Strengthening of education systems
Strengthening of education systems
STRENGTHENING OF EDUCATION SYSTEMS

A discussion paper prepared for GIZ

Gabriele Göttelmann-Duret (IIEP-UNESCO)
Klaus Bahr (Consultant)

with contributions from
Anton De Grauwe (IIEP-UNESCO)
Florence Arestoff (Université Paris-Dauphine)
the Documentation Centre (IIEP-UNESCO)

in cooperation with
Nils Geissler, Head of Education Section (GIZ)
Karina Frainer, Education Policy Advisor (GIZ)
The views and opinions expressed in this book are those of the authors and do not necessarily represent the views of UNESCO or IIEP or GIZ.

The designations employed and the presentation of the material throughout this review do not imply the expression of any opinion whatsoever on the part of UNESCO or IIEP or GIZ concerning the legal status of any country, territory, city or area or its authorities, or concerning its frontiers or boundaries. The study was financed by GIZ and executed by IIEP experts with the aim to inform GIZ about market trends.

Published by:
International Institute for Educational Planning
7–9 rue Eugène Delacroix, 75116 Paris, France
info@iiep.unesco.org
www.iiep.unesco.org

Cover design: IIEP
Typesetting: Linéale Production
Printed in IIEP’s printshop
© UNESCO 2012
## Contents

List of acronyms 7
List of tables, figures, and boxes 9
Executive summary 11
Introduction 15

1. The strengthening of education systems: A brief conceptual discussion 17
   1.1 Introductory remarks 17
   1.2 Social systems as defined in social science theories 18
   1.3 How can the systems approach help to understand educational development in countries receiving aid? 18
   1.4 What do we mean by the ‘strengthening of education systems’? 19
   1.5 Are SWAps and the SES approach the same? 20

2. Pursuing educational development goals from a system strengthening perspective 23
   2.1 Introductory remarks 23
   2.2 Broadening access and balancing enrolments in education 23
   2.3 Improving quality 31
   2.4 Equity in education 36
   2.5 Main conclusions of the chapter 42

3. Strengthening the policy and management capacity of education systems 45
   3.1 Introductory remarks 45
   3.2 National public sector management reforms 45
   3.3 International frameworks influencing national education planning and plan implementation 49
   3.4 Critical issues regarding capacity development for educational policy implementation and management 57
   3.5 Main conclusions of the chapter 61

4. Do development agencies and governments currently have a ‘systems approach’ to educational development? 63
   4.1 Introductory remarks 63
   4.2 To what extent is the strengthening of education systems a leading concept in current education strategies of international aid agencies? 64
   4.3 System strengthening in national education policy and plan documents 73
   4.4 Main conclusions of the chapter 74
5. Future areas of the strengthening of education systems:
   Conclusions and suggestions 77
5.1 Priority areas of action and research for the strengthening of education systems 77
5.2 International and national framework for future strengthening of education systems 83
5.3 Possible donor points of focus for the strengthening of education systems in the coming years 84

Bibliography 91

Bibliography on ‘International assistance to education’ (2005–2010) 102
List of acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>AFD</td>
<td>Agence française de développement (French Agency for Development)</td>
</tr>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>AUSAID</td>
<td>Australian Agency for International Development</td>
</tr>
<tr>
<td>BMZ</td>
<td>Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung (German Federal Ministry for Economic Cooperation and Development)</td>
</tr>
<tr>
<td>CIDA</td>
<td>Canadian International Development Agency</td>
</tr>
<tr>
<td>DAC</td>
<td>Development Assistance Committee</td>
</tr>
<tr>
<td>DANIDA</td>
<td>Danish International Development Agency</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development (UK)</td>
</tr>
<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>EFA</td>
<td>Education for All</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FTI</td>
<td>Fast Track Initiative</td>
</tr>
<tr>
<td>GIZ</td>
<td>Deutsche Gesellschaft für Internationale Zusammenarbeit</td>
</tr>
<tr>
<td>GMR</td>
<td>EFA Global Monitoring Report</td>
</tr>
<tr>
<td>IADB</td>
<td>Inter-American Development Bank</td>
</tr>
<tr>
<td>IDB</td>
<td>International Development Bank</td>
</tr>
<tr>
<td>IFPRI</td>
<td>International Food Policy Research Institute</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>IWGE</td>
<td>International Working Group on Education</td>
</tr>
<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
</tr>
<tr>
<td>LDC</td>
<td>Least developed countries</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MTEF</td>
<td>Medium-term expenditure framework</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
</tr>
<tr>
<td>Norad</td>
<td>Norwegian Agency for Development Cooperation</td>
</tr>
<tr>
<td>ODA</td>
<td>Official development assistance</td>
</tr>
<tr>
<td>ODI</td>
<td>Overseas Development Institute (UK)</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PASEC</td>
<td>Programme d’analyse des systèmes éducatifs des États et gouvernements membres de la CONFEMEN</td>
</tr>
<tr>
<td>PIRLS</td>
<td>Progress in International Reading Literacy Study</td>
</tr>
<tr>
<td>PISA</td>
<td>Programme for International Student Assessment</td>
</tr>
<tr>
<td>PRSP</td>
<td>Poverty reduction strategy papers</td>
</tr>
<tr>
<td>SACMEQ</td>
<td>Southern and Eastern African Consortium for Monitoring Educational Quality</td>
</tr>
<tr>
<td>SES</td>
<td>Strengthening of education systems</td>
</tr>
</tbody>
</table>
List of abbreviations

Sida        Swedish International Development Agency
SWAp        Sector-wide approach
TIMSS       Trends in International Mathematics and Science Study
TVET        Technical and vocational education and training
UNDP        United Nations Development Programme
UNESCO      United Nations Educational, Scientific and Cultural Organization
UNICEF      United Nations Children's Fund
USAID       United States Agency for International Development
WB          World Bank
List of tables, figures, and boxes

Tables

Table 4.1  Strategic direction and priority goals and levels of the education strategies of selected international development agencies and organizations  64

Figures

Figure 2.1  Share of World Bank lending by sub-sector (%)  25
Figure 2.2  Types of school assessment applied in different country contexts (countries grouped according to average student performance levels)  35
Figure 5.1  Crucial mechanisms for the strengthening of education systems  78

Boxes

Box 1.1  What is a sector-wide approach (SWAp)?  20
Box 2.1  Some conclusions on broadening access and balancing enrolments  30
Box 2.2  Some conclusions on approaching and achieving quality in education  37
Box 2.3  Conclusions on equity in education  43
Box 3.1  Some conclusions concerning public sector management and institutional reforms  50
Box 3.2  Some conclusions on international frameworks influencing planning and management of education systems  57
Box 3.3  Conclusions concerning capacity development  60
Executive summary

This paper discusses current approaches and possible future actions for educational development at national and international levels with regard to their contribution to the strengthening of education systems (SES) as a whole.

An overview of the current situation of education in aid-receiving countries indicates that many of them are still far from reaching the Education for All (EFA) and Millenium Development Goals (MDGs) by 2015. Furthermore, serious imbalances in the overall development of education systems have been observed. Such observations have recently led to increasing interest on the part of certain development partners, in particular the German Federal Ministry for Economic Cooperation and Development (BMZ) and the World Bank, who have declared their intention to place the strengthening of education, in a holistic manner, high on current agendas.

Concepts and theories of social systems help increase understanding of – and potentially modify interventions on – organized action for educational development (e.g. at country level). Indeed, they draw attention to the fact that education systems, like any other social system, are complex, composed of a multitude of interrelated factors that need to be ‘put in concert’ to achieve the system’s goals. They also underline the need for mechanisms of integration across the different sub-sectors, areas, and resources to be managed. Moreover, by underlining the fact that social systems are open systems, they emphasize the need for education systems to respond to and receive support from their social, cultural, and economic environment.

According to the concept adopted here, SES implies enabling these systems to achieve their goals in an effective, integrated, and sustainable way, while factoring in close interaction with their cultural, social, and economic environment.

However, a review of relevant data, research results, and IIEP field experience applying the perspective of system analysis, leads to the conclusion that major education development goals – access/enrolment, quality, equity – are neither pursued in an integrated manner (taking into account that they are interlinked and cut across different levels and sub-sectors), nor in close interaction with the environment of the education system.

Certain regulatory mechanisms appear to play a highly relevant role in combining actions aimed at different quantitative, qualitative, and equity-related goals of education, and maintain effective interaction between the education system and its environment.
Executive summary

One may point out in particular:

- **Planning, monitoring, and information**: These are prerequisites for informed decision-making at all levels; they foster transparency, provided that they are relevant, reliable, and at the same time accessible; and without them no education goal can be achieved in an effective, efficient, and responsive manner.

- **Redistribution mechanisms**: These are used to redress inequities in education, imbalances in enrolment trends across different levels and sub-sectors, and certain barriers to achieving educational quality.

- **Student flow regulation and quality management mechanisms**: These can play a critical role in fostering balanced and affordable enrolment expansion and/or pursuing quality and equity-related goals at the same time.

- **Participation of the main groups of players inside and outside the education system**: This can help ensure that the formulation of all major education goals, objectives, targets, and strategies is responsive to the education system environment (and is, hence, more adequate), and is effectively supported by those involved and/or affected.

- **Incentives and support**: These are necessary to enable and motivate players effectively inside and outside the education system to help attain set goals and objectives.

Many developing countries have engaged in reforms or specific measures to enhance their capacity to manage education systems, in particular medium-term finance planning (MTEF), programme-based and result-based planning and budgeting, sector-wide approaches (SWAp), and targeted budget support. Some of these new management frameworks or tools can indeed help to link objectives, planned actions, and available resources in a more stringent way or to promote more consistent development action, thus contributing to the adoption of a more holistic approach.

However, national capacity for applying these management devices and more generally for policy-setting, planning, implementation, and monitoring, is still often inadequate.

Lessons from reform assessments and practical experience show that attempts to enhance the effectiveness of strategic education system management functions, such as planning, financial, or human resource management (e.g. capacity development), generally require intervention at three different system levels. There is a need to strengthen: (i) individual capacities (i.e. the knowledge, skills, and motivation of individuals involved in the mentioned processes); (ii) organizational capacity (i.e. the capacity of organized entities such as ministries of education, universities, etc.) to contribute to these processes in an organized way; and, (iii) institutional capacity (national regulations, incentives, institutionalized processes of policy-setting and evaluation, etc.).
At the same time, however, it has become more and more widely acknowledged that public sector reforms or capacity development programmes can only be fully effective and sustainable if they take into account the cultural values and social norms predominant in the society at large.

While the need to move towards sector-wide action for educational development (combining international and national interventions) is recognized in strategy documents, with few exceptions most agencies and organizations providing assistance to education do not attempt to conceptualize or advocate for a truly systemic approach. There is also little mention of reinforcing critical system regulation mechanisms as a priority for future action.

Notable exceptions are the World Bank Education Strategy 2020 and the BMZ draft Education Strategy 2010–2013, both of which underline the need for strengthening education systems as a whole. In the case of the World Bank Education Strategy, particular attention is devoted to certain mechanisms for system regulation.

But the strategies of most bilateral and multilateral donors and agencies focus on the promotion of selected goals and particular levels of education. Rarely do strategy documents address the implications, either positive or negative, of strategies aimed at reaching a specific goal for the achievement of other goals (e.g. the consequences of specific quality-improvement actions for gender, social, and geographical equity).

Many aid agencies and multilateral organizations provide and promote support to aid-receiving countries in the form of capacity development programmes in the areas of educational policy-setting, planning, and management. Capacity development activities can indeed play a relevant role in strengthening the overall functioning of countries’ education systems, provided that they are aligned with holistic approaches to attaining the education system’s goals and the surrounding socio-cultural environment.

This paper concludes with a set of suggestions for priority areas for future activities and research, from an SES perspective. These include actions that could be taken by donors at national and international levels, with special attention being given to those areas that emerge from the present analysis as particularly strategic for the functioning and strengthening of educational systems as a whole, namely:

1. **Policy and plan preparation**

Suggested relevant actions relate in particular to:

i. The cooperation of national decision-makers and aid agencies on the improvement of tools and procedures applied for situational analyses, projections/simulations, monitoring and evaluation from an SES perspective when preparing or revising an education sector plan/strategy;
Executive summary

ii. Training and institutional capacity strengthening in modern educational planning and management;

iii. Critical reflection and debate at international level regarding the impact of international targets, indicators, and benchmarking systems on crucial aspects of SES in aid-receiving countries; and

iv. Guidelines, other tools, and training for agency staff to help them work towards SES when participating in the preparation of national education sector strategies and plans.

2. Systemic quality management

Systemic quality management at country level will require in particular:

i. Enhancement of national institutional capacity and professional expertise in measuring and monitoring student achievements and other relevant aspects of educational quality (in particular, non-cognitive learning outcomes and process factors);

ii. Promotion of social consultations and reflective work on the definition of ‘quality’ and quality objectives and targets in the specific national context; and

iii. Support for professional and administrative staff training (curriculum experts, human resource managers, school heads, etc.) in the design and implementation of quality improvement programmes.

3. Knowledge generation and information management

Particular emphasis needs to be placed on:

i. Enhancing the technical capacity of institutions (ministries, universities, specialized bodies, etc.) and their staff for the collection, storage, processing, and analysis of data and other types of information, through training of staff in key information management positions, training trainers, and strengthening training institutions in charge of national capacity development in this area;

ii. Strengthening national research capacity on education system development issues, particularly through the training of research staff in SES critical areas, and national and sub-regional reviews of existing statistical data and non-quantitative information on input-outcome and results processes related to principal education system goals; and

iii. Promoting dissemination of education-related data and information to all national stakeholders, i.e. via user-friendly summary reports, etc.
Introduction

This paper, addressed to the German agency for international cooperation, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ),1 aims to provide information on current approaches and possible future actions aimed at the ‘strengthening of education systems’ (SES) in partner countries. This issue is of central interest to GIZ, which operates as a technical agency worldwide and supports, in particular, the German government in achieving its objectives in the field of international cooperation for sustainable development – including education.

Certain recent trends in both educational development and international cooperation in the field of education have led to greater attention being paid to the strengthening of education systems as a whole, rather than to some of their parts or aspects.

First, it has become increasingly obvious that increasing the speed of educational development is a complex task that cannot be undertaken by concentrating only on certain specific goals. Hence, significant progress has been made, especially over the last decade, towards the provision of access to Education for All – the focus of most efforts. However, serious problems remain with regard to the attainment of other major educational-development aims, including quality and equity in the education provided. Some of the foremost challenges are: the difficulty of enrolling or retaining the children of certain population groups in the school system; the low or mediocre learning achievements of those completing primary or higher levels of education; the persistent and sometimes widening disparities in primary completion rates and progression through the education system; and the lack of school leavers with knowledge and skills relevant for the development of their country. These challenges are particularly severe in countries that still record net basic-education enrolment rates below 60 per cent, that have little scope for boosting their education budgets significantly, and therefore have little chance of reaching the EFA goals by 2015.

Second, many aid agencies have become more attentive to and involved in a shift from micro-level projects to more macro-level general backing of national education and poverty-reduction strategies.

---

1. Since January 2011, the former GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit), DED (Deutscher Entwicklungsdiensst), and InWEnt (Internationale Weiterbildung und Entwicklung) have been merged into the GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit).
Introduction

Since the late 1990s, a number of development partners have shown growing interest in a sector-wide approach to educational development as a response to the need for more coherent and better coordinated cooperation in this field.

More recent calls to ‘strengthen education systems’ (World Bank, 2010a) or to ‘promote education in a holistic manner’ (German Federal Ministry for Economic Cooperation and Development – BMZ, 2010) evoke a systems approach to educational development. This approach, however, seems to have received little attention and consideration in the international arena, until now. The present paper should help to fill this void.

Chapter 1 discusses the concept of ‘social systems’, and makes an attempt to clarify what the ‘strengthening of education systems’ (SES) could mean from the perspective of system analysis, as well as its difference from ‘sector-wide approaches’ (SWAp) to education. According to the concept adopted here, SES implies enabling education systems to achieve their goals in an effective, integrated, and sustainable way, while factoring in close interaction with their cultural, social, and economic environment.

On the basis of relevant findings from research and IIEP’s own studies and experiences, Chapter 2 addresses the following questions: To what extent has educational development in aid-receiving countries been approached in a systemic (or ‘holistic’) way? Furthermore, what could be done from this perspective?

Strengthening entire education systems, not only specific parts or aspects of the system, requires adequate national policy and management capacities. Chapter 3 takes a critical look at recent ways of developing such capacities in developing countries.

In the light of the conclusions of the foregoing chapters, Chapter 4 evaluates current education strategy documents of major aid agencies and national educational development plans. It examines the extent to which they support the idea of strengthening education systems as well as any possible strategies they present.

The paper ends with Chapter 5, which presents conclusions and suggestions concerning priority areas for future SES action and research at national and international levels.
1 The strengthening of education systems: A brief conceptual discussion

1.1 Introductory remarks

Why and how can the concept and approach of ‘social systems’ contribute to international cooperation in education? Before discussing areas of future action and research relating to the strengthening of education systems (SES), a general understanding is needed of what is now meant by education ‘systems’ and the ‘strengthening of education systems’, and how these terms are used by national governments and the international donor community.

The new World Bank (WB) Education Strategy 2020 portrays disillusionment at the limitations of aid focused on specific inputs and activities without considering their translation into results. The document advocates an understanding of the complexities of the education sector and how it really works in countries receiving aid.

Educational investments that focus on building classrooms and school laboratories, purchasing learning materials, or financing teacher training programs expand the educational architecture, enabling it to have the physical capacity to deliver services to more people, but do not necessarily help the education system function more effectively or efficiently. (World Bank, 2010a)

Beyond the World Bank Education Strategy, several recent strategic documents (e.g. German Federal Ministry for Economic Cooperation and Development – BMZ, 2010) or discussion papers (e.g. USAID, 2010) concerning aid for education development emphasize the need to conceptualize and understand the functioning of the education sector (or ‘system’) as a whole.

There seems to be increasing awareness that, as a USAID discussion paper puts it, ‘aid to education reform cannot be effective unless it understands how and why the system actually works’ (Gillies, 2010).

In view of these signs of a renewed interest in the systems approach to educational development, it seems opportune to take a look at the concept of the ‘social system’ as commonly defined in social science theories, as well as the possible meaning that the strengthening of education as a ‘system’ can take in the context of development cooperation.
1.2 Social systems as defined in social science theories

There exists a variety of different theories concerning social systems (Talcott Parsons, Niklas Luhmann, Michel Crozier, and Arnold Mintzberg, to name some eminent exponents). Here, particular reference is made to Talcott Parsons (Parsons, 1951) and his thesis of the key ‘functional necessities’ or characteristics of social systems, summarized and widely referred to as AGIL:

- **Adaptation**: In contrast to most technical systems, social systems are open systems; hence, they interact with their environment for the definition of general system goals, gathering resources from the environment, provision, and redistribution of material and immaterial social benefits.
- **Goal attainment**: To attain its goals, a social system has to set operational objectives and organize actions in order to reach them.
- **Integration**: In order to make all players of the system work towards the set goals and objectives, the values and norms guiding them have to converge and be sufficiently embraced by all.
- **Latency/maintenance**: For social systems to be able to fulfil the above-mentioned functions, they need to build on elements or mechanisms that are integrative over time (values, religion, etc.); such elements or mechanisms generally change only slowly.

Although they may introduce some additional or diverging aspects, many other social system theories share the essential assumptions behind Parson’s AGIL scheme, namely that complex social systems in modern societies are:

- Open (learning from and influencing their environment), and
- Oriented towards certain goals (set in adaptation to their environment).

Moreover, they:

- Require integration (which does not mean that they exclude conflict) to guide action towards the set goals and reduce the complexity of possibilities, and
- Strive for sustainability (which does not mean that they do not change).

1.3 How can the systems approach help to understand educational development in countries receiving aid?

By conceiving the education sector as a social system, the attention of development partners is directed towards certain ‘functional characteristics’ not necessarily given particular weight or systematic treatment when targets and programmes for educational development are set:

- The *complexity, multiplicity, diversity, and interlinkages of factors and mechanisms* that come into play in any attempt to achieve progress in educational development.
Therefore, acting on one single factor (or a limited set of factors) at a given moment does generally not provoke a major change in the education system and its performances.

- The need for integrative mechanisms. Taken in isolation from each other, actions aimed at attaining certain specific educational goals and targets or mobilizing certain specific groups of system actors (e.g. central administrators and external experts) do not magically add up to a coherent overall achievement of the set educational goals. Without integrative mechanisms, setbacks and lack of sustainability are likely to occur.
- The openness of the education sector or ‘system’: The latter does not operate in a vacuum but is part of broader (political, social, cultural etc.) systems, and therefore in permanent need to interact with and ‘learn’ from its environment.
- The tendency of the education fabric to change slowly, both because its complexity raises obstacles to easy changes and because without stability it is hardly possible to receive sustainable support from inside and outside the system.

1.4 What do we mean by the ‘strengthening of education systems’?

Based on these considerations, a well-functioning (‘strong’) education system is one that fulfills well its functional necessities (Adaption-Goal Attainment-Integration-Latency).

Strengthening education systems, therefore, means helping both national and international partners to:

- Ensure effective interaction between the education sector, other sectors, and the different groups of society (e.g. via intersectoral and participatory planning) in order to identify and respond to educational-development needs (examples of such ways and means are: public debates on education reforms, social consultations, research);
- Achieve educational-development goals in a holistic manner, taking into account their inter-connections as well as linkages among the various factors and arrangements required to attain the goals of education systems in a consistent manner across different sub-sectors and levels of education;
- Lead players from both inside (managers, teachers) and outside (parents, non-governmental organizations) the education system towards coherent, integrated action to attain these goals, through incentives, procedures, etc.; and
- Factor a long-term perspective and sustainability concerns into the formulation of education policies and strategies.

While the systems approach has the advantage of drawing attention to the complexity of education systems and their need for regulation and integration characteristics, it should not be forgotten that the systems are actually run by human
beings, and that different individuals and groups may have conflicting interests or views about which goals and objectives are more important, when and how they should be achieved, and who should provide the resources. The strengthening of education systems should therefore also give attention to providing ways and means to express and address diverging interests and conflicts.

1.5 Are SWAps and the SES approach the same?

One may raise the question as to whether international cooperation in education has not already moved towards a systems approach to education sector development over recent years.

Since the late 1990s, many aid agencies have become more critical towards aid via specific projects and more engaged in general support to the overall development of education in aid-receiving countries. The so-called ‘sector-wide approach’ (SWAp) has received increasing attention and support as a possible way to achieve this through new funding and coordination modalities (see section on SWAp for further details).

The new aid architecture, the principles of which are contained in the Paris Declaration of 2005 and the Accra Agenda for Action of 2008, is intended to facilitate the gradual introduction of country-led (instead of donor-led) and sector-wide (rather than piecemeal) improvements of the national development process through the introduction of new aid modalities. These are: sector-wide programme planning, coordinated international funding, and budget and technical-assistance support. This is to be done by placing all donor action solely within the framework of national sector plans and carrying out donor work within national management mechanisms and regulatory frameworks such as national implementation units, national bidding procedures, national budgeting, accounting, and control mechanisms.

Box 1.1 What is a sector-wide approach (SWAp)?

The defining characteristics of a SWAp are that all significant funding for the sector supports a single sector policy and expenditure programme under government leadership, adopting common approaches across the sector and progressing towards reliance on government procedures to disburse and account for all funds.

However, a key lesson from experience is that SWAp is, as the name implies, an approach rather than a blueprint. Most programmes – even quite well established ones – are in the midst of a process to broaden support to all sources of funding, making coverage of the sector more comprehensive, bringing ongoing projects into line with SWAp, and developing common procedures and increased reliance on government. The working definition thus focuses on the intended direction of change, rather than current attainment (Brown et al., 2001).
SWAps are first and foremost a shift in the procedural – but not necessarily in the conceptual – approach to international development cooperation in the education sector. Adopting a sector-wide approach to education development aid is a step towards recognizing the imperative of national ownership of education policies, as well as the need for better coordination among donors and between the latter and aid-receiving countries. However, this does not necessarily mean that the involved parties approach and seek to strengthen the education sector as a system – as defined above. They may still emphasize strategies or projects focusing on certain specific goals or sub-sectors of education and give little attention to interlinkages with other goals and sub-sectors.

The next chapter examines the extent to which the main goals of educational development, currently promoted at the international level, are in actual practice pursued in a holistic (systemic) way – in other words, approaching the education sector and its development as a whole and addressing the interdependence of its parts.
2 Pursuing educational development goals from a system strengthening perspective

2.1 Introductory remarks

Education for All (EFA) as well as the Millennium Development Goals (MDGs) focus on the following three educational development goals:

1. Broadening access to basic education and balancing enrolments across different levels and sub-sectors,
2. Improving the quality of education, and
3. Equity in education.

From a review of relevant data, research results, and conclusions from IIEP’s field experience conducted for the present paper, it emerges that, despite significant progress, these goals are still far from being attained in many developing countries.

The present chapter discusses current open challenges with regard to the achievement of each of the three goals and argues that a systems approach can help to better understand and eventually address the noted setbacks.

2.2 Broadening access and balancing enrolments in education

Introductory remarks

Access to, and to some extent completion of, primary education have improved considerably in the developing world over recent decades thanks to substantial investments and effective policies. However, low-income countries are far from reaching universal primary education (UPE) as measured by primary enrolment and completion rates (World Bank, 2010c; IIEP, 2010b). The EFA Global Monitoring Report 2011 also finds that – despite some progress – the EFA goals set in 2000 remain far from being reached:

- Hunger is holding back progress. In developing countries 195 million children under 5 – one in three – experience malnutrition, causing irreparable damage to their cognitive development and their long-term educational prospects.
- The number of children out of school is falling too slowly. In 2008, 67 million children were out of school. Progress towards universal enrolment has slowed. If current trends continue, there could be more children out of school in 2015 than today.
- Many children drop out of school before completing a full primary cycle. In sub-Saharan Africa alone, 10 million children drop out of primary school every year.
• About 17 per cent of the world's adults – 796 million people – still lack basic literacy skills. Nearly two-thirds are women.
• Wider inequalities are restricting opportunity.
• The quality of education remains very low in many countries. Millions of children are emerging from primary school with reading, writing, and numeracy skills far below expected levels.
• Donors have not met the commitments they made in 2005 to increase aid. Current trends are a source of concern. Development assistance to basic education has stagnated since 2007 (UNESCO, 2011).

At post-primary levels enrolments have risen significantly overall; however, set policy targets and social demand for secondary and higher education are still far from being attained, especially in poor developing countries.

Current patterns of funding tend to contribute to unbalanced enrolments across education systems

In many instances, there are also significant mismatches between, on the one hand, enrolments in different levels and sub-sectors of education and, on the other, the actual social demand and economic need for specific levels and types of education. To a significant extent, such discrepancies are the result of imbalances in the allocation of both external and national funding available for education.

Aid to basic education has been abundant when compared to that flowing to other levels, but assistance has not always been directed where most needed. ‘Donors do not give a high enough priority to low-income countries. In 2008, this group received US$2.05 billion – less than half of all aid to basic education’ (Colclough et al., 2010; UNESCO, 2010a). More generally, countries which do not meet international ‘governance standards’ (in general poor countries) tend to be neglected by international aid and technical assistance while they are most in need of external support (Cogneau and Naudet, 2004).

In sub-Saharan Africa, sustained investment in primary education will be needed to reach the EFA target: an estimated US$16 billion will be required each year until 2015 (IIEP-UNESCO, 2010b).

At the same time, almost everywhere in the developing world – especially in countries close to reaching UPE – the most critical issue is the pressing need to expand post-primary education. Public (national and external) education funding has remained concentrated on primary schooling, neglecting other levels and sub-sectors, especially secondary education.

The World Bank, for example, has increased its investment in primary education since the 1990s, but has only recently raised the share devoted to secondary education (Figure 2.1).
Some European countries including Germany and France have targeted their education aid at post-primary – in fact mainly post-secondary – education. But at least part of this aid has been attributed to scholarships and inter-university cooperation rather than secondary and post-secondary schooling in the countries receiving aid.

Overall, secondary education appears to have been particularly neglected by external aid. In sub-Saharan Africa (the largest regional aid recipient), secondary education received only 11 per cent of total direct aid to education in 2008, while primary education received 30 per cent, and higher education 26 per cent (IIEP-UNESCO, 2010b).

Secondary education has also been largely underfunded by national governments, although there are significant variations from one region of the world to another. Sub-Saharan countries, in particular, devote a very limited share of education expenditure to secondary education (28 per cent) when compared to those in South and West Asia (43 per cent) (IIEP-UNESCO, 2010b).

Yet, there is a growing worldwide consensus that secondary schooling must be expanded in many developing countries, particularly at post-primary/lower-secondary level. There are several reasons:
First, as more countries achieve universal primary schooling, demand for education is moving to higher levels of the education system, and the world is witnessing an explosion of individual and family aspirations for secondary education. Second ... (all countries have an evident interest in) building and harnessing the values, attitudes, and skills of young people through quality secondary education, thus ensuring that they will become active and productive citizens of their communities. Third, economies increasingly need a more sophisticated labor force equipped with competencies, knowledge, and workplace skills that cannot be developed only in primary school (World Bank, 2005).

However, the additional funding required to achieve significant enrolment growth at these levels will be far beyond what many developing countries, especially the poorer ones, can afford. The magnitude of the challenge and the implications of different policy options are demonstrated by Mingat et al. in their presentation and discussion of possible scenarios for post-primary education in sub-Saharan Africa:

In a scenario that combines the most expansive policy for coverage, the more input-intensive of two possible assumptions for service delivery and a 20 percent share of education in overall government spending (and assuming a real GDP per capita growth of 2 percent per year), the resulting aggregate gap in recurrent funding in 2020 for the 33 countries would amount to $29.1 billion a year for post-primary education and $3.1 billion a year for primary education ... Filling the gaps with external funds would imply that 68 percent of total aggregate expenditures would rely on outside sources, which is a very high rate of dependency, possibly an unrealistic one ...

However, even in the most restrictive of these scenarios, the recurrent funding gap is projected at $3.4 billion a year for post-basic education and $5.2 billion a year for basic education, (a 9-year cycle in E5-5. This gives a system-wide total of $8.6 billion a year), while the gap in capital funding for basic and secondary education is projected at $2.6 billion a year. The dependency ratio would be 40 percent if the policies for service delivery were to favor the more input-intensive options and the share of education in total government spending were limited to 20 percent. With more economical options for service delivery, an increase in the share of government financing to at least 23 percent, and restrained expansion of upper secondary and tertiary education, the system-wide recurrent funding gap could be brought down to $6.5 billion a year and the dependency ratio would then fall below 35 percent (Mingat et al., 2010).

Recent studies (Lewin, 2007; Mingat et al., 2010; World Bank, 2005) agree that in most developing countries, especially in Africa and South Asia, significant secondary-enrolment growth cannot be achieved without substantial further investment accompanied by a notable reduction in the current relative unit cost (per student) at this level.

Governments will have to strike a balance between the respective rates of expansion towards enrolment targets at different levels. Their policy choices will be influenced by current patterns (especially the current distance from universal primary education) but also by already set national priorities (e.g. the choice of expanding lower secondary while restricting government-financed growth at upper secondary and higher education levels (Lewin, 2007).
Access and completion at basic education level are largely related to equity and quality issues in education

Although the international donor community has paid considerable attention to primary education over recent decades, there remain significant problems of access and completion at the basic education level. These problems concern specific social groups and relate to both supply-side and demand-side factors.

Disparities in educational supply structures

Significant geographical disparities in the provision of schools, teachers, textbooks, equipment, and administrative and pedagogical support persist in many developing countries. Some areas face difficulties including long home-to-school distances, poor school infrastructures, and limited availability of qualified and motivated teachers. A number of strategies have been adopted to address these issues with some – albeit limited – success: improved school mapping, special incentives for local recruitment of rural teachers, and so on.

However, comparatively little attention has been paid to populations in shanty towns, which are expanding rapidly in many developing countries as a result of often massive urban exodus. Little is being done for the schooling of those populations (IIEP-UNESCO, 2009, quoted in Arestoff, 2011) and little is known about the number of out-of-school children living in such areas. Moreover, attempts to enrol and retain them in some alternative form of basic education are seldom evaluated with regard to their possible upscaling and dovetailing with the mainstream education system.

While new strategies and forms of educational supply need to be developed and implemented effectively, expanding education is not only a matter of schools, classrooms, and teachers: it also depends to a large extent on the social demand for education.

Demand-side factors

Costs

It is widely acknowledged that the direct costs and opportunity costs of education are often so high for the rural and urban poor that their children remain excluded from school or drop out of education (UNESCO, 2010b). As a result, primary enrolment and completion targets – and equity of access to the subsequent levels – are not reached as fast as foreseen by national education plans.

In order to reduce the direct cost of primary education and boost enrolments at this level, some 14 developing countries abolished primary-school fees between 1999 and 2007 (UNESCO, 2010b). The result in most cases was a steep growth in recorded primary-school enrolments. However, there are still pockets of unreached children, most of whom belong to the poorest populations.
Some countries have introduced schemes to encourage those who remain out of school for economic reasons. States including Brazil, India, Indonesia, Mexico, and Pakistan have introduced ‘conditional cash transfers’. Some have initiated transfers in kind, such as the example of school meals in Bangladesh and India. More states, including several East African countries, are planning to introduce these changes. These programmes mainly concern primary schooling, but also extend in some cases to secondary education. Evaluations of such programmes show very positive effects (see Teruel and Davis, 2000, on Mexico). However, certain prerequisites are needed for such targeted programmes to be effective: (i) adequate and reliable information on the target group (their real degree of poverty, their attitude towards schooling irrespective of cost considerations, etc.); and (ii) the capacity to manage these rather complex targeted programmes. In a number of developing countries with large poor populations these conditions cannot be easily met and large-scale, non-targeted incentive measures (school meals, etc.) may then be more appropriate (De Janvry et al., 2001; Lavallée et al., 2009).

Social and cultural factors
Available research also highlights a number of social and cultural factors which explain why certain groups of children stay out of school or drop out early. A summary of relevant related findings and discussions is provided in the *EFA Global Monitoring Report 2010* (UNESCO, 2010b). In summary, however, what is taught has a very significant impact on children's enrolment and retention in school: if what children learn is perceived by parents as largely irrelevant to their expected future economic and social life, or even as running counter to the culture and traditions of the community, there can be strong resistance to schooling.

In particular, girls' participation is influenced by a number of factors: gender stereotyping in the curricula and textbooks decreases attendance, while the availability of teachers sensitive to gender issues, separate toilets, and a safe school environment tend to enhance participation.

For both girls and boys, participation tends to be higher when the parents are literate. Unfortunately, adult-literacy programmes have received relatively little attention and only scarce funding from the international community, although their value in helping to ‘reach unreached’ children is undisputed.

The challenge of adequate supply structures and flow regulation at post-primary levels
While the education strategies and plans of most countries clearly aim to extend basic education for all to eight or nine years of schooling, regulation of access from primary education to the following cycle (upper-primary or lower-secondary according to the system and terminology adopted) remains an open issue. In many countries, the primary
leaving exam still operates as a screening device and generates serious bottlenecks at the transition stage from primary to post-primary.

In most instances, extended basic education for all will also require a serious review of the education on offer at post-primary/secondary level. ‘Secondary expansion without curriculum reform risks irrelevance and wastage. New populations of school children require curricula that address their needs, respond to changing social and economic circumstances, and recognise resource constraints’ (Lewin, 2007).

Even with new, more skills-oriented curricula, general mainstream post-primary education may not be in a position to absorb or attract all groups of children. In many instances, non-formal skill-development programmes, provided by a variety of agencies not under the umbrella of the education ministry, have played a significant role in training the workforce for the informal sector.

Although most of these supplementary learning opportunities do not feature in education policies or sector plans, ... (many) adolescents need to use these learning options for their post-primary learning. Therefore, it is necessary to create a broader definition of immediate post-primary education and learners’ needs and to incorporate TVET [technical and vocational education and training] initiatives into mainstream education planning and provision (Hoppers, 2009).

Lack of systemic and coordinated plan preparation and implementation

Adequate assessment of imbalances in enrolments and corrective action to address them requires several prerequisites: monitoring, research, planning, and coordinated intervention across the different levels and sub-sectors of education and the different sectors of development (health, infrastructure, etc.). These prerequisites are often not fully met. Indeed, educational development plans and policies and international indicative frameworks focus only on certain sub-sectors and levels. Even where national decision-makers and international partners desire comprehensive holistic policies, data and research on the dynamics of enrolments at different levels and in different sub-sectors are generally scarce. In addition, the widely prevalent segmentation of different ministries in charge of the various levels and sub-sectors of education hinders the coordination of planning and implementation (in many countries, up to five or six different ministries are in charge of specific education sub-sectors).
Box 2.1 Some conclusions on broadening access and balancing enrolments

Enrolment ‘imbalances’ across different levels and sub-sectors of education are mainly the result of:

• Insufficient and uneven allocation of funds to education,
• Insufficient consideration of equity and quality aspects when setting quantitative enrolment targets,
• Lack of a systemic approach to educational supply and student flow regulation at post-primary levels, and
• Deficient coordination within the education sector and across all concerned sectors.

Addressing these imbalances requires multi-faceted situational assessments and coordinated corrective action

Expanding enrolment at post-primary level while simultaneously maintaining efforts for universal primary education (where it has not yet been attained) will require more resources from both national and international sources and in some cases the reallocation of public funds, especially towards the lower secondary/upper primary cycle. In addition, many countries will probably need to find effective strategies to reduce the unit cost of upper primary/lower-secondary education, in particular through better utilization of teaching staff, enhanced quality, reduced wastage, and so on.

In order to achieve quantitative targets of educational development it is important to also consider quality and equity-related aspects. The different educational development goals are interconnected and their attainment needs to be approached from a holistic perspective. Indeed, retention and progression in the education system depend to a large extent on qualitative aspects of education such as adequate and gender-sensitive school facilities and textbooks, attractive curricula and, if possible, integration or consideration of local languages in primary level instruction. Retention and progression are also favourably influenced by the literacy level of parents, the enhancement of which can no longer be a marginal objective in education development plans.

Achieving universal access to and retention in primary education (UPE) as well as balanced enrolment increase at subsequent levels is not only a matter of ‘educational supply’; but also to a large extent a matter of social demand (i.e. the behaviour of the population towards education), which is itself influenced by a variety of factors.

Where cost is the main factor preventing poor rural and urban populations from enrolling their children in basic education, adequate measures to reduce all related costs to a minimum (including the opportunity cost) can help attenuate or overcome the problem. In addition or alternatively, specific targeted strategies that go beyond the education sector (including measures concerning food, infrastructure, health, etc.) may provide a solution to the education-related needs and expectations of specific population groups. Such strategies call for better intersectoral planning and coordination.

While cost and economic factors influence educational demand in all countries, the interplay of cost, socio-cultural factors, and the characteristics of the educational offer (applied pedagogy and curriculum, teacher qualification and motivation, school organization and environment, curriculum offer, student selection and tracking, etc.) that shapes educational behaviour and progress is context-specific. More qualitative
2.3 Improving quality

Introductory remarks
The need to improve quality has grown and become increasingly evident as countries, including the least developed, have succeeded in attracting more children to school. Quantitative gains will be of limited effect if children do not learn in school, or if what they learn is of little value to their future lives.

An increasing amount of research is being produced on ways to assess and measure the quality of education and on the factors upon which it depends. The prevailing concept of quality focuses on cognitive skills in maths, reading and writing, language, and science. Life skills and social skills have received significantly less attention in international debates and research, although their importance is recognized by all.

A large number of factors are known to be related to educational quality: the EFA Global Monitoring Report 2005 (UNESCO, 2005) presents an analytical framework on quality, which contains nearly 30 sets of factors that have an impact on student achievement, in terms of acquired skills and values. Each of these factors (such as ‘school governance’ or ‘teaching and learning materials’) can be subdivided again into many more elements. The report also contains a well-argued overview of quality-improvement strategies.

Existing schools of research on the quality of education
Put simply, research on quality improvement can be categorized under three traditions:

- ‘Production-function studies’, which attempt to identify the inputs with the greatest impact on student achievement. Findings from this type of studies (e.g. on the importance of textbook provision or the lack of impact of class size) are sometimes interpreted in a simplistic fashion, especially because some researchers tend to disregard the complexity of the processes involved in transforming inputs into results.
• Somewhat in response to this criticism, other researchers have given more attention to the functioning of the school, either through large quantitative studies (generally referred to as ‘school effectiveness’ research) or through case studies that describe and analyse the process of quality improvement (referred to as ‘school improvement’ research).

• Another category can be termed ‘system improvement’ research: it focuses on comparative analyses of the conditions of quality-related progress of education systems (generally measured in terms of student achievement in major international and regional assessments such as PISA, TIMSS, PIRLS, and SACMEQ). For example, policy-makers may want to know whether their education system has improved, remained the same, or deteriorated. It identifies interesting sets of strategies that systems at different levels of (average) student achievement have used in order to improve (see Mourshed et al., 2010).

This wide range of research has led to conclusions that are sometimes different and even seemingly contradictory (e.g. regarding the impact of teacher pre-service training on the quality of teaching and eventually student achievement levels). However, diverging research conclusions are to a large extent due to the fact that the specific teaching-learning context, in terms of state of school infrastructures, general academic level of teachers, quality of textbooks, school management, and so on, and the specific interplay of factors influencing the corresponding student achievement vary from one country studied – and one stage of national educational development – to another.

**Key conditions for quality improvement**

Notwithstanding the differences between the various schools of research, a consensus emerges on several points.

First, improvement in teaching and learning will not be achieved by investing in one single factor or a few isolated factors. It is now generally recognized that a quick increase in the provision of a single item, such as textbooks, will not necessary lead to swift improvement. Variations in student performance levels between different education systems and different schools cannot be explained by one or several factors taken in isolation, but rather by the interaction of various factors and mechanisms in particular: material, human, and organizational resources; the mechanisms needed for the proper functioning of the system; and the system’s interaction with its environment (parents, local community, employers, etc.). A systems approach can help to enhance the awareness and understanding of the multitude of factors that influence teaching and learning and to consider their interrelationships. It suggests that quality improvement is complex and therefore tends to be fairly slow.

Second, factors that relate to **processes** are of particular importance. Processes serve to transform educational inputs into results through: educational administration,
professional support services and their relationships with schools, the relationships between schools and the community; the internal functioning of schools, and so on. Here, it is important note that some schools perform much better than others with the same level of inputs and resources, and the same is true of different education systems. This can be seen as a positive message: resource constraints are not insurmountable. But it is also a challenging one. Indeed, it raises the following question: precisely what needs to be done to ensure that education systems obtain the best possible results with a specific level of resources?

Third, the importance of processes does not mean that inputs are of no importance whatsoever. A basic level of inputs is indispensable for any system to function properly. Aside from teachers, school resources such as classroom structures, tables and chairs, water, dictionaries, and so on, play a particularly relevant role. Yet in many countries yearly school censuses and surveys, such as those made by the Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ), show that these inputs are still not fully available in many schools (see SACMEQ country reports on the SACMEQ website [www.sacmeq.org] and Saito, 2007). The question which then quickly arises in certain studies is: which inputs make the most difference? Since processes of input transformation play a significant role, this question is very difficult to address and requires complex, longitudinal studies.

According to converging findings in the above-mentioned studies, the minimum package of core inputs needed for any school and/or education system to provide education of decent quality includes: motivated and competent teachers, decent school resources, clear textbooks that reflect a well-integrated curriculum, and sufficient time on task. The need for students and teachers to spend a certain amount of time working together in the classroom has received a lot of attention recently. However, this and the other core inputs are interdependent, in particular process factors. Thus, the fact that a lot of time is lost through teacher absenteeism reflects deeper, complex problems that relate in particular to teacher management, supervision, remuneration, and career. Student absenteeism may, at least partly, be due to their need to work to sustain their family and other such factors that a simple decree on the mandatory minimum number of teaching hours alone cannot solve.

Fourth, the identification of adequate quality-improvement strategies becomes complex and difficult when the diversity of country contexts is considered (and even the diversity of contexts within each country). The same strategy can be very effective in one context and detrimental in another. For instance, giving school leaders more autonomy can improve the effectiveness of schools if those school leaders are well-trained professionals, but it may have the opposite effect if school leaders lack training and qualifications.
Nonetheless, there are a few general core strategies that contribute greatly to quality improvement while also strengthening the overall cohesion of the education system. The next section identifies four core strategies that can serve as general guides to quality improvement.

**Core strategies for quality improvement**

**Developing the professionalism of principals and teachers**

The behaviour of principals and teachers stands at the heart of quality improvement. There is evidence that the best functioning schools and systems have genuine professional corps of teachers and principals. In many developing countries the situation is quite the reverse. The required transformation demands the development of a supportive architecture for school staff that will need to focus on offering a clear curriculum framework, practical tools, and training in technical skills. It also may require strengthening and reorientation of the supervisory services. In systems that are at an early stage of improvement, pedagogical support and control mechanisms are central. Only at a later stage, when teachers have more professional skills, can they be given more autonomy. The role of the supervision service then shifts to promoting professional exchange among peers. Teachers’ professionalism and autonomy go hand in hand.

**Focus on performance, its assessment, and support**

It is precisely when school staff are given more support that demand for performance can intensify. This may be linked to better organized performance evaluation and accountability mechanisms. In addition to the strategic role of regular student achievement assessments over long periods of time, three points are worth emphasizing here.

First, strategies aimed at giving more responsibilities to schools have to strike a balance between control and support. That balance depends partly on the quality of the schools and the resources available within them. Arguably, the transposition of the concept of school evaluation from developed countries, where demand is greater for public accountability, to developing countries and under-resourced schools can have adverse effects. Hence, the school-evaluation strategy that is being propounded is generally not suited to such schools. They need genuine support, not simply pressure.

Second, the focus on performance should involve the entire education system, not only teachers and schools. At each level (central, intermediate, and school), this demands consideration of the core roles each echelon should play in ensuring quality improvement.

Third, as has clearly emerged from a comprehensive study on quality improvement processes in the education sector in different parts of the world (Mourshed *et al.*, 2010), the strategic inputs as well as the modes of control, evaluation, and support that...
can enhance student performance are context-specific and change over time. As an example, Figure 2.2 shows the school accountability tools used by education systems to enhance their quality. In countries, including some developing countries, where student performance levels have improved from ‘poor’ to ‘fair’ and from ‘fair’ to ‘good’, standardized assessments (e.g. student achievement test results) and external evaluation of school performance (e.g. management audits) are considered to constitute the most adequate approach. In contrast, in systems moving towards excellence and where school staff is more professional, self-evaluation seems to be more common and adequate.

**Figure 2.2** Types of school assessment applied in different country contexts (countries grouped according to average student performance levels)

Source: Based on Mourshed *et al.*, 2010.

*Guiding improvement through the more systematic use of information*

Effective accountability and support systems require good (relevant, timely, fairly precise) information. Education systems tend to collect a lot of data, through school censuses, regular administrative and supervision reports, examination results, and so on, but their use in guiding decision-making is limited.

Information on student performance, developed through national or international assessments such as PISA, TIMMS, and SACMEQ, is essential and its analysis gives a
better understanding of the causes of low quality and disparities within countries and schools. Such assessments should ideally make results available quickly. However, this is a challenge with some international assessments, especially when capacity building is involved. Moreover, for many developing countries, setting up a national assessment system may be expensive and technically difficult. The use of national examination results can also be useful, though this may require examinations to be more closely aligned with the curriculum.

However, the challenge is not necessarily – or not only – to collect more information, but rather to use whatever is already available to guide interventions at different levels. In addition, simple performance indicators by themselves are insufficient; they should be accompanied by comparative data (if possible covering longer periods of time so as to gauge progress), and especially by advice on how to improve performance. Without such guidance, disparities will increase.

**Strengthen the mediating layer**

The study by Mourshed *et al.* cited above highlights the importance of a ‘mediating layer’:

> As the school systems we studied have progressed on their improvement journey, they seem to have increasingly come to rely upon a ‘mediating layer’ that acts between the center and the schools. This mediating layer sustains improvement by providing three things of importance to the system: targeted hands-on support to schools, a buffer between the schools and the center, and a channel to share and integrate improvements across schools (Mourshed *et al.*, 2010).

However, in most developing countries, the ministry’s actual outreach to schools is limited and administrations at the mediating levels are weak, as IIEP research has shown (e.g. De Grauwe *et al.*, 2011; Lugaz *et al.*, 2010). As a result, schools tend to feel isolated. This is particularly damaging to remote schools, which are also the ones most in need of support. There is an urgent need to transform the now almost moribund district education offices into genuine drivers of school support and supervision, able to shape policy. Because the resources directed to these offices will remain limited for many years to come, they should give most attention and devote most of their resources, including their professional advice and supervision, to the schools and teachers most in need.

### 2.4 Equity in education

**Introductory remarks**

Education is a basic human right. Yet 72 million children throughout the world are still out of school and an estimated 759 million adults (of whom two-thirds are women) remain illiterate. In most parts of the world, females, ethnic minorities, and populations living in extreme poverty or remote areas clearly have less opportunity than the rest of society.
to acquire the basic knowledge and skills that are essential for full participation in the economic, social, and cultural life of today’s society. This constitutes a serious limitation for both their individual well-being and the overall development of the society they belong to.

**Box 2.2 Some conclusions on approaching and achieving quality in education**

Research and strategies related to the quality of education have focused to a large extent on the assessment and monitoring of cognitive achievements in a limited number of areas, and on possible measures to improve student achievement. While undoubtedly relevant for the purpose of monitoring progress in education, this approach has drawn attention and support away from other crucial aspects of what can be considered the ‘quality of education’, and from possible improvements in areas related to those aspects.

A more inclusive concept of quality and related enhancements has to integrate the practical knowledge and skills and social behaviours indispensable to better living conditions, including health, conflict resolution, environmental protection, productive work, and so on.

Both the concepts of quality and quality improvement strategies in education need to be holistic. Quality improvement in practice has turned out to be complex and depends closely on context-related sets of interventions.

These have to build upon a minimum set of inputs, in particular school infrastructure, teachers, teacher guides, and student textbooks. At the same time, in order to improve the quality of teaching and learning and their outcomes, it is important to work on processes. Processes of particular relevance are those that enhance competencies (training), motivation (remuneration, career prospects, etc.), teacher accountability (assessment, supervision, etc.), and the work of school principals and other professionals in charge of improving management and support, especially at the administrative levels that mediate between schools and central education administration.

Despite a number of drawbacks and remaining obstacles, however, significant progress in access to education has been accomplished. At present, *inequalities in the quality and relevance of the education* that different population groups receive constitute an even more severe challenge for the future.

Available results from international comparative research on student achievements show that in many countries there are large disparities in what children actually know at the end of primary education – according to their socio-economic background. At the same time, however, student achievements can also be considerably influenced by school-related factors, in particular sufficient supply/presence and quality of teachers (see the websites of OECD-PISA, PASEC, SACMEQ, etc.).

The present section focuses on inequalities in the quality of education received by different population groups and possible ways of addressing them.
Equity in education is related to the quality of education provided

In-school learning conditions

Untrained teachers, textbook shortages, and other ‘unfriendly’ learning conditions are most commonly found in poor rural and remote schools. Overcrowded classes, poor or damaged school infrastructure, and lack of community support are rare in advantaged urban areas, but are commonplace in schools of poor, peri-urban districts.

This causes discouragement and underperformance among the affected children, and disgruntlement among their parents. It largely explains their relatively low primary-completion rates.

However, improvement in the learning and achievements of pupils does not systematically figure among the priority targets of international aid agencies. This goal was stated explicitly in only about one-fifth of World Bank education projects. However, the World Bank presently recognizes the importance of investments in learning and knowledge acquisition – not only as a means to improve the quality of the workforce and stimulate economic growth, but also as a strategy for poverty reduction and combating inequity (World Bank, 2010a).

Which measures can be applied to tackle serious inequalities in the provision of proper learning conditions? The answers to this question may vary, particularly according to the proportion and geographical spread of children affected by very poor learning conditions at school (see Arestoff, 2011). Where large pupil populations are concerned, blanket, non-targeted quality-improvement schemes involving the provision of textbooks, school repair, and classroom construction can influence the learning and retention of underprivileged pupil groups, as observed in Ghana (e.g. after the implementation of a major World Bank project that included the measures outlined above).

Where at least a minimum level of required physical and material conditions for learning are available, more pointed action can help deal with social gaps in access to quality education. Measures to enhance the teaching and living conditions of teachers in rural and remote areas, such as teacher housing, teaching aids, special professional support, in-service training, and incentives, can contribute to improving teaching and learning in these generally disadvantaged areas. Strategies like free access to pre-school education and compensatory classes as well as supervised homework can be used to target children from specific underprivileged population groups, such as ethnic or other minorities and extremely poor populations.

However, these strategies will only be effective if the required implementation capacity exists – the availability of necessary data on target groups, the management capacity of the different administrative units, and so on – and if their design and
implementation has taken into account for the broader educational and social context with which they will interact.

**Language of instruction**

There is ample evidence that children in their early years learn best when taught in their home language, with other languages gradually introduced (UNESCO, 2010b; UNESCO Bangkok, 2008). However, around 221 million children speak a different language at home from the language of instruction at school, and many perform poorly simply because they struggle to understand the language in which they are being taught. Children from better-off and educated families in urban areas are generally more exposed to the official language of instruction in their early years and are therefore better prepared for school than those from low-income and less-educated households living in poor areas.

There are no easy solutions to this problem, however. Parents often tend to consider mother tongue instruction as ‘secondhand’ education. Furthermore, the introduction of linguistic diversity will only be successful if: (i) there are enough teachers able to teach in the respective local languages where needed, (ii) curricula are adjusted accordingly, and (iii) adequate textbooks are developed and distributed effectively.

There have been a number of encouraging experiences, particularly in Latin American countries. In Mexico, the retention and achievements of non-Hispanic population groups were improved considerably through a combination of measures including (i) special teacher training; (ii) the development and use of student textbooks, teacher guides, and resources, as well as audiovisual communication support in the indigenous language; and (iii) financial incentives for the targeted parents and local communities (World Bank, 2004).

Effective strategies, like those adopted in Mexico, obviously require significant investments. Another major condition of success is, again, adequate policy implementation and management capacity. These conditions are difficult to find or to create quickly in many low-income countries with modest overall levels of educational management (UNESCO, 2010b). In any case, the implementation of such strategies requires previous research on actual teaching-learning conditions in the classrooms, as well as careful implementation planning, and monitoring. The latter can help avoid painful experiences, such as the bilingual education programme in Mali, which attracted a lot of attention and support in the 1990s, including from international donors, but eventually stumbled over lack of textbooks and other pedagogical tools in the local languages, as well as large classes (Arestoff, 2011).
Provision of alternative pathways to knowledge and skills development

It is not possible to reach all children and adolescents in many countries with the existing school map and offering of mainstream education and training. New ways and means to offer opportunities to learn and develop life skills will therefore be necessary.

‘Second chance’ programmes can make a difference to attempts to combat marginalization. ‘Comprehensive packages that provide training as part of a wider package of skills and support are more likely to succeed … In countries like Argentina, Chile, Peru and Uruguay (they) have been successful in reaching the marginalised’ (UNESCO, 2010b).

More generally, it will be important to better articulate and build bridges between general, technical, and vocational education programmes of different types and at different levels, and to integrate them within the framework of national qualification systems and comprehensive national skills-development plans and strategies.

Poor living conditions affect children’s capacity to fully benefit from education

A number of factors linked to their living conditions and environment prevent many children from benefiting fully from the school education provided. Apart from specific circumstances such as war, natural disasters, and so on, which are not addressed in this document, illness and malnutrition during early childhood (or the mother’s pregnancy) can severely diminish a child’s capacity to learn. In contexts where the population infected with HIV or other serious illnesses is large, many children are orphans, semi-orphans, or have to look after sick family members. As a consequence, they tend to be absent more often from school, drop out early, or perform less well than their peers.

In addition to health care and education, the availability of basic infrastructures such as decent shelter, electricity, and clean water can help to enhance the general conditions under which children live and learn. In other words, the provision of such minimum conditions of decent living must be upgraded, since the children to whom these are denied can hardly be expected to learn effectively and meet national achievement standards.

Unfortunately, reliable demographic data, especially on the population of rapidly growing peri-urban slums, are often lacking, hampering adequate planning and provision of water, sanitation, and health services (IIIEP-UNESCO, 2010a). Above all, uncomfortable choices will have to be made in many resource-strapped countries with little capability of providing basic health, education, infrastructure facilities, and social services across the entire territory.

Besides the systematic mainstreaming of equity concerns into general intersectoral social planning and programmes, there is a need for action targeted to the poorest
groups, combining education, health, and infrastructure-related measures. To some extent, both types feature in current poverty reduction strategies.

Yet despite some progress, various studies (ODI, 2004; Raffinot and Samuel, 2006) have demonstrated a number of difficulties and drawbacks linked to the poverty reduction strategy papers (PRSP) framework for coordinated planning and action across the ministries and institutions concerned. They have also pointed out some serious limitations regarding the democratic participation of all population groups in the preparation and implementation of poverty reduction strategies.

While intersectoral planning and coordination challenges are further discussed in Chapter 4, the following section briefly addresses the possible contribution of participatory educational/social policy processes to the achievement of equity-related goals, and eventually to the overall strengthening of the education system.

**More equity and system strengthening through participation**

Since the late 1980s, many developing countries have adopted a more consultative approach to the preparation of new educational policies and plans, organizing public debate with the main national and international stakeholders on future education policy choices and involving society representatives in working groups set up to develop new education plans. Since the late 1990s, this trend has advanced further, with the involvement of civil society highlighted as a main desired feature in the preparation and implementation of poverty reduction strategies.

One of the main assumptions behind these attempts has been that civil society representatives (including not only parliamentarians, but also teachers and trade unions, employers, parent associations, representatives of local municipalities, religious organizations, women’s associations, etc.) are in a better position than government agencies to identify the actual needs of the different social groups and articulate their expectations. While trade-offs between different interest groups are inevitable, poverty reduction strategies can, in principle, prove more effective. Moreover, greater equity in the provision of educational and other social services is difficult to achieve without consulting the supposed beneficiaries.

The influence civil society can actually exert on social policy targets and strategies depends to some extent on the form of its involvement and the power of those who intervene. Consultations, for example with local communities or special target groups, and participatory research certainly foster better understanding and knowledge of the needs and constraints of different social groups (e.g. when and how children take part in harvesting in rural areas and so miss school). However, such knowledge does not necessarily generate policy objectives and strategies.
Civil society and any of its constituent groups can, in principle, have more influence on education and other social policies through formalized participation, including organized votes, adoption of policy documents, and so on. However, such formal – hence accountable – participation requires that certain conditions be met. Most importantly, participants in civil-society organizations or representatives must be:

- Representative of specific interest groups,
- Legitimate (i.e. they must be publicly acknowledged as representative), and
- Endowed with the analytical and organization capacities needed to take part in policy-making processes.

Effective participation in policy-making processes also requires that participants receive adequate information.

A number of critical studies on the implementation of civil society participation in PRSPs (see synthesis in Arestoff, 2011) show that these conditions are seldom fulfilled, especially in many countries receiving aid. Often, the most underprivileged groups have neither the required information nor the strongest voice to defend their interests effectively, even if participatory processes are in place.

To enhance their level of information as well as their actual participation and influence, effective ‘checks and balances’ mechanisms have to be strengthened or created. Beyond the predominant PRS approach centred on civil-society consultation, stronger processes of government accountability need support.

Existing institutions for government accountability have been largely bypassed in first generation PRS processes in favour of introducing new mechanisms for participation such as focus groups, consultative workshops and PPAs [participatory poverty assessments]. Only sporadic attempts have been made to engage the existing media, parliamentary committees, audit offices, and watchdog bodies in monitoring and holding the government to account for delivering on PRS commitments, or to strengthen their capacity and commitment to fulfil this role (ODI, 2004).

In many aid-recipient countries, the narrowing of disparities in the provision of educational services will require reinforcement of these more powerful ‘watchdog’ mechanisms for holding governments accountable, in particular: democratically elected parliaments, open information, and independent auditing. Some of these mechanisms, in particular auditing and other forms of accountability enhancement, have attracted increasing support from international aid agencies.

2.5 Main conclusions of the chapter

It is important to approach the achievement of major education development goals – access/enrolment, quality, and equity – in a holistic manner and across the different levels and sub-sectors of education because all the processes involved are tightly interwoven.
Box 2.3 Conclusions on equity in education

Effective strategies for greater equity in the provision of quality education cannot be designed without a clear understanding of the precise problems in the specific context studied. For this purpose, the capacity to analyse the functioning of both the education and the social systems is paramount. Such strategies will need to act simultaneously on a variety of factors, in particular:

- Accessibility and affordability of mechanisms of participation for poor and other disadvantaged groups,
- The learning conditions in schools attended by these groups, and
- Their general living conditions and opportunities.

In order to design and implement such strategies effectively, existing intersectoral planning, programming, and budgeting procedures and tools will need to be strengthened in many countries.

The reinforcement of robust social and political ‘checks and balances’ mechanisms (social consultations, parliament, information flows, auditing and other independent control) can help put disadvantaged groups in a better position to participate effectively in educational/social policy processes. Availability of adequate situational assessments and information are another prerequisite for addressing existing inequity in education.

However, more knowledge and consequently research and monitoring is required on: (i) the linkages between the quantitative development of enrolments, quality, and equity in education; and (ii) the interaction of strategies aimed at achieving the respective goals. Such knowledge must then feed back into situational diagnoses, prospective planning, and policy formulation in education.

Intersectoral social planning, budgeting, and coordination mechanisms can foster a more holistic approach to educational development and a better responsiveness to the social environment in the formulation of education goals, targets, and strategies for the future. They can also make for greater effectiveness in the implementation of such strategies by combining efforts from different institutions and groups.

Furthermore, certain regulatory mechanisms appear to play a highly relevant role in the simultaneous achievement of quantitative, qualitative, and equity-related goals of educational development, because they can aid in the pursuit of different goals at the same time. On the basis of the preceding analysis, one can highlight planning, monitoring, and information systems – prerequisites for informed decision-making at all levels that also foster transparency, provided that they are relevant, reliable, and accessible. Without these no education goal can be achieved in an effective, efficient, and ‘responsive’ manner.
Strengthening of education systems

- **Redistribution mechanisms** work to redress inequities in education, imbalanced enrolment trends across different levels and sub-sectors, and certain obstacles to achieving educational quality.

- **Student flow regulation and quality management mechanisms** can play a critical role in fostering balanced and affordable enrolment expansion and/or the pursuit of quality and equity-related goals at the same time.

- **Participation** (in the broad sense of the term) of the main groups of players inside and outside the education system can help to ensure that the formulation of all major education goals/objectives/targets and strategies are responsive to the environment of the education system and thus more adequate, and are effectively supported by those involved and/or affected.

- **Incentives and support** are necessary to enable and motivate players inside and outside the education system effectively to help attain the set goals and objectives.

To some extent at least, such mechanisms are in place in almost all countries. The noted current problems in achieving major educational goals seem to indicate, however, that the existing mechanisms are not always comprehensive enough or fully effective, and that more attention and efforts are needed to ensure improvement in the future.
3 Strengthening the policy and management capacity of education systems

3.1 Introductory remarks

As the previous chapter showed, processes to attain major development goals are closely interwoven and a systems approach can help to better understand and eventually address these goals in a more effective and sustainable way. Certain regulatory mechanisms – research, information systems, sectoral and intersectorial planning, fund (re)allocation, student flow regulation, incentives, consultative/participatory decision-making, and so on – may have a particularly important function in setting major educational development goals in a responsive manner and in achieving them simultaneously.

Governments and aid agencies have, to some extent, recognized the importance of these mechanisms for improving the effectiveness of the education sector (or the public sector in general), and have undertaken a number of reforms in strategic areas: Education Management Information Systems, results-based planning, budgeting and management, civil service reforms, and others. These are known as 'system management mechanisms' because of their influence on the overall management of the education system, rather than on specific and limited parts of it.

This chapter examines the trends and challenges characterizing these reform attempts. Special attention is given to public-management reforms and international frameworks that have affected education sector management in developing countries. The chapter concludes with some reflections on current outstanding issues of capacity development for education system management.

3.2 National public sector management reforms

Public sector management reforms have been undertaken in a number of developing countries over recent years. The majority aim to improve the accountability, effectiveness, and efficiency of resource utilization in the public sector. Primarily, they affect public-finance planning and management (budgeting and budget execution), tax administration, management information and financial control systems, decentralization of resource management, and the civil service. Reforms are often introduced by or in cooperation with international partners. However, countries that receive little or no external development assistance are also engaged in reforms of their public sector. The
education sector is at the centre of these new approaches as the second-largest recipient of public funds (after defence) (see UNESCO, 2009 and UNDP Public Administration Reform website). However, history shows that significant institutional (e.g. legal) reforms are in principle a formalization of profound changes in the social and political sphere. If instigated from outside or above, their implementation has proved to be difficult and largely ineffectual.

**Comprehensive management reforms**

A comprehensive study on public sector management reforms emphasizes that while there is ‘widespread adoption by governments of the language of management reform, there has been generally much weaker implementation’ (Bangura and Larbi, 2006: 11).

This conclusion is in line with the findings of a recent evaluation of reform projects supported by the World Bank and undertaken by the Bank’s own Independent Evaluation Group. It states that:

> despite the continued efforts and some modification of the approach, civil service reform has been relatively unsuccessful. [...] The case studies show that reform in the area of civil service and administrative reform has been extremely challenging, even in a relatively supportive environment (World Bank, 2008: 53).

One reason for the weak implementation of such reforms is **lack of inter-ministerial cooperation** and the fact that the ministry or department in charge of public-management reform often lacks the authority or credibility to enforce reform measures in other ministries. This is partly because the reforms are not planned and implemented together with the sectoral ministries concerned. In these cases, the education sector tends to perceive reform measures as externally determined exercises and, as such, inappropriate to address education system issues.

However, resistance to, or failure of, recent public sector reforms is not merely the result of lack of communication and coordination. The main criticism of so-called imported, ‘modern’ **public sector reform packages** is that they are ill-suited to the existing regulatory framework and broader management culture of the public services of the country concerned. To a large extent, such packages have been introduced in countries on the assumption that their public service is too rigid, too powerful, and a constraint on efficient and smooth operation inside and outside the public sector. The underlying assumption is that the bureaucratic, institutional power of civil servants needs to be offset by stronger **internal** control of their performance, on the one hand, and more forceful **external** control and incentives, on the other (for example, by introducing market-type choice mechanisms and evaluation by beneficiaries of public services – including education). This has been described as a move from old public administration (OPA) to new public management (NPM). However, public administrations in many developing
countries and especially in the least developed nations lack even the characteristics of OPA:

Many of the poorest countries have yet to achieve the OPA stage. They lack a professional civil service and rely a lot on patronage and informal networks. In these circumstances, trying to transform existing bureaucracies along NPM lines may create little more than an empty managerial shell. Countries need to complete the process of building effective OPAs before embarking on NPM (Bangura and Larbi, 2006: 21).

However, some reforms have been relatively successful. These are characterized by strong national leadership, effective consultation and consideration of the different interests of social groups that may support or oppose reforms, and are anchored in change at the grassroots level. Promising initiatives also acknowledge:

- the need to sequence and phase in reforms to meet existing capacity for implementation or to reduce reform ambitions. Given the weak capacities, the approach to reforming the public sector may be to take small incremental steps, starting with the reform of basic incentives that strengthen accountability and improve performance (Bangura and Larbi, 2006: 285).

The impact of public sector reforms takes time to show through, especially if they are comprehensive, technically complex, and require significant changes in habits and attitudes. They risk being inadequate and ultimately ineffective if their underlying values contradict the tenets that prevail in the social environment of the sector. For example, recruitment criteria based exclusively on technical qualifications may be difficult to implement, and consideration of a community-related quota could be more appropriate, if solidarity with the community of origin is a more forceful social value than objectivity or efficiency. Public sector reforms are also politically very intricate: their costs are immediate while their benefits in terms of better service delivery are only visible over the long term.

These findings are corroborated by the results of a comparative study of education reform processes over 20 years in five developing countries:

- The key factors for success have been continuity, adaptation, and time. In none of the cases, however, are specific reforms operating at acceptable quality standards on a national scale. In the rush to scale up in a ‘cost-effective’ way, there is a tendency to look for a formula, instead of recognizing that the human process of developing ownership, strengthening new behaviors, and changing systems is done at province-by-province, district-by-district, and school-by-school levels. The substantive reforms that affect teacher and student behavior require not simply new knowledge, but rather reculturing (Gillies, 2010).

**Results-based planning**

Results-based planning aims to define goals and targets. It focuses on expected output: number of pupils, number of classrooms, budget, and so on. It also focuses on impact
Strengthening of education systems

and outcome over the longer term: learning achievements, levels of skills acquired, performance of teachers, pedagogical quality of the teaching-learning process, relevance of teaching-learning materials, and impact of quality-improvement packages, such as FSQI/fundamental school quality level, on the achievement of major educational goals such as access of social groups to education and gender equity. Expressing expected results in outcome terms is becoming a key feature of education sector plans. It can be considered as a step in the right direction towards strengthening education systems as it provides an approach that connects specific envisaged programmes and activities to the eventual achievement of system goals.

This approach is also a response to the current situation: despite significant quantitative efforts (growth in budgets, number of teachers, classrooms, etc.) and reforms, learning results have remained low, and quality and equity goals are far from being attained. Its purpose is to improve both the effectiveness of resource allocation to meet targets and the long-term impact of education reforms on their environment.

In practice, however, there is little evidence for the (short-term) positive effects of this new approach. First, the public sector organizations that have implemented this approach without major resistance seem to be those in which results-orientation and performance measurement are accepted values and established practices in areas other than results-based planning (Boesen, 2004; Grindle and Hilderbrand, 1995).

Second, considerable methodological difficulties persist in defining the appropriate indicators to measure outcomes and impact. The same is even more true for indicators to measure progress in translating outputs into outcome and outcome into impact (Pollitt and Bouckaert, 2000).

Time-consuming, costly data gathering and monitoring, as well as complex studies are required to measure, inter alia, the contribution of greater textbook provision to higher student achievement, and the contribution of higher student achievement to productivity in the workplace. Research is also required to cast light on the ‘black box’ of input-outcome results relationships and to generate reliable information for results-based planning.

Decentralization

Decentralization reforms shift responsibilities from central to lower levels of government. The aim is to bring the management of education closer to the user and promote community participation in the sector-reform process and the delivery of education services. In most countries the education ministry has established regional, provincial, and district units in charge of the day-to-day implementation of ministry decisions. There is a tendency also to decentralize responsibilities for planning, budget preparation (in some cases budget allocation), personnel administration, and management of physical infrastructure.
Donors increasingly prefer decentralized management to ensure that their support responds to the needs of the user and actually reaches the user, as well as to build decentralized management capacity right down to school level.

In general, however, the ministry retains responsibility for overall student flow regulation and for sector-wide quality and equity issues, such as teacher recruitment and training, curriculum, standard setting, and the examination system.

Sector management entities at central and decentralized levels face a number of challenges which must be overcome in order to strengthen institutional capacity and make decentralization effective:

• Rolling out national plans into sub-national plans (provincial, regional, etc.), ensuring that nationally set targets are translated into sub-national targets, and that the national targets will be reached by the end of the plan period, is a methodologically complex task, particularly in countries with decentralized public sector entities, such as provincial or regional government that have autonomy in matters of education budget allocation, school and administrative personnel management, and school mapping.
• There is a lack of compatibility between planning approaches (process, methodology, tools) applied at central and at sub-national levels, often due to different donors advocating different approaches.
• Central-level administrations tend to decentralize responsibilities without delegating authority.
• Uncoordinated and inconsistent regulations from different authorities (education ministry, interior ministry, local authorities) are common and hamper school-based management and community participation in local system management.
• Certain regulations (e.g. lines of authority to be followed) tend to block effective feedback and use of information resulting from implementation monitoring and impact assessment.
• Shortage of skilled educational planners and managers is even more severe at decentralized levels than at central level.

3.3 International frameworks influencing national education planning and plan implementation

International goals and principles and modalities of cooperation have a considerable influence on national education policies, planning, and plan implementation. Therefore, it is important to discuss how and how much they help strengthen the capacity of national education systems to pursue their goals in an integrated (systemic), efficient, and effective way.
Since the Jomtien Conference in 1990 and the Dakar conference in 2000, international debate on and support for Education for All (EFA), the Millennium Development Goals (MDGs), and to a large extent poverty-reduction strategies, has focused attention on basic education, and primary education in particular. The benchmarks set by the EFA Fast Track Initiative (FTI) further encourage countries that remain relatively far from achieving the EFA goals to allocate most of their education budget to primary education. However, this emphasis on basic education has resulted in an unbalanced, rather than an integrated, approach to the development of education systems.

### Box 3.1 Some conclusions concerning public sector management and institutional reforms

Participation in the design and implementation of institutional reforms by those who are directly concerned is essential, even if it slows the reform process. Those concerned include civil servants themselves, as well as those who pay for, and benefit from, their services.

Comprehensive public sector reforms are bound to remain largely ineffective if their underlying cultural values and social norms are not aligned with those predominating in the society at large. It may make more sense to focus on a small number of essential reforms that can be anchored in changes at grassroots level and to implement them in an evolutive way, rather than to push for rapid, across-the-board, institutional reforms of the public sector.

Results-based planning is a step towards more effective goal achievement in a systems perspective. However, its implementation is hampered by serious methodological and data-related difficulties. Until conclusive research findings are available, which may take years, it is advisable to build on and improve the available information and institutional capacity. A first step in this direction could be the establishment of overviews for each region and possibly for each country of all available quantitative and non-quantitative information concerning the relationships between inputs and the functioning of the education system, on the one hand, and results in terms of learning achievements and achievements of social, economic and cultural goals, on the other.

Decentralization requires: (i) adaptation of the regulatory framework and organizational structures of education sector management to ensure that decentralized entities not only have responsibilities, but also the authority to exercise them; (ii) strengthening of the planning and management capacity of staff at decentralized levels; and (iii) tools (methodology, techniques) specifically geared to decentralized planning and management. These conditions are difficult to meet in a number of developing countries.

Any of the mentioned reform attempts has to take into account the existing administrative capacities, as well as cultural and socio-political factors in favour of or against the envisaged changes.

---

**International education development goals and targets**

Since the Jomtien Conference in 1990 and the Dakar conference in 2000, international debate on and support for Education for All (EFA), the Millennium Development Goals (MDGs), and to a large extent poverty-reduction strategies, has focused attention on basic education, and primary education in particular. The benchmarks set by the EFA Fast Track Initiative (FTI) further encourage countries that remain relatively far from achieving the EFA goals to allocate most of their education budget to primary education. However, this emphasis on basic education has resulted in an unbalanced, rather than an integrated, approach to the development of education systems.
If the majority of donors focus on international goals at country level, that is, on basic education at the expense of other levels and types of education and training, and if governments also concentrate national resources on basic education in order to meet their international commitments, namely quantitative targets as quickly as possible, then sooner or later the education system will become lopsided and post-primary education and the qualitative aspects of each educational level will be neglected.

**Towards a sector-wide approach to educational development planning and support**

Over the last 20 years there have been significant changes in international cooperation in the education sector, which point to a more systemic approach. The main features of these changes are the move from projects to programmes, the sector-wide approach (SWAp), targeted budget support, and the medium-term expenditure framework (MTEF).

The new international cooperation modalities were introduced to serve several purposes:

- Reduction of coordination efforts and transaction costs, thus enabling national-sector management to progress more effectively and efficiently towards attainment of the education goals.
- Increased national empowerment, since donors are supposed to align with the policy priorities and objectives set by government, and the latter is supposed to lead the education sector plan preparation and implementation processes with which donors are associated.
- Integration of external financial and other forms of aid within a systems perspective of national educational development.

**From projects to programmes**

Since the 1980s, programme-based planning and plan implementation within a sector-wide framework has become a common approach for educational development planning. The only exception is so-called fragile countries where the project approach remains a suitable modality for rebuilding education systems. Programme-based planning was developed as a response to approaches that targeted only one or a few elements of the education sector (common in specific projects) without much regard for the remaining components. Narrow targeting uses up considerable resources, but yields very limited progress towards sector goals, and has dysfunctional effects on other components of the system.

Under *programme-based planning and resource allocation*, the planned development of education is expressed in the form of programmes (i.e. clusters of projects). The education ministry has to justify its budget requests on the basis of programmes. Budgets are formulated both in programme form and – within each programme – in the usual fiscal budget form of budget categories. Such programmes...
are set within a sector-wide framework to ensure that the repercussions of each programme on all other major programmes are assessed and taken into account. The totality of programmes has to constitute a ‘feasible balance’. In other words, all programmes have to be accommodated within the sector resource ceiling, and the targets of each programme have to be established in a way that ensures that all targets together enable the sector to progress efficiently and effectively towards the fulfilment of the set education goals.

**Sector-wide approach (SWAp)**

The SWAp was first introduced in the 1990s with the aim of ensuring coherence between donor and government programmes. Under SWAp, education sector donors and government (ministries of education, finance, and planning) prepare and agree on a set of sector-wide programmes integrated into an education sector plan. Donors coordinate their programme actions among themselves and align them with those of the government. Sector-wide programmes include recurrent as well as capital expenditure. The government and donors place the financial resources needed for programme implementation into a common funding ‘basket’ or provide general or targeted financial support to the regular national budget. Implementation of the programme is no longer the responsibility of the donors, but of the government. Implementation monitoring and evaluation is again a joint government–donor task.

However, the reality of SWAp has often been quite different:

- There is often a lack of coherence between national medium-term plans and internationally initiated programmes and goals (poverty-reduction strategies, EFA-FTI, MDG programmes). Priorities and targets differ, timeframes do not match, and donor implementation modalities are not geared to national public sector management systems. Some countries have even had two kinds of education plans running in parallel: the national plan and somewhat separate EFA or MDG-focused plans.
- Donors sometimes influence heavily the process leading up to national sector plans. Although the donor share in the education sector budget is no more than 10 per cent on average, and although policy responsibility for programme objectives and implementation lies entirely with the government, the latter’s position in negotiations with donors tends to be weak. This is because: (a) donor financing is usually the only significant source of funding for innovative and reform actions, while national budget resources are fully absorbed by recurrent commitments, mainly personnel expenditure; and (b) education ministries often do not have the same level of professional capacity as donors, particularly, and understandably, for newly suggested reforms.
- Donor-driven innovative actions absorb national policy and budgetary attention, but cannot be scaled up for lack of national organizational, regulatory, and
budgetary provisions, and because donors do not allow for forward linkages and integration of successful pilots in future sector or sub-sector, donor-supported programmes.

- Different international partners active in the same country propound different approaches to planning and data management, sector reform, and improvement of quality and relevance. This causes confusion and weakens rather than strengthens national planning capacity. One of the related consequences is that the donor providing the most financial support to the sector or to a specific programme tends to become the de facto leading international partner.

- The SWAp process is sometimes used to justify donor interventions that do not actually apply SWAp (with coordinated basket funding or budget support), but in many aid recipient countries frame the majority of all aid-supported programmes and projects. Non-SWAp interventions are placed within a sector-wide or sub-sector-wide framework (e.g. the education plan, the FTI-plan) and justified by the donors concerned as being a contribution to the overall sector plan. However, their interaction with and implications for the overall regulation of student flows, balanced teacher deployment, and budget allocations, according to the system goals, are not considered to be part of the ‘mainstream’ sector plan.

- During plan preparation, the process of setting targets remains a mainly technical exercise. In general, it is neither devised nor organized at the central, critical dialogue phase of the planning process, during which public and non-public stakeholders negotiate priorities, jointly assess implementation feasibility, and build consensus and support for innovations and reforms.

- Sector performance indicators for monitoring are often defined by external experts. Country-specific management features, such as strong management responsibilities of school leaders, are rarely translated into performance indicators or considered in sector performance assessments.

**Targeted external support to national education budgets**

Since the early 2000s, the international development banks and several large bilateral aid donors have provided financial cooperation in the form of direct support to national budgets. This support is earmarked for the financing of activities that aim to achieve specific sector development goals (e.g. EFA-related goals) or cross-sectoral goals (e.g. MDGs, poverty alleviation). This kind of aid modality is one of the principal objectives of the Paris Declaration and the Accra Agenda. Its ultimate purpose is effectively to enhance national empowerment.

The characteristics of targeted budget support can be summarized as follows:

- The government and donors jointly prepare a programme, setting the objectives and targets, and agree on the total budget of the programme and each partner’s share.
Strengthening of education systems

• The total programme budget is included in identifiable form in the government budget as a section or budget line earmarked for the programme.
• The donor share is transferred as a lump sum into the government budget via the same process used for foreign-currency financing of government activities.
• Implementation of the programme and management of the budget is the sole responsibility of the government. Donors do not set up project implementation units, nor are they otherwise involved in the day-to-day management of the programme.
• Government and donors jointly supervise the implementation process and evaluate progress, results, and impact.

New forms of financial planning and medium-term expenditure frameworks (MTEF)

More and more countries are introducing modern forms of medium-term public finance planning. The most common approach is the medium-term expenditure framework (MTEF), initially developed and advocated by the International Monetary Fund (IMF) and the World Bank since the end of the 1990s. Today, it is also supported by the regional development banks (IDB, ADB, AfDB), the European Commission (EC), and major bilateral donors (AFD, DFID, Sida, USAID, etc.), usually as part of governance-improvement programmes. MTEF is driven by the ministries of finance and piloted in sectors with a high share in public recurrent expenditure, typically the education sector, health, and social security.

MTEF is a planning process leading to a multi-year rolling plan for all public sectors. It is expressed in both programme and budget form, and is increasingly formulated in result-oriented terms.

The national education plan informs the MTEF process, which in turn feeds into the annual education budget. While the annual budget (finance act) remains the legally binding document, it is being replaced by the MTEF as the main resource-allocation instrument. The MTEF is the link between the long-term education plan and its implementation through annual budgets. The ministry of finance sets the indicative MTEF budget ceiling for each sector through a transparent negotiation process with all sectors, based on draft MTEF plans prepared by each sector.

Programme budgeting is an essential feature of medium-term expenditure frameworks

In principle, the MTEF approach increases the negotiating strength of the education sector vis-à-vis the ministry of finance (and also the ministry of planning for the investment budget), as well as the autonomy of resource management within the sector. It assures the education sector a foreseeable multi-year, indicative budget level, thereby significantly facilitating the action planning of reforms and long-term programmes. It allows a large measure of flexibility in the sequencing of activities and the use of resources. Through its dual top-down and bottom-up preparation and reporting
process, it increases accountability and transparency. Last but not least, it helps improve efficiency of resource use and effectiveness in both the normal day-to-day functioning of the sector and specific development and reform programmes.

In practice, however, the education sector MTEF is still in its infancy and has encountered a number of institutional and technical-methodological difficulties (see e.g. Raffinot and Samuel, 2006) that need to be overcome in order to strengthen the education system:

- Education authorities at central and sub-national levels are ill-equipped to face the MTEF and SWAp challenges. This puts them at a disadvantage with regard to the finance ministry and major donors.
- Education sector budgets are determined by finance ministries (for recurrent budgets) and planning ministries (for investment budgets) via a negotiation process, which is both technical and political. The education ministry has a relatively weak position in these negotiations because of lack of technical capacity in matters of public finance and state-of-the-art education planning.
- Similarly to results-based planning, MTEF programme budgeting requires country-specific information on input-to-outcome (cause-effect) relations, concerning the teaching-learning process, social demand for schooling and so on. National staff involved in programme budgeting generally lack access to or knowledge of such crucial information, which is often contained in studies and research undertaken by and shared among a restricted group of national and international experts, NGOs, and international and bilateral agencies.
- There is a frequent lack of coherence between the finance and education ministries with regard to the formulation and presentation of programmes. Methodological differences on the approaches used to translate programmes into budget categories also exist.

**New aid architecture**

The so-called ‘new aid architecture’ formulated in the Paris Declaration (2005) and the Accra Agenda (2008) and adopted by all official development assistance (ODA) providers, a large number of non-governmental organizations (NGOs), and the governments of almost all developing countries, sets a number of principles that guide the strategies and programmes of almost all donors. These principles are:

- National ownership, in other words, a nationally driven process of sector policy-setting and policy-implementation planning, supported but not led by international development partners;
- Alignment of implementation of donor-financed actions (programmes, projects) along the system of rules and procedures of the recipient country;
Strengthening of education systems

- Harmonization of donor actions (both designing and implementing actions) with government priorities through budget support;
- A shared focus on development results, that is, consensus among national authorities and their international partners concerning the results (outcomes) to be attained by common action; and
- Mutual accountability, in other words, a two-way formal information flow between national and international partners.

Progress in applying these principles has been slow in the few years since the Paris and Accra conferences. This is most apparent with regard to the issue of country ‘ownership’ of development policies. While the avowed intention is to increase country ownership and strengthen development partnership, the mechanisms put in place by the Paris Declaration may have unwittingly curtailed, rather than increased, the aid recipients’ control of their policies. Several factors could have contributed to this:

- The processes of preparing EFA plans and FTI submissions, MDG implementation programmes, and PRSPs require intense donor involvement at all stages of preparation. The plans also need endorsement by the donors for the requesting country to be eligible for assistance. *Major donor countries or agencies are the final arbiters.*
- The intention of the Paris Declaration is to reduce *conditionality* thereby fostering greater partner/country ownership. In practice, it requires compliance through the application of its 12 indicators. This approach can generate new conditionality packages for disbursement of aid under new mechanisms, such as direct budget support and sector-wide approaches. The criteria for evaluating recipient countries’ governance systems as part of the new aid system are all ultimately determined by the OECD Development Assistance Committee (DAC), working closely with the World Bank.
- The *imbalance of power* between donors and partner countries may have increased. The mechanisms put in place after the Paris Declaration have strengthened the voice and role of donors as they are now more coordinated. At the country level, the asymmetry between the aid-receiving country and its donors and creditors (if they form a united group) is deepened if the national planning and budgeting capacities of the recipient country are weak.
3.4 Critical issues regarding capacity development for educational policy implementation and management

Many governments and aid agencies are aware of outstanding capacity development needs. A plethora of programmes, evaluations, papers, and toolkits (see EFA-FTI, 2008) are now available, but there are few research studies on capacity development in the education sector (examples of recent work include Bethke, 2009; De Grauwe, 2009; De Grauwe and Segniagbeto, 2009; Oulai et al., 2011).

IIIEP’s experience with operational capacity development projects, and results from relevant research all point to three dimensions or levels of capacity development that need to be investigated and addressed when national education systems show serious weaknesses in one or several areas of policy implementation and management. These are:

- **Individual capacity**: the knowledge, skills, and motivation of the people involved in the planning and management processes;
Strengthening of education systems

- **Organizational capacity**: the capacity of organized entities (such as education ministries, their different departments, universities, etc.) to contribute to these processes in an organized way); and
- **Institutional capacity**: the contribution of existing normative laws and regulations and other guiding frameworks (social and cultural values, international standards and procedures) that shape policy implementation and management in the education sector.

Many aid agencies and governments have increasingly invested in individual capacity development programmes, as well as promoting organizational change in education ministries and planning departments, and sometimes even broader institutional reforms or measures (public sector reforms, programme budgeting, etc.). International evaluations of capacity development programmes, like that by the World Bank Independent Evaluation Group (World Bank, 2008), indicate that the effects of many of these initiatives have been rather disappointing. Hence, it is worth finding out which conditions best promote the expected outcomes.

**Capacity development at individual level**

The skills and competencies of individual officers in education administration are often unsuitable and insufficient when compared to the human resource and job requirements. Of course, skill-development needs differ greatly between and within countries. Moreover, they can change over time because of governance reforms. For example, decentralization of planning and management tasks may lead to growing training needs at decentralized levels. Often, the main challenge at central level is not a lack of qualified personnel, but their *effective deployment, utilization, monitoring, and reward*. Training opportunities exist, but depend solely on the offering of a few providers. Furthermore, staff enrolment in training programmes is often neither planned nor organized systematically. Usually specialized national and regional centres that provide training in educational planning and management are unavailable or deficient, thereby perpetuating dependency on foreign providers.

Available evidence suggests that three crucial principles should be applied to ensure the effectiveness of skill-development programmes:

- **Matching posts and staff profiles**: This often involves the training of existing planning and management staff and/or recruitment and training of new staff. However, training existing staff in certain areas and techniques to enable them to do their job better is of limited effect when they can be replaced at any time by other employees whose profile is in no way suited to the post. In educational administrations, low ‘professionalization’ of planning and management staff is a serious problem. In many cases, only a few educational planners belong to a specialized corps with professional training in educational planning and/or
management, because their recruitment and posting are not linked to formally recognized requirements concerning their knowledge and skills in educational planning and management. For educational administrations, this is a severe weakness, which has widespread fallout on the overall effectiveness and efficiency of education systems. Such consequences are, of course, very complex and hard to measure from a methodological point of view.

Nevertheless, investment in training of individuals or teams in core areas and techniques of educational planning and management is not a waste, as it contributes to the strengthening of the overall education system, as long as those concerned remain a part of it. According to IIEP’s own field experience, the existence of a critical mass of well-trained individuals, competent in core areas of educational planning and management, can actually constitute the most important basis for rebuilding or reinforcing education systems, especially in contexts of post-conflict, emergency, and institutional and organizational fragility of the state apparatus. Existing international evaluation studies tend to underestimate or overlook completely the long-term and indirect effects of training individuals. This is because the methodology applied generally focuses on short and medium-term effects of skill-development programmes to improve staff effectiveness in specific workplaces, and/or for the achievement of specific programme objectives. This is because these are the factors that generally interest external funders.

- **Supportive staff monitoring and evaluation**: In many cases, staff evaluation is merely a ritual that has no impact on the staff member’s career. Some form of reward system or measures linked to performance seems to be necessary to maintain high motivation and professional development efforts. But reports on successful measures in this area showing sustainable positive effects are difficult to find.

- **Consistent and sustained professional development**: Many training programmes provided through international support, either locally or abroad, are of limited effect if methodology and contents do not (or insufficiently) take into account the specific needs and working environment of ‘trainees’. Moreover, there is frequently a lack of follow-up once trainees return to their workplace. Sustained capacity building requires a concept of professional development that includes specific training, targeted assignment of trained staff, and ways to spread the new skills throughout the system. Yet few education ministries adopt such a comprehensive approach and system-wide, long-term plans for professional development.

**Capacity development at organizational level**

The effects of individual capacity development depend to a significant extent on the functioning of the organization in which the individuals operate. A complex set of
Strengthening of education systems

Constraints can hinder the organization’s effectiveness, irrespective of the level of individual capacity of its staff. For example:

- Absence of a common vision and disbelief that the organization can make a difference;
- Weakness of normative framework and structure, including distribution of tasks and responsibilities serving to guide the organization’s work through detailed organizational charts and post descriptions;
- Incentives that go against effective and efficient organizational functioning;
- Weakness of organizational accountability.

For any organization, it is fundamental to develop a common vision of the organization's role. Putting heads together, through the involvement of the entire staff, to think about what the ministry, district education office, or even a school can achieve and how best to achieve it, can be a very useful way to unite staff and create a feeling of belonging to the organization. A common vision may be particularly necessary when a ministry is going through a process of transformation.

The development and implementation of a vision must be supported by an appropriate organizational structure and an effective normative framework. For a ministry, for instance, it may be necessary to review and enhance the organization’s structure and normative framework via an institutional audit: identifying the mandate and the main tasks of a specific ministry, examining the internal structure and regulations and their relationship with the mandate, and identifying who is responsible for what and analysing how effectively the tasks are being performed. On this basis, new structures and normative frameworks can be developed. This implies proposing a clear structure for the ministry, which states the tasks of each department or unit; identifying a set of tasks for each unit; proposing a suitable number, and especially profile, of staff for each unit so that it can perform its duties effectively; and developing job descriptions for each staff member of this specific unit. Audits can also help review and enhance communication and collaboration among ministry departments.

**Box 3.3 Conclusions concerning capacity development**

While profound institutional change is difficult to implement, especially under the instigation and guidance of external agencies and specialists, individual and organizational capacity development measures can help to ensure that organizational tasks are performed and specific policy objectives in the education sector are attained effectively and efficiently. Further research is needed to assess the respective indirect and long-term effects of various specific capacity development measures on the attainment of specific results and functional objectives that have been set for the education system in a particular country context.
Organizational improvement depends significantly on the incentives available to staff. Posts in the public administration of many countries are not very attractive. In some contexts, envisaging a change in the culture of the public administration to create greater effectiveness and accountability may be unrealistic – even if normative frameworks and structures are changed on paper. It is likely that these incentives will have to be partly financial, and therefore difficult to implement in contexts of severe budgetary limitations.

3.5 Main conclusions of the chapter

Many developing countries, often under the direct or indirect pressure of international partners, have engaged in ambitious comprehensive reforms aimed at enhancing their capacity to manage education systems efficiently and effectively. However, there is often a lack of adequate system management capacity for policy-setting, planning, implementation, and monitoring, and to ensure effective use of available resources, including international aid.

Lessons from reform assessments and practical experiences show that efforts are generally required at three different system levels in order to enhance the effectiveness of major education system management functions (planning, financial, or human resource management, e.g. capacity development). There is a need to strengthen:

- Individual capacities: the knowledge, skills, and motivation of individuals involved in the mentioned processes;
- Organizational capacity: the capacity of organized entities such as ministries of education, universities, and so on, to contribute to these processes in an organized way;
- Institutional capacity: national regulations, incentives, institutionalized processes of policy-setting and evaluation, and so on.

At the same time, however, it has become widely acknowledged that the underlying cultural values and social norms of public sector reforms or planned specific organizational changes need to be closely aligned with those predominant in the society at large to be effective and sustainable. In the long run, capacity development initiatives that focus on the most crucial system management issues, are consultative in nature, anchored in changes at grassroots level, and implemented in an incremental way, seem to be more effective than comprehensive, top-down institutional sector reforms.
Do development agencies and governments currently have a ‘systems approach’ to educational development?

4.1 Introductory remarks

A few general conclusions emerge from Chapters 2 and 3 for both the authorities of aid-receiving countries and aid agencies interested in promising educational development approaches and measures.

The first one is that specific educational development goals can be attained in a more effective and sustainable way if they are approached from a ‘systems perspective’; that is, by taking into account their interconnections, as well as existing interlinkages, in the development of different levels and sub-sectors of education, and their responsiveness to the system environment.

The second one is that certain regulatory mechanisms are particularly relevant for the overall ‘systemic’ development of the education sector in practice. In particular these include planning and monitoring; social consultations and other knowledge generating processes (development of information systems, etc.); and redistributive, guiding, supportive, and rewarding mechanisms.

Last but not least, capacity development efforts in policy, planning, and management are required in many countries to achieve further educational progress within a holistic perspective. Capacity development efforts will not be effective if they are designed and implemented without clear linkages to the general and specific objectives to be attained by the education system. Moreover, they must give due attention to strategic regulatory mechanisms and be responsive to the system environment. Furthermore, such efforts have to be considered in the specific country context concerned and with regard to their long-term effects.

Whether or not these or similar conclusions may also be found in the current education strategies of major aid agencies is an interesting question that the present chapter attempts to address.
4.2 To what extent is the strengthening of education systems a leading concept in current education strategies of international aid agencies?

**Overview**

A systems or holistic approach to educational development, as discussed in the previous chapters, is only found in the education strategies of a few development agencies. Only the new draft Education Strategy 2020 of the World Bank (World Bank, 2010d) and the new Education Strategy 2010-2013 of the German Federal Ministry for Economic Cooperation and Development (BMZ, 2010) emphasize the systems approach or systems perspective as relevant for future education sector development work. A USAID draft discussion paper also underlines the usefulness of such an approach (Gillies, 2010), but the system concept and approach do not appear in the recently adopted USAID Education Strategy (USAID, 2011).

It is interesting to first take an overview of the main general and specific directions taken by the education strategies of major aid agencies or respective ministries. The main results of a review of strategy papers of major international development-assistance agencies are summarized in Table 4.1 (UN Agencies are not considered here, but their strategy of intervention in education will be discussed in the subsequent sections).

<table>
<thead>
<tr>
<th>Development agency/organization/ministry</th>
<th>Priorities in education strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Development Bank Group (AfDB)</td>
<td>Reforming and transforming higher education systems by:</td>
</tr>
<tr>
<td></td>
<td>• Strengthening national and regional centres of excellence for training in selected priority areas;</td>
</tr>
<tr>
<td></td>
<td>• Building and/or rehabilitating existing science and technology infrastructure;</td>
</tr>
<tr>
<td></td>
<td>• Linking higher education to the productive sector.</td>
</tr>
<tr>
<td>Agence française de développement (AFD)</td>
<td>• Universal enrolment by 2015 (gender equity);</td>
</tr>
<tr>
<td></td>
<td>• Access to productive employment (adaptability to changing labour market through apprenticeships);</td>
</tr>
<tr>
<td></td>
<td>• Capacity building and technical assistance to governments.</td>
</tr>
<tr>
<td>Asian Development Bank (ADB)</td>
<td>• Raising quality of technical and vocational education and training;</td>
</tr>
<tr>
<td></td>
<td>• Expansion of higher quality, more accessible basic and secondary education in poorer countries.</td>
</tr>
<tr>
<td>Australian Agency for International Development (AUSAID)</td>
<td>• Gender equity through improved functioning of education systems (completion of primary education and progression to higher levels of education);</td>
</tr>
<tr>
<td></td>
<td>• Relevance and quality of education, including vocational and technical education.</td>
</tr>
</tbody>
</table>
Do development agencies and governments currently have a ‘systems approach’ to educational development?

<table>
<thead>
<tr>
<th>Development agency/organization/ministry</th>
<th>Priorities in education strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danish Development Agency (DANIDA)</td>
<td>Access to education for women (emphasis on fragile states).</td>
</tr>
<tr>
<td>European Union – European Commission (EU-EC)</td>
<td><strong>Overall strategy</strong></td>
</tr>
<tr>
<td></td>
<td>• Enhance national and international actions to achieve MDGs (12-point MDG action plan) targeting the most off-track countries (LDCs and fragile countries);</td>
</tr>
<tr>
<td></td>
<td>• Ensure balanced development of education systems (goal set in 2002 and confirmed in 2005).</td>
</tr>
<tr>
<td></td>
<td><strong>Priorities at national level</strong></td>
</tr>
<tr>
<td></td>
<td>• Promoting work-related training and higher education.</td>
</tr>
<tr>
<td></td>
<td><strong>Priorities at international level</strong></td>
</tr>
<tr>
<td></td>
<td>• Progressively bring together the timing of national and EU programming cycles at partner country level by 2013;</td>
</tr>
<tr>
<td></td>
<td>• Improve EU division of labour in and across recipient countries;</td>
</tr>
<tr>
<td></td>
<td>• Prioritize action in countries where most progress is to be made;</td>
</tr>
<tr>
<td></td>
<td>• Target actions for the most vulnerable population groups;</td>
</tr>
<tr>
<td></td>
<td>• Use the joint programming framework to share development priorities and objectives to avoid duplication and overlap;</td>
</tr>
<tr>
<td></td>
<td>• Establish a common EU approach for implementing commitments on mutual accountability and transparency;</td>
</tr>
<tr>
<td></td>
<td>• Use the common timing to develop a joint programming framework and European country strategy papers and pluri-annual programmes for education development assistance.</td>
</tr>
<tr>
<td>German Federal Ministry for Economic Cooperation and Development (BMZ)</td>
<td><strong>Overall strategy</strong></td>
</tr>
<tr>
<td></td>
<td>• Education as a key to development.</td>
</tr>
<tr>
<td></td>
<td><strong>Core ideas</strong></td>
</tr>
<tr>
<td></td>
<td>• Overcome educational deprivation as the top priority;</td>
</tr>
<tr>
<td></td>
<td>• Promote education on a holistic basis:</td>
</tr>
<tr>
<td></td>
<td>• Improve the quality of and access to basic education;</td>
</tr>
<tr>
<td></td>
<td>• Further expand vocational education and training;</td>
</tr>
<tr>
<td></td>
<td>• Strengthen higher education and research instead of neglecting the talent available;</td>
</tr>
<tr>
<td></td>
<td>• Replace outmoded concepts with innovative approaches in education;</td>
</tr>
<tr>
<td></td>
<td>• Lifelong learning;</td>
</tr>
<tr>
<td></td>
<td>• Involve all important actors to a greater degree;</td>
</tr>
<tr>
<td></td>
<td>• Cooperate more closely with the private sector;</td>
</tr>
<tr>
<td></td>
<td>• Make education measures more effective;</td>
</tr>
<tr>
<td></td>
<td>• Make education more relevant and more visible.</td>
</tr>
<tr>
<td>Inter-American Development Bank (IADB)</td>
<td>• Early childhood development;</td>
</tr>
<tr>
<td></td>
<td>• School-to-work transition;</td>
</tr>
<tr>
<td></td>
<td>• Teacher quality.</td>
</tr>
</tbody>
</table>
## Strengthening of education systems

<table>
<thead>
<tr>
<th>Development agency/organization/ministry</th>
<th>Priorities in education strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan International Cooperation Agency (JICA)</td>
<td><strong>Overall strategy</strong>&lt;br&gt;• Strengthen educational systems and institutions to improve quality EFA;&lt;br&gt;• Join global initiatives to achieve the MDGs;&lt;br&gt;• Support policy-making by engaging in the planning and implementation process of educational development plans.&lt;br&gt;<strong>Priorities</strong>&lt;br&gt;• Basic education (primary, secondary) and higher education.&lt;br&gt;<strong>In basic education:</strong>&lt;br&gt;• Teacher training, community-participatory school management systems, construction of school facilities by local contractors, and capacity development of educational administrators in central and local governments;&lt;br&gt;• Science and mathematics education and expansion of the human resource base with sufficient scientific knowledge and up-to-date technical skills;&lt;br&gt;• Vocational training in post-conflict countries;&lt;br&gt;• Alignment with national development plans and coordination with other donors to respond to mid and long-term perspectives.&lt;br&gt;<strong>In higher education:</strong>&lt;br&gt;• Support to core universities to lead the higher education sector of their countries and regions;&lt;br&gt;• Focus on engineering, agriculture, and public health sectors.</td>
</tr>
<tr>
<td>The Netherlands (Ministry of Foreign Affairs)</td>
<td>• Until recently: special emphasis on capacity development in education;&lt;br&gt;• Plans for the future: interventions focused on a few countries and sectors — maybe less on education.</td>
</tr>
<tr>
<td>New Zealand Aid (NZAID)</td>
<td>• Assisting core bilateral partner countries to achieve EFA goals;&lt;br&gt;• Post-basic and tertiary education with particular emphasis on achieving gender equality at these levels by 2015.</td>
</tr>
<tr>
<td>Norwegian Ministry of Foreign Affairs</td>
<td>• Achieve EFA goals, in particular gender and quality basic education;&lt;br&gt;• Combating HIV and AIDS, and assisting vulnerable groups;&lt;br&gt;• Public sector reforms (enhancing transparency);&lt;br&gt;• Special focus on countries in emergency situations.</td>
</tr>
<tr>
<td>Swedish International Development Agency (SIDA)</td>
<td><strong>Long-term partnership and development approach with a focus on:</strong>&lt;br&gt;• EFA, in particular gender equality;&lt;br&gt;• Humanitarian assistance.</td>
</tr>
<tr>
<td>UK Department for International Development (DFID)</td>
<td>• Access to basic cycle of primary and lower secondary education, with an emphasis on fragile states;&lt;br&gt;• Quality of teaching and learning, particularly for basic literacy and numeracy;&lt;br&gt;• Skills development for young people.</td>
</tr>
</tbody>
</table>
Do development agencies and governments currently have a ‘systems approach’ to educational development?

<table>
<thead>
<tr>
<th>Development agency/organization/ministry</th>
<th>Priorities in education strategy</th>
</tr>
</thead>
</table>
| US Agency for International Development (USAID) | • Improving reading skills for 100 million children in primary grades by 2015;  
• Improved ability of tertiary and workforce development programmes to generate workforce skills relevant to a country’s development goals;  
• Increased equitable access to education in crisis and conflict environments for 15 million learners by 2015. |
| World Bank (WB) | **Overall strategy**  
• Strengthen education systems through reforming governance and management (pedagogical, resources, and policy) to make the system work effectively and efficiently towards achieving national education goals (quantitative, qualitative, and social).  
**Priorities at national level**  
• Increase physical capacity of the education system to increase enrolments at all levels;  
• Support education reforms which strengthen the system’s capacity to achieve learning goals;  
• Support building, dissemination, and use of knowledge base to underpin policy and planning;  
• Strengthen management capacity to increase effectiveness of government resources and aid financing.  
**Priorities at global level (international and national)**  
• Development and dissemination of knowledge base to support system-wide approach through: (i) reliable and comparable data on performance of the functioning of education systems and learning outcomes; and (ii) analytical and practical evidence and know-how about policies and programmes that effectively improve the functioning of education systems. |

On the basis of this review it is possible to distinguish three main different views on how the different agencies aim to support educational development in aid-receiving countries:

- **Position 1**: Educational development has to be approached from a holistic or systemic perspective (BMZ, 2010; World Bank, 2010a).
- **Position 2** (sometimes combined with position 3): The best possible contribution to educational development lies in focused support to specific levels or development goals of education (bilateral agencies like DFID, JICA, and also the so-called ‘new development partners’).
- **Position 3**: To promote educational progress in countries receiving aid, priority must be placed on the development of national capacities in educational policy-setting, planning, and management. The European Union, European bilateral aid agencies (e.g. AFD, SIDA, and Norad), USAID, and also UNESCO fall into this category, as do,
Strengthening of education systems
to some extent, UNICEF, the World Bank, and non-governmental organizations (NGOs) like Oxfam and Education International.

**Strengthening education systems as a whole**

Of all the multilateral and bilateral donor agencies, the World Bank in its recently adopted Education Strategy discusses the system concept and approach to educational development in the most explicit way. According to a strategy paper (World Bank, 2010d), the ‘education system’ includes:

- All formal and non-formal ‘learning opportunities … available to children, youth, and adults, … provided and/or financed by the state or by non-state entities’ (private individuals, private enterprise, community organizations, faith-based organizations, etc.);
- Its beneficiaries and stakeholders: students, trainees, their families, communities, employers;
- The rules, regulations, policies, resources, and financing mechanisms by way of which the education system operates.

The教育 system is seen as:

a complex network of participants (government agencies, public and private providers, individuals, communities, and organisations) concerned with the provision, financing, and regulation of learning services and the functional and power relationships and accountability mechanisms that connect them (World Bank, 2010d).

This clearly reflects a systems approach in which the economic (service delivery), political (power relationships), managerial, and financial rationales predominate. Other rationales that commonly operate in education systems appear to be neglected; for example, culture (values, beliefs, and traditions) and social cohesion (e.g. norms shared by certain groups of society).

The World Bank is particularly interested in making sure that the educational development goals set in aid-receiving countries are effectively and efficiently attained. Education systems are seen as ‘strong’ if they have precisely the capacity to achieve their goals in an efficient and effective manner. Its Education Strategy 2020 underlines ‘the importance of getting governance arrangements, financing, incentives and accountability mechanisms, and management tools aligned with educational goals’ (World Bank 2010d).

Among the mechanisms and arrangements deserving special attention, the World Bank Education Strategy mentions in particular the following:

- ‘Policy formulation, standard setting and quality assurance, planning, financial management, student assessment, human-resource management, and intergovernmental and external partnerships’; and
Do development agencies and governments currently have a ‘systems approach’ to educational development?

- ‘Data and knowledge that can support evidence-based policy-making,’ in particular concerning the relations between inputs and outcomes of the education process and the management of the system.

Because little is actually known about the links between these system mechanisms/arrangements and the attainment of educational goals, the World Bank Education Strategy 2020 puts ‘knowledge generation and policy debate’ and the development of a ‘global knowledge base on educational reform’ among the top priorities for future action aimed at strengthening education systems.

It is interesting to note and maybe discuss that, while emphasizing the relevance of strengthening education systems as a whole, the World Bank Education Strategy continues to set different priorities in terms of goals and levels to be targeted for its support to different country groups: ‘countries in fragile situations’ (where the building, running, and improvement of education sector management is considered to be the priority); ‘low-income countries’ (where access to education and balanced expansion of learning opportunities are given priority); and ‘middle-income countries’ (for which equity of learning opportunities and development of relevant skills for economic competitiveness are seen as top priorities).

A holistic approach to future educational development action is also emphasized in the recent draft strategy paper of the German Federal Ministry for Economic Cooperation and Development for the education sector:

> We take a holistic view, which is why we aim to strengthen entire education systems. In future we will no longer promote individual parts of the education system in isolation, but will always incorporate the links to other parts of the system (BMZ, 2010).

The German agency for international cooperation, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), also emphasizes the need for balanced development cutting across different levels and sub-sectors of education in aid-receiving countries in a policy paper entitled ‘Zukunft durch Bildung’ (A future through education). Consolidation of institutional capacity for education policy and planning constitutes another declared priority objective (GTZ, 2010).

France’s Development Agency (AFD) adopts a similar perspective (AFD, 2010). However, while moving towards a more holistic approach, both German and French development cooperation point out certain educational development goals or sub-sectors as particular foci of their education strategy.

It is also interesting to note that a recent USAID draft paper on ‘Aid Effectiveness and Education System Reforms: A Systems Approach,’ also underlines (similarly to the World Bank Education Strategy) the usefulness of the systems approach in international cooperation, and highlights the strategic effects of certain regulatory mechanisms on the functioning and results of education systems, that is:
Strengthening of education systems

the flows and feedback mechanisms, and the rules of the game that affect the relationships. These may include examinations, standards, admission processes, teacher selection and promotion process, or financial flows. Information is an important connector and point of leverage (USAID, 2010).

However, such an approach has not been integrated into the formally adopted USAID strategy for education.

Strengthening education systems by promoting specific educational development goals or levels

Many bilateral and some multilateral aid agencies focus on promoting specific priority goals, such as access to basic education, education quality – especially literacy and numeracy – gender equality in education, and the development of relevant skills for productive work. (They also often give attention to capacity development in policy-making and management.)

In spite of this, the education strategies of most ministries or agencies of donor countries do not emphasize areas of intervention, levels (e.g. secondary education), or mechanisms (social consultation, examination/assessment systems, flow regulation, planning, etc.) which the preceding analysis found to be strategic for the overall strengthening of education systems (SES). This general statement needs to be nuanced, however.

First, apart from the World Bank, few bilateral agencies have taken initiatives towards strengthening education systems as a whole or targeting areas crucial to SES. BMZ with its new draft education strategy is among them, however, and has placed a particular emphasis on the strengthening of education systems as a whole and on mechanisms which emerge from the present paper as crucial for system strengthening. These include enrolment regulation across different levels, comprehensive and (if possible) systemic quality management, and articulation between the education sector and its social and economic environment (see BMZ, 2010). Although system strengthening does not appear as a key concept or idea in the current education strategies of UNESCO or the AFD, both organizations support areas of national capacity development that have a strategic role in strengthening education systems as a whole, in particular education sector analysis, planning, and monitoring.

Second, certain agencies emphasize specific goals (e.g. quality improvement), levels and sub-sectors, or specific areas of educational development that they wish to support over the coming years. This may be a response to the fact that, in practice, when it comes to drawing up national education sector strategies and plans, individual donors cannot be active in all areas of education at the same time (i.e. over the same plan period), and therefore prefer to back specific goals, areas, or levels.
Towards strengthening of policy-making and system management capacities

A third group of agencies, which overlaps with the previous two, places special attention on the strengthening of educational policy-making and management capacities. (An area also mentioned as highly relevant by agencies of the first group.) The OECD Development Co-operation Report 2010 (OECD-DAC, 2010) focuses on the strengthening of regulatory mechanisms at country level important for effective international cooperation. Under the DAC concept:

- particular attention is paid to country mechanisms to manage aid through national procedures, that is, ... national arrangements and procedures for public financial management, procurement, audit, monitoring and evaluation, and social and environmental procedures ... statistical systems, analytical work and technical assistance management (OECD-DAC, 2010).

The education strategies of most bilateral agencies (DFID, JICA, Norad, Sida, etc.) broadly emphasize the need for capacity development in education sector management. They support the strengthening of essential management functions such as pedagogical management including teacher training, curriculum, standards, exams and so on; resource management including personnel, physical infrastructure, finance; and policy management such as target-setting, planning, stakeholder involvement. At the same time, they pursue the promotion of specific education-related development goals like EFA, gender parity in education, and poverty alleviation.

Similarly, a number of international agencies, in particular UN organizations (UNESCO, UNICEF), Sida, and NGOs such as Oxfam and Education International, have also underlined the importance of capacity development in education policy, planning, and management. They also give special attention to the interaction between education systems and their environment, and the principle of sustainability and responsibility towards future generations.

The three guiding principles of UNESCO’s strategy for education are to:

- Promote education as a fundamental right through EFA and policy reforms to advance the right to education, and empowerment of the poor;
- Improve the quality of education and the diversification and promotion of universal values; and
- Foster innovation and the sharing of information.

UNICEF directs its education strategy towards early childhood, girls, and an intersectoral approach to educational and social development. In some of its statements, the organization points out the tension inherent to its approach, which focuses on education as a human right and necessarily requires action aimed at specific population groups and particular areas of the education sector.
Strengthening of education systems

There is often a need to focus on specific interventions for excluded, marginalised and disadvantaged groups. It is through such interventions that we learn valuable lessons of what works under certain conditions. At the same time, however, it is clear that in the long run the right to education is best served within quality education systems (UNICEF, 2006).

Next to the World Bank, it is likely that the EU-EC will play a leading role in the development of education over the coming years. The Commission and EU Member States are major supporters of education in over 140 developing countries and the EU collectively accounts for almost 60 per cent of total (DAC) aid commitments to education. Therefore, it is useful to examine more closely the major aspects of the current EU strategy for development cooperation in education.

The EU-EC education strategy as such is not formulated in a single document; it is contained in several documents that together represent the strategy. These usually take the form of communications from the Commission to the Council, the European Parliament, the European Economic and Social Committee, and the Committee of the Regions. The main documents that guide the present EU-EC policy on education development assistance and actions and set the strategy for the coming years include: the Communication of March 2002 on Education and training in the context of poverty reduction; the Communication of October 2005 on Speeding up Progress towards the MDGs; and the Communication of April 2010 on a Twelve-Point EU Action Plan in Support of the Millennium Development Goals.

The EU-EC will pursue various main lines of action in the coming years: at national level through direct support to recipient countries, and at international level by coordinating efforts among EU member countries and through its participation in international development cooperation fora such as DAC and initiatives like the Fast Track Initiative (FTI) Catalytic Fund. These are as follows:

- Improving quality: teaching-learning processes, learning achievements, school-based management, teacher training, teacher management, curricula, and teaching-learning materials;
- Improving relevance to employment and labour markets: teaching-learning processes, curricula, materials, exam-system developments; strengthening links between schools and the world of work;
- Increasing access: identification of social, economic, and cultural barriers to access and development, and application of measures to overcome them;
- Skills training for out-of-school youth;
- Aligning education sector management with public sector reform and decentralization;
- Technical planning and management capacity at central and decentralized levels, adapting regulatory frameworks, strengthening the capacity of education...
ministries in financial management and educational planning and implementation monitoring;
• Improving the information base for planning, especially in planning for quality, and education sector monitoring to ensure better education service delivery and outcomes;
• Expanding the range of funding possibilities: wider use of budget support for sector support, pooled funds, project and technical support; MDG contracts; exploration of innovative sources of finance such as public-private partnerships;
• Enhancing use of country management systems for implementation of budget-support programmes;
• Improving conditions for predictability of aid to the education sector to honour commitments made over a certain period in accordance with the intended result (e.g. rolling commitments that give the education and finance ministries a more predictable longer-term horizon within which to plan and coordinate with PRSP cycles); aligning disbursements with needs; and
• Increasing efforts to cut high transaction costs of education aid for partner governments by reducing fragmentation of aid, duplication of efforts, and conflicting approaches to the same issue.

Most of the above-mentioned items relate to the strengthening of national capacities for education sector policy, planning, and management.

4.3 System strengthening in national education policy and plan documents

A review of national education sector strategy documents (sector and sub-sector plans) included in IIIEP’s Planipolis database reveals that the terms ‘education sector’ and ‘education system’ are often used interchangeably. National strategies present the education sector as:

• Responding to the needs of its (social, economic, natural, etc.) environment, which it aims to serve, from which it draws resources, and which it aims to change through poverty reduction and relevance to economic development;
• Geared towards achieving goals and targets (enrolment, quality, and equity) with the help of specific organizational structures, such as ministries of education, and other governmental and non-governmental organizations, and regulatory mechanisms (rules, procedures, budgets);
• Consulting and bringing together a variety of stakeholders; and
• Aimed at sustainable provision of education. In other words, education is conceived as a long-term mission to be fulfilled on the basis that it is a human right and has both integrative and inter-generational functions for society as a whole.
4.4 Main conclusions of the chapter

The preceding analysis shows that while the education strategy documents of most international development agencies place their intervention within the perspective of sector-wide educational development, they do not emphasize the strengthening of education systems as a whole. Moreover, most of the areas that emerge from the present analysis as key to system strengthening are not among the priority areas for support mentioned in these strategies. The two exceptions, to some extent, are the World Bank Education Strategy 2020 and the BMZ Education Strategy 2010–2013.

The strategies of most donors and agencies, especially those operating at the bilateral level, focus on the promotion of selected goals and particular levels of education. Given their necessarily limited resources and intervention capacities in international cooperation this may not not be surprising. However, the fact that the strategy documents do not even discuss the positive or negative implications of the promoted goals and related strategies for the achievement of other national educational goals (e.g. consequences of specific quality-improvement strategies for gender, social, and geographical equity) provides some food for thought.

Similarly, a number of donors and agencies promote aid in the form of capacity development programmes in the areas of policy-setting, planning, and management. Such programmes can eventually contribute to strengthening the overall functioning of national education systems, but more context-specific research and work is required to
Do development agencies and governments currently have a ‘systems approach’ to educational development?

better understand and promote their contribution to the overall strengthening of the targeted education system.

Because governments have the responsibility to consider and serve diverse views and interests, and to achieve the set targets in as efficient a manner as possible, national education strategies and plan documents often adopt a more comprehensive view of educational development (covering a variety of goals, sub-sectors, areas, etc.) than do most strategy papers of aid agencies. However, the complex linkages and potential contradictions between certain targets and the strategies set to achieve them are generally not tackled.

Suggested education sector management reforms rarely refer to the mentioned regulatory mechanisms, which are particularly crucial for effective goal attainment and efficient functioning of the education system.

In conclusion, the need to move towards more coherent and comprehensive action for educational development (combining international and national interventions) is widely acknowledged in the strategy documents of both agencies and governments. With few exceptions, however, neither agencies nor governments conceptualize or advocate for a truly systemic approach. Moreover, only in exceptional cases is the reinforcement of critical system regulation mechanisms recognized as a priority for the future.
5 Future areas of the strengthening of education systems: Conclusions and suggestions

This section starts by drawing together some major conclusions from the preceding chapters, and suggests priority areas for future development activities and research from the strengthening of education systems (SES) perspective. The suggestions include actions at national and international level with special attention to those that could be undertaken by donors over the coming years.

5.1 Priority areas of action and research for the strengthening of education systems

The present paper has pointed out that a systems approach can help to better grasp – and eventually act upon – the existing interlinkages between different actions aimed at achieving major educational development goals and conducted in different educational levels and areas. It also draws attention to the necessary responsiveness of education systems to their environment.

Such an approach can contribute to an enhanced understanding of the actual functioning, achievements, and setbacks of education systems. However, there is currently little discussion at the international level on the strengthening of systems of education as an alternative to the more commonly practised promotion of certain sub-sectors, specific goals, or areas of education. This may prove surprising, taking into account the increasing concern for sustainable and sector-wide development in education and other sectors, and may need to be addressed in the future.

From the analyses carried out for this paper it emerges that certain mechanisms or areas are particularly relevant when preparing and implementing policies or programmes aimed at major educational development goals and when managing the education sector. In particular:

1. Those establishing *linkages between actions* aimed at different educational development goals and objectives (e.g. policy preparation and planning, budgeting, and management by objectives);
2. Those *redistributing financial, human, and other resources* to address inequities and inefficiencies in pursuing major development goals (budgeting, financing policies, human resource management, etc.);
3. Those *integrating* action across different levels/sub-sectors and areas of intervention (student flow regulation through selection and guidance systems, quality
improvement across different levels and sub-sectors through comprehensive quality assurance and quality management systems;
4. Those facilitating effective interaction with, response to, and support from the environment of the education system (consultative mechanisms, etc.);
5. Country-specific information bases and research to generate adequate knowledge on the functioning of education systems, how their goals and objectives are being set and eventually attained, and how sustainable progress can be made;
6. Capacity development for education system management, particularly through staff training and incentive systems.

**Figure 5.1 Crucial mechanisms for the strengthening of education systems**
It is to these areas that agencies and organizations interested in strengthening national education systems as a whole (and not only certain of their sub-sectors or areas) need to give more attention and support in the future. Each of the mentioned areas or mechanisms can make a strategic contribution to strengthening education systems and deserves in-depth reflection on possible action to be taken at country and international levels in the future.

However, in the limited framework of the present paper, some conclusions and suggestions have been elaborated only for three of these areas, namely areas (1), (3), and (5) mentioned above. Complementary discussions and recommendations relating to these and the other strategic areas are required.

**Area 1: Focus on policy and plan preparation**

The preparation of policies and plans can play a particularly relevant role in addressing the interconnections between various educational development goals and the strategies across different levels and sub-sectors leading to them. There are other processes or mechanisms through which such interconnections can be established, such as the aforementioned preparation of education budgets or ‘management by objectives’ in particular. But these processes presuppose that adequate objectives and targets have been set and appropriate policies and strategies for achieving them been identified and accepted. This justifies the special interest taken in educational policy and plan preparation in the section hereafter.

**Main conclusions and priority issues**

The preparation of a five-year or 10-year plan for the education sector is an opportunity to address educational development from a SES viewpoint; that is, from a holistic and open, consultative perspective. In practice, however, major SES aspects are often overlooked, as has emerged from previous analyses in this paper.

Educational planning and policy preparation often have a number of shortcomings from the SES standpoint, in particular the following:

- The situation analysis or diagnosis undertaken prior to the formulation of the plan/strategy often disregards the articulation between quantitative and qualitative developments taking place at different levels and in different sub-sectors of the education system. Furthermore, situation analyses rarely include assessments of current policy aims and related objectives from a range of different – and possibly conflicting – social viewpoints, even though these might be relevant for the formulation of a new sector development strategy or plan. This current state of affairs is due to several factors, in particular:

  - The widespread focus of current education sector strategies/plans on certain levels and/or sub-sectors, in particular primary education over the
last decade, and on a few specific goals – access, retention, improvement of student achievement, gender equity – mainly influenced by international development targets, benchmarks, and aid flows.

- Very limited time spent on situation analysis, compared to the programming phase.
- Minimal knowledge regarding interactions between strategies aimed at different, concurrent goals and targets.
- Budgetary and monitoring frameworks attracting priority attention to easily quantifiable targets and results.

- The formulation of policy/plan targets and related implementation strategies/programmes tends to proceed by level or sub-sector and goal or problem area (access, quality, equity): targets and strategies are seldom chosen or justified with reference to existing cross-effects between quantitative, qualitative, and equity-related aspects of educational development across different levels and sub-sectors, and sustainability of the suggested programmes beyond the plan period is rarely addressed, except in the form of simulations of financial sustainability for different sector-development scenarios.

To some extent, these shortcomings derive from those characterizing the tools (e.g. simulation models) and information base commonly used for the elaboration of targets and strategies, and partly from the restrictive framework (timeframe, organizational structures, procedures) within which these processes take place:

- The projection and simulation tools currently employed to build scenarios and determine adequate targets and strategies for the advancement of education in developing countries do factor in the linkages between different levels and sub-sectors (e.g. in terms of student flows or resource distribution). However, they focus largely on easily quantifiable aspects of educational development (enrolments, financial and human resources, costs, etc.).
- Information and methodological tools that can help assess and discuss the possible evolution of qualitative aspects of education (e.g. student achievements, relevance of education for employment, learners’ satisfaction with teaching/learning processes, etc.) as well as their interactions with quantitative and future developments of education relating to equity are, at present, very scarce.
- The logical framework and results-based approaches often applied to set operational targets for sector plans and prepare implementation programmes do not seem to address these gaps.
- Limited use is also made of social consultations and other means (such as research) to bring the needs, expectations, and constraints of the system environment into the picture. Furthermore, once begun, the timeframe set for
these processes is often too short for comprehensive and reliable information to be generated.

- Rarely do the applied planning approaches treat target-setting as an iterative process of dialogue in which alternative ways of reaching policy goals are assessed, not only for their resource implications, but also for systemic interlinkages and long-term effects.

- In plan preparation, there is still a widespread tendency to emphasize the efficient utilization of resources and to take efficiency indicators (unit costs, pupil-teacher ratio, etc.) as an indication of system effectiveness, while tending to neglect comprehensive work on desired results and different possible combinations of inputs and environmental factors (culture etc.) that bring about desired results.

- Little attention is generally given to genuine evaluation of programmes. The monitoring of system progress according to a few internationally agreed targets and benchmarks has become popular. There may be sound arguments for monitoring progress in a context wherein donors provide blanket or sectoral budget support and relinquish direct control over the way in which their financial aid is spent. However, monitoring progress within a short and medium-term perspective, and according to a few targets not necessarily related to the specific country context, does not guarantee the long-term development of the education system as a whole in the desired direction. Without careful evaluation of the success and failure of past strategies and their causes, in their specific context, it is likely that efforts and resources will be wasted and avoidable mistakes will be repeated in the future.

What could be done?

- Actions at country level²

- National decision-makers and aid agencies could work together to improve the tools and procedures applied for situational analyses, projections/simulations, monitoring, and evaluation from an SES perspective, when preparing or revising an education sector plan.

- A major prerequisite for this would be the availability of relevant context-specific research findings on linkages and interaction among different educational-development aspects and strategies, and on factors and procedures that enhance the responsiveness of educational strategies and plans to the system environment. In many instances, provision could be made for external financial and technical support for the conduct of context-related research and development projects, national and sub-regional research networks,

---

2. Action to be carried out in countries or regions, by national entities (ministries, training and research institutes, etc.) with or without support from international partners.
and for individual and group training of researchers and planners in the crucial areas.

– Another essential condition for policy and plan preparation from an SES perspective is adequate knowledge and know-how to apply a systems perspective. This is important to master modern educational-planning approaches, which treat target-setting as a policy process using state-of-the-art analysis and projection models, and to cope with the new public sector management environment (programme and result-based planning, decentralization, medium-term finance planning).

• Action at international level

– There is a need for critical thinking and debate at this level regarding the impact of current international targets, indicators, and benchmarking systems on crucial aspects of SES in aid-receiving countries. Until fact-based and rigorously researched information on that impact is available, it would be sensible to be cautious about the further extension of international targets, indicators, and benchmarks.

– Based on currently available and future relevant research and development work relating to SES, aid agencies could revise and adjust guidelines and other tools for educational planning and policy preparation. They could also offer their staff training to help them work towards SES when participating in the preparation of national education sector strategies and plans.

What we need to know better: Suggested priority areas for research

From the preceding considerations, it emerges that research and development is needed in a variety of areas, particularly in the following:

• Linkages between quantitative, qualitative, and equity-related aspects of educational development from medium and long-term perspectives.

• Contribution of specific education sector development programmes to the achievement of multiple goals set for the education sector from medium and long-term perspectives.

• Effects and implications of different modes and procedures currently used to bring the expectations, needs, and constraints of the system environment into the preparation of education sector strategies and plans.

• Sustainable improvements of consultative and participatory mechanisms of educational policy formulation and implementation in different types of contexts;

• Plan-monitoring indicators that could factor in a SES perspective including temporary context-related constraints (e.g. of existing data and information systems).
• Articulation between student-flow regulation and achievement of major quantitative, quality, and equity-related goals of system development.
• Education/job-market relations in different types of situations concerning the pace of technological change and the concerned sectors of the economy.
• Context-specific factors that condition demand for, and access to, education; and
• Effectiveness of current patterns of allocation of financial, human, and material resources for achieving multiple educational goals.

**Area 3: Focus on systemic quality management**

Since both governments and international development partners currently place improvement of educational quality at the top of their agenda, it is particularly important to pursue this goal in a way that strengthens the targeted education systems as a whole. In other words, such improvements should take into account different levels and sub-sectors without neglecting other major educational development goals such as access to and equity in education.

**Main conclusions and priority issues**

• In current programmes, the prevailing concepts and targets relating to quality tend to be fairly restrictive. Generally, they stay focused on cognitive learning outcomes (achievements). They rarely integrate aspects of relevance, although the need to make education and training more relevant to the productive and reproductive life of people is increasingly recognized and addressed to some extent in debates and programmes relating to formal and non-formal training. Generally, little reference is made to what different social groups – in different countries – actually consider to be relevant education or education of good quality.

A number of factors appear to have contributed to this situation:

– Over recent years, results-based management has become an increasingly important concept in the education sector and has increased pressure to produce results that are measurable. What students actually know at certain stages of their educational career is not only of central interest to them and society as a whole; achievement can also be more easily measured, tested, and shown as results of the education fabric than other types of results of formal education processes (acquired values, social attitudes and behaviour, practical skills, etc.).

– As many aid agencies have disengaged from specific projects with precise quality-related objectives (improved teacher training or textbooks, etc.) and shifted to the support of sector-wide development strategies, growing attention and efforts are noticeable at international level to define a few relevant universal (context-neutral) education quality targets and monitoring...
indicators, such as student achievements in maths, reading, and science. These have affected the national priorities relating to other aspects of educational quality improvement in countries receiving aid.

- Efforts to define, measure, and inform other quality targets and indicators (e.g., those relating to the relevance of learning outcomes) have encountered significant obstacles, especially the unavailability of instruments or capabilities for research, assessment, and data-collection in the related areas.

- Except within the framework of a few major national educational reforms, aid-receiving countries do not conduct regular, broad, social consultations, and other forms of enquiries about populations’ views and expectations regarding the quality of education.

- The World Bank and most bilateral agencies have already engaged in large assistance programmes to improve the quality of education in developing countries from various angles. However, as emerged from the preceding analysis, strategies for improving the quality of education are rarely defined from a system-strengthening perspective – taking into account other education development objectives and the linkages between quality issues across different levels of education (e.g., long-term impact of poor-quality secondary education on the knowledge of teachers and indirectly on pupil achievement). One major explanation of this seems to lie in the lack of research, policy evaluations, and information that deal with aspects of education quality improvement from such a broad and longer-term perspective.

- Moreover, even where some relevant comprehensive knowledge on certain educational quality issues does exist, it is not necessarily known and/or applied by those involved in the formulation and/or implementation of educational strategies.

- The nature and mix of concrete measures that can be implemented to ensure the conditions of providing education meet at least minimum quality standards necessarily vary with context-specific constraints, resources, expectations, and so on. However, little is currently known about effective context-related quality-improvement strategies.

- Context-specific research on and evaluations of long-term processes to improve education quality and the sustainability of achievements are rather infrequent.

- The scarcity of broad consultations of relevant stakeholders hampers the gathering of knowledge about specific expectations and possible obstacles that hinder quality-improvement initiatives on the ground.

- Effective implementation of quality-improvement policies depends to a considerable extent on the provision of guidance, support, and incentives to the different players
(not only teachers but also administrators at different levels, inspectors, etc.) and organizations (ministry departments, specialized bodies like examination boards, etc.) involved.

Yet in practice, reform processes and the planning of implementation tend to devote very little time and resources to such flanking measures, especially those supporting the administrative staff concerned.

**What could be done?**

- **Action at country level:**
  - Social consultations and deliberations on the definition of ‘quality’ and quality objectives and targets from the viewpoint of strengthening the system should systematically be built into the formulation of all major new programmes intended to improve the quality of education.
  - Greater attention and support must be given to the strengthening of national institutional capacity and professional expertise in aid-receiving countries in the areas of measurement and monitoring student achievement and other relevant aspects of educational quality. (In particular, this applies to non-cognitive learning outcomes and process factors, and the design and implementation of quality assurance systems across different levels and sub-sectors of education.)
  - There is a need to promote effective ways and means of disseminating available information on the quality-related aspects of education among the main stakeholders.
  - The development of guidance tools for administrative staff (human-resource managers; school heads, etc.) engaged in the implementation of major national quality-improvement programmes also deserves greater attention and support.

- **Action at international level:**
  - A more careful definition may be needed. Likewise, greater caution should go into the setting of education quality targets and indicators in international fora (e.g. FTI) and by individual aid agencies.
  - Beyond the current efforts of the World Bank, bilateral and multilateral agencies could seek to contribute to more systemic approaches to education quality improvement and create international and regional/sub-regional fora, networks, or task forces for this purpose, involving high-level specialists and practitioners from different parts of the world.
What we need to know better: Suggested priority areas for research

What clearly emerges from the previous considerations is the need for further research and development activities, at both country and international levels, to focus on the following:

• Non-cognitive learning objectives, results, and indicators, and related measurement techniques;
• Context-specific aspects of the improvement of education quality;
• Education quality analyses from a system-strengthening perspective; and
• Evaluation of major national quality-improvement programmes from a perspective of strengthening the system (i.e. factoring in the responsiveness to the system environment and effects on the achievement of other major system goals).

Area 5: Focus on knowledge generation and information management

Main conclusions and priority issues to be addressed through SES actions

Reliable and timely statistical data and other quantitative and non-quantitative information on the operation and status of the education system are essential for all areas of education management (policy, administrative, financial, pedagogical), especially with a view to effective system management. In many countries, existing data and information are unsuitable or insufficient for this purpose. The main issues here are the following:

• Lack of integration or coordination between multiple educational systems of data collection, storage, and analysis operating concurrently in the same country (typically, data systems run by the national statistics service, the education ministry, the finance ministry, autonomous entities in charge of school construction and textbook production, and information and data generated by donor-driven pilot activities). Often, these are insufficiently compatible with each other and produce divergent information.
• Results-based planning and programming need information on input/result/impact relationships in specific contexts. Such information is grossly insufficient, mainly due to a lack of national capacity for data collection and research, processing, and analysis. It is not uncommon that research is driven and financed by external development partners, who follow an agenda that reflects their concepts and assumptions, rather than those formulated by stakeholders and researchers of the aid-receiving country.
• Access to data and other relevant information is often difficult for the main users in the education system (in particular, sector managers at central and sub-national level). This is due to insufficient dissemination, inadequate information and
communications technology (ICT) capacity, and analysis and presentation that are off-putting to the user (i.e. overly complex).

What could be done?

- **Action at country level:**
  - In most developing countries, *education authorities need support to improve their information systems* with regard to the generation and dissemination of both statistics and non-quantitative information on the functioning of the education system. Financial and technical assistance could also promote tools to make relevant information on education and educational management more accessible and usable by all sector stakeholders inside and outside the education administration.
  - Substantial SES actions will have to focus on enhancing the technical capacity of institutions (ministries, universities, specialized bodies, etc.) and their staff for the collection, storage, processing, analysis, and dissemination of data and other types of information. Sustainable SES effects can be expected, especially from the training of staff in key information-management positions; from the training of trainers; and from strengthening the training institutions in charge of national capacity development in this area.
  - All countries need effective *research capacity* focused on education system development issues. SES action is required to support country-specific research policies and national research institutions to implement these. The training of research staff in those areas found to be particularly crucial for the national educational development could be a relevant, integral part of this effort.

- **Action at international level:**
  - For each country and region, international partners could undertake (in a coordinated and mutually supportive approach) a review of all existing statistical data and non-quantitative information on input/outcome and results processes related to the main goals of the education system. They could also support the development of effective ways and means to make this information accessible to all national stakeholders (i.e. via easily understandable summary reports).

---

3. Action to be carried out in countries or regions, by national entities (ministries, training and research institutes, etc.) with or without support from international partners.
What we need to know better – suggested priority areas for research

• The design and implementation of actions necessary to generate new relevant knowledge do not necessarily require further research, but consultations on priorities for the generation of new information and knowledge on educational development issues may be needed.
• In certain aid-recipient countries it may be helpful to address serious problems that have beset the operation of existing information and communication systems by using (possibly participatory) organizational analyses/management.

5.2 International and national framework for future strengthening of education systems

For several years to come, the Paris Declaration and the Accra Agenda will continue to be the framework for international development cooperation, to which all donors and all recipient countries are formally committed. Through its far-reaching goals, targets, and modalities, focused on national empowerment, this framework strongly influences the development policies, goals, targets, and modalities of recipient countries. In addition, national education sector policies and plans are significantly shaped by the Education for All and the Millenium Development Goals.

The policy dimensions and the technical scope and depth of this framework for both international cooperation and national development are still relatively new. As work progresses, a number of difficulties and issues are emerging as pointed out in this paper.

In the coming years, donor and government responses to SES challenges at the country level will depend mainly on:

• Where countries stand, the challenges they face in developing their education systems to reach the sector goals, and the sector planning and management approaches they currently apply; and
• Where international donors stand, the commitments they have made, the approaches they pursue to effectively honour their commitments, and their strategies for the coming years to enhance their education support to partner countries.
5.3 Possible donor points of focus for the strengthening of education systems in the coming years

On which kind of actions should donors focus their support to strengthen education systems in the coming years?

Donors with large development financing capacity, such as the European Union and the World Bank, can be active in almost all of the mentioned areas. They operate in many countries, in all regions of the world. Consequently, they can disseminate information widely (e.g. research results, comparative data), as well as concepts and approaches for policy-setting, policy implementation, resource management, and so on. They generally rely upon a large network of experts and enjoy operating conditions for their action that enable them to play a leading role.

Donors with relatively limited development-funding capacity – most of the bilateral donors – have two options. Either they can continue doing what they are already doing best; that is, focus their work on specific goals, levels, and types of education in selected countries. Or they can go beyond their traditional forms of intervention and include new strategic system-strengthening activities, thereby gaining influence on the sector policy and strategy debate at country level, and on the international debate about education development assistance.

Donors with substantial capacity to mobilize expertise in a number of specific areas – most bilateral donors – could focus on promoting progress in one or two specific strategic areas of action (and/or research) within one or two chosen general priority areas for SES. The selected general and specific areas should be those in which the donor can mobilize and sustain a critical mass of expertise needed to effect a strengthening of the system, either in selected target countries or at international level (the latter in the event of involvement in more conceptual/research work).

In education, no goals can really be achieved without effective national empowerment; and there can be no true national empowerment without solid national capacity in the management of policy, planning, information, and knowledge. Therefore, bilateral donors may wish to promote further bolstering of national capacity in these areas.

How can donors support the sustainable strengthening of education systems in their partner countries?

To have a sustainable impact on the strengthening of education systems with limited incremental interventions, donors could envisage:

• Designing and carrying out capacity-building programmes from a SES perspective and in the mentioned strategic areas in one or two countries in each region.
This would comprise: (a) context-specific studies on needs and strategic areas of system strengthening and related capacity development; (b) training of ministries (education staff, sub-national education management entities, etc.); and (c) advisory assistance to entities directly involved in strategic areas of education sector management (ministries of education, finance, planning, etc.).

- Developing *training materials* in strategic areas specific to each (sub-)region, which respond to capacity development needs typical of the countries of the region and are context-sensitive.
- Working towards the sustainability of generated system management capacity by *creating and supporting core groups of national and regional experts, researchers, and trainers*, organized and enabled to spread and pass on their knowledge and know-how throughout the countries of the region. IIEP-UNESCO experience suggests that work to strengthen systems is closely linked to sector planning and management.
ABBREVIATIONS

ADB: Asian Development Bank
AFD: Agence française de développement
AfDB: African Development Bank
AUSAID: Australian Agency for International Development
AUP: Association for the University of Paris
IIEP: International Institute for Educational Planning
UNESCO: United Nations Educational, Scientific and Cultural Organization

BIBLIOGRAPHY


Bibliography


Bibliography


GTZ 2010. Zukunft durch Bildung (Entwurf Dezember 2010). Eschborn. GTZ.


Bibliography


Ministry for Foreign Affairs, Finland. 2006. Education strategy for Finland’s development cooperation. Merikasarmi: Ministry for Foreign Affairs.


------. 2009. MDG2, All boys and girls to attend school, Dutch development cooperation. The Hague: Ministry of Foreign Affairs.


www.prspsynthesis.org/synthesis10.pdf

Bibliography


------. 2010b. *Swedish development cooperation. This is how it works*. Stockholm: Swedish International Development Cooperation Agency.


Bibliography


Online databases:

Planipolis. A portal on educational plans and policies from UNESCO Member States. Available at:
   http://planipolis.iiep.unesco.org/basic_search.php

SACMEQ. Southern and Eastern Africa Consortium for Monitoring Educational Quality. Available at:
   www.sacmeq.org

UNDP Public Administration Reform website. Available at:
   www.pogar.org/publications/other/un/undp/pubadminreform-practicenote-04e.pdf
Bibliography on ‘International assistance to education’ (2005–2010)


Heyneman, S.P. 2009. ‘The failure of Education for All as a political strategy’. In: *Prospects, 39*(1).


Lind, A. 2007. ‘What can and should donors do to strengthen adult education systems to meet the basic learning needs of youth and adults?’ In: *Adult Education and Development, 68*.


Bibliography


GIZ Education Sector Profile

The services delivered by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH draw on a wealth of regional and technical expertise and tried and tested management know-how. As a federal enterprise, we support the German Government in achieving its objectives in the field of international cooperation for sustainable development. We are also engaged in international education work around the globe. Most of our work is commissioned by the German Federal Ministry for Economic Cooperation and Development. GIZ also operates on behalf of other German ministries as well as German federal states and municipalities, and public and private sector clients in Germany and abroad. GIZ operates in more than 130 countries worldwide.

We support our partners at local, regional, national and international level in designing strategies and meeting their policy goals by offering demand-driven, tailor-made and effective services for sustainable development. GIZ operates in many fields: education, health and food security; economic development and employment promotion; governance and democracy; security, reconstruction, peace building and civil conflict transformation; and environmental protection, resource conservation and climate change mitigation.

GIZ’s work in the education sector focuses on the support of our partners in developing a sound education policy and well-performing education systems. The key challenge is to improve the quality and quantity of education and education outcomes. Our flexible methods and instruments support education reform processes and capacity development at all levels of the education system: from early childhood education, primary, post-primary, secondary to tertiary education and vocational training through formal and non-formal approaches. We also address special education aspects like peace education, inclusive education, innovative education financing, HIV-prevention or gender sensitive education. We collaborate with high-level international practitioner networks and promote the exchange of experiences between the various education stakeholders. We offer tailor-made solutions for education policy-makers and provide high quality training and professional development for school administrators and teachers.
More than 1,500 titles on all aspects of educational planning have been published by the International Institute for Educational Planning. A comprehensive catalogue is available in the following subject categories:

**Educational planning and global issues**
- General studies – global/developmental issues

**Administration and management of education**

**Economics of education**
- Costs and financing – employment – international cooperation

**Quality of education**
- Evaluation – innovation – supervision

**Different levels of formal education**
- Primary to higher education

**Alternative strategies for education**
- Lifelong education – non-formal education – disadvantaged groups – gender education

Copies of the catalogue may be obtained on request from:
IIEP, Publications and Communications Unit
info@iiep.unesco.org

Titles of new publications and abstracts may be consulted online:
www.iiep.unesco.org
The International Institute for Educational Planning

The International Institute for Educational Planning (IIEP) is an international centre for advanced training and research in the field of educational planning. It was established by UNESCO in 1963 and is financed by UNESCO and by voluntary contributions from Member States. In recent years the following Member States have provided voluntary contributions to the Institute: Australia, Denmark, India, Ireland, Netherlands, Norway, Spain, Sweden, and Switzerland.

The Institute's aim is to contribute to the development of education throughout the world, by expanding both knowledge and the supply of competent professionals in the field of educational planning. In this endeavour the Institute cooperates with training and research organizations in Member States. The IIEP Governing Board, which approves the Institute's programme and budget, consists of a maximum of eight elected members and four members designated by the United Nations Organization and certain of its specialized agencies and institutes.

Chairperson:
Raymond E. Wanner (USA)
Senior Adviser on UNESCO issues, United Nations Foundation, Washington DC, USA.

Designated Members:
Christine Evans-Klock
Director, ILO Skills and Employability Department, ILO, Geneva, Switzerland.
Carlos Lopes
Assistant Secretary-General and Executive Director,
United Nations Institute for Training and Research (UNITAR), Geneva, Switzerland.
Juan Manuel Moreno
Lead Education Specialist, Education Sector, World Bank, Washington DC, USA.
Guillermo Sunkel
Social Affairs Officer, Social Development Division (ECLAC), Santiago, Chile.

Elected Members:
Aziza Bennani (Morocco)
Former Ambassador and Permanent Delegate of Morocco to UNESCO, Paris, France.
Nina Yefimovna Borevskaya (Russia)
Chief Researcher and Project Head, Institute of Far Eastern Studies, Moscow.
Birger Fredriksen (Norway)
Consultant on Education Development for the World Bank.
Ricardo Henriques (Brazil)
Special Adviser of the President, National Economic and Social Development Bank.
Takyiwa Manuh (Ghana)
Professor, Former Director of the Institute of African Studies, University of Ghana.
Jean-Jacques Paul (France)
Professor of Economics of Education, Department of Economics and Business Administration, University of Bourgogne, Dijon.
Zhang Xinsheng (China)
President, China Education Association for International Exchange.

Inquiries about the Institute should be addressed to:
The Office of the Director, International Institute for Educational Planning,
7–9 rue Eugène Delacroix, 75116 Paris, France
About this paper

Sustainable educational development cannot be achieved by concentrating efforts on a single goal; it requires a systems approach. Certain development partners, in particular the German Federal Ministry for Economic Cooperation and Development (BMZ) and the World Bank, have recently placed high on their current agendas the strengthening of education in a holistic manner.

Based on a review of relevant data, research results, and IIEP-UNESCO field experience, this paper, which applies the perspective of system analysis, discusses recent strategies of major development agencies and governments in the area of education. It concludes that major education development goals – access/enrolment, quality, equity – have been pursued neither in an integrated manner (taking into account that they are interlinked and cut across different levels and sub-sectors), nor in close interaction with the environment of the education system.

The paper recommends in particular the strengthening of certain regulatory mechanisms such as education sector planning, comprehensive quality management, social consultations, and policy research, which appear to play a highly relevant role in establishing interlinkages between quantitative, qualitative, and equity-related goals of education, and in maintaining effective exchanges between the education system and the surrounding society.