

MINISTRY OF FOREIGN AFFAIRS OF DENMARK  
Danida

TECHNICAL ADVISORY SERVICE

# MONITORING AND INDICATORS IN THE EDUCATION SECTOR



TECHNICAL NOTE

2006

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**Technical Note**

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Monitoring and Indicators in the Education Sector  
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## ABBREVIATIONS

AMG	Aid Management Guidelines
Danida	Danish International Development Assistance
EFA	Education for All
FTI	fast-track initiative
GDP	gross domestic product
GER	gross enrolment rate
GNP	gross national product
HQ	headquarters
MDG	Millennium Development Goal (of the United Nations)
M&E	monitoring and evaluation
MOE	Ministry of Education
NER	net enrolment rate
PRS	poverty reduction strategy
PRSP	poverty reduction strategy paper
SIDA	Swedish International Development Agency
SPS	sector programme support
SWAp	sector-wide approach
UPC	Universal Primary Completion
UPE	Universal Primary Education
UNESCO	United Nations Educational, Scientific and Cultural Organisation

## 1. Introduction

This Note offers a brief introduction to indicators and monitoring tools of relevance to the education sector in Danida's countries of cooperation. It is primarily aimed at supporting officers at the Danish representations or at HQ responsible for preparing and managing Danish bilateral development assistance. The Note may also be of assistance to staff in partner organisations responsible for monitoring, their Danida advisers, and consultants who assist in preparing and managing programmes and projects.

The present Note should be read in conjunction with the technical note on "Monitoring at Programme and Project Level – General Issues", which presents definitions of relevant monitoring terms and explains important aspects of the monitoring challenge at the programme and project level, including the links between monitoring and the international agenda on ownership, alignment, harmonisation, and management for results. The definitions, terms and concepts used in the present Note correspond to those presented in the general note.

Chapter 2 contains a short background about the types of Danish support as well as alignment and harmonisation issues in the education sector, while Chapter 3 presents internationally-defined goals, indicators and targets. Chapter 4 then deals with the issue of objectives and indicators at the national level, i.e. in PRSPs. Chapters 5, 6 and 7 are concerned with the level of the sector as such, and with Danish support for it (sector programme support, SPS), discussing relevant indicators as well as related monitoring tools and methods at this level.

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## 2. Sector Background

The education sector has historically been characterised by internationally well-defined and uniform concepts and indicators. This was confirmed in April 2000, when the World Education Forum, under UNESCO, met in Dakar, Senegal, and 155 countries adopted and committed themselves to the six goals – with corresponding targets and indicators – of the Dakar Framework for Action, *Education for All: Meeting our Collective Commitments*. The six goals of Education for All (EFA) served as follow-up to the *World Declaration on Education for All*, adopted in Jomtien, Thailand, in 1990. Later, in 2000, the UN adopted the Millennium Declaration, pledging to achieve eight Millennium Development Goals, of which one belongs entirely to the realm of education, namely MDG 2 "Achieve universal primary education", while another is partly related to education, MDG 3 "Promote gender equality and empower women".

The six EFA goals and the two MDGs constitute the backbone of Danida's education policy. Consequently, Danish support for education in the partner countries is set within this framework. Accordingly, the design, formulation, monitoring and evaluation of education development programmes must relate to these international goals, including their corresponding targets and indicators, and ensure that the indicators of each programme intervention are aligned with these to the greatest extent possible.

In addition, the principles of the harmonisation and alignment agenda feature very prominently in Danish support for the education sector. In all bilateral education programmes, Denmark is working jointly with other donors within the framework of a SWAp, in most cases through sector budget support or pooled funding (basket fund), with a high degree of harmonisation and alignment.

### 3. Internationally-defined goals, indicators and targets

In March 1990, the international community put education on the global agenda during the World Conference on Education for All in Jomtien, Thailand, when governments set themselves the challenge of achieving universal primary education (UPE) by 2000. Ten years later, representatives of all nations gathered again at the World Education Forum in Dakar, Senegal, to examine the results. This gave rise to the most in-depth evaluation of basic education ever undertaken on a global scale. The EFA 2000 assessment took stock of the status of education in approximately 180 countries, evaluating the progress achieved during the 1990s.

The EFA Assessment found that many countries have difficulties in achieving UPE. Nonetheless, during the Forum, governments reiterated their commitment to accomplishing and sustaining universal access to, and completion of, high-quality basic education by 2015. UNESCO was mandated to take the lead role in global efforts to fulfil this aspiration.

At the UN Millennium Summit in September 2000, 189 member states adopted the Millennium Declaration and its eight Millennium Development Goals (MDGs), pledging to achieve universal primary education (Goal 2) and gender equality in education (Goal 3) by 2015.

In 2001, the Development Committee of the World Bank called on the Bank to prepare an Action Plan aimed at accelerating progress towards the MDGs for education. The resultant plan was endorsed in April 2002, followed by the launch of the Fast Track Initiative (FTI). The latter seeks to increase the momentum towards universal primary completion (UPC) through a combination of stronger national policies, improved capacity and more financial resources, raised domestically as well as from the donor community.

Table 1 below summarises the EFA goals and core indicators, linking them to the MDGs and to the FTI indicators, in order to provide a comprehensive overview. This may be of use to, for instance, Representation staff tasked with assessing how to link sector documents and strategies with internationally-defined indicators (the particular sets of goals and targets are included in Annex 1 (EFA), 2 (MDG) and 3 (FTI)).

As it appears from the table, the three sets of objectives/targets/indicators cannot be consolidated into a single list as they tend to overlap, covering some of the same issues, albeit with different formulations and addressing rather different aspects of those issues. As it also appears, the three sets vary widely in scope. The EFA goals and indicators constitute the most comprehensive list, covering all internationally-recognised major elements of basic education (understood to comprise early-childhood education, primary education, and literacy), though secondary education is only present in goal number 5 on gender equality. Conversely, only two aspects of education have been extracted from the MDGs (of which one, MDG 3, again on gender equality, concerns all levels of education). Lastly, the FTI indicators are, on the one hand, more selective than those of EFA, for instance by being exclusively concerned with primary education. On the other hand, they are much more specific and detailed on the issues singled out.

Thus, although the EFA framework largely defines the issues to be monitored, reading the table horizontally reveals clear inconsistencies as to what exactly should be measured under each of the three initiatives. When deciding on which indicators to 'promote' as part of the national education sector monitoring system (and hence of the monitoring system of the Danish education sector

support), it is important to know that all countries have committed themselves to monitoring both the EFA goals and the MDGs, while only countries associated with the FTI have pledged to monitor the FTI indicators. In non-FTI countries, therefore, the FTI indicators are not mandatory, but may serve as a source of inspiration, in case more detailed monitoring in selected areas appears to be warranted. Note also that, although the EFA goals and the corresponding MDGs are phrased differently, the relevant indicators are identical, i.e. monitoring the EFA indicators will also serve to monitor the relevant MDG indicators.

Table 1: International education indicators: overview of EFA goals and indicators, MDGs, MDG targets and indicators, and FTI indicators

EFA goals	EFA (Dakar) indicators	MDG and targets	MDG indicators	FTI indicators	FTI targets
1) Expand and improve comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children <b>(outcome)</b> <sup>1</sup>	<p><u>Indicator 1:</u> Gross enrolment in early childhood development programs, including public, private and community programs, expressed as a percentage of the official age-group concerned, if any, otherwise those aged 3 to 5</p> <p><u>Indicator 2:</u> Percentage of new entrants to primary grade 1 who have attended some form of organized early childhood development program</p> <p><u>Indicator 3:</u> Apparent (gross) intake rate: new entrants in primary grade 1 as a percentage of the population of official entry age</p>				
2) Ensure that by 2015 all children, particularly girls, children in difficult circumstances, and those belonging to ethnic minorities, have access to and are able to complete primary education that is free, compulsory and of good quality <b>(outcome)</b>	<p><u>Indicator 4:</u> Net intake rate: new entrants to primary grade 1 who are of the official primary school-entrance age as a percentage of the corresponding population</p> <p><u>Indicator 5:</u> Gross enrolment ratio</p> <p><u>Indicator 6:</u> Net enrolment ratio</p>	<p><u>MDG goal 2:</u> Achieve universal primary education <b>(outcome)</b></p> <p>Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling</p>	Net enrolment ratio in primary education	<p>1.Intake into first grade: Total Girls' intake rate Boys' intake rate</p> <p>2.Private share of enrolments - (% of pupils enrolled in exclusively privately-financed primary schools)</p>	<p>100 100 100</p> <p>10 or less</p>

<sup>1</sup>Please note that the monitoring level of each of the EFA and MDG goals listed above is indicated in brackets at the end of each sentence. In line with the general monitoring note results largely outside the control of the intervening organisation are on outcome or impact level especially if their benefit can also be felt directly by the end-users. The monitoring level of indicators and targets should directly interrelate with these objectives. However, there are exceptions. The exceptions are also indicated in brackets after each relevant indicator or target.

EFA goals	EFA (Dakar) indicators	MDG and targets	MDG indicators	FTI indicators	FTI targets
	<p>Indicator 7: Public current expenditure on primary education (a) as a percentage of GNP (b) per pupil, as a percentage of GNP per capita <b>(input)</b></p>			<p>3.Public domestically-generated revenues as % of GDP <b>(input)</b></p> <p>4.External grants as % of GDP <b>(input)</b></p> <p>5.Education share of budget (%) – (Defined as public recurrent spending on education as % of total public recurrent discretionary spending)</p> <ul style="list-style-type: none"> <li>• Estimate including grants</li> <li>• Estimate excluding grant <b>(input)</b></li> </ul> <p>6.Primary education share of education budget (%) defined as public recurrent spending on primary education as % of total public recurrent spending on education, including grants <b>(input)</b></p>	<p>14 – 18</p> <p>---</p> <p>20</p> <p>20</p> <p>42 – 64</p>
	<p>Indicator 8: Public expenditure on primary education as a percentage of total public expenditure on education <b>(input)</b></p>				
	<p>Indicator 9: Percentage of primary school teachers having the required academic qualifications <b>(output)</b></p>			<p>7.Average annual salary of primary school teachers (for countries with both civil service and contract teachers, use the weighted average salary)</p>	

EFA goals	EFA (Dakar) indicators	MDG and targets	MDG indicators	FTI indicators	FTI targets
				<ul style="list-style-type: none"> <li>• No. of new contract teachers recruited this year</li> <li>• Total stock of contract teachers</li> <li>• Average salary</li> <li>• Number of new civil service teachers recruited this year</li> <li>• Total stock of civil service teachers</li> <li>• Average salary <b>(input)</b></li> </ul> <p>8. Recurrent spending on items other than teacher remuneration as % of total recurrent spending on primary education <b>(input)</b></p> <p>9. Estimated annual effective instructional hours of schooling (not official hours) in publicly-financed primary schools <b>(activity)</b></p>	<p style="text-align: center;">3.5 <i>(Expressed as multiple of GDP per capita)</i></p> <p style="text-align: center;">33</p> <p style="text-align: center;">850 - 1000</p>
	<p><u>Indicator 10:</u> Percentage of primary school teachers who are certified (or trained) to teach according to national standards <b>(output)</b></p>				
	<p><u>Indicator 11:</u> Pupil-teacher ratio <b>(output)</b></p>			<p>9. Pupil-teacher ratio in publicly-financed primary schools <b>(output)</b></p>	<p style="text-align: center;">40:1</p>
	<p><u>Indicator 12:</u> The repetition rate is the no. of repeaters in a given grade in a given school year expressed as a pct. of enrolment in that grade the previous school year</p>			<p>10. % repeaters among primary school pupils</p>	<p style="text-align: center;">10 or less</p>
	<p><u>Indicator 13:</u> The survival rate to grade 5 is the percentage of a cohort of pupils who enrolled in the first grade of primary</p>		<p>Proportion of pupils starting grade 1 who</p>	<p>11. Primary completion rate Total: Girls' completion rate</p>	<p style="text-align: center;">100 100</p>

EFA goals	EFA (Dakar) indicators	MDG and targets	MDG indicators	F'TI indicators	F'TI targets
	education in a given school-year and who eventually reach grade 5		reach grade 5	Boys' completion rate	100
	<u>Indicator 14:</u> The coefficient of efficiency is the optimum number of pupil-years needed for a cohort to complete the primary cycle, expressed as a percentage of the number of pupil-years actually spent by the cohort				
3) Ensure that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programs <b>(outcome)</b>	<u>Indicator 16:</u> Literacy rate of 15-24 year olds		Literacy rate of 15-24 year-olds		
4) Achieve a 50 percent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults <b>(outcome)</b>	<u>Indicator 17:</u> Adult literacy rate, is the percentage of the population aged 15+ that is literate				
5) Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality <b>(outcome)</b>	<u>Indicator 18:</u> Literacy - Gender Parity Index	<u>MDG Goal 3:</u> promote gender equality and empower women <b>(outcome)</b> <u>Target 4:</u> Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015			
6) Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills <b>(outcome)</b>	<u>Indicator 15:</u> Percentage of pupils having reached at least Grade 4 of primary schooling who have mastered as set of nationally defined basic learning competencies				

Sources: 1) Education for All Fast Track Initiative Framework Document, World Bank 2004. 2) Report on the meeting and proposals for the future development of EFA Indicators, pp. 31-332, UNESCO Institute for Statistics. (2001). 3) EU Member States Educations Expert Meeting, June 2002. 4) Progress and result indicators and their relevance for educational policy analysis, SIDA 2

## 4. Objectives and indicators in PRSPs

At the national level, the respective Poverty Reduction Strategies (PRS) and national education sector policies and strategies are key entry points for Danish development assistance to education. Danish aid should be aligned with national and sector-specific objectives and strategies, preferably in close cooperation with fellow donors. This is a key message of the Aid Management Guidelines (AMG), reflecting the international agenda of ownership, alignment, and harmonisation.

Where a PRS or a sector policy or strategy does not yet exist, Danida is committed to supporting its preparation.

Since all countries have signed up to the EFA goals and the MDGs, the PRSPs as well as education policies and strategies should relate closely to the internationally-defined objectives, indicators and targets in Table 1, *in addition to* meeting nationally-defined requirements. However, in practice, it is frequently observed that the PRSP is not linked as clearly as expected to the objectives and indicators of the EFA and MDGs, and/or to national education strategies. This happens when not all national objectives and indicators coincide with internationally-defined ones, and/or when there is inconsistency between overall national strategies and sector-specific documents. Such problems may stem from various factors, but are often due to capacity constraints in the process of drawing up documents (shortages in qualified planning and M&E staff, time, coordination between ministries, etc.).

This gives rise to a number of points.

1. As pointed out by UNESCO, more work will have to be done nationally and by the donor community to link PRSPs more directly with the EFA/MDG frameworks. The development of comprehensive education sector strategies and plans, comprising all initiatives in education, including internal reforms and donor-financed development programmes, can be an important tool in these efforts. National education sector strategies have been instrumental, and are now being prepared by more than 120 countries, including objectives and actions for all parts of the education sector. Donors may also support the process of updating PRSPs and of developing poverty monitoring systems, insisting that these national tools take in the goals and indicators of EFA and MDGs.
2. Similarly, donors supporting the education sector should seek to influence the formulation and revision of sector policies, strategies and plans so as to: a) reflect the international goals, targets, and indicators, and b) ensure consistency with the national PRS. Where these two endeavours are, to some extent, contradictory, compromises need to be found, at least temporarily. Well-founded sector work will often be able to influence subsequent efforts at the PRS level, achieving consistency on the terms of the sector.
3. Wherever indicators in the sector documents and/or PRSP are – and are bound to remain – inconsistent with the international frameworks, it is important at least to ensure that the definitions used in specifying the indicators are the same. This concerns such concepts as the gross and net enrolment rates, the repetition rate, the survival rate, etc., but also, for instance, the age brackets used for literacy and adult literacy statistics.
4. As noted earlier, the international indicators mostly cover primary and other elements of basic education. Those parts of national and sector documents concerned with upper secondary and tertiary education will therefore have to rely on indicators prepared in-country. At least for secondary education, the EFA indicators may serve as a source of inspiration in that process, as

many important aspects of secondary education to be monitored are the same, or largely the same, as in primary education. In tertiary education, the situation is different. Here, the issues to be monitored differ substantially from those of primary and secondary education, calling for specialised knowledge and literature on the development and monitoring of tertiary education. It is worth noting that, with the gradual move of Danish education aid towards sector-wide approaches that cover the totality of the education sector, the issue of how to monitor secondary and tertiary education is taking on ever greater importance.

5. Lastly, it has already been noted that the international indicators mostly concern the input, the output, and to some extent the outcome levels of education sector development. When building an M&E system for the education sector, and especially for (Danish or joint) education sector support, it will remain necessary, however, to monitor processes and activities (e.g. capacity development activities) at a level that relates directly to the annual work plans rather than to the over-all sector documents. It is important to note that the international indicators do not provide for this, and cannot replace the detailed monitoring of the implementation of annual work plans, capacity development plans, etc.

The international indicators do not cover the long-term impact level either. Monitoring the impact of education would require indicators mostly pertaining to other sectors and aspects of national development than the education sector, such as the development of democracy, economic growth, employment characteristics, fertility rates, nutrition, etc. This topic is beyond the scope of the present paper, and the task of impact monitoring generally lies with the overall PRS monitoring system rather than with the sector or programme.

## 5. Objectives and indicators in SPS

In the context of SWAPs, Denmark is gradually moving towards supporting the education sector as a whole, or at least certain sub-sectors (e.g. primary and/or secondary education) in their entirety. For some time to come, however, part of the Danish assistance will remain earmarked.

To the extent such development assistance is provided by Denmark alone, preparation of the support – including laying down the objectives, outputs, activities, inputs, and the monitoring system with its indicators – is incumbent upon Danish Representations in collaboration with national authorities. However, even in this case, the international, the national, and the sector frameworks and documents should underpin the formulation of objectives and indicators, aligning with these to the greatest extent possible. One reason is that this will enable monitoring of the support at these levels to be conducted within the sector's existing monitoring set-up, without adding unreasonably to its workload.

At the level of more detailed monitoring, SPS involves the same need as described above under point 5 to formulate indicators of outputs, activities and processes featuring in the annual work plans, on which the ministry of education or other partner organisation can report regularly through quarterly or six-monthly progress reports.

Finally, even in the case of earmarked support, it is necessary to monitor aspects of the education sector as a whole. On the outcome side, this should be done through the indicators already being monitored by the authorities, hopefully in line with international indicators. On the input side (more specifically as regards the partner government's inputs into the sector), inspiration may be found in EFA indicators #7 and 8 and the corresponding FTI Indicative Framework, as well as in the FTI indicators corresponding to EFA indicator #9 (see Table 1).

Presently, not all national education sector programmes (ESPs) are strongly linked to the relevant PRSP and to the internationally-defined objectives and indicators. However, Danida seeks to assist partner countries in linking the objectives and indicators in ESPs closer to EFA, MDG/FTI and the national PRSP.

The following table has been developed as “a case model” to show how educational sector programme support (ESPS) can be linked to EFA and PRSP. Accordingly, the ESPS component laid out below operationalises the objectives and indicators defined in the EFA and PRSP. At the same time, examples of indicators are listed at various logframe levels for inspirational purposes.

**Table 4: ESPS indicators linked to EFA and PRSP objectives. The example of a Teacher Training Component of an ESPS**

	Indicators	Targets
<p><b>INTERMEDIARY OBJECTIVE (EFA goal 16)</b> Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills</p>	<ul style="list-style-type: none"> <li>Percentage of pupils having reached at least Grade 4 of primary schooling who have mastered a set of nationally-defined basic learning competencies (EFA Goal 16 indicator)</li> </ul>	<ul style="list-style-type: none"> <li>90% by 2010</li> </ul>
<p><b>INTERMEDIARY OBJECTIVE (PRSP objective)</b> Increased completion and survival rates in primary schools</p>	<ul style="list-style-type: none"> <li>Completion rates</li> <li>Survival rates</li> </ul>	<ul style="list-style-type: none"> <li>85% by 2008</li> <li>80% by 2008</li> </ul>
<p><b>IMMEDIATE OBJECTIVE (Programme objective)</b> The quality of primary school teachers has improved and the output of teachers has increased</p>	<ul style="list-style-type: none"> <li>The output of teachers</li> <li>The number of years of teacher education</li> <li>External tests and user tests regarding improved quality of the teachers' output</li> </ul>	<ul style="list-style-type: none"> <li>500 per year by 2007</li> <li>3 years by 2006</li> <li>80% are minimum on level B by 2007</li> </ul>
<p><b>OUTPUTS</b> The National Teacher Education Programme and its management structure has been introduced into the remaining 7 primary Teacher Training Colleges (TTC)</p>	<ul style="list-style-type: none"> <li>Delivery of college-based courses</li> <li>School-based years implemented</li> <li>Course management team posted and trained</li> </ul>	<ul style="list-style-type: none"> <li>On 14 TTC by '06</li> <li>As above</li> <li>As above</li> </ul>
<p>Increased relevance of the teacher education course</p>	<ul style="list-style-type: none"> <li>Adoption of teaching approaches based on learner-centred activities and participation</li> <li>No. of teachers who find the courses relevant</li> </ul>	<ul style="list-style-type: none"> <li>Approach adopted by 2005 March</li> <li>Increase by 20% from 2004 to 2010</li> <li>3 revisions by 2005</li> </ul>
<p>Continuing development in the implementation of the National Teacher Education Programme in the three pilot TTCs</p>	<ul style="list-style-type: none"> <li>Revision of course delivery and curriculum made in the light of experience</li> </ul>	<ul style="list-style-type: none"> <li>3 revisions by 2005</li> </ul>
<p>Capacity built at District Level</p>	<ul style="list-style-type: none"> <li>District Education Boards perform according to new standards/model</li> </ul>	<ul style="list-style-type: none"> <li>It performs by '06</li> </ul>
<p>Capacity built at TTC level</p>	<ul style="list-style-type: none"> <li>No. of new teaching approaches introduced after 2006</li> </ul>	<ul style="list-style-type: none"> <li>1 per year</li> </ul>
<p>Capacity built at school level</p>	<ul style="list-style-type: none"> <li>Percentage of teachers who master the new national teaching approach</li> </ul>	<ul style="list-style-type: none"> <li>60% in 2005; 70% in 2006; 75% in 2007 and 98% in 2010</li> </ul>
<p><b>ACTIVITIES</b></p>	<ul style="list-style-type: none"> <li>Number of training courses</li> </ul>	<ul style="list-style-type: none"> <li>40 in 2004 and 05</li> </ul>
<p>Training of teachers in new national teaching approach</p>	<ul style="list-style-type: none"> <li>Support structure plan developed</li> </ul>	<ul style="list-style-type: none"> <li>1 plan by 2004</li> </ul>
<p>Establishment of an appropriate support structure through TRCs</p>	<ul style="list-style-type: none"> <li>No. of reviews</li> </ul>	<ul style="list-style-type: none"> <li>1 per 5 years from 2004</li> </ul>
<p>Review the National Teacher Education Programme</p>	<ul style="list-style-type: none"> <li>No. of man hours available for the activities outlined above</li> </ul>	<ul style="list-style-type: none"> <li>1000 by 2005</li> </ul>
<p><b>INPUTS</b> Sufficient manpower available on time in MoE and districts</p>		

**Note: The two intermediate objectives should be understood as alternative possibilities, since an LFA matrix would never have two objectives at this level.**

## 6. Choice of indicators

Education sector programme objectives and indicators are formulated by partner governments in cooperation with Danish embassies and with identification, formulation, appraisal and review missions. During implementation, M&E-related embassy activities concentrate on quality control of the defined indicators and on supervision of the monitoring process.

When assessing indicators in ESPS, the following steps may be helpful:

1. Compare the framework of objectives and indicators with Danida's various requirements in relation to SPS, SWAp, budget support etc., as they are stated in the Aid Management Guidelines (e.g. regarding the details of reporting and whether or not a logframe should be prepared).
2. Assess whether the objectives and indicators found in national education sector plans and/or PRSP are reflected in the document, and if they are absent, assess how to incorporate them.
3. Assess whether the document relates to the MDG and EFA objectives and indicators, and if not, how this could be implemented.
4. Compare the document to other donors' education sector programme objectives and indicators. This may produce inspiration, avoid contradictions and highlight potential overlaps of initiatives by coordinating the activities (including the building of M&E capacity).
5. Assess the quality of the indicators by:
  - Assessing whether the indicators reflect the activities, outputs and objectives to which they are linked: are they concerned with central or peripheral elements of the objective, output and activity?
  - Finding inspiration concerning supplementary or more relevant indicators, e.g. in the literature and homepages mentioned in the chapter below.
  - Assessing whether the indicators, objectives and targets as a whole are SMART (specific, measurable, accurate, realistic and time-bound).
  - Assessing whether the objectives, indicators and targets are sufficiently sensitive to gender, ethnicity, age and poverty.
  - Assessing the user friendliness of the indicators and the M&E tools, including the language and data-collection methodologies used.
  - Examining the costs of collection of data including the relevance and importance of delivering and transforming valid data for stakeholders at all levels.
  - Assessing the data-handling competencies of all stakeholders, including the capacity to analyse and plan on the basis of data from the M&E structures.

## 7. Methods of sector monitoring

In most developing countries, national monitoring and evaluation (M&E) suffers from inadequate financial and performance capacity. Amongst local authorities and at the school level, the need for evaluation may not even be fully accepted. Evaluation can be seen as a threat to, rather than as support for, local development. Quantitative data can be erratic, while qualitative data may be misinterpreted. Therefore, data often fails to be updated and/or fully reliable. Additionally, the M&E methodologies, including the selected indicators used at the national level, are not always up to date.

The monitoring and evaluation standards in developing countries are being challenged by national and international forces working towards good governance, by the various stakeholders emphasising the need for valid, efficient and transparent information systems, and by global trends towards restructuring the public sector. The context of M&E can be highly complex, and an array of alternative objectives, indicators and methodologies introduced by authorities, donors and stakeholders can be in use at the same time, without any co-ordination. Even limited M&E capacities

may fail to be used and developed in an optimal manner, may not be combined across sectors, and may be impervious to strategic decision-making.

When monitoring educational objectives and indicators in developing countries, it is necessary to gather data from multiple sources, to analyse the quality of the data, and occasionally to assist in building the necessary M&E capacity and authority.

National, ministerial or local bureaus of statistics, as well as the M&E unit in the Ministry of Education, are natural starting points when searching for data on input and activity levels. This includes budgets and expenditures, intake capacity in grade 1, number of educated primary-school teachers, etc. However, these statistics are far from always reliable, and at times it is necessary to assist in developing statistical capacity, including the promotion of a co-operative attitude to the M&E system by all stakeholders nationally and locally in order to compile valid data.

When monitoring and evaluating the education sector's outcome, there is often no qualitative data concerning, for instance, improved teaching skills or students' learning achievements. This could call for funding of studies into these aspects, and at the same time for capacity to be established within the ministry to continue such research, including the development of relevant methodologies and tools, in order to establish a coherent education management information system (EMIS).

## 8. Annexes

### Annex 1: MDG goals, targets and indicators

The following presentation lists the two education-related MDG goals with attendant targets and indicators. The status of indicators and definitions of key indicator terms can be found by following the Internet link.

#### **Goal 2: Achieve universal primary education**

##### **Target 3**

Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

##### **Indicators**

6. [Net enrolment ratio in primary education \(UNESCO\)](#)
7. [Proportion of pupils starting grade 1 who reach grade 5 \(UNESCO\)](#)
8. [Literacy rate of 15-24 year-olds \(UNESCO\)](#)

#### **Goal 3: Promote gender equality and empower women**

##### **Target**

4.

Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015

##### **Indicators**

9. [Ratio of girls to boys in primary, secondary and tertiary education \(UNESCO\)](#)
10. [Ratio of literate women to men, 15-24 years old \(UNESCO\)](#)

## Annex 2: FTI indicators

Indicator	Average for some successful countries
<b>1. Resource mobilisation</b>	
Public domestically generated revenues as % of GDP	14 – 18
External grants as % of GDP	-----
Education share of budget (%)	
<i>Defined as public recurrent spending on education as % of total public recurrent discretionary spending (a)</i>	
• Estimate including grants	20
• Estimate excluding grants	20
Primary education share of education budget (%)	
<i>Defined as public recurrent spending on primary education as % of total public recurrent spending on education, including grants (b)</i>	42 – 64
<b>2. Student flows</b>	
Intake into first grade, total (c)	100
• Girls' intake rate	100
• Boys' intake rate	100
Primary completion rate, total (d)	100
• Girls' completion rate	100
• Boys' completion rate	100
% repeaters among primary school pupils 10 or less	10 or less
<b>3. Service delivery</b>	
Pupil–teacher ratio in publicly-financed primary schools (e)	40:1
Average annual salary of primary school teachers: (f) <i>(for countries with both civil service and contract teachers, use the weighted average salary)</i>	3.5
Contract teachers	
• Number of new contract teachers recruited this year	
• Total stock of contract teachers	
• Average salary	
Civil service teachers	
• Number of new civil service teachers recruited this year	
• Total stock of civil service teachers	
• Average salary	
Recurrent spending on items other than teacher remuneration as % of total recurrent spending on primary education (g)	33
Annual instructional hours	
<i>Estimated effective hours of schooling (not official hours) in publicly-financed primary schools</i>	850 - 1000
Private share of enrolments	
% of pupils enrolled in exclusively privately financed primary schools.	10 or less

## Notes:

(a) Public recurrent spending on education includes all spending through ministries or other government units providing primary and secondary schooling, vocational/technical education and higher education. It also includes public expenditures for education transferred to private and non-government providers and educational grants and subsidies to students or their families. Public recurrent discretionary spending is defined as public spending from all sources –including external grants— less debt service (interest payments only). The education share of total public recurrent spending should be presented both including and excluding external grants.

(b) This benchmark is pro-rated to the nationally defined length of the primary cycle, i.e. 42% if it is 5 years, 50%, if 6 years, 58% if 7 years, and 64% if 8 years. Countries whose basic education cycle is longer than 8 years are encouraged to report data for a primary-equivalent sub-cycle of 5 or 6 years.

(c) Defined as students enrolled in grade 1, net of repeaters, as a percentage of the population cohort at the official age of entry to first grade.

(d) Defined as students completing the final grade of primary school as a percentage of the population cohort of official graduation age. If data on students completing the final grade are not reported, a proxy primary completion rate should be used, defined as: students enrolled in the final grade of primary school, adjusted for the average repetition rate in last grade, as a percentage of the population cohort of official graduation age.

(e) Includes all teachers on payroll. “Publicly-financed schools” refers to schools supported by government whether publicly or privately managed and all teachers fully paid by the government, either directly or indirectly.

(f) Expressed as a multiple of GDP per capita. Includes salary and budgeted cost of benefits (i.e. pension, health services, transport, housing and other items paid for by the state). For countries with a two-tier teacher contracting system, disaggregated information on teacher stocks, flows and average monthly salaries (in local currency units, with exchange rate, or in US\$) should also be presented.

(g) Recurrent spending on items other than teacher remuneration includes all non-salary spending (e.g. teaching/learning materials, student assessment, school feeding, student stipends, etc.) plus salaries of administrative and other personnel who are not classroom teachers.

## Annex 3: EFA Objectives and Indicators.

The following table lists all EFA goals and indicators. It also includes a set of suggestions by the European Commission on how to improve the indicators. Note that these suggestions are not authorised, neither by UNESCO, nor by the members of the EU. They may however serve as a source of inspiration in case additional indicators in the concerned areas are sought.

EFA goals	Existing EFA (Dakar) indicators	EU suggestions
1) Expand and improve comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children	<p><u>Indicator 1:</u> Gross enrolment in early childhood development programs, including public, private and community programs, expressed as a percentage of the official age-group concerned, if any, otherwise those aged 3 to 5</p> <p><u>Indicator 2:</u> Percentage of new entrants to primary grade 1 who have attended some form of organized early childhood development program</p>	<p>Percentage of public &amp; private enrolment Teacher/pupil ratio Improve coverage of data on target group and of all programmes</p>
2) Ensure that by 2015 all children, particularly girls, children in difficult circumstances, and those belonging to ethnic minorities, have access to and are able to complete primary education that is free, compulsory and of good quality	<p><u>Indicator 3:</u> Apparent (gross) intake rate: new entrants in primary grade 1 as a percentage of the population of official entry age</p> <p><u>Indicator 4:</u> Net intake rate: new entrants to primary grade 1 who are of the official primary school-entrance age as a percentage of the corresponding population</p> <p><u>Indicator 5:</u> Gross enrolment ratio</p>	<p>Percentage of new entrants by type of school (public &amp; private) Grade 1 intake rate (disaggregated by gender and rural areas)</p> <p>Percentage of new entrants by type of school (public &amp; private); Pct. of over-age, normal and under-age new entrants Grade 1 intake rate (disaggregated by gender and rural areas) GER by specific grades, by gender Gross enrolment rate in primary education (disaggregated by gender in rural areas)</p>
	<p><u>Indicator 6:</u> Net enrolment ratio</p>	<p>NER by specific grades, by gender, enrolment in percentage by type of school (public &amp; private) Pct. of over-age, normal and under-age enrolled students Out-of-school children by age, by gender, and by other characteristics (e.g. social class, income group, urban &amp; rural, etc.)</p>
	<p><u>Indicator 7:</u> Public current expenditure on primary education (a) as a percentage of GNP (b) per pupil, as a percentage of GNP per capita</p>	<p>Government spending on education as a percentage of GDP Government spending on education as a percentage of total public expenditure Public expenditure on primary education as a percentage of total public expenditure on education</p>
	<p><u>Indicator 8:</u> Public expenditure on primary education as a percentage of total public expenditure on education</p>	<p>Expenditure on teachers' salary as pct. of public current expenditure Expenditure by family and by private sector Expenditure on didactic inputs (books etc.) Non-salary recurrent spending as a percentage of recurrent</p>

EFA goals	Existing EFA (Dakar) indicators	EU suggestions
		<p>spending in primary education</p> <p>Average primary teacher salary as a pct. of GDP per capita</p>
	<p><u>Indicator 9:</u> Percentage of primary school teachers having the required academic qualifications</p>	<p>To be dropped (difficult to compare across nationalities)</p> <p>Proportion of female teachers</p> <p>Absenteeism amongst children and staff</p> <p>Primary teachers with equivalent secondary education degree as a percentage of total teacher population</p> <p>(Definition of "certified" must be changed)</p>
	<p><u>Indicator 10:</u> Percentage of primary school teachers who are certified (or trained) to teach according to national standards</p>	
	<p><u>Indicator 11:</u> Pupil-teacher ratio (PTR)</p>	<p>Class (pedagogic group) per teacher ratio</p> <p>Books/pupil ratio</p> <p>Pupil-teacher ratio (disaggregated to rural areas)</p> <p>Pupil-textbooks ratios (disaggregated to rural areas)</p>
	<p><u>Indicator 12:</u> The repetition rate is the no. of repeaters in a given grade in a given school year expressed as a pct. of enrolment in that grade the previous school year</p>	<p>By type of school</p> <p>Average repetition rates (disaggregated by gender and rural areas)</p>
	<p><u>Indicator 13:</u> The survival rate to grade 5 is the percentage of a cohort of pupils who enrolled in the first grade of primary education in a given school-year and who eventually reach grade 5</p>	<p>Survival rate by grade and type of school; Transition rate to secondary school by gender and type of school;</p> <p>Primary completion rate</p> <p>Primary completion rate disaggregated by gender and rural areas</p>
	<p><u>Indicator 14:</u> The coefficient of efficiency is the optimum number of pupil-years needed for a cohort to complete the primary cycle, expressed as a percentage of the number of pupil-years actually spent by the cohort</p>	<p>To be dropped</p>
<p>3) Ensure that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programs</p>	<p><u>Indicator 16:</u> Literacy rate of 15-24 year olds</p>	<p>Achievement of life skills</p>
<p>4) Achieve a 50 percent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults</p>	<p><u>Indicator 17:</u> Adult literacy rate, is the percentage of the population aged 15+ that is literate</p>	<p>Achievement of literacy skills</p> <p>Adult literacy rate (disaggregated by gender and rural areas)</p>
<p>5) Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to</p>	<p><u>Indicator 18:</u> Literacy - Gender Parity Index</p>	<p>Gender parity index F/M in gross and net intake rate, gross and net enrolment rate, repetition, survival rates, transition rate to secondary education</p>

<b>EFA goals</b>	<b>Existing EFA (Dakar) indicators</b>	<b>EU suggestions</b>
<p>and achievement in basic education of good quality</p> <p>6) Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills</p>	<p>Indicator 15: Percentage of pupils having reached at least grade 4 of primary schooling who have mastered a set of nationally defined basic learning competencies</p>	<p>Identify cost-effective methodology for surveys</p>