDA - Mario Bels

enrolments also involves the development and promotion of short vocational training leading to diplomas or qualifications, in order to direct the supply of training by reference to national contexts and market demands.

In a context of globalization of economies and knowledge, and so of internationalization of tertiary education, controlling enrolments must go along with the unconditional improvement of the services provided ; this is essential both for national development and to ensure competitiveness at global level. The internationalization of tertiary education creates a context favourable to higher mobility of students, teaching staff and researchers on the continent and elsewhere. However, the virtually unidirectional flow of African competencies towards countries in the North is a sizeable handicap for the economic and social development of the continent (cf. chapter 7). It is therefore important to increase the attractiveness of the training supply in tertiary education in Africa by improving study and teaching conditions (access to documentary resources, more functional research frameworks and innovative branches of training) and by recruiting highly qualified teaching staff, in order to enhance effective research. In this respect, the rating of tertiary education and research institutes published with extensive media coverage is a strong incentive.

The internationalization of tertiary education also strengthens the need for harmonization and modernization of pedagogical practices (synchronization of the systems and standards used, common nomenclature of diplomas ...). Quality assurance devices have priority on this subject and can facilitate settlement of the issues related to accreditation, harmonization of academic titles and mobility. Finally, in a context where resources are scarce, the development of quality tertiary education will only be possible with more favourable trade-offs to pedagogical and research expenditure in the national budgets. In many countries, social aid takes up a too large share of the budgets. Better management and targeting of social aid, according to criteria to be defined (criteria of excellence and/or socioeconomic criteria and/or support to branches of study of high social relevance), and efforts for involving the private sector in the provision of quality social services to students are all urgent considerations to be adapted to the situation of each country.

The change at tertiary education level will follow on from a global vision, embracing the education system as a coherent system more effective than the sum of its respective sub-sectors (basic education, secondary, tertiary ...), and which potentially addresses the demands in human resources, knowledge and know-how coming from all sectors of national life. Tertiary education must also fulfil its prospective function and its role of intellectual support to political thinking. Beyond the improvement in the production and dissemination of knowledge, the problems of poor management, governance of the institutions and absence of effective dialogue between partners call for special attention and reforms.

8

C H A P T E R

EDUCATION FOR ALL IN AFRICA

3. Flow regulation, financing of education and equity

The implementation of genuine sector-wide policies and the constraints weighing on same, both in terms of financing and in terms of relevance, would justify a more active policy for flow regulation in many African countries at upper secondary and tertiary education levels. These are certainly policies that are difficult to set up and that must fit into a process of dialogue, fuelled by sound arguments in a progressive calendar. Flow regulation can take the traditional form of restricted access; it could be more effective if it was also based on a reconsideration of free education, in order to contribute to mobilizing new resources, more effectively reconcile individual education choices and community interests, and provide the government with a guidance and incentive mechanism that is lacking. The proposal for families to finance part of the cost of education, borne today by society, can hardly be taken into consideration without also looking into the issues of equity, which are often given as the reason for rejection of the proposal without seriously examining the arguments behind this.

3.1 Flow regulation and participation by the families in financing post-primary education

The financial projections set out in chapter 6 are convincing enough as to the fact that many African countries will not be in a position to finance the expansion of secondary education at current pace and costs. This is without even allowing for the additional financial efforts that some of them could be obliged to make in order to reach UPE. While it is important, as suggested by the report of the 3rd SEIA conference held recently, to reduce the costs of post-primary education in order to make its expansion financially sustainable, there are many arguments for justifying additional expenditure made necessary by the indispensable reference to international standards, particularly in tertiary education, and in some branches of upper secondary education. It will be inevitable, in many cases, to control expansion in enrolments, even to decrease total enrolments in some courses of study which are well known to lead to limited job opportunities.

This flow regulation can operate directly through the setting up of different restrictions on access (competitive examinations, guidance commission ...), which ensure the regulation of the courses of study and the academic levels of those admitted. This is an issue that is difficult to handle socially, due to the political weight of students. Many developed and emerging countries have preferred to get round it by enabling the development of a selective sector of limited size beside a vast open sector, bound to depreciate progressively. Besides the fact that neither equity nor social stability are ensured in this type of institutional arrangement, it does not in any case seem to constitute an adequate response. At the same time, entrusting the development of the selective sector to the private sector, while maintaining a low performing public sector, cannot be considered a serious alternative.

Implementing flow regulation through an increased participation by the families, even by businesses, in financing upper secondary education can, in this specific context, represent a more acceptable option socially.

Increasing the financing of education by the families in post-primary levels, or more generally imagining a transfer of costs between the system's stakeholders could participate in a quantitative and qualitative regulation of the overall sector:

- Private financing enables mobilization of new resources to be devoted to the education system overall, and enables satisfaction of the priorities of the moment, like strengthening UPE in some countries where it is limited due to extreme poverty in part of the population, setting up of aid to the most destitute, improving the quality of the studies proposed.
- Increasing the cost of education for the beneficiaries may reinforce the relevance of their choices and encourage putting a halt to courses of study of limited value. As noted earlier (chapter 7), the low effectiveness of some branches, and their very uncertain economic benefits, is largely due to the fact that their cost is covered by society.
- The rise in the cost of studies should also make students more demanding, as to the content and conditions of study and would thus be conducive to an improvement in the quality of studies and their outlets.
- More globally, this policy would enable the government to be directly involved in flow regulation by promoting some fields of studies rather than others. Rather than bemoaning the little interest shown by the families for TVET or scientific studies, which should be promoted by many countries, it would be possible to develop a system of modulation of registration fees, to attract more young people to these sectors. This would, of course, have to be adjusted with the needs of society and the situation of the labour market.

When referring to the average situation of the different countries in terms of enrolments, it appears clearly that participation by the families in financing education should neither concern primary education nor, as far as possible, lower secondary education. The importance of the economic dimension in primary schooling can be seen by the trends in enrolment that go along with policies concerning school fees, and this could even justify, with a view to UPE, an aid policy targeting the poorest populations, for whom free education is not enough to ensure access and survival in school. In the short term, the policy of participation by the families in education expenditure should only concern upper secondary education and tertiary education, for which the imbalance between qualifications and jobs are often the most manifest and where more resources should be concentrated on a smaller number of beneficiaries for better quality education.

The present situation is quite paradoxical in these education levels insofar as, in many countries, free education is no longer the rule in secondary education while, at the same time, it is still in effect for students in tertiary education, a higher proportion of whom receive direct aid from the government. One can then appreciate the difficulty of radically changing these established facts and also the importance of social dialogue and of the agenda that must accompany these necessary reforms.

3.2 Private financing of education and equity

The issues of financing and modes of regulating access to the different levels and forms of education are connected. It is imperative to include actions aimed at promoting equity. Although free education does not guarantee, on the one hand, the poorest individuals access to the schooling system, it does, on the other hand, lead to redistribution towards those who are the most capable of benefiting from the schooling system. For a single age group, economists traditionally measure the equity in the distribution of public resources in education by the profit gained by pupils, according to their schooling pattern¹⁷. The longer a child spends in schooling, the more he/she benefits from the public resources mobilized for education, due to the increase in expenditure per pupil along with the level of study. In 2005, for all the African countries for which appropriate data is available, it can be seen that the 10% most educated have benefited from 40% of the public resources in education. This low «structural» equity, connected to the schooling pattern alone, is made worse by the fact that this is obviously very much dependent upon the social origin of the pupils. Even though we do not have a comparative data base as to school attendance according to social origin, there is hardly any doubt that those who have studied the longest, belong to the more privileged segments of society and have in addition benefited from good quality, whether in primary, secondary or tertiary education.

The impact of free education on the inequality of schooling patterns can be studied through the abundant literature on social inequalities, including several international articles by Duru-Bellat (2006). This work shows that the development of schooling has little effect upon economic and social inequalities. Social selection and access to high economic positions take place in this context through longer studies and the compartmentalization of courses of study that tend to consolidate the initial inequalities. In the competition for available positions, the rise of the average level of schooling goes, hand in hand, with a drop in the value of diplomas, economically and socially speaking, and thus longer schooling for children from the most privileged backgrounds¹⁸. In developed countries, in spite of the distinct rise in the average length of studies, the process of social differentiation in schooling patterns is still at work and involves early choices of distinctive or elite courses of study.

While equity must preside over the orientations of the education system, it is clear that it is not free education that will make it possible to achieve this goal. It is therefore appropriate to turn the traditional set of arguments completely around, in order to make equity one of the objectives in giving up free post-primary education. Just like positive discrimination policies, the search for equity implies supporting the poorest and, for the most skilled, considerable support to enable longer education. This type of policy requires additional resources, which could be obtained by abandoning the notion of free education for longer studies; besides, this is justified by the private nature of investment in this type of education, which is largely funded by society today.

The financing reforms must go, hand in hand, with the promotion of equity: firstly, in the name of justice, as the poorest individuals should not be denied access to longer courses of education when they have the necessary ability; secondly, in the name of effectiveness, as any reform on the financing of education is doomed to failure, if it does not take equity into account. Ensuring that funding by the families contributes to the reinforcement of the quality of the educational supply and to flow regulation, while enabling improved access for the poorest individuals to levels of education, that were practically inaccessible to them at present, is thus one of the keys to success of this type of reform. A fairer system would confine free education to the levels attended by all (primary and basic education) and would impose a participation on those who have the possibility of pursuing their studies, while ensuring, at all levels, the targeted redistribution towards the underprivileged.

¹⁷ The analysis consists in estimating, from net enrolment rates, the structure of final schooling (approximation of the share of a generation completing their studies at each level) and in calculating as a second step, according to the expenditure per pupil and the length of each cycle, the structure of public resources «appropriated» by the pupils, according to their schooling. Finally, a comparison is made between the structure of enrolments on the one hand, and that of expenditure on the other hand, and the more or less equitable nature of the distribution is measured by using traditional distribution analysis tools (Lorenz curve, Gini coefficient).

¹⁸ Becker did not state things otherwise, in 1967, when he showed that the individual point of balance in educational investment was connected to financial resources and individual capacities. In this framework, the most able and the richest (*a fortiori* the most apt who are at the same time the richest), due to the lower cost of their studies, invest more than others.

4. Adopting management and guidance instruments for the supply of training and appropriate frameworks for dialogue and action

Defining and setting up genuine sector-wide policies supposes an extension, if not a redefinition, of diagnosis and assessment tools of how the education system and the labour market operate. This requires the simultaneous change and reinforcement of the structures incorporating the sector dialogue at national and regional levels, and also of the frameworks for action for the development of the government-donor dialogue and the concretisation of external financial support to the education system.

4.1 Refining sector diagnosis at country level

CSR-type sector analysis generally covers all areas of the education system. To date, they are however more detailed for primary and secondary education than for technical/vocational and tertiary education. It is advisable to extend the field of sector analysis to the overall educational system, and particularly to give more detailed coverage to tertiary education and the different forms of technical and vocational education and training. The global diagnosis could consist of making prior analyses to provide an appropriate description for apprehending the specific situation of each sub-sector.

In tertiary education, the analysis must clearly be made at the level of the different branches, as to their operation, internal effectiveness and costs; the results should be contrasted per university, when there are several on the territory. It will not be possible to benefit from information aimed at a fine steering of the sub-sector, if tertiary education is handled as a homogeneous whole, when it is in fact made up of academic disciplines and institutions that offer neither the same quality of education nor the same job opportunities. Besides student-teacher ratios, the quality of the teaching profession is certainly an important element to be broken down as to the different categories of teaching staff and their commitment and production in terms of research.

The low contribution of tertiary education to growth in the less advanced countries and in the emerging countries (chapter 7) can to some extent be put down to the fact that it has been developed on the basis of general courses of study. In the past, the latter enabled the development of civil service and State departments but do not really address the needs of the present day markets ; the poor quality of service provided has also something to do with this observation and, in itself, reflects the situation of over enrolment and the poor student-teacher ratio. Many African universities function with a very low number of high-ranking professors and a large body of junior lecturers, sometimes simply holding a master degree. Manifestly, the objective, at this level of education, is not to reduce the unit cost in order to ensure massive access, but to develop quality tertiary education in hardly flexible global public budget plans.

An analysis of technical and vocational education must lead to even more differentiated programmes and, no doubt, to a wide variety of situations in terms of training (traditional courses, school courses combined with work experience ...) and financing. Analysis already carried out in several African countries, show that it is important to go into great detail there again. It concerns a sector with a high number of flourishing initiatives to be federated, supported, financed, assessed, and first of all identified. Other criteria are used to evaluate the relevance



© UNESCO BREDA - By Reg'

of this sub-sector, compared to other levels of education. The implementation of sandwich courses and in-job training, for example, depends critically on legislation with respect to businesses, on tax legislation and additional efforts that can be made, in order to structure the different branches, the future growth of which lies in their capacity for defining the needs in terms of skills.

When looking at the performance of these levels of post-primary education, priority should be given to the analysis of external effectiveness (cf. section 4.2), highlighting the characteristics of integration for those who have been trained, rather than analysing the quality of learning achievement, which will continue to be a useful element of assessment in general secondary education. This is of course critical for technical and vocational education, and just as much so for tertiary education, which cannot go on educating cohorts of unemployed.

The extension of sector diagnosis must also concern the simulation tools, enabling global and inter-sectoral financing trade-offs (financing needs for the sector compared to mobilizable national and external resources). Recourse to financial simulation models, as is often the case after sector analysis, has been directed, up till now, towards securing the necessary funds for satisfying the goal of UPE. In this exercise, the Fast Track Initiative indicative framework defines references for primary education in terms of budget allocation (50% of public expenditure on education on average) and in terms of intra-sectoral trade-offs for primary education, aiming at holding in check the unit costs per pupil while protecting quality. There is nothing comparable for post-primary education and this obviously represents an important analytical work project at country level, and also in the framework of international comparisons, with the aim of «benchmarking» trade-offs at these levels of education. Comparing simulation models, including all levels of education for a significant sample of countries, should enable each of them to measure the global leeway, as to the evolution in schooling in the overall sector and also to highlight the most auspicious inter and intra-sectoral trade-offs for financially sustainable complete sector-wide policies.

4.2 Better management of the training supply by setting up mechanisms for regular monitoring of the employment market and training needs

We have already noted several times (chapter 7), that the specificity of the investment in human capital does not enable a rapid adjustment of the «education market», i.e. abandoning hardly effective courses of study to the benefit of others, which would be more effective. Thus, regular monitoring of external effectiveness and particularly integration of school leavers are the basis for defining effective policies for post-primary education and, above all, for justifying public funding. This involves giving greater attention to the employment situation, in such a way as to guide pupil/student flow to the different levels of education.

On the level of global quantitative adjustments, it is necessary to collect regular data on the access to employment by education system leavers. While knowing the rate of unemployment is useful, it is far from sufficient in the context of duality of the African labour markets, where adjustments take place mainly through situations of underemployment and downgrading, masking the reality of the imbalance. More direct information, on the job filled

and on the salary, is necessary to complete this description. Considerable effort is essential in Africa for regular implementation of this type of investigation to support any policy for the development of post-primary or post-basic education. Choice must be guided by the capacity to inform on market specificity¹⁹.

Running these surveys is not the direct responsibility of the ministries in charge of education. They address wider concerns involving other ministries or institutions, particularly those in charge of economy, development, national planning, etc. The availability of observation tools and sharing information on market situations can represent the first important step towards intersectoral approaches, necessary for improved management of post-primary education.

Much more detailed market observation is required, in order to create new courses of study. Studies, carried out in vocational education, show that structuring the market stakeholders is a prerequisite for expressing needs that can lead to supplying new training. It is important to be pragmatic, insofar as, even when precise needs may be expressed, these do not necessarily justify implementing specific permanent training courses; tailoring existing courses of study may be an alternative to the creation of totally new ones. Moreover, the expression of needs by employers is far from neutral, particularly in a context where they would not participate in financing the branches of training that they may suggest and where needs may change rapidly. It is therefore necessary to devise sufficiently flexible mechanisms, to be assessed frequently by all stakeholders, enabling rapid adjustment of programmes.

4.3 Promoting and developing sector dialogue

The sector policies to be undertaken imply new levels of trade-offs. These reforms demand strong political determination that will be all the more effective, if supported by a renewed social dialogue. The international community itself will then be confronted with new challenges justifying new changes to its framework of action, in addition to the concretisation of promises made.

The changes, that have occurred since the Dakar Forum in the different countries and at international cooperation level certainly, constitute a significant advantage in this context. National and international discussions around "credible plans", even of limited scope in sector-wide terms, and the stronger commitments for directing aid at national budget level are indisputable positive outcomes. These changes are a necessary condition for undertaking new policies; however, they will not be less insufficient if the practices they have fostered stay in their present configuration.

Obtaining a national consensus on the promotion of primary education was not difficult, once it was seen to have few repercussions upon the other sectors. To a great extent, the most difficult trade-offs have been carried out within primary education itself and, in particular, around the reduction of the expenditure per pupil on teaching staff. The new policies to be implemented should be trickier in that they concern the operation of all levels and suppose, in many countries, a modification in priorities and in financing modalities. There are arguments to support the different changes. They must be widely discussed nationally in the framework of a serious dialogue built around the challenges of justice and development.

¹⁹ When carried out, these surveys must respect several principles : (i) the instruments must be capable of apprehending the specificities and the complexity of African labour markets ; (ii) the measure of the levels of education must be fine enough for effective steering; (iii) they must be led and used on a permanent basis for effective monitoring; (iv) they must be of moderate cost in order to be covered by national budgets; (v) results must be rapidly made available to ensure better reactivity of the education system to the changes in the labour market.

The aim of this dialogue is first and foremost to rapidly set the basis for a global sector policy, together with a realistic agenda. Cutting corners could lead to brutal rejection of the reforms; disconnecting them too excessively from each other could just, as well, lead to reconsidering the achievement of the set goals. In the present context, under the pressure of the growth in enrolments in primary education, it could be very tempting to limit these reforms to setting up basic education, which would necessarily give rise to a consensus, by putting off, until later, the more difficult structural reforms concerning the other levels of education. While basic education must indeed be considered as an important goal for transition towards a new stage of growth, especially for countries having consolidated UPE, this goal can only take on its full meaning through a reorganization of the different levels of education, together with reforms in terms of courses of study facilitating economic integration and a clear redefinition of the roles, financing and content of general upper secondary and tertiary education.

Changes to the modalities of financing will, no doubt, be one of the most difficult issues to handle. As suggested above, the arguments that exist for facilitating evolution must be backed up by supported observations, in terms of the situation of employment and equity. In general, the quality of the dialogue and of the reforms will be very much dependent on the collection of sound convincing data. In this respect, much is expected from the financial simulation exercises for the overall sector and from the urgent mobilization of national data on employment and development perspectives.

The urgent need for factual elements undoubtedly comes up against the changing *modus operandi* of technical and financial partners. There is, at the time when the need is felt the most, a technical deficit and a lack of human resources on the side of the governments as on that of their partners, as to the capacities for global understanding of the challenges of harmonization of the different levels of education and of definition of the activities to be actually set up.



© UNESCO BREDA - By Reg'

Local technical and financial partner coordination should play an important role in this mobilization, but it is not sure that this can be possible with the present way of working. Harmonization of aid is a changing process and, unlike what has been observed for primary education, it is not sure that it can be so easily set up in areas and levels of education where the donor countries themselves have very different conceptions and approaches. The pooling efforts, characterizing these local donor groups, do not go so far as realising joint, or even shared, technical analysis. The technical reinforcement of the technical and financial partner groups could therefore constitute a major challenge in this new context. It could involve the technical and financial partners supporting the creation of new regional expertise units at the disposal of their groups and of the governments that they support.

4.4 Improving EFA coordination

The many EFA promotion, coordination and monitoring mechanisms are indispensable. They report to multiple decision-making bodies: governments, bilateral and multilateral development agencies, NGOs and civil society. They constitute the major driving force of the EFA movement, and must constantly reinforce their dynamic and positive action.

Nationally, each mechanism has played a specific role, which has not continued, due to the very evolution in the EFA movement. The programme approach, sector analysis and sector plans introduce new mechanisms that govern, more than ever, the implementation of genuine education policies, illustrated more particularly by the example of the ten-year education development plans.

In some countries, the national EFA coordination has been the mainspring of this new process. In many other cases, due to the fact that it was not the centrepiece of government structures for elaborating and monitoring educational policy, in the way education planning departments or ten-year development plan steering units are, it became out of phase and disconnected from the operational mechanisms.

So, the countries have let structures build up and it is undoubtedly time to reconsider the relevance of some of these, starting with the national mechanisms operating at present.

Sub-regional mechanisms have hardly worked, whether with reference to the sub-regional EFA Forums or to the devices specific to the sub-regional economic communities. There are many reasons for the lack of success, ranging from the poor quality of the sub-regional integration processes to the absence of an appropriate institutional base, and to the lack of resources. However, one of the major reasons is probably the difficulty of connecting sub-regional programmes and national programmes.

Comparing the EFA national coordination agendas, at each sub-region, would probably be the start to a solution. But the resources will still be lacking, at sub-regional level, to make the mechanism work. This is where the commitment contained in the Dakar framework for action: *«regional and international support is planned in order to reinforce regional and sub-regional forums and capacities in terms of EFA, especially in Africa»* should be put into practice.

At regional level, the African Union is experiencing evident difficulties for implementing and monitoring the Decade of Education for Africa. The device supported by the regional economic communities has not worked. On top of the reasons mentioned above concerning these communities, there is a fundamental issue. It is unquestionably legitimate for the African Union to have goals in terms of education. But the African Union does not seem to have found the way to use the necessary political influence on the countries. In terms of

implementation of a Decade of Education for Africa, it is already quite difficult to manage to organize consultation on educational policies and strategies, sharing of information and successful experience, transnational studies and data collection. A Decade of Education for Africa has a much greater ambition, the feasibility of which has not been proven in the past. Education in Africa is progressing thanks to other vectors that the continental authorities should identify, in order to provide them with support. .

The activity of the regional EFA Forum, which has convened three times over the period 2001-2007, has been positive in terms of monitoring progress and in terms of advocacy. The Regional Forum seems nevertheless to have lost sight of one dimension, which is the definition of a programme of activities and support to national efforts for EFA, as adopted in the form of a regional agenda for monitoring EFA in the first Regional Forum. This must be a permanent element for the future of the Regional Forum. The agenda must be defined from the needs expressed at country level, in terms of coordination and must link national, sub-regional and regional EFA monitoring mechanisms closely together.





Appendix 1: The quality of available statistical data

Appendix 2: Summary statistical tables

**Table 1: Population and macro-economics context,
duration of the education level**

Table 2: EFA index

Table 3: Diagnostic system

Table 4: Financials and Fast Track indicators

Except particular information, school indicators presented in these tables refer to 2004/05 school year, the other years are recognizable by the following code:

- a) 2000/01
- b) 2001/02
- c) 2002/03
- d) 2003/04
- e) 2005/06

Appendix 3: List of abbreviations and acronyms

1. The quality of available statistical data

The high volume of statistical tools used in this report calls for an interrogation, as to the quality of available data and, similarly, as to their modalities of production. This must cover the field of administrative data, generally produced by the ministries in charge of education, and that of demographic data and also socioeconomic data, when »school« results have to be put into perspective with a country's socioeconomic realities.

The analysis of the present and future challenges, connected to the availability of reliable statistics in a consistent production framework, is increasingly a prerequisite for the involvement of development partners in regional and national programmes. This may be the reason why African governments attach more importance today to improving their statistics systems qualitatively, in a context where the effectiveness of development aid is at the centre of the debate and emphasizes the necessity for results-oriented management. This change is inevitably dependent on the availability of monitoring-assessment indicators, which are themselves fuelled by quality statistical data, unfortunately not always accessible. The desire shown by governments to modernise »the statistical tool« goes well beyond the education sector and many countries have embarked¹ on the conception of new National Strategies for the Development of Statistics (NSDS). Adopting an NSDS is in line with the elaboration of Poverty Reduction Strategy Papers (PRSPs) as, in many countries, the monitoring of Millennium Development Goals (MDG) and the setting up of Poverty Reduction Strategies (PRS) significantly increases the need for information in the social sectors and more particularly in the education sector.

The fundamental missions of an information system must aim at satisfying users and therefore make reliable, relevant and comparable data² available regularly and without due delay in the fields that it is meant to cover. For the education sector, these missions are therefore fundamentally a part of the EFA goals and more generally of the MDGs. Reaching these goals therefore necessarily implies reinforcing national capacities, because data published internationally³ draw their seal of approval from national data.

Administrative data is generally obtained through annual school census reports, which, in theory, guarantee their exhaustiveness. In practice, this is not always the case and frequent statistical coverage problems are observed, particularly for secondary education or technical and vocational education and training. These problems are all the more flagrant for private education, due to the frequent reluctance by headmasters to participate in a statistical campaign that they interpret as an administrative check.

The quality of data can also be questioned on several aspects connected to data collection and to their statistical processing, ranging from consistency checking to the implementation of adequate procedures for the imputation of missing data, very rarely implemented in the different countries. Amongst the indicators published, the (net or gross) enrolment ratios and more generally the access indicators, are very much dependent on the quality of demographic data which are, as a general rule, estimations originating from more or less reliable projections from the latest GPHC data⁴. In addition, the stability of the quality of data over time has significant consequences on the quality of longitudinal analysis. In many countries, the variability of figures from one year to the next makes projections risky.

While the ministries of education are often responsible for the »statistical chain« connected to administrative data, they are far from being the only ones to publish »figures«. Many structures, ministry departments, NGOs, donor agencies, etc. produce and disseminate statistics, often in the form of aggregated indicators, but also sometimes in the form of raw data. This is particularly true since the generalisation of PRSPs in developing countries. This secondary data as a whole constitutes a huge potential, which is only very rarely the subject of analysis and of critical use by the ministries in charge of education.

All the above observations lead to recommending countries to adopt a »quality approach« in the production and use of statistics. Promoting practices aimed at improving the quality of

1 With, in particular, the guidance of Partnership in statistics for development in the 21st century (PARIS21), support from the African Development Bank Group (AfDB) and the support of the Economic and Statistical Observatory of Sub-Saharan Africa (AFRISTAT) for French-speaking countries.

2 Ideally, comparable in time and space, and so internationally.

3 This internationally published data includes UNESCO Institute for Statistics (UIS) data.

4 General Population and Housing Census.

statistical data would certainly be a first significant step towards this goal and the assessment of current practices can be made with the help of a generic grid⁵.

National capacity building, in terms of sector-wide statistics, often comes up against the low availability, in the ministries, of human resources that are technically competent in the areas of statistical production. This shortage could be attenuated with more frequent recourse to resources available in the National Institutes of Statistics (NIS) by the ministries in charge of the social sectors and more particularly of the education sector. However, the NIS have only recently become involved with sector-wide statistics and, while the technical competencies exist, these must be updated and put into context in the light of the challenges of EFA and of sub-sector specificities.

In developing countries, and especially in Africa, most inventoried data sources focus on the PRSPs implemented in the different countries. Much data is redundant and contributes to the production of indicators that are not always coherent with each other. Initial analysis shows a problem of comparability of published data. The systematic publication of metadata⁶ for all the published variables and indicators may be an initial answer to the problem. Such publications are not usual in Africa. The countries should certainly be encouraged to make a critical documentary review of available data and of the indicators they produce. In addition, and on a parallel, the lack or under-utilisation of norms and nomenclatures significantly contributes to reducing comparability.

In referring to the DQAF Education, modernizing national statistical tools should involve, as a priority, (i) a documentary analysis of the texts governing education statistical data collection, (ii) a critical review of the collection tools used, (iii) a technical analysis of the (material and organizational) statistical processing chain, (iv) an assessment of the degree of decentralisation of the «statistical process», and (v) an analysis of the integration of education sector statistics into the more global scheme of the NSDS. Diagnostic studies resulting from the different stages mentioned above would bring out the indispensable articulations between education sector statistics and the more general NIS statistics. The international comparability⁸ of data is a major concern for many partners and more particularly for the UNESCO Institute for Statistics (UIS). In this context, the different countries should make an effort in completely filling in and returning the UIS annual questionnaires. The development, in due course, of the education «satellite account» concept should make a significant contribution to improving the supply of data relating to education financing.

5 Mostly originating from (i) Permanent Surveys on Household Living Conditions (PSHC), (ii) Demographic and Health Surveys (DHS), (iii) Multiple Indicator Surveys (MICS), and (iv) HIV/AIDS information systems in some countries.

6 This generic grid is synthesized under the generic name of Data Quality Assessment Framework (DQAF)/Cadre d'Evaluation de la Qualité des Données (CEQD) by the International Monetary Fund (IMF). Its application to the field of education, as a result of joint efforts by UNESCO Institute for Statistics and the World Bank, is a major tool for implementing internationally-recognised technical statistics aimed at standardizing statistical results and methods in order to arrive at improved regional comparability.

7 Metadata includes more specifically the documentation of concepts, fields of application, classifications, registration bases, sources and statistical techniques used, etc.

8 A very special effort must be made by the departments concerned to improve the use and appropriation of the International Standard Classification of Education (ISCE) in the production and processing of statistical data on education.

2. Summary statistical tables

Table 1: Population and macro-economics context, duration of the education level

Countries	Population and macro-economics context 2004					Age and schooling duration				
	GDP per capita (U.S. \$)	Total population (000)	% of school age population (primary)	Adult (15-49) living with HIV/AIDS (%)	Human development index (rank/177)	Pre Primary entrance age	Pre Primary duration	Primary duration	Lower secondary duration	Upper secondary duration
Algeria	2 616	32 358	12.1	0.1	102	4	2	6	3	3
Angola	1 298	15 490	11.7	3.7	161	3	3	4	4	3
Benin	498	8 177	16.8	1.8	163	4	2	6	4	3
Botswana	4 895	1 769	17.8	24.1	131	3	3	7	3	2
Burkina Faso	376	12 822	17.2	2.0	174	4	3	6	4	3
Burundi	90	7 282	16.8	3.3	169	4	3	6	4	3
Cameroon	919	16 038	16.0	5.4	144	4	2	6	4	3
Cape Verde	1 915	495	15.5	-	106	3	3	6	2	4
CAR	334	3 986	16.6	10.7	172	3	3	6	4	3
Chad	454	9 448	17.4	3.5	171	3	3	6	4	3
Comoros	472	777	16.1	<0.1	132	3	3	6	4	3
Congo	1 129	3 883	17.5	5.3	140	3	3	6	4	3
Côte d'Ivoire	855	17 872	16.2	7.1	164	3	3	6	4	3
Dem. Rep. of Congo	118	55 853	17.1	3.2	167	3	3	6	2	4
Djibouti	851	779	16.2	3.1	148	4	2	6	4	3
Egypt	1 034	72 642	13.1	<0.1	111	4	2	6	3	3
Equatorial Guinea	6 572	492	13.5	3.2	120	3	4	5	4	3
Eritrea	219	4 232	13.9	2.4	157	5	2	5	2	4
Ethiopia	107	75 600	21.6	4.4	170	4	3	8	2	2
Gabon	5 306	1 362	16.0	7.9	124	3	3	6	4	3
Gambia	281	1 478	14.9	2.4	155	3	4	6	3	3
Ghana	398	21 664	15.3	2.3	136	3	3	6	3	3
Guinea	381	9 202	16.1	1.5	160	3	4	6	4	3
Guinea-Bissau	182	1 540	16.6	3.8	173	4	3	6	3	2
Libyan Arab Jamahiriya	5 073	5 740	11.6	0.1	64	4	2	6	3	3
Kenya	466	33 467	18.4	6.1	152	3	3	6	2	4
Lesotho	765	1 798	18.1	23.2	149	3	3	7	3	2
Liberia	138	3 241	17.2	-	-	3	3	6	3	3
Madagascar	241	18 113	14.3	0.5	143	3	3	5	4	3
Malawi	144	12 608	23.1	14.1	166	3	3	8	2	2
Mali	371	13 124	17.3	1.7	175	3	4	6	3	3
Mauritania	455	2 980	16.0	0.7	153	3	3	6	3	3
Mauritius	4 911	1 233	10.0	0.6	63	3	2	6	3	4
Morocco	1614	31 020	12.3	0.1	123	4	2	6	3	3
Mozambique	286	19 424	19.4	16.1	168	3	3	7	2	3
Namibia	2716	2 009	20.3	19.6	125	3	3	7	3	2
Niger	228	13 499	16.9	1.1	177	4	3	6	4	3
Nigeria	560	128 709	16.8	3.9	159	3	3	6	3	3
Rwanda	208	8 882	16.3	3.1	158	4	3	6	3	3
Sao Tome and Principe	407	153	14.9	-	127	4	3	6	2	3
Senegal	673	11 386	16.2	0.9	156	4	3	6	4	3
Seychelles	8685	81	10.3	-	51	4	2	6	3	3
Sierra Leone	202	5 336	15.6	1.6	176	3	3	6	3	3
Somalia	-	7 964	18.4	0.9	-	3	3	7	2	2
South Africa	4507	47 208	15.2	18.8	121	6	1	7	2	3
Sudan	551	35 523	15.3	1.6	141	4	2	6	2	3
Swaziland	2333	1 034	19.7	33.4	146	3	3	7	3	2
Togo	344	5 988	16.6	3.2	147	3	3	6	4	3
Tunisia	2820	9 995	10.8	0.1	87	3	3	6	3	4
Uganda	246	27 821	21.1	6.7	145	4	2	7	4	2
U.R. of Tanzania	288	37 627	18.7	6.5	162	5	2	7	4	2
Zambia	469	11 479	19.8	17.0	165	3	4	7	2	3
Zimbabwe	1388	12 936	18.8	20.1	151	3	3	7	2	4
Simple average	1392	-	16.2	6.4	-	-	-	-	-	-

Table 2: EFA index

Countries	African development index		Pre Primary GER (%)	Primary completion rate (%)	GER gender parity index (%)	Adult literacy rate (%)
	2005	2000				
Algeria	73	66	6.0	96	93	70
Angola	36	32	-	43(c)	71(c)	67
Benin	34.5	22	5.4	65(e)	81(e)	35
Botswana	82	82	7.0	93	99	81
Burkina Faso	21	13	1.9	40(e)	90(e)	22
Burundi	34	28	1.8	36	86	59
Cameroon	51	51	24.7	62	85	68
Cape Verde	78	82	53.6	95(d)	95(d)	76
CAR	22	23	4.0	31	69	49
Chad	17	13	0.8	35(d)	67(d)	26
Comoros	41	36	3.3	51	88	56
Congo	49	42	5.8	73	92	48
Côte d'Ivoire	33	30	3.2(c)	48(c)	79(c)	49
Dem. Rep. of Congo	-	-	-	-	-	67
Djibouti	33	30	1.0	32	82	65
Egypt	77	74	14.4	98	96	71
Equatorial Guinea	61	59	40.9	54	95	87
Eritrea	39	34	11.9	51	81	57
Ethiopia	35	26	2.2	36(e)	86(e)	42
Gabon	61	56	13.9(c)	66(c)	99(c)	71
Gambia	41	39	18.2(d)	63(d)	106(d)	38
Ghana	56	50	41.6	72	96	58
Guinea	36	23	6.8(e)	60(e)	84(e)	40
Guinea-Bissau	27	25	10.0(c)	38(c)	67(c)	54
Libyan Arab Jamahiriya	-	-	-	-	-	82
Kenya	77	67	53.9	95	96	74
Lesotho	72	66	33.5	74	100	82
Liberia	-	-	-	-	-	-
Madagascar	55	42	7.6	58	96	71
Malawi	54	57	-	45	102	64
Mali	19	18	2.5	43	80	19
Mauritania	40	39	1.7	45	101	51
Mauritius	88	90	95.5	98	100	84
Morocco	53	43	53.6	80	89	52
Mozambique	31	20	-	42	85	46
Namibia	75	84	28.9	75	102	85
Niger	17	12	1.4	28	73	29
Nigeria	58	54	15.4(d)	76(d)	86(d)	67
Rwanda	43	34	2.5	38	102	65
Sao Tome and Principe	75	55	32.2	77	98	79
Senegal	36	29	7.9	50	97	39
Seychelles	95	94	101.5	106	100	92
Sierra Leone	33	24	4.2	61	81	35
Somalia	-	-	-	-	-	-
South Africa	86	81	37.5(d)	100(d)	96(d)	82
Sudan	42	38	25.5	50	87	61
Swaziland	62	61	18.2	64	93	80
Togo	48	46	2.4	72	85	53
Tunisia	81	73	21.7	99	97	74
Uganda	54	54	2.1	58	100	67
U.R. of Tanzania	53	53	28.7	55	96	69
Zambia	64	52	-	79	95	68
Zimbabwe	80	84	43.2	80	98	90
Simple average	52	47	20	63	90	61

Table 3: System diagnosis (2004/05 or close)

Countries	Primary				Lower secondary			
	Gross enrolment rate (%)	Primary apparent intake rate (%)	Survival rate to the last grade (%)	Actual primary > secondary transition	Gross enrolment rate (%)	Access rate to first grade (%)	Access rate to last grade (%)	Actual transition rate lower > upper secondary (%)
Algeria	112	101	99	91	100	87	74	59
Angola	70(c)	76(c)	57(c)	-	-	-	-	-
Benin	96(e)	116(e)	85(e)	91(e)	48(e)	59(e)	27(e)	64(e)
Botswana	104	106	82	99	86	91	82	56
Burkina Faso	62(e)	79(e)	79(e)	49(e)	19(e)	20(e)	11(e)	46(e)
Burundi	85	88	49	50	17	18	8	70
Cameroon	117(d)	112(d)	64(d)	59(d)	35(d)	37(d)	33(d)	53(d)
Cape Verde	112(d)	97(d)	69(d)	87(d)	93(d)	83(d)	66(d)	75(d)
CAR	75	76	64	56	15	17	8	65
Chad	81(d)	105(d)	44(d)	71(d)	22(d)	25(d)	13(d)	73
Comoros	85	70	70	85	41	43	28	82
Congo	112	95	77	77	62	56	39	36
Côte d'Ivoire	72(c)	72(c)	74(c)	60(c)	29(c)	29(c)	22(c)	58(c)
Dem. Rep. of Congo	-	-	-	-	-	-	-	-
Djibouti	40	43	74	98	28	31	20	64
Egypt	101	99	99	92	96	90	83	37
Equatorial Guinea	131	105	36	-	40	-	-	-
Eritrea	65	59	75	87	44	44	34	67
Ethiopia	76(e)	141(e)	79(e)	84(e)	30(e)	30(e)	23(e)	19(e)
Gabon	132(b)	94(b)	63(b)	89(b)	61(b)	54(b)	34(b)	70(b)
Gambia	81(d)	89(d)	67(d)	100(d)	65(d)	62(d)	59(d)	53(d)
Ghana	88	95	76	94	64	68	53	42
Guinea	77	75	80	70	38	39	25	87
Guinea-Bissau	93(b)	122(b)	47(b)	82(b)	32(b)	30(b)	18(b)	80(b)
Libyan Arab Jamahiriya	113	94	-	-	114	-	-	-
Kenya	114	118	83	97	71	93	31	95
Lesotho	131	123	64	74	47	54	30	83
Liberia	-	-	-	-	-	-	-	-
Madagascar	138	179	67	56	27	33	18	56
Malawi	110	156	30	42	19	19	18	76
Mali	69	68	77	80	35	33	21	40
Mauritania	93	112	64	62	26	28	19	88
Mauritius	101	99	95	82	85	83	80	97
Morocco	105	99	76	80	63	64	43	67
Mozambique	105	156	40	49	20	21	12	79
Namibia	99	98	78	99	75	74	56	55
Niger	47	58	71	65	12	18	6	51
Nigeria	99	117	73	-	37	-	-	-
Rwanda	100(a)	179(a)	-	56(a)	13(a)	13(a)	9(a)	96(a)
Sao Tome and Principe	134	116	74	73	71	56	37	72
Senegal	78	91	65	60	28	30	19	60
Seychelles	110	116	100	-	108	-	-	-
Sierra Leone	154	204	51	72	42	44	30	46
Somalia	-	-	-	-	-	-	-	-
South Africa	105(d)	114(d)	92(d)	89(d)	99(d)	89(d)	87(d)	98(d)
Sudan	60	67	76	91	45	45	43	58
Swaziland	105	115	80	95	53	61	35	97
Togo	104	90	72	84	62	61	42	50
Tunisia	109	100	97	93	94	92	69	95
Uganda	123	157	27	43	23	25	20	43
U.R. of Tanzania	107	114	76	35	14	19	9	25
Zambia	113	126	77	55	45	43	40	42
Zimbabwe	97	118	76	71	55	57	52	95
Simple average	98	106	71	75	50	48	35	65

	Upper secondary			Technical	Tertiary	Source for the raw date	Countries
	Gross enrolment rate (%)	Access rate to first grade (%)	Access rate to last grade (%)	Number of pupils/students per 100,000 inhabitants			
46	43	28	1650	2335	UIS	Algeria	
-	-	-	508	311	UIS	Angola	
17(e)	18(e)	11(e)	366(e)	592(e)	National	Benin	
46	46	46	1505	576	UIS	Botswana	
5(e)	5(e)	3(e)	175(e)	218(e)	National	Burkina Faso	
6	6	3	199	232	CSR	Burundi	
19(d)	17(d)	10(d)	2533(d)	623(d)	CSR	Cameroon	
47(d)	50(d)	30(d)	474(d)	790(d)	UIS	Cape Verde	
7	6	6	94	94	CSR	CAR	
11(d)	9(d)	9(d)	50(d)	117(d)	CSR	Chad	
27	23	21	22	235	UIS	Comoros	
16	14	11	1348	440	CSR	Congo	
15(c)	13(c)	12(c)	-	604(c)	UIS	Côte d'Ivoire	
-	-	-	-	-	-	Dem. Rep. of Congo	
14	13	12	329	218	UIS	Djibouti	
31	30	28	262	3571	UIS	Egypt	
7	-	-	279	-	UIS	Equatorial Guinea	
20	23	8	56	114	UIS	Eritrea	
4(e)	4(e)	3(e)	-	233	UIS	Ethiopia	
25(b)	24(b)	17(b)	585(b)	615(b)	UIS	Gabon	
26(d)	31(d)	21(d)	154(d)	109(d)	UIS	Gambia	
21	23	18	99	330	UIS	Ghana	
20	22	10	91	280	CSR	Guinea	
16(b)	15(b)	12(b)	-	35(b)	Pôle de Dakar	Guinea-Bissau	
32	-	-	4620	6795	UIS	Libyan Arab Jamahiriya	
27	30	23	-	331	UIS	Kenya	
24	25	18	114	339	UIS	Lesotho	
-	-	-	-	-	UIS	Liberia	
9	10	6	-	248	UIS	Madagascar	
14	14	13	-	41	UIS	Malawi	
10	8	6	348	278	UIS	Mali	
19	17	16	218	294	UIS	Mauritania	
71	78	37	2022	1367	UIS	Mauritius	
31	28	22	715	1183	UIS	Morocco	
7	10	3	130	146	UIS	Mozambique	
31	31	30	-	614	UIS	Namibia	
3	3	2	37	80	UIS	Niger	
32	-	-	-	1024	UIS	Nigeria	
9(a)	8(a)	7(a)	248(a)	297(a)	UIS	Rwanda	
26	27	16	52	128	UIS	Sao Tome and Principe	
11	12	8	52	470	National	Senegal	
93	-	-	-	-	UIS	Seychelles	
13	14	9	535	312	CSR	Sierra Leone	
-	-	-	-	-	-	Somalia	
80(d)	85(d)	46(d)	973(d)	1530(d)	UIS	South Africa	
26	25	23	50	637	UIS	Sudan	
33	34	26	70	570	UIS	Swaziland	
20	21	9	338	372	UIS	Togo	
64	65	44	943	3117	UIS	Tunisia	
9	9	8	115	329	UIS	Uganda	
2	2	2	-	116	UIS	U.R. of Tanzania	
17	17	16	68	229	UIS	Zambia	
27	50	5	7	471	UIS	Zimbabwe	
24	23	16	561	708		Simple average	

Table 4: Financial and Fast Track Indicators (2004/05 or closest year)

Countries	Resource mobilization		Distribution of education budget			Current unit cost as % of per capita GDP		
	Government revenues as % of GDP	% for education in government revenues	% for primary (adjusted to 6 grades)	% for secondary (adjusted to 7 grades)	% for tertiary	Primary	Secondary	Tertiary
Algeria	40.9	8.7	44.2	-	-	11	-	-
Angola	37.5	6.7	51.7	-	-	8	-	-
Benin	16.4	22.6	50.7	27.5	22.1	11	19	149
Botswana	37.5	4.9	43.7	37.7	18.6	6	6	90
Burkina Faso	12.8	21.9	62.0	19.0	19.0	19	47	550
Burundi	20.1	18.0	46.3	28.4	25.3	15	65	719
Cameroon	15.2	16.3	40.0	45.0	15.0	6	29	73
Cape Verde	24.8	20.7	44.2	37.1	18.7	18	22	285
CAR	8.4	17.3	49.5	27.5	23.0	7	23	225
Chad	10.5	13.1	49.6	29.1	21.3	5	19	339
Comoros	15.6	19.6	45.7	46.7	7.7	12	30	130
Congo	19.1	15.8	28.6	41.6	29.8	5	21	183
Côte d'Ivoire	17.5	24.5	46.6	37.4	16.0	17	48	137
Dem. Rep. of Congo	9.5	7.1	32.2	34.9	32.8	3	-	-
Djibouti	28.7	23.5	50.6	-	-	-	-	-
Egypt	23.0	5.9	40.4	20.7	38.9	9	-	-
Equatorial Guinea	32.6	-	-	-	-	-	-	-
Eritrea	27.5	7.5	32.1	49.8	18.1	12	36	445
Ethiopia	17.0	15.9	54.9	26.1	18.9	13	-	-
Gabon	30.1	16.1	35.6	38.9	25.5	5	14	52
Gambia	20.9	16.0	49.8	-	-	18	-	-
Ghana	23.8	25.3	34.4	-	-	18	-	-
Guinea	11.1	18.4	44.4	30.8	24.8	9	14	231
Guinea-Bissau	17.2	11.7	33.3	43.0	23.7	7	14	121
Libyan Arab Jamahiriya	-	-	40.4	39.3	20.3	11	-	-
Kenya	21.2	27.4	41.6	-	-	9	22	266
Lesotho	49.7	24.2	34.5	29.5	36.0	18	47	578
Liberia	14.8	-	-	-	-	-	-	-
Madagascar	12.0	23.4	59.2	24.4	16.5	8	36	189
Malawi	23.2	16.1	45.4	36.4	18.2	8	28	149
Mali	17.4	23.4	35.3	48.4	16.3	11	50	193
Mauritania	24.0	13.0	44.2	38.9	16.9	13	47	121
Mauritius	19.9	18.3	36.5	45.8	17.7	9	14	49
Morocco	25.8	23.2	36.6	47.1	16.3	21	44	111
Mozambique	12.6	21.0	48.0	30.0	21.9	10	32	791
Namibia	30.2	18.5	55.4	35.9	8.7	21	25	93
Niger	11.2	24.1	60.0	26.7	13.3	20	61	515
Nigeria	26.7	8.6	29.1	51.2	19.7	14	-	-
Rwanda	13.9	18.9	43.2	19.6	37.3	8	59	787
Sao Tome and Principe	18.5	-	-	-	-	-	-	-
Senegal	18.5	22.1	44.0	28.4	27.7	14	20	296
Seychelles	50.0	13.0	35.6	46.9	17.4	15	15	-
Sierra Leone	24.8	19.4	48.2	29.8	22.0	9	30	278
Somalia	-	-	-	-	-	-	-	-
South Africa	24.0	21.5	41.0	43.5	15.5	14	18	53
Sudan	13.2	16.2	46.0	-	-	10	-	-
Swaziland	30.7	13.7	22.6	51.9	25.5	11	29	246
Togo	16.9	20.8	50.0	35.0	15.0	13	20	112
Tunisia	28.5	20.5	33.3	45.0	21.7	16	26	68
Uganda	12.7	30.1	47.2	-	-	10	-	-
U.R. of Tanzania	11.8	29.7	55.1	-	-	16	-	-
Zambia	18.2	11.1	45.6	35.0	19.4	7	19	164
Zimbabwe	33.8	30.1	60.6	-	-	16	24	201
Simple average	22	18	44	36	21	12	30	257

	% of resource to the 10% more educated people	Fast Track Indicators (primary)					Source for finance data
		Pupil-Teacher Ratio	Public teachers' average salary as units of per capita GDP	% current spending other than teachers' salary	% of repeaters	% of pupils in private	
	-	25	-	-	11.2	0.0	IMF, UIS
	-	-	1.5	19.0	22.2(c)	5.0(c)	IMF, UIS
	45	43(e)	3.6	42.1	7.8(e)	13.0(e)	IMF, Simulation model
	25	26	-	-	4.8	5.1	IMF, UIS
	60	52(e)	5.7	30.6	5.3(e)	13.8(e)	IMF, CSR
	60	49	6.8	12.0	30.4	1.4	CSR
	38	48	3.6	25.0	25.8	23.7	CSR
	25	26(d)	-	-	12.8(d)	0.0(d)	IMF, FTI, UIS
	63	83	4.9	33.0	29.6	10.0	CSR
	67	63(d)	2.3	37.2	24.8(d)	31.2(d)	CSR
	30	35	-	-	27.1	10.0	IMF, UIS
	46	83	1.8	66.3	23.2	26.5	CSR
	40	42(c)	4.8	23.0	17.6(c)	10.9(c)	IMF, UIS
	52	-	1.0	10.3	-	-	IMF, CSR
	-	35	5.7	38.0	9.5	14.7	IMF, FTI, UIS
	-	22	-	-	2.2	8.0	IMF, UIS
	-	32	-	-	28.9	29.9	IMF, UIS
	40	48	7.7	29.6	12.7	7.9	IMF, UIS
	65	72	6.7	30.7	7.0(e)	3.7(e)	IMF, Simulation model
	28	36(c)	-	-	34.4(c)	29.3(c)	IMF, UIS
	-	35(d)	3.7	23.0	9.7(d)	2.6(d)	IMF, FTI
	-	33	4.0	26.4	5.8	20.5	Pôle's estimate (according to FTI secretary)
	41	45(e)	2.3	45.7	8.7(e)	20.6(e)	Simulation model
	26	38(c)	1.9	30.7	21.1(c)	19.4(c)	Simulation model
	-	-	-	-	-	2.5	IMF, UIS
	34	40	5.3	10.0	5.8	4.5	IMF, FTI, UIS
	31	42	6.6	30.8	18.8	0.3	IMF, CSR
	-	-	-	-	-	-	
	45	54	3.1	38.9	18.3	18.9	Simulation model
	-	64	4.0	14.0	20.2	0.9	IMF, FTI, UIS
	47	54	4.3	45.5	19.0	37.0	CSR
	36	40	3.1	31.8	10.1	8.0	CSR
	19	22	-	-	4.8	25.1	IMF, UIS
	26	27	3.4	10.5	12.7	6.6	IMF, UIS
	37	66	5.2	20.9	10.4	2.4	Simulation model
	20	33	-	-	15.1	3.9	IMF, UIS
	63	44	6.1	35.9	5.3	4.1	IMF, CSR
	-	37(d)	4.9	9.1	2.6(d)	-	IMF, UIS
	68	62	3.8	27.9	19.2	0.8	Simulation model
	-	31	-	-	23.5	-	
	37	47	4.2	16.8	11.9	11.2	Simulation model
	-	14	1.7	35.2	-	4.7	IMF, UIS
	57	67	3.9	31.0	12.0	5.0	CSR
	-	-	-	-	-	-	
	17	36(d)	-	9.8	8.0(d)	2.0(d)	IMF, UIS
	-	28	2.2	22.5	1.7	5.3	IMF, World Bank
	34	32	-	-	14.3	-	IMF, UIS
	45	34	5.0	25.2	22.9	41.7	IMF, UIS
	16	21	-	-	8.5	1.0	IMF, UIS
	-	50	2.9	26.2	13.1	9.1	World Bank
	-	58	3.6	13.1	4.0	0.9	Pôle's estimate (according to FTI secretary)
	31	51	2.7	21.7	6.3	3.4	IMF, UIS
	23	39	6.1	25.0	0.0	86.9	IMF, World Bank
	40	43	4,1	27	14	13	

3. List of abbreviations and acronyms

ADEA	Association for the Development of Education in Africa
AFD	Agence Française de Développement (French Development Agency)
AFRISTAT	The Economic and Statistical Observatory of Sub-Saharan Africa
AIR	Apparent Intake Rate
ANCEFA	African Network Campaign on Education for All
AU	African Unity
BREDA	UNESCO Regional Office for Education in Africa
CCNGO	Collective Consultation of Non Governmental Organisations
CEMAC	Economic and Monetary Community of Central Africa
COMEDAF	Conference of African Ministers of Education
CONFEMEN	Conference of Ministers of Education for Francophone Countries
CREFEME	Educational Evaluation and Management Research and Training Centre at the Mohammed V Souissi University in Rabat
CSR	Country Status Report
DHS	Demographic and Health Survey
DIAL	Développement Institutions et Analyses de Long terme (Research Center on Economics Development)
ECOWAS	Economic Community Of West African States
EFA	Education for All
EQJA	Programme of skills development for youth and adults
FTI	Fast Track Initiative
GCE	Global Campaign for Education
GDP	Gross Domestic Product
HIPC	Heavily Indebted Poor Countries
HIV-AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
ICT	Information and Communication Technology
IEMAC	Improving Education Management in African Countries
ILO	International Labour Organisation
LAMP	Literacy Assessment and Monitoring Program
LIFE	Literacy Initiative for the Excluded
MDG	Millennium Development Goals
MICS	Multiple Indicators Cluster Survey
MLA	Monitoring Learning Achievement
MTEF	Medium Term Expenditure Framework

NEPAD	New Partnership for Africa's Development
NGO	Non Gouvernemental Organisation
ODA	Official Development Assistance
ODL	Open and distance learning
OECD	Organisation for Economic Cooperation and Development
OUA	Organisation of African Unity
PALOP	African Countries of Portuguese Official Language
PARSAT	Regional Program of Statistical Support <i>Programme d'appui régional à la statistique</i>
PASEC	Programme for analysis of the CONFEMEN education systems <i>Programme d'analyse des systèmes éducatifs de la CONFEMEN</i>
PCR	Primary Completion Rate
PIRLS	Progress in International Literacy Study
PISA	Programme for International Student Assessment of the OECD
PPA	Pupils' Parents Association
PTR	Pupils-teacher Ratio
QIBB	Survey on basic indicators of well-being <i>Questionnaire des indicateurs de base du bien-être</i>
SACMEQ	Southern Africa Consortium of Monitoring Education Quality
SADC	Southern African Development Community
SEIA	Conference on Secondary Education in Africa
TIMSS	Trends in International Mathematics and Science Study
TVET	Technical and Vocational Education and Training
UEMOA	West African Economic and Monetary Union / <i>Union économique et monétaire ouest-africaine</i>
UIS	UNESCO Institute for Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund
UPE	Universal Primary Education
USAID	United States Agency for International Development

References

- Aghion P., Cohen E., 2004, *Education et croissance*, Conseil d'Analyse Economique, La Documentation française. Paris, 2004.
- Al-Samarra S., Bennell P., 2006, «Where has the education gone in Sub-Saharan Africa? Employment and other outcomes among secondary school and university», MPRA Paper n°128.
- Ambert M., Chapelle K., 2003, «Education, Dualisme régional et développement économique : le cas de 14 Etats indiens entre 1970-1993», *Revue Région et Développement*, n° 17-2003.
- Amelewonou K., Brossard M., 2005, «Développer l'éducation secondaire en Afrique : Enjeux, contraintes et marges de manœuvre», UNESCO BRED, *Document présenté à l'atelier régional sur l'enseignement secondaire*, 21-25 novembre 2005, Addis Abeba.
- Amelewonou K., Brossard M., Reuge N., 2003, «Atteindre la scolarisation primaire universelle au Sénégal, éléments d'analyse de la rétention», UNESCO-BREDA, *Document de travail du Pôle d'Analyse Sectorielle en Education*, Dakar, mimeo.
- Amprou J., Chauvet L., 2004, «Efficacité et allocation de l'aide, revue des débats», AFD, *Note et Documents*, n°6, Paris.
- Association pour le développement de l'éducation en Afrique (ADEA), 2005, «Le défi de l'apprentissage : améliorer la qualité de l'éducation de base en Afrique subsaharienne», Document préparé pour la biennale de l'ADEA, Grand Baie, Maurice, 3-6 décembre 2003, Verspoor, Paris.
- Banque mondiale, 1993, *The East Asia miracle, Economic growth and public policy*, Oxford University Press for The World Bank, Washington DC.
- Banque mondiale, 2004, «Cost, Financing and School Effectiveness of Education in Malawi. A future of limited choices and endless opportunities», World Bank, *Working Papers Series Africa Region Human Development*, Washington DC.
- Banque mondiale, 2005, *Indicateurs de développement dans le monde 2005*, Washington DC.
- Banque mondiale, 2007, «L'enseignement secondaire en Afrique (SEIA), A la croisée des chemins : Choix en matière d'enseignement secondaire en Afrique subsaharienne», Banque Mondiale, *Working papers Série Développement Humain de la Région Afrique*, Washington DC.
- Banque mondiale, 2007, *Development and the next generation, World Development Report 2007*, Washington DC.
- Barro R. J., 1991, «Economic growth in a cross section of countries», *The Quarterly Journal of Economics*, May 1991.
- Barro R.J., 2001, «Human Capital and Growth», *The American Review*, vol.91, n°2, May 2001.
- Baudelot C., Leclercq F., 2005, *Les effets de l'éducation*, République Française, Ministère de l'Education Nationale, Paris.
- Beine M., Docquier F., Rapoport H., 2006, «Brain drain and human capital formation in developing countries: winners and losers», *Université catholique de Louvain, Département des Sciences Economiques Working Paper*, n°2006023.
- Bennell P., 1996a, «Rates of Return to Education: Does the Conventional Pattern Prevail in Sub-Saharan Africa?», *World Development*, n°24, p. 183-199.
- Bennell P., 1996b, «Using and Abusing Rates of Return : A Critique of the World Bank's 1995 Education Sector Review», *International Journal of Educational Development*, n°16, p. 235-248.
- Bennell P., Sergerstrom J., 1998, «Vocational Education and Training in Developing Countries: Has the World Bank Got it Right?», *International Journal of Educational Development*, n°18, p. 271-87.
- Bernard J.-M., Simon O., Vianou K., 2005, *Le redoublement : mirage de l'école africaine ?*, PASEC/CONFEMEN, Dakar.
- Bernard J.M., Nkengne Nkengne A.P., Robert F., 2007, «La relation entre réformes des programmes scolaires et acquisitions à l'école primaire en Afrique : réalité ou fantasme ? L'exemple de l'approche par les compétences», *Les documents de travail de l'IREDU*, DT2007/4, CNRS-Université de Bourgogne, Dijon.
- Berthélemy J-C., Varoudakis A., 1995, «Clubs de convergence et croissance : le rôle du développement financier et du capital humain», *Revue économique*, année 1995, vol. 46, n°2, p. 217-235.
- Bigsten A., Isaksson A., Soderbom M., Collier P., Zeufack A., Dercon S., Fafchamps M., Gunning J.W., Teal F., Appleton S., Gauthier B., Oduro A., Oostendorp R., Patillo C., 2000, «Rates of return on physical and human capital in Africa's manufacturing sector », *Economic Development and Cultural Change*, n°48, p. 801-827.
- Bourdon J., 1999, «Éléments d'analyse de l'efficacité des systèmes éducatifs et de formation : Peut-on définir une lecture comparative sous l'angle qualitatif de la dépense éducative?», *Communication IDEP*, 21 et 22 juin 1999, Marseille.

- Bourdon J., 2007,
«Jusqu'où peut-on comparer les apprentissages scolaires ?»,
mimeo.
- Bourguignon F., Leipziger D., 2006,
Aid, Growth, and Poverty Reduction : Toward a New Partnership Model, World Bank, Washington DC.
- Bourguignon F., Sundberg M., 2006,
Aid Effectiveness : Opening the Black Box, World Bank, Washington DC.
- Bressoux P., 2000,
Modélisation et évaluation des environnements et des pratiques d'enseignement. Habilitation à diriger des recherches, Université Pierre Mendès France, Grenoble.
- Brilleau A., Roubaud F., Torelli C., 2004,
«L'emploi, le chômage et les conditions d'activité dans les principales agglomérations de sept Etats membres de l'UEMOA», *Dial Document de Travail*, DT 2004-06.
- Brossard M., Foko B., 2007,
«Les acquisitions scolaires et la production d'alphabétisation de l'école primaire en Afrique : approches comparatives», UNESCO-BREDA, *Note thématique du Pôle d'Analyse Sectorielle en Education*, n°2, Dakar.
- Brossard M., Foko B., 2007,
Coût et financement de l'enseignement supérieur en Afrique francophone, Banque mondiale, Série Développement Humain de la Région Afrique, Washington DC.
- Bruns B., Mingat A., Rakotomalala R., 2003,
Achieving universal primary education by 2015 : A chance for every child, World Bank, Washington DC.
- Burnside C., Dollar D., 1997,
«Aid, Policies, and Growth», *World Bank Policy Research Working Paper Series*, n°1777, Washington DC.
- Burnside C., Dollar D., 2000,
«Aid, Policies, and Growth», *American Economic Review*, vol. 90(4).
- Caillods F., Keith L., 2001,
Financing secondary education in developing countries: strategies for sustainable growth, IIEP, Paris.
- Card D., 1999,
«The Causal Effect of Education on Earnings», in O. Ashenfelter and D. Card (eds), *Handbook of Labor Economics*, vol. 3a, p. 1801-1863, Netherlands : Elsevier Science Publishers BV.
- Casero P.A., Seshan G., 2006,
«Public-Private Sector Wage Differentials and Returns to Education in Djibouti», *World Bank Policy Research Working Paper*, n°3923, Washington DC.
- Cerbelle S., Jarousse J.P., 2004,
Une évaluation des activités d'alphabétisation des adultes au Maroc, Université Mohammed V Rabat-Souissi, CREFEME, Rabat.
- Clemens M., Radelet S., Bhavnani R., 2004,
«Counting Chickens when they Hatch : the Short-term Effect of Aid on Growth», *Center for Global Development Working Paper*, n°44.
- Cogneau D., Naudet J.D., 2004,
«Qui mérite l'aide : Egalité des Chances, Aide internationale et Réduction de la Pauvreté», *AFD, Notes et Documents*, n°7, Paris.
- Cogneau D., Bossuroy T., De Vreyer P., Guénard C., Hiller V., Leite P., Mesple-Soms S., Pasquier-Doumer L., Torelli C., 2006,
«Inégalités et équité en Afrique», *AFD, Notes et Documents*, n°31, Paris.
- Coignard E., 2006,
«Statistiques portant sur les deux universités nationales du Bénin», République du Bénin, Ministère de l'Enseignement Supérieur et de la Formation Professionnelle, Cotonou.
- Coleman J.S., Campbell E.Q., Hobson C. J., McPartland J., Mood A.M., Weinfeld F.D., York R.L., 1966,
Equality of Educational Opportunity, U.S. Government Printing Office, Washington.
- Conférence d'Abuja, 2006,
Financing for Development: The Abuja Commitment to Action Adopted at the Abuja Conference, www.financingmdgsconference.org, Abuja, Nigeria.
- CREA, 2003,
Analyse socioculturelle de la demande d'éducation. Quelle école primaire désirent les populations du Sénégal ?, Université Cheick Anta Diop, Dakar.
- Crouch L., Umansky, I., 2007,
Fast Track Initiative: Initial Evidence of Impact, World Bank, Washington DC.
- Damiba A., 2005,
«Revue des plans d'action nationaux d'éducation pour tous, pays francophones et lusophones d'Afrique et de la Guinée Equatoriale », *Background paper prepared for the EFA Global Monitoring Report 2006*.
- Deaton A., Benjamin D., 1988,
«The Living Standards Survey and Price Policy Reform: a Study of Cocoa and Coffee Production in Côte d'Ivoire», *World Bank, LSMS Working Paper*, n°44, Washington DC.
- Dessus S., 2000,
«Capital Humain et croissance : Le rôle retrouvé du système éducatif» *Economie publique*, n°6.
- Dial, 2007,
«Youth and labour markets in Africa», *Dial document de travail*, DT 2007-02.

- Docquier F., Marfouk A., 2006, «La fuite des cerveaux entrave-t-elle la croissance européenne ?», *Regard économique*, n°43.
- Docquier F., 2006, Brain drain and inequality across nations, FNRS and IRES, Université de Louvain, Belgique.
- Dragoset L., Vilhuber L., 2006, «Schooling and Early Work Experience in Uganda», *World Bank, in Youth in Africa's Labor Market, vol. II, Country Case Studies, Chapter 3*, Washington, DC.
- Dreher A., Nunnenkamp P., Thiele R., 2006, «Does aid for education educate children ? Evidence from panel data», *Duesternbrooker Weg 120*, Kiel Working Paper, n° 1290.
- Duflo E., 2005, «Field Experiments in Development Economics », *Paper Prepared for the World Congress of the Econometric Society*.
- Duflo E., Hanna R., 2005, «Monitoring Works : Getting Teachers to Come to School», *NBER Working Paper*, n°11880.
- Duru-Bellat M., 2006, *L'inflation scolaire : Les désillusions de la méritocratie*, Editions du Seuil, République des Idées, Paris.
- Easterly W., Levine R., Roodman D., 2003, «New Data, New Doubts : Revisiting Aid, Policies and Growth», *Center for Global Development Working Paper*, n°26, Washington DC.
- Ewoudou J., Vencatathellum D., 2006, «An Empirical Analysis of the Rates of Returns to Education in Cameroon », *Communication at the CSAE Conference 2006*, Oxford.
- Fast Track Initiative, 2006a, *FTI Catalytic Fund Status Report*, November.
- Fast Track Initiative 2006b, *Education Program Development Fund (EPDF) Summary Progress Report*, November.
- FMI, 2005, «Rendre l'aide efficace», *Finances et Développement*, Septembre, vol. 42, n°3, <http://www.imf.org/external/pubs/ft/fandd/2005/09/index.htm>.
- Fafchamps M., Söderbom M., Benhassine N., 2006, «Job Sorting in African Labour Markets», *Centre for the Study of African Economies Working Paper*, WPS/2006-02, Oxford.
- Foko B., Brossard M., 2007, «Couverture scolaire des années 1970 et impact sur la croissance économique entre 1970 et 2003», UNESCO-BREDA, *Document de travail du Pôle d'Analyse Sectorielle en Education*, Dakar.
- Foko B., Ndém A. F., Reuge N., 2007, «L'efficacité externe de l'éducation au Sénégal : une analyse économique », UNESCO-BREDA, *Note pays du Pôle d'Analyse Sectorielle en Education*, n°4, février 2007, Dakar.
- Foster A., Rosenzweig M., 1996, «Technical Change and Human Capital Returns and Investments: Evidence from the Green Revolution », *American Economic Review*, n°86(4), p. 931-953.
- Fouda Ndjodo M., 2007, «Cameroun : Evaluation des mécanismes de coordination et d'appui à l'éducation pour tous », *Etude de cas nationale réalisée pour la Revue des mécanismes de coordination et d'appui de l'EPT de l'UNESCO BREDA*, mimeo.
- Fredriksen B., 2007, *Report on Meeting of EPDF Task Force*, March 8-9, 2007, Norway, Oslo.
- Gioan P. A., 2007, *Les leviers pour des politiques d'enseignement supérieur soutenables financièrement dans les pays francophones d'Afrique*, Banque mondiale, Série Développement Humain de la Région Afrique, Washington DC.
- Girma S., Kedir A., 2005, «Heterogeneity in Returns to Schooling: Econometric Evidence from Ethiopia », *Journal of Development Studies*, n°41(8), p. 1405-1416.
- Glewwe P., 1990, «Investigating the Determinants of Household Welfare in Cote d'Ivoire», *World Bank, LSMS Working Paper*, n°71, Washington DC.
- Glewwe P., 1996, «The Relevance of Standard Estimates of Rates of Return to Schooling for Education Policy : A Critical Assessment», *Journal of Development Economics*, n°51, p. 267-290.
- Glewwe P., 2002, «Schools and Skills in Developing Countries: Education Policies and Socioeconomic Outcomes», *Journal of Economic Literature*, June 2002, n°40 (2), p. 436-482.
- Guillaumont P., Chauvet L., 2001, «Aid and Performance: A Reassessment», *Journal of Development Studies*, n°37 (6), p. 66-92.
- Gurgand M., Duru-Bellat M., Mons N., Roché S., Blaya C., Debarbieux E., Vidal D., Cros F., 2004, *Quel est l'impact des politiques éducatives ? Les apports de la recherche*, Commission du débat national sur l'avenir de l'école.
- Gurgand M., 1999, «Sait-on mesurer le rôle économique de l'éducation ? Confrontations des résultats empiriques micro et macroéconomiques », *Document de travail du CREST*.

- Hansen H., Tarp F., 2001, *Aid effectiveness disputed*, University of Copenhagen.
- Hanushek E., Kimko, D., 2000, «Schooling, Labor-Force Quality, and the Growth of Nations», *American Economic Review*, American Economic Association, vol. 90(5), p. 1184-1208.
- Hanushek E., Woessmann L., 2007, «The role of education quality for economic growth», World Bank, *Policy Research Working Paper Series*, n°4122.
- Harms P., Lutz M., 2004, «The Macroeconomic Effects of Foreign Aid : A Survey», *University of Saint Gallen Discussion Working Paper*, n° 2004-11.
- Hmamouchi A.C., 2005, *L'évaluation : le parent pauvre de l'enseignement supérieur*, <http://www.rdh50.ma/Fr/pdf/contributions/GT4-5.pdf>.
- Jamison D.T., Lau L.J., 1982, *Farmer Education and Farm Efficiency*, World Bank, Washington DC.
- Jarousse J.P., Mingat A., 1993, *L'école primaire en Afrique. Analyse pédagogique et économique*, L'Harmattan, Paris.
- Johnstone D. B., 2003, *Finance et accessibilité dans l'enseignement supérieur : Droits d'inscription et prêts aux étudiants en Afrique au sud du Sahara*, Etude de cas préparée pour la conférence régionale sur «Amélioration de l'enseignement supérieur en Afrique au sud du Sahara : ce qui marche !», Université d'Etat de New York, Buffalo.
- Jolliffe D., 1998, «Skills, Schooling, and Household Income in Ghana», *World Bank Economic Review*, n°12, p. 81-104.
- Kahyarara G., Teal F., 2006, *General or Vocational Education? Evidences from the Returns to Education in Tanzanian Manufacturing Firms*, mimeo.
- Kazianga H. 2004, «Schooling Returns for Wage Earners in Burkina Faso: Evidence from the 1994 and 1998 National Surveys», *Economic Growth Center Discussion Paper*, n°892, Yale University, New Haven.
- Keith L., 2005, *Seeking secondary schooling in Sub-Saharan Africa: strategies for sustainable financing*, World Bank, *African Human Development Series*, Washington DC.
- Kellaghan T., Greaney V., 2004, *Assessing Student Learning in Africa*, World Bank, *Directions in Development*, Washington DC.
- Keller J., Nabli M., 2002, «The macroeconomics of labor market outcomes in MENA over the 1990's : how growth has failed to keep pace with a burgeoning labor market», *Egyptian Center for Economic Studies Working Paper*, n°71.
- Kremer M., 2003, «Randomized Evaluations of Educational Programs in Developing Countries: Some Lessons», *American Economic Review*, n°93(2), p. 102-106.
- Kuepie M., Nordman C. J., Roubaud F., 2006, «Education and Labour Market Outcomes in Sub-Saharan West Africa», *Dial Working Paper*, n°2006/16, Paris.
- Lassibille G., Tan J.P., 2005, «The Returns to Education in Rwanda», *Journal of African Economies*, n°14(1), p. 92-116.
- Le Houérou P., Talierno R., 2002, «Les cadres de dépenses à moyen terme : du concept à la pratique. Enseignements préliminaires tirés de l'Afrique», Banque mondiale, *Série Document de travail de la Région Afrique*, n° 28, février 2002.
- Martin M.O., Mullis I.V.S., Chrostowski S.J., 2004a, *TIMSS 2003 Technical Report*, Chestnut Hill, MA: Boston College, Center for the Study of Testing, Evaluation, and Educational Policy.
- Martin M.O., Mullis I.V.S., Gonzalez E.J., Chrostowski S.J., 2004b, *TIMSS 2003 International Science Report: Findings From IEA's Trends in International Mathematics and Science Study at the Fourth and Eighth Grades*, Chestnut Hill, MA: Boston College, Center for the Study of Testing, Evaluation, and Educational Policy.
- Michaelowa K., Weber A., 2006, «Aid Effectiveness Reconsidered : Panel Data Evidence for the Education Sector», *HWWA Discussion Paper*, n°264.
- Michaud P.C., Vencatachellum D., 2003, «Human Capital Externalities in South Africa», *Economic Development and Cultural Change*, n°51(3), p. 603-628.
- Mignot A., 2002, *Rapport sur l'enseignement supérieur au Gabon*, http://www.cenarest.ga.refer.org/IMG/pdf/Rapport_Gabon.pdf.
- Mincer J., 1974, *Schooling, Experience and Earnings*, National Bureau of Economic Research, New York.
- Mingat A., Suchaut B., 2000, *Les systèmes éducatifs africains : une analyse économique comparative*, De Boeck University.
- Mingat A., Tan J.P., 1996, «The full social returns to Education : Estimates based on country's economic growth performance», World Bank, *Human Development Working papers*, Washington DC.

- Mingat A., 2003,
«L'ampleur des disparités sociales dans l'enseignement primaire en Afrique : sexe, localisation géographique, et revenu familial dans le contexte de l'EPT», Banque mondiale, *Document de travail du Département Développement Humain de la Région Afrique*, juin, Washington DC.
- Mingat A., 2004,
Questions de soutenabilité financière concernant le développement de l'enseignement secondaire dans les pays d'Afrique subsaharienne, Banque mondiale, *Série Développement Humain de la Région Afrique*, Washington DC.
- Mosley P., Hudson J., Horrell S., 1992,
«Aid, the Public Sector and the Market in Less Developed Countries : A Return to the Scene of Crime», *Journal of International Development*, n°4(2).
- Mosley P., Hudson J., Horrell S., 1987,
«Aid, the Public Sector and the Market in Less Developed Countries», *Economic Journal*, n°97.
- Murimba S., 2003,
«Situation of learning achievement», ADEA, *Papier préparé pour la réunion biennale de l'ADEA*, Paris, décembre.
- Mwabu G., Schultz T. P., 1996,
«Education Returns across Quintiles of the Wage Function: Alternative Explanations for Returns to Education in South Africa», *American Economic Review*, n°86(2), p. 335-339.
- Nordman C.J., Roubaud F., 2005,
«Reassessing the Gender Wage Gap: Does Labour Force Attachment Really Matter? Evidence from Matched Labour Force and Biographical Surveys in Madagascar», *DIAL Working Paper*, n°2005/06, Paris.
- Nordman C.J., Wolff F.C., 2007,
«Is there a Glass Ceiling in Morocco? Evidence from Matched Worker-Firm Data», *DIAL Working Paper*, n°2007/04, Paris.
- Obidegwu C., 2005,
«The Medium-Term Expenditure Framework: The Challenges of Budget Integration in SSA countries», World Bank, *Africa Region Working Paper Series*, n° 82.
- OCDE, 2002,
Education at a Glance, OCDE, www.oecd.org/els/education/eag2002, Paris.
- OCDE, 2004,
Learning for Tomorrow's World. First Results from PISA 2003 / Apprendre aujourd'hui, réussir demain - Premiers résultats de PISA 2003, OCDE, Paris.
- OCDE, 2006,
Regards sur l'éducation: les indicateurs de l'OCDE 2006, OCDE, Paris.
- OIT, 2002,
Women and Men in the Informal Economy: A Statistical Picture, Gender and Employment Sector, Geneva.
- OIT 2004,
A Fair Globalization: Creating Opportunities for All, Report of the World Commission on the Social Dimension of Globalization, Geneva
- Packer S., 2006,
«Joint monitoring review missions in the education sector», *Background paper prepared for the Education for All Global Monitoring Report 2007*.
- Parent D., 2006,
«Youth Labor Market in Burkina Faso: Recent Trends», World Bank, in *Youth in Africa's Labor Market, Vol. II Country Case Studies*, Chapter 4, Washington DC.
- Pasquier-Doumer L., 2007,
«L'analyse globale des secteurs éducatifs africains par la méthodologie RESEN», UNESCO-BREDA, *Note thématique du Pôle d'Analyse Sectorielle en Education*, n°3, avril, Dakar.
- Pascharopoulos G., Patrinos H.A., 2004,
«Returns to Investment in Education : A Further Update», *Education Economics*, n°12(2), p. 111-134.
- Raffinot M., Samuel B., 2006,
«Les cadres de dépenses à moyen terme : un instrument utile pour les pays à faible revenu ?», STATECO, n°100.
- Rapport d'Etat d'un Système Educatif National (RESEN), 2005a,
Le système éducatif de la République démocratique du Congo : Priorités et alternatives.
- Rapport d'Etat d'un Système Educatif National (RESEN), 2005b,
Éléments de diagnostic du système éducatif tchadien. Pour une Politique Educative Nouvelle.
- Rapport d'Etat d'un Système Educatif National (RESEN), 2005c,
Éléments de diagnostic du système éducatif malien : le besoin d'une politique éducative nouvelle pour l'atteinte des objectifs du millénaire et la réduction de la pauvreté.
- Rapport d'Etat d'un Système Educatif National (RESEN), 2006,
Le système éducatif congolais : diagnostic pour une revitalisation dans un contexte macroéconomique plus favorable, mimeo.
- Rapport d'Etat d'un Système Educatif National (RESEN), 2007b,
Éléments de diagnostic du système éducatif mauritanien, mimeo.
- Reuge N., 2004a,
«Mesurer l'avancée vers la scolarisation primaire universelle», UNESCO-BREDA, *Note méthodologique du Pôle d'Analyse Sectorielle en Education*, n°1, août, Dakar.

- Reuge N., 2004b,
«Les profils de scolarisation», UNESCO-BREDA, *Note méthodologique du Pôle d'Analyse Sectorielle en Education*, n°2, novembre, Dakar.
- Rowan B., Correnti R., Miller R.J., 2002,
«What Large-Scale Research Tells Us about Teacher Effects on Student Achievement: Insights from the Prospects Study of Elementary Schools», *Teachers College Record*, vol. 104, n°8, p. 1525-1567.
- Schultz T.P., 2004,
«Evidence of Returns to Schooling in Africa from Household Surveys : Monitoring and Restructuring the Market for Education», *Journal of African Economies*, n°13, p. 95-148.
- Siphambe H.K., Thokweng-Bawena M., 2001,
«The Wage Gap Between Men and Women in Botswana's Formal Labour Market», *Journal of African Economies*, n°10(1), p. 127-142.
- Söderbom M., Teal F., Wambugu A., Kahyarara G., 2006,
«Dynamics of Returns to Education in Kenyan and Tanzanian Manufacturing», *Oxford Bulletin of Economics and Statistics*, n°68(3), p. 261-288.
- Tarantino G.C., 2004,
Imputation, Estimation and Prediction using the Key Indicators of the Labour Market (KILM) Data Set, International Labour Organization, Employment Strategy Department, Geneva.
- Trostel P., Walker I., Woolley P., 2002,
«Estimates of the Economic Return to Schooling for 28 Countries», *Labour Economics*, n°9, p. 1-16.
- UNECA, 2005,
Economic Report on Africa 2005: Meeting the Challenges of Unemployment and Poverty in Africa, Addis Abeba.
- UNESCO, 1998,
«Vers un agenda pour l'enseignement supérieur : défis et tâches dans la perspective du XXI^e siècle à la lumière des Conférences régionales », *Document de travail de l'UNESCO*, ED-98/CONF.202/6, Paris.
- UNESCO, 2000,
Cadre d'action de Dakar : l'Education pour tous, tenir nos engagements collectifs.
- UNESCO, 2002,
Education pour tous : le monde est-il sur la bonne voie ?, *Rapport mondial de suivi sur l'EPT 2002*.
- UNESCO, 2005,
Réforme de l'Enseignement Secondaire : Vers une convergence de l'acquisition des connaissances et du développement des compétences, UNESCO, Paris.
- UNESCO, 2007,
Un bon départ : Protection et éducation de la petite enfance, *Rapport mondial de suivi sur l'EPT 2007*.
- UNESCO BREDA, 2004,
Rapport d'activités en faveur de l'Education pour tous en Afrique sub-saharienne, Dakar.
- UNESCO BREDA, 2005,
Dakar+5 : Education Pour Tous en Afrique : Repères pour l'Action, UNESCO, Dakar.
- UNESCO BREDA, 2007,
«Evaluation des mécanismes de coordination de l'EPT au niveau national à partir d'une quinzaine d'études de cas», *mimeo*.
- UNESCO Bureau Multi Pays Mali, 2006, «Aide mémoire Journées de réflexion sur les cadres partenariaux du 6 au 7 juin 2006», *mimeo*.

