

SAFETY, RESILIENCE,  
AND SOCIAL COHESION:  
A GUIDE FOR EDUCATION  
SECTOR PLANNERS

# MONITORING AND EVALUATION

How will we know  
what we have done?

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A programme of **education above all™**

## About the booklets

This publication is one of a series of six educational planning booklets on promoting safety, resilience, and social cohesion in and through education. The booklets should be read alongside more traditional planning materials for the education sector (see the Key Resources section in each booklet for details). The series includes:

- Glossary of terms
- Booklet 1 – Overview: Incorporating safety, resilience, and social cohesion in education sector planning
- Booklet 2 – Analysis: Where are we now?
- Booklet 3 – Policy: Where do we want to go?
- Booklet 4 – Programming: How do we get there?
- Booklet 5 – Cost and financing: How much will it cost and who will pay?
- Booklet 6 – Monitoring and evaluation: How will we know what we have done?

A parallel series of booklets has been published on incorporating safety, resilience, and social cohesion in curriculum development and teacher training.

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7-9, rue Eugène Delacroix

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info@iiep.unesco.org

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Michael Mutinda, a teacher in one of Dadaab's primary schools shows his pupils how a tablet computer works.

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SAFETY, RESILIENCE, AND SOCIAL  
COHESION: A GUIDE FOR  
EDUCATION SECTOR PLANNERS

## **Booklet 6**

MONITORING  
AND EVALUATION

How will we know  
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## Abbreviations

AOP	annual operational plan
EMIS	education management information system
IBE	International Bureau of Education
LFA	logical framework approach
M&E	monitoring and evaluation
MoE	ministry of education
PEIC	Protect Education in Insecurity and Conflict
RBM	results-based management

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## Foreword

Crisis-sensitive education content and planning saves lives and is cost-effective. Education protects learners and their communities by providing life-saving advice in cases of emergency. Good planning can save the cost of rebuilding or repairing expensive infrastructure and education materials. Over the long term, crisis-sensitive education content and planning strengthen the resilience of education systems and contribute to the safety and social cohesion of communities and education institutions.

The devastating impact of both conflict and disasters on children and education systems is well documented and has triggered a growing sense of urgency worldwide to engage in strategies that reduce risks. Annually, 175 million children are likely to be affected by disasters in the present decade (Penrose and Takaki, 2006), while the proportion of primary-aged out-of-school children in conflict-affected countries increased from 42 per cent of the global total in 2008 to 50 per cent in 2011.

The urgency of developing education content and sector plans that address these risks is undeniable. This series of booklets aims to support ministries of education to do just that. With a common focus on safety, resilience, and social cohesion, a series of six booklets on education sector planning and a further eight booklets on developing curriculum are the result of collaboration between the Protect Education in Insecurity and Conflict Programme, UNESCO's International Institute for Educational Planning, and UNESCO's International Bureau of Education. This collaboration and the overall framework build on the efforts and momentum of a wide range of stakeholders, including UNICEF and its Peacebuilding, Education and Advocacy programme.

The mission of the International Institute for Educational Planning (IIEP-UNESCO) is to strengthen the capacity of countries to plan and manage their education systems through training, research, and technical cooperation. Additionally, IIEP has developed expertise in the field of education in emergencies and disaster preparedness. Its programme on education in emergencies and reconstruction has produced a Guidebook for Planning Education in Emergencies and Reconstruction, as well as a series of country-specific and thematic analyses. It has undertaken technical cooperation and capacity development in crisis-affected countries such as Afghanistan, South Sudan, and Chad, and has developed and piloted crisis-sensitive planning tools in West and East Africa.

Protect Education in Insecurity and Conflict (PEIC) is a programme of the Education Above All Foundation, founded by Her Highness Sheikha Moza bint Nasser of Qatar. PEIC aims to promote and protect the right to education – at all levels of education systems – in areas affected or threatened by crisis, insecurity, or armed conflict. PEIC supports the collection and collation of data on attacks on education and the strengthening of legal protection for education-related violations of international law. PEIC works through partners to help develop education programmes that are conflict-sensitive and reduce the risks of conflict or its recurrence.

The International Bureau of Education (IBE-UNESCO) supports countries in increasing the relevance and quality of curricula aimed at improving basic competencies such as literacy, numeracy, and life skills, and addressing themes that are highly relevant at local, national, and global levels such as new technologies, values, sustainable human development, peace, security, and disaster risk reduction. IBE offers such services as strategic advice, technical assistance tailored to specific country needs, short- and long-term capacity development, providing access to cutting-edge knowledge in the field of curriculum and learning.

This series of publications, which is the fruit of collaboration between IIEP-UNESCO, PEIC, and IBE-UNESCO, draws on the particular expertise of each of these agencies. With these booklets, we aim to support the staff of ministries of education, at central, provincial, and district levels, to promote education systems that are safe, resilient, and encourage social cohesion through appropriate education sector policies, plans, and curricula. This initiative responds to an identified need for support in systematically integrating crisis-sensitive measures into each step of the sector planning process and into curriculum revision and development processes. By adopting crisis-sensitive planning and content, ministries of education and education partners can be the change agents for risk prevention and thus contribute to building peaceful societies in a sustainable manner.

**Suzanne Grant Lewis**  
Director, IIEP

**Mmantsetsa Marope**  
Director, IBE

**Mark Richmond**  
Director, PEIC

## Booklet 6 – Monitoring and evaluation: How will we know what we have done?



### Take-away points

- ▶ Monitoring and evaluation (M&E) is essential for knowing whether an education sector plan is being implemented or not, as well as for learning lessons for future policy and planning.
- ▶ It is imperative that education ministries take action on M&E findings.
- ▶ Measureable and realistic indicators are essential to monitor progress and achievement against set targets. Indicators that measure aspects of safety, resilience, and social cohesion should be developed.
- ▶ Having a good education management information system (EMIS) is an essential component of credible educational planning. It is necessary to review the EMIS to determine what indicators for safety, resilience, and social cohesion are already included, and what others may need to be added.
- ▶ Mobile phone technology can be utilized for data collection and monitoring in areas affected by crisis.
- ▶ Annual operation plans (AOPs) are important to ensure that sector plans are effectively implemented. There is a need to incorporate safety, resilience, and social cohesion into AOPs.
- ▶ Results-based management and 'logical framework' approaches are increasingly used in planning. They should also include elements to ensure: safety and protection for learners, staff, and assets; resilience and educational continuity; and social cohesion through equitable access to relevant, quality education, including appropriate curriculum and language(s) of instruction.



# Introduction

Why is monitoring important? How do we ensure that the data collected is analysed and used? How can monitoring and evaluation best be applied to ensure the issues of safety, resilience, and social cohesion (discussed in *Booklets 1 to 5*) are actually addressed? These are some of the questions discussed in this booklet.

Monitoring and evaluation (M&E) is essential if we are to know whether an education sector plan is being implemented or not. Collecting, monitoring, analysing, and evaluating information helps ministries of education (MoEs) learn lessons for future policy and planning. M&E helps identifying obstacles as well as highlighting possible changes to the way programmes are implemented. The indicators that track progress need to be relevant, and adapted to monitoring levels of safety, resilience, and social cohesion within the education system.

Such data can be collected, analysed, and maintained as part of the national education management information system (EMIS).

This booklet outlines what an M&E framework might look like. It includes examples of indicators that could be used by ministries of education for monitoring levels of safety, resilience, and social cohesion within their programmes. It aims to help MoEs to prepare an operational plan with objectives and priority programmes, as well as precise targets, outputs, activities, timelines, indicators, and designated MoE units.

This booklet and the following five steps indicate the reflections that MoEs should consider when reviewing their existing M&E plan or creating a new one, in order to monitor issues of safety, resilience, and social cohesion in the education system.

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## Box 6.1 Understanding monitoring and evaluation

**Monitoring** is the continuous and systematic collection of data on specified indicators in order to provide the main actors of an ongoing development intervention with indications as to the extent of progress and the achievement of objectives (in relation to allocated resources).

**Evaluation** is the systematic and objective assessment of an ongoing or completed policy, or plan, including its design, implementation, and results. It aims to assess the relevance and fulfilment of objectives and strategies with the intention of informing decision-making.

**EMIS** (education management information system) is an information system that ensures effective collection, storage, and analysis of information at both central and decentralized levels in order to improve policy formation, planning, resource allocation, and monitoring.

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## **Steps to monitor and evaluate programmes for safety, resilience, and social cohesion**

- ▶ Develop a logical framework that includes elements of safety, resilience, and social cohesion.
  - ▶ Develop indicators to measure the degree to which safety, resilience, and social cohesion are addressed in the education system.
  - ▶ Review the education management information system (EMIS) to incorporate indicators related to safety, resilience, and social cohesion.
  - ▶ Address issues of data collection in areas affected by crisis by using technology or local data collection mechanisms.
  - ▶ Incorporate indicators of safety, resilience, and social cohesion into annual operational plans.
-

## Step One

### Develop a logical framework that includes elements of safety, resilience, and social cohesion

Many MoEs use results-based management (RBM) for planning. With RBM, planning begins with an overall goal. Interventions are subsequently designed to achieve this goal in a progressive and logical manner.

Results-based planning establishes a *results chain* of *activities* leading to *outputs* which then lead to *outcomes* and *impacts*. Indicators are defined at each level of the results chain.

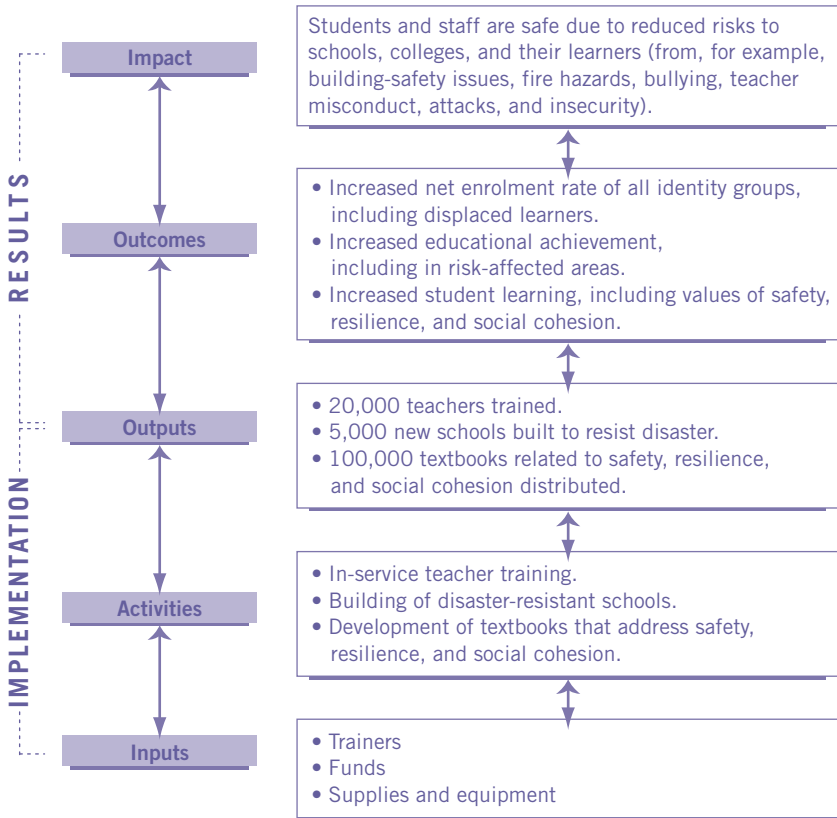
The logical framework approach (LFA), or 'logframe', is a tool often used for RBM (see *Annex B* for more information on the LFA).

Logframes typically:

- specify *indicators* to measure achievement;
- specify *sources of information* for collecting evidence;
- help MoEs monitor *activities* to ensure that *outputs* are achieved;
- help with evaluating the *outcome(s)* of the programme's *outputs* for its beneficiaries.

When planning for safety, resilience, and social cohesion, the results chain and subsequent logframe should include issues relating to safety, resilience, and social cohesion. *Figure 6.1* shows how this might be done.

**Figure 6.1**  
**Example of an M&E results chain that includes**  
**issues of safety, resilience, and social cohesion**



**Source:** Adapted from Kusek and Rist, 2004: 18.

*Outputs, outcomes, and impacts* combined form the *results levels*. *Activities and inputs* concern *implementation* and, together, form the *results chain*. The three results levels are described as follows:

- **Outputs** are the products, capital goods, and services resulting from a development intervention which are relevant to the achievement of outcomes. Time horizon: immediate or short-term.
- **Outcomes** are the short- or medium-term effects of an intervention's outputs, mainly at the level of the direct beneficiaries. Time horizon: medium-term.

- **Impact** is the higher goal that a development intervention intends to contribute to. It should demonstrate that change has taken place. Time horizon: medium- to long-term.

When using a results-based M&E system, emphasis is placed on whether inputs and activities contribute to achieving the results (outputs, outcomes, and impact), and whether planned effects are achieved.

*Box 6.2* provides examples of how indicators that address issues of safety, resilience, and social cohesion can be classified according to the results chain.

Decision-makers increasingly emphasize the need to assess the outcomes and intended impacts of a particular project or plan. Many goals relating to social cohesion are long-term, in terms of both individual attitude and behaviour change, and societal change (which will also be affected by external positive or negative factors). Governments and their supporting partners, however, often request a rapid and short-term demonstration of results. While it is not easy to measure and attribute impact for some of the results expected for safety, resilience, and social cohesion, some intermediate impacts can be measured, as indicated in this booklet.

Questions to guide MoEs in determining whether the plan has both a logical framework and addresses issues of safety, resilience, and social cohesion could include:

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### **Box 6.2**

#### **Categorization of indicators with reference to the results chain**

**Indicators of input/activities** measure financial, administrative, and regulatory resources provided by government or donors.

Example: *Share of education budget devoted to emergency operations, and the stockpiling of emergency education materials.*

**Process indicators** measure the processes involved in using inputs and activities.

Example: *Numbers of teachers trained using modules that incorporate safety, resilience, and social cohesion; management techniques and inspection techniques used.*

**Indicators of outputs** measure the immediate and concrete consequence of the activities undertaken and resources used.

Example: *Number of schools built according to safe-school construction standards; number of educational planners trained in safety, resilience, and social cohesion pedagogy.*

**Indicators of outcome** measure the intermediate results generated relative to the objectives of an operation at the level of direct beneficiaries.

Example: *School enrolments, levels of learner achievement, and percentage of girls entering and completing the first grade of primary education in crisis-affected areas.*

**Indicators of impact** measure the long-term and aggregate results or changes in the segment of society targeted by an operation.

Example: *Reduction in disparities and grievances related to lack of education services.*

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## Does the logical framework for the education sector plan ...

- cover all levels of monitoring, i.e. output, outcome, and impact levels?
- include elements that relate to safety, resilience, and social cohesion, as per the following headings?

### **Education systems are safe and protective of learners, education personnel, and assets:**

- Do programmes successfully reduce risks internal to schools and colleges (e.g. building safety, fire hazards, bullying, and teacher misconduct)?
- Do programmes successfully reduce risks from natural hazards (e.g. floods, hurricanes, and earthquakes)?
- Do programmes successfully reduce risks from insecurity and conflict (e.g. attacks on schools or colleges, and child recruitment)?

### **Education systems are resilient and provide continuous education regardless of context:**

- Do programmes make education systems more resilient at all levels (e.g. records protection, effective school management committees, and flexibility when access is disrupted)?
- Do programmes make education infrastructure more resilient (e.g. disaster-resistant building standards and their enforcement, and safe siting of education institutions)?
- Do education programmes promote personal resilience (e.g. psycho-social support for students and teachers, positive classroom management, and student participation)?

### **Education systems promote social cohesion through equitable access to relevant quality education:**

- Do programmes make access to all levels of education more equitable, regardless of identity, gender, religion, or geographic location?
- Do programmes promote languages of instruction and language studies at different levels of education that respect cultural identity, are pedagogically sound, and meet societal aspirations?
- Do programmes enhance curriculum and classroom practice to promote skills for conflict resolution, responsible citizenship, the workplace, personal life and health, respect for all, and teamwork?

## Step Two

### Develop indicators to measure the degree to which safety, resilience, and social cohesion are addressed in the education system

The purpose of indicators for monitoring and evaluation (M&E) is to:

- Specify realistic targets for measuring or judging if the stated objectives have been achieved.
- Provide the basis for monitoring, review, and evaluation, and thus feed back into the management of the organization or project, and into learning lessons and planning for other subsequent work.
- Contribute to transparency, consensus, and ownership of the overall objectives and plan (UNESCO, 2006: 51).

Indicators should serve as inputs to the decision-making process, where the decision-maker – both government and donor – uses the indicators as tools for policy dialogue and adjustment (Sida, 2004).

For example, indicators related to safety, resilience, and social cohesion, such as those illustrated in *Box 6.3*, might require further discussion among planners and/or policymakers to determine the most appropriate and context-specific indicators to address the risks identified in the education sector diagnosis.

Indicators should not be used in isolation. To be meaningful, they can be compared with:

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#### **Box 6.3**

##### **Sample EMIS indicators that might contribute towards safety and/or resilience:**

**Output:** Number of schools that have been retrofitted to withstand disasters.

**Outcome:** Fewer children harmed through poorly designed schools; more children feel safe about attending school.

**Impact:** Increase in net enrolment and retention rates in areas of recurrent disaster.

##### **Sample EMIS indicators for output, outcomes, and impact that might contribute to greater social cohesion:**

**Output:** Number of teachers trained to teach positive values of peaceful co-existence and tolerance of diversity.

**Outcome:** Number of teachers using lessons learned during training.

**Impact:** School communities (in schools where teachers have been trained in above values) engaged in school or community-based peacebuilding activities.

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- previous observations (and matched against progress);
- observations in other countries (or comparison with provinces in the same country).

Or the indicator can compare resources used with results obtained.

Indicators are used to measure performance achievement (these are often called performance indicators), sometimes in relation to inputs used. Indicators used in this way usually describe:

- a situation prevailing before or at the beginning of the planning period (baseline);
- an expected situation at the end of the plan (i.e. the target to be achieved at the end of the plan period);
- intermediate targets (i.e. annual targets).

Some examples of indicators are provided in *Table 6.1*. These relate specifically to safety, resilience, and social cohesion, but also fit within the standard framework of typical sub-sector plan organization (which would include access, equity, quality, and management). See *Annex A* for more information on how to construct indicators.

**Table 6.1**  
**Sample indicators relating to safety, resilience, and social cohesion**

	Objectives	Indicators
Safety (relates also to issues of access)	To ensure safety and protection for all children and youth, to, from, and in school	<ul style="list-style-type: none"> <li>▶ Percentage increase in the number of school buildings that are safe and can resist impacts of natural hazards.</li> <li>▶ Percentage decrease in number of attacks on education facilities, personnel, and students.</li> <li>▶ Percentage decrease in number of children recruited by armed groups, whether at school or on their way to/from school.</li> </ul>
	To promote the use of teacher codes of conduct (including child-friendly and constructive classroom-management techniques, and the prohibition of all forms of abuse of students, including corporal punishment and sexual harassment or abuse)	<ul style="list-style-type: none"> <li>▶ Teacher code of conduct that bans use of corporal punishment and sexual abuse in place and used by a certain proportion of teachers.</li> <li>▶ Number of incidents of reported physical and sexual abuse reduced.</li> </ul>



	Objectives	Indicators
<b>Resilience</b> (relates also to issues of management)	To promote educational continuity in crisis situations	<ul style="list-style-type: none"> <li>▶ Percentage of schools occupied/partially occupied by armed groups, internally displaced persons, or refugees.</li> <li>▶ Percentage decrease in number of school days lost due to recurring or infrequent natural hazards.</li> <li>▶ Percentage of schools that have alternative locations or methods for instruction arranged, in case of disasters, insecurity, or conflict.</li> </ul>
	To increase the capacity of education staff and students to be better prepared, withstand, and respond to conflict, insecurity and/or disaster	<ul style="list-style-type: none"> <li>▶ Percentage of professionals and students with increased knowledge of issues and interventions related to safety, resilience, and social cohesion.</li> <li>▶ Percentage of education institutions using safety/contingency plans.</li> </ul>
<b>Social cohesion</b> (relates also to equitable access to quality education)	To increase equitable access to relevant quality education at all levels, regardless of identity, gender, religion, or geographic location	<ul style="list-style-type: none"> <li>▶ Standard education indicators (see also UIS, 2009):               <ul style="list-style-type: none"> <li>◆ Gross and net enrolment and intake ratios;</li> <li>◆ student/teacher, student/classroom, student/textbook ratios;</li> <li>◆ school-life expectancy, survival rate;</li> <li>◆ private versus public expenditure levels;</li> <li>◆ share of education expenditure by sub-national level allocated according to need, disaggregated by location, education level, gender, age, and identity group, where possible.</li> </ul> </li> </ul>
	To increase the level of community awareness of issues and interventions related to safety, resilience, and social cohesion in at least three affected areas by a given year	<ul style="list-style-type: none"> <li>▶ Percentage of schools with school management committees trained in issues related to safety, resilience, and social cohesion.</li> <li>▶ Percentage of schools and community groups using drills to practice standard operating procedures for emergencies and disasters.</li> <li>▶ Percentage of school communities engaged in disaster risk reduction and climate change adaptation activities.</li> </ul>
	To ensure that, by a given year, the values of human rights, peaceful co-existence and tolerance of diversity, and the skills of conflict resolution and responsible citizenship are actively promoted through textbook revision and utilization and other context-specific mechanisms	<ul style="list-style-type: none"> <li>▶ Realistic curriculum policies for this area that are operational in current conditions have been identified and adopted as policy.</li> <li>▶ Curricula and textbooks for all education inputs (including teacher education) reviewed, and negative language or values replaced by positive messages and education for conflict resolution.</li> <li>▶ Increase in proportion of teachers trained in teaching positive values of peaceful co-existence, tolerance of diversity, and conflict resolution.</li> <li>▶ Percentage of children and youth (in schools where teachers have been trained in the above values) engaged in school or community-based peacebuilding activities.</li> </ul>

The indicators in *Table 6.1* are not exhaustive, and each context will need to develop indicators that are context-specific and address the risks identified in the education sector diagnosis and the targets set out for the programme priorities (see *Booklet 4* for setting programme priorities). Examples from Palestine and the Seychelles (*Boxes 6.4* and *6.5*) illustrate how some ministries of education are already collecting some data that relate to the risks identified in their countries.

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#### **Box 6.4**

##### **Fragility indicators in Palestine's education sector plan**

The Ministry of Education in Palestine developed specific 'fragility indicators' in its 2014–19 education development strategic plan (MoEHE, 2014: 165), which enable officials to monitor the impact of conflict-related disasters on the system, and to observe progress towards risk reduction within the sector. This includes Area 'C', which is one of three temporary administrative divisions in the West Bank created by the Oslo Accords. Among the 13 indicators are:

- ▶ Number of schools exposed to acts of aggression against infrastructure.
- ▶ Number of students/teachers physically violated by the Israeli army or by settlers.
- ▶ Average number of teaching hours lost due to violations.
- ▶ Percentage of students who drop-out from schools in Area C.
- ▶ Degree of common psychological and behavioural problems among students of Area C.
- ▶ Level of suitability of school buildings, according to international standards.
- ▶ Percentage of students with safe access to school.

UNESCO trained 244 teachers and community members in Gaza in 2011 in the use of the UN Security Council Resolution 1612 monitoring and reporting mechanism (MRM). This enabled them to report (and illustrate with photos) violations of the right to education to their government and the international community. During the high-intensity bombings in March 2011, all schools were able to report and, as a result, the MRM had much more comprehensive data (see Gaza case study for details).

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#### **Box 6.5**

##### **Seychelles: Creating a baseline for monitoring disaster risk reduction objectives and programmes**

Education institutions and communities in the Seychelles are confronted with a range of risks, including floods and tsunamis, fires, road safety, landslides, and wind storms. In 2011, the Ministry of Education of the Seychelles decided to conduct an in-depth study on the exposure of school communities to risk, and the degree of disaster preparedness of the education sector. Through this assessment, data was collected regarding the occurrence and type of disaster that school communities face, the existence of any emergency and disaster preparedness plan and disaster management committee at school level, the practice of emergency drills, the existence of school emergency alert systems, the state of schools' surrounding

walls or fences, the percentage of educational staff receiving first-aid and security training, and so on. The study was completed and updated by a rapid school survey carried out by the MoE in May 2013.

The study helped establish baseline data that laid the foundation for the integration of a cross-cutting priority programme within the Seychelles' education sector medium-term strategy (MTS), 2013–2017. This cross-cutting priority programme aims to 'develop and maintain a culture of safety and preparedness sector-wide, and thus build resilience to disasters at all levels'. The implementation strategy for this programme is based around five main actions: 1) making organizational arrangements; 2) coordinating efforts and plans; 3) adapting infrastructure to meet safety norms; 4) developing capacities of education actors, including teachers, school communities, and central ministry staff; and 5) reflecting risk and disaster management in national curricula. This cross-cutting priority programme includes different components and activities all related to baseline data (2013), targets (2017), and indicators. The table below is an extract from the MTS 2013–2017 priority programme matrix.

Programme components & activities	Baseline (2013)	Indicators/Targets (2017)
<b>Sub-Programme 4.1 School Disaster Management</b>		
<b>Component 1: Setting up organisational arrangements</b>		
Establish School Safety Committees in all schools.	51% of schools either do not have or are developing disaster management committees.	100% of schools have disaster management committees by 2017.
Develop district-level management plans.	46% of schools either do not have or are not aware of district-level management plans.	100% of schools have district-level management plans by 2017.
<b>Component 3: Development of Emergency and Disaster Preparedness Plans</b>		
Train school boards on Risk and Disaster Management (RDM) and how to conduct a school-level risk assessment.	0% of schools boards are trained on RDM and how to conduct a school-level risk assessment.	100% of schools communities are trained on RDM and how to conduct a school-level risk assessment by 2017.
Develop school Emergency and Disaster Preparedness (EDP) Plans.	28% of schools either do not have or have informal EDP Plans.	100% of schools have EDP Plans by 2017.
Organise regular simulation drills to test disaster preparedness plans and skills levels.	54% of schools have never practiced fire drills, 89% for flooding drills, 80% for tsunami drills and 91% for landslide drills.	100% of schools practice regular simulation drills by 2017.

**Source:** Ministry of Education, Republic of the Seychelles. 2013. Draft Education Sector Medium-Term Strategy, 2013–2017.

## Step Three

### Review the education management information system (EMIS) to incorporate indicators related to safety, resilience, and social cohesion

The national EMIS is the single most important source of information for planning, and therefore also for monitoring safety, resilience, and social cohesion. Yet, many countries face persistent problems getting and processing the necessary data for national statistics in a timely and reliable form.

Many countries face two critical issues. The first relates to the scope of the EMIS: it is often limited to data from the annual school census, while data on cost and financing, human resources (teachers and other staff), learner achievement, and issues related to safety, resilience, and social cohesion are often not covered. Few education ministries collect data that are relevant to disasters and conflict. Yet, even if such data are collected (for example, by humanitarian actors or the education cluster), they are often not stored in a format compatible with the school census data.

The second issue has to do with the poor quality of statistical information, which is even more problematic in crisis-affected areas. This can be due in part to a lack of qualified staff, poor working conditions for EMIS units, or the design of the data instruments. It is particularly damaging when a reliable statistical database is absent. Progress monitoring can be made impossible, while a trusting relationship between government and development partners can become difficult.

Another problem is that sample data, often the cheapest, most up-to-date and most accurate form, is not always seen as part of an EMIS and, if collected, may be lost or not be updated.

This is why education sector plans often include a component on strengthening the national EMIS. A study conducted by IIEP in 2009 found that 33 out of 46 education sector plans (ESPs) surveyed contained a component related to the improvement of EMIS for improved ESP monitoring. Such a component should cover, among other things, the improvement of indicators on safety, resilience, and social cohesion, and the means for collecting data to measure them.

It is essential to determine where and how the data will be collected. In order to observe and analyse progress towards specific objectives for safety, resilience, and social cohesion, education planners need to ensure that the indicators developed are, as far as possible, fully integrated into the EMIS (for example, specific questions, regarding, for example, the condition of school infrastructure or the existence of a school safety plan, can be added to the existing annual survey at little additional cost). The framework for monitoring safety, resilience, and social cohesion indicators can also draw on traditional education indicators, such as enrolment or completion rates and pupil-teacher ratios. For example, the analysis of disaggregated indicators by sub-national geographic regions (and, where possible, district level) and by group characteristic (for example, religious, ethnic, linguistic, displaced, refugee, or gender) can be used to reveal disparities leading to a lack of equitable access to relevant quality education (which can become a grievance and a problem in terms of social cohesion).

Utilizing existing indicators and building on them according to the specific issues affecting the education system will make the monitoring process more efficient, and make it easier to monitor progress toward safety, resilience, and social cohesion objectives. For non-traditional objectives, however, new indicators are often needed (for example, the number of schools with disaster plans). Sample data can often be the best method, as it can be collected accurately by trained survey staff. Collecting some conflict-related data on a census basis may also be politically too sensitive.

## Step Four

### Address issues of data collection in areas affected by crisis by using technology or local data collection mechanisms

As mentioned in *Figure 6.1*, the first step in the monitoring process is information gathering. In situations of instability or crisis, the difficulties of data collection can be considerable. Yet, even then, the management of the education system must continue in an intelligent and timely way. The following measures can help improve data collection in such situations.

- **Prioritize data to be collected.**

Many planning departments tend to want to collect as much data as possible, but, in practice, not all data collected are used. In crisis situations, rapid needs assessments can

also be used when lengthy data collection exercises cannot be conducted. This information should then be integrated into the EMIS.

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#### South Sudan

Hand-held devices are being used by data collectors across the country to transmit EMIS data on a monthly basis. Over 90 per cent of the country was covered in 2010. (See AED, 2010).

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- **Accessibility:** Accessing schools may be difficult or impossible for data collectors during, for example, armed conflict or floods. When data intended to reflect national realities cannot be collected in certain regions its reliability is questionable. The **inaccessibility** of some areas may be offset by the use of **mobile phones for the collection of primary data** (as has been the case in South Sudan).

- **The organization and coordination of data collection:** Decentralized management structures are often responsible for collecting and monitoring data. Depending on country contexts, it will be more or less relevant to centralize or decentralize data collection. When human resources are very limited, centralized collection processes may be more effective. In contrast, when the decentralized structures have sufficient resources, centralization can be a handicap because it prolongs the process and increases the risk of error. The participation and inclusion of key stakeholders can provide additional human resources and support verification exercises.

- **Pooling the financial, material, and human resources** of different actors and entities involved in the education sector (ministry, non-governmental organizations, bilateral and multilateral, private sector, etc.) should be **encouraged**. For example, it may be possible to designate partners to assist with data collection, such as

local non-governmental organizations that have a presence in conflict- or disaster-affected areas and which may be able to access the information safely and assist in transmitting the data to the appropriate level (either to a regional level or the central level). Working with school management committees or youth groups to collect and store the data may also be effective.

- **Technological means:** Data collection and processing can take place with minimal computer technology (hardware and software). However, these facilities are in short supply in many localities and, where they exist, the number of staff qualified to use such technology remains limited, especially in decentralized departments.

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### Uganda

DevTrac is a SMS-based system that was piloted at school level in Uganda. It provides ongoing data on teacher absenteeism; corporal punishment; sanitation and hygiene; emergencies; and so on. This digital data collection method makes it possible to conduct rapid assessment during floods in Uganda, and to deploy a targeted response. (See DevTrac, 2012).

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## Step Five

### Incorporate indicators of safety, resilience, and social cohesion into annual operational plans

A precondition for the successful implementation of an education sector strategic plan is the preparation of annual operational plans.<sup>1</sup> This is essential, but often neglected. An annual operational plan (AOP) is an annual work plan derived from a multi-year sector plan. An AOP indicates the precise targets to be reached during a year and spells out in detail the activities to be undertaken. The AOP therefore also serves as a 'must-have' basis for periodic progress reporting. And the AOP makes it possible to later monitor implementation of the sector plan. This makes the AOP the foundation of a sound M&E system, and an essential component of the strategic planning cycle.

Typically, an AOP is prepared on a programme-specific basis. It follows the same structure and logical framework format as the programme matrices, but is more detailed. The AOP links programmes with resources, and provides information on timing, roles and responsibilities, unit costs, and other useful information. That is why it is important to ensure that safety, resilience, and social cohesion components are reflected in the annual operational plan.

Even if safety, resilience, and social cohesion programmes have not been included in the medium- or long-term education plan, they can still be incorporated as part of the annual operational planning process. For instance, while Niger's 10-year education sector plan (2014-2024) was approved without explicitly mentioning risks of conflict and disaster, the ministry of education was able to include in its AOP the development of a conflict and disaster risk analysis of the education sector and relevant risk reduction measures.

The process of developing an AOP that reflects issues related to safety, resilience, and social cohesion requires dialogue:

- **Between the ministry of education and national disaster management and/or peacebuilding departments:** often, national disaster management

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1. This section is adapted from IIEP's Education Sector Planning distance-learning course, and IIEP and GPE, 2012.



plans are developed and in place, without necessarily indicating how different sectors need to reflect these plans.

- **Between the ministry of education and the ministry of finance:** close links should be made between the annual plan preparation and the annual budget preparation to ensure that funding relating to implementation of safety, resilience, and social cohesion measures is included in both budgets and there is full compatibility between the two in order to facilitate plan implementation.
- **Between services inside the ministry of education:** The MoE's technical directorates must collaborate closely with the MoE's finance and planning offices to ensure consistency of approach, including in relation to issues of safety, resilience, and social cohesion.
- **Between the government and local actors:** many countries see the importance of communities not just for their financial contributions but for accountability reasons, and are granting more autonomy and authority to school committees (including school safety and protection committees). This has policy and budgetary implications which must be considered.
- **Between the government and development partners:** it is necessary to get as much information as possible on all activities financed through external funding (on-budget and off-budget). In the past, most donor funding went to projects and most costs were 'off-budget'. This has changed somewhat with the SWAp process (Sector Wide Approach). Many donors now fund the education plan. Many are joining pooled arrangements or funding via sector budget or general budget support.

There are several ways to present an AOP and annual budget. Some AOPs (for example, in Cambodia) are a simple work plan in matrix format with very little written text. Such as:

- A small introduction explaining the rationale of the budget.
- An explanation of the preparatory process.
- Some general comments on the different budget summary tables and on the possible financing gap.

Others (such as in Zambia) have substantial narrative sections and can be rather lengthy documents. For example, with:

- A reminder of overall policies and priorities.
- A situation analysis for each programme.
- A narrative presentation of each programme matrix.

The work plan matrix is always the centrepiece of the AOP. It must be aligned with the medium-term plan's programme matrices. In cases where a

programme budget approach has been adopted, it must also be made coherent with the programme-budget structure, as indicated above.

Work plan matrices can vary, but some minimum components must be included. *Figure 6.2* shows an example matrix for an AOP (which is not exhaustive and provides an example of one activity only), with an activity that could be useful in insecure or disaster-affected areas. Many more examples have been mentioned above and in earlier booklets.

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## Key actions

- ▶ Develop a clear logical framework for monitoring and evaluation, including elements to ensure: safety and protection for learners, staff, and assets; resilience and educational continuity; and social cohesion through equitable access to relevant quality education.
  - ▶ Develop realistic and measurable indicators that monitor the degree to which the education system addresses issues of safety, resilience, and social cohesion.
  - ▶ Review the education management information system (EMIS) to determine what indicators for safety, resilience, and social cohesion are already included, and identify additional indicators to be added – including on a sample basis where appropriate.
  - ▶ Ensure data collection can be conducted even in insecure or risk-affected areas by using technology or local data collection mechanisms.
  - ▶ Include activities and accompanying indicators that address issues of safety, resilience, and social cohesion in annual operational plans.
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**Figure 6.2.**  
**Example - Annual Operational Plan and Budget Matrix**

		ANNUAL WORK PLAN 2014				BUDGET - All figures to be confirmed		
		Expected results/indicators	Baseline	Timing	Responsibility	Activity code	Total budget	Government
Priority programme 1:				Q1 Q2 Q3 Q4				xx xx others
Sub-programme 1:	Cross-cutting programmes Education in emergencies							
<b>Planned activities (examples)</b>								
<b>Main activity 4:</b> To increase capacity of education staff and students to be better prepared for, withstand, and respond to conflict, insecurity, and/or disaster	Expected results: Education staff and students more resilient to disaster and/or conflict and insecurity							
<b>Sub-activity 4.1:</b> Design context-specific training package for education personnel and students on addressing risks of disasters and/or conflicts and insecurity	Training package developed and tested	0	x		MoE/ disaster risk management committee	CRR 14/04/01	\$5,000	
<b>Sub-activity 4.2:</b> Train education personnel and students on addressing risks of disasters and/or conflicts and insecurity	Professionals and students have increased knowledge of issues and interventions related to safety, resilience, and social cohesion	0	x	x	As above	CRR 14/04/02	\$2,000,000	\$500,000 \$1,000,000
<b>Sub-activity 4.3:</b> Develop school-based safety/contingency plans	Education institutions using safety/contingency plans	0		x	Head teacher/ student bodies	CRR 14/04/03	\$4,000,000	\$500,000 \$3,500,000

## Key Resources

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**DevTrac**. 2012. DevTrac: Real time reporting on public services in Uganda [Website].

▶ <http://devtrac.ug/>

**European Commission/DG Development**. 2002. *Guidelines for the use of indicators in country performance assessment*. Brussels.

▶ [http://ec.europa.eu/development/icenter/repository/guidelines\\_indicators\\_cpa\\_en.pdf](http://ec.europa.eu/development/icenter/repository/guidelines_indicators_cpa_en.pdf)

**IIEP-UNESCO**. 2010a. *Strategic planning: Concept and rationale*. Educational sector planning, Working paper 1.

▶ <http://unesdoc.unesco.org/images/0018/001897/189757e.pdf>

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▶ <http://www.iiep.unesco.org/sites/default/files/121106-guidelines-for-education-sector-plan-preparation-and-appraisal-en.pdf>

**IIEP-UNESCO and UNICEF WCARO**. 2011. *Integrating conflict and disaster risk reduction into education sector planning: Guidance notes for educational planners*.

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**Kusek, J.Z. and Rist, R.C.** 2004. *Ten steps to a results-based monitoring and evaluation system*. Washington, D.C.: World Bank.

- ▶ [https://www.globalhivmeinfo.org/Gamet/pdf/828\\_Ten%20steps%20to%20a%20Results-based%20M\\_E%20system%20-%20SUMMARY-1.pdf](https://www.globalhivmeinfo.org/Gamet/pdf/828_Ten%20steps%20to%20a%20Results-based%20M_E%20system%20-%20SUMMARY-1.pdf)

**MoEHE** (Ministry of Education and Higher Education, Palestine). 2014. *Education development strategic plan 2014-2019. A learning nation*.

- ▶ [http://planipolis.iiep.unesco.org/upload/Palestine/Palestine\\_Education\\_development\\_strategic\\_plan\\_2014\\_2019.pdf](http://planipolis.iiep.unesco.org/upload/Palestine/Palestine_Education_development_strategic_plan_2014_2019.pdf)

**Ministry of Foreign Affairs of Denmark.** 2006. *Monitoring and indicators of the education sector*. Technical Note. Copenhagen: MoFA of Denmark.

- ▶ [http://amg.um.dk/en/~media/amg/Documents/Technical%20Guidelines/Monitoring%20and%20Indicators/Indicators%20in%20sectors/Monitoring\\_Education.pdf](http://amg.um.dk/en/~media/amg/Documents/Technical%20Guidelines/Monitoring%20and%20Indicators/Indicators%20in%20sectors/Monitoring_Education.pdf)

**Penrose, A. and Takaki, M.** 2006. 'Children's rights in emergencies', *Lancet*, 367, pp. 368-369.

**Sida** (Swedish International Development Cooperation Agency). 2004. *Monitoring for education results: A study on results-orientation and the role of indicators*.

**UNDP** (United Nations Development Programme). 2009. *Handbook on planning, monitoring and evaluating for development results*. New York: United Nations Development Programme.

- ▶ <http://web.undp.org/evaluation/handbook/documents/english/pme-handbook.pdf>

**UNESCO.** 2006. *National education sector development plan: A result-based planning handbook*. Paris: UNESCO, specifically sections 4.2.1. on Indicators; 4.2.2 and 4.2.3 on Evaluation (pp. 51-58).

- ▶ <http://unesdoc.unesco.org/images/0014/001447/144783e.pdf>

**UIS** (UNESCO Institute for Statistics). 2009. *Education indicators. Technical guidelines*.

- ▶ <http://www.uis.unesco.org/Library/Documents/eiguide09-en.pdf>

**USAID** (United States Agency for International Development) **and GPE.** 2013. *Integrating conflict and fragility analysis into the education system analysis guidelines: A proposed companion guide*. Washington DC: USAID and GPE. (Author: Cynthia Koons)

- ▶ [http://pdf.usaid.gov/pdf\\_docs/PA00JW1Z.pdf](http://pdf.usaid.gov/pdf_docs/PA00JW1Z.pdf)

# Annex A

## Choosing and constructing indicators

### Relevance and validity of indicators

The most important criteria for choosing indicators are their ability to measure what they are supposed to measure (validity), and their alignment with the expressed goal and/or objective of an education sector plan (relevance). As explained in *Booklet 3*, education sector plans are commonly structured in terms of goals, overall and specific objectives, and strategies. Since specific objectives are typically of a quantitative nature and expressed in terms of quantity, quality, and time, indicators will naturally be chosen from the most important targets set.

*Figure 6.3* presents the different elements that indicators need in order to effectively measure progress towards established objectives. Most typically, indicators in education plans focus on levels 1 and 2 and relatively few indicators include the level of change required within a given time period.

**Figure 6.3**  
**How to construct an indicator?**

1	<b>BASIC INDICATOR</b> More numerous and better-trained students learn values related to social cohesion
2	<b>ADD QUANTITY (HOW MANY?)</b> The number of graduates has increased from 5,000 to 14,000
3	<b>ADD QUALITY (WHAT TYPE OF CHANGE?)</b> Number of graduates coming from low-income families in crisis-affected regions who pass standard exams (40% female/60% male) has increased from 5,000 to 14,000
4	<b>ADD TIME (DURATION)</b> Number of graduates coming from low-income families in crisis-affected regions who pass standard exams (40% female/60% male) has increased from 5,000 to 14,000 per year from the starting date of the plan, programme, or project.

### Different types of indicators

Indicators can be grouped under different types of categories:

- Direct or indirect indicators
- Quantitative and qualitative indicators
- Indicators by level of monitoring

Direct indicators are used for objectives that relate to a directly observable change resulting from activities and outputs. For instance, if the expected result is to 'train over two years 250 inspectors in educational planning and management', then the direct statistical indicator would be simply a count by semester, or by year, of the number of those actually trained in this field.

Indirect or proxy indicators may be used if the achievement of objectives is not directly observable (for instance, increasing the quality of life, or strengthening capacity in educational management) or if measuring an objective would be too costly because it would involve major data collection. Instruments of information collection – such as user satisfaction surveys or public expenditure tracking studies – could be used to construct proxy indicators. From these surveys, indicators can be calculated, for example, the percentage of users of administrative services who are satisfied or the percentage of funding reaching direct beneficiaries.

Quantitative indicators may relate to the frequency of meetings, the percentage of people trained, growth rates, or the intakes of inputs, e.g. grants, number of safe school buildings, and teachers trained in aspects related to safety, resilience, and social cohesion. They are statistical measures that give results in terms of percentages, rates, ratios, and indexes.

Qualitative indicators may refer to the level of participation of a stakeholder group, stakeholder opinions and satisfaction, decision-making ability, etc. Qualitative indicators measure results in terms of 'compliance with..., quality of..., extent of..., level of...'(UNDP, 2009: 63). When the expected results are qualitative (change of attitude, capacity building, etc.) a non-statistical approach may be necessary. But, since these aspects are generally difficult to measure, it is often necessary to conduct surveys or research and then to derive quantitative measures for these aspects.

Under the results-based management approach, indicators can be categorized with reference to the results chain (input-activities-outputs-outcomes-impact), as shown in *Figure 6.1* (see also EC and DG Development, 2002: 3).

## **Data for monitoring and evaluation**

Since indicators will need to be calculated on at least a yearly basis (to establish annual performance reports), they need to be available in a timely fashion. This will also allow comparisons to be made over several years or across regions, with a view to establishing trends, or making regional comparisons. This means that it is important to choose indicators which can be calculated from data which will be available on a yearly basis, via the regular data collection procedures operated by EMIS.

Indicators which can typically be calculated from EMIS data (together with population and financial data) relate to the measurement of:

- Access and participation (apparent and net intake rates, gross and net enrolment rates, transition rates).
- Internal efficiency (flow rate, survival rate, wastage ratio, completion rate, etc.).

- Quality (pupil-teacher ratio, percentage of primary school teachers with the required academic and/or professional qualifications, percentage of children of final grade in a cycle who master a set of nationally defined basic learning competencies).
- Finance (public expenditure on education as a percentage of GDP, public expenditure on education as a percentage of government expenditure, public recurrent expenditure per pupil as a percentage of GDP per capita, public expenditure on primary education as a percentage of total public expenditure on education, teachers' remuneration as a percentage of public recurrent expenditure on education).

Sometimes the ministry of education does not have access to general population data (either because such data do not exist or are politically sensitive). This makes it challenging to calculate net intake and enrolment rates for the education system.

This example concerning the achievement of Education for All (EFA) goals illustrates the relationship between sector goals, overall objectives, specific objectives, and indicators (see the box below), and provides an example of an indicator for access.

Goal	Overall objective	Specific objectives	Indicators
Achievement of EFA by 2015	Increase access to primary education	Increase the net intake rate (NIR) to grade 1 from 85% in 2010 to 100% in 2015	NIR
		Increase the net enrolment rate (NER) in primary education from 80% in 2010 to 100% by 2015	NER

When preparing an education sector plan, projections of enrolment will, generally, have been made on the basis of observed trends in the past. In this case, there are yearly targets against which yearly monitoring can be based (see the box below).

## Baselines and targets

Objective	Baseline	Target	Target	Target	Target	Target	Indicator
	NER 2010	NER 2011	NER 2012	NER 2013	NER 2014	NER 2015	
Increase access to primary education	80%	84%	88%	92%	96%	100%	% NER

Since there may be several indicators and targets associated with the same objective (for access, there is the gross enrolment rate (GER), the net enrolment rate, the apparent intake rate; the net intake rate by gender, by grade, by region), it will be important to select those indicators which are most meaningful either because of their aggregate nature (for instance, GER for access), or because they refer to a particular problem in the sector which will be tackled by the plan intervention. If there is, for instance, a particular problem in a country with children entering grade 1 over-aged, then an important performance indicator would be the net intake rate to grade 1 or the percentage of over-age children among the grade 1 enrolments.



## Annex B

### The logical framework approach

A logical framework approach, with the logical framework matrix (known as a 'logframe'), is commonly used in project design. It is a systematic, logical method of organizing activities for reaching objectives, which summarizes the programme or project and its goals, objectives, anticipated results, activities, and targets, typically in four columns, by four rows. It should be accompanied by more detailed work plans or activity schedules.

Once consensus has been reached on the project's overall objective(s), specific objective, results and activities, planners should define the precise targets to be achieved, the sources of information that will allow for the verification of these targets, and the assumptions surrounding activity implementation. The idea is to start from the purpose statement and work downwards, following 'means-end' logic, and asking two questions:

- (i) If we achieve the specific objective of the project, what are the different results to be produced?
- (ii) What activities need to be implemented in order to deliver each of the specific results?

Developing a logframe requires going a step further than elaborating strategies, and involves considerable discussion and brainstorming among stakeholders in order to provide sufficient details on the expected results and the specific activities required to implement the strategies in order to reach the specific objectives. A sample logframe, together with a brief explanation of each element to be included, is provided in *Table 6.2* below.

**Table 6.2**  
**Typical structure and content of a logical framework matrix**

Programme description	Indicators	Source of verification	Assumptions
<p><b>Overall goal</b>            The broad development impact to which the programme contributes at a national or sectoral level (provides the link to the policy and/or sector programme context).</p> <p><i>e.g. Improved quality of primary education in crisis-affected areas</i></p>	<p>Measures the extent to which a contribution to the overall objective has been made.</p> <p><i>e.g. Learning outcomes improved at international standards</i></p>	<p>Sources of information and methods used to collect and report it (including who and when/how frequently).</p> <p><i>e.g. International tests such as SACMEQ</i></p>	
<p><b>Specific objective</b>            The development outcome at the end of the programme, more specifically the expected benefits to the target group(s).</p> <p><i>e.g. Improved learning achievements in crisis-affected areas</i></p>	<p>Helps answer the question: 'How will we know if the specific objective has been achieved?'            Should include appropriate details of quantity, quality, and time.</p> <p><i>e.g. Percentage of students in crisis-affected areas achieving minimum scores in exams increased from 35% in 2009 to 52% in 2015</i></p>	<p>Sources of information and methods used to collect and report it (including who and when/how frequently).</p> <p><i>e.g. National examination results from crisis-affected areas</i></p>	<p>Assumptions (factors outside the programme management control) that may impact on the results.</p> <p><i>e.g. Students have support from families to complete the education cycle</i></p>
<p><b>Results</b>            The direct outputs (goods and services) that the programme delivers, and which are largely under project management's control.</p> <p><i>e.g. 1. Curriculum developed            2. Textbooks and guides available            3. Trained teachers</i></p>	<p>Helps answer the question: 'How will we know if the results have been delivered?'            Should include appropriate details of quantity, quality, and time.</p> <p><i>e.g. New curriculum available            Pupil/textbook ratio            Number of teachers trained in new methods</i></p>	<p>Sources of information and methods used to collect and report it (including who and when/how frequently).</p> <p><i>e.g. Evaluation reports for quality of textbooks and teaching methods</i></p>	<p>Assumptions (factors outside the programme management control) that may impact on the results.</p> <p><i>e.g. Teachers and parents adopt new curriculum            Proper incentives provided for teachers to enrol in training</i></p>

Programme description	Indicators	Source of verification	Assumptions
<b>Activities</b> The tasks that need to be carried out to deliver the planned results.	Sometimes a summary of resources/means is provided in this box.	Sometimes a summary of costs/budget is provided in this box.	Assumptions (factors outside the programme management control) that may impact on the activity-result linkage.
<i>e.g. 1.1 Develop syllabi and pedagogical materials</i> <i>2.1 Publication of textbooks</i> <i>2.2 Distribution of textbooks to schools</i> <i>3.1 Train teachers</i>	<i>e.g. Inputs</i>	<i>e.g. Costs</i>	<i>e.g. Stable exchange rate throughout the duration of the project</i>

The logframe matrix is typically read from the bottom to the top. The bottom row (activities) explains *how* the results, specific objectives, and overall goals will be attained. In turn, the rows above (results, specific objectives, and overall goals) clarify *why* the activities are being implemented.

The four columns provide different types of information about the steps in each row mentioned. The first column (programme description) is used to provide a basic description of the activities, results, specific objectives, and overall goals. The second column (indicators) lists the relevant indicators or targets that will allow planners to know if the results, specific objectives, and goals have been attained or if the activity has been implemented. The third column (sources of verification) describes the sources of information for this data, and the fourth column lists the assumptions (external factors which could influence positively or negatively the aspects described in the first column).

**Figure 6.4**  
**Logic of the LFA**

Programme description	Indicators	Source of verification	Assumptions
<b>Overall goal</b> The broad development impact to which the programme contributes at a national or sectoral level (provides the link to the policy and/or sector programme context).  <i>e.g. Improved quality of primary education in crisis-affected areas</i>	Measures the extent to which a contribution to the overall objective has been made.  <i>e.g. Learning outcomes improved at international standards</i>	Sources of information and methods used to collect and report it (including who and when/how frequently).  <i>e.g. International tests scores (CAMEQ)</i>	Assumptions (factors outside the programme management control) that may impact on the activity-result linkage.
<b>Specific objective</b> The development outcome at the end of the programme, more specifically the expected results (for target group(s)).  <i>e.g. Improved learning achievements in crisis-affected areas</i>	Helps answer the question: 'How will we know if the specific objective has been achieved?' Should include appropriate details of quantity, quality, and time.  <i>e.g. Percentage of students in crisis-affected areas achieving minimum scores in exams increased from 35% in 2009 to 52% in 2015</i>	Sources of information and methods used to collect and report it (including who and when/how frequently).  <i>e.g. National examination results from crisis-affected areas</i>	Assumptions (factors outside the programme management control) that may impact on the activity-result linkage.  <i>e.g. Students have support from families to complete the education cycle</i>
<b>Results</b> The direct outputs (goods and services) that the programme generates, which are largely under project management control.  <i>e.g. 1. Curriculum developed</i> <i>2. Textbooks and guides available</i> <i>3. Trained teachers</i>	Helps answer the question: 'How will we know if the results have been delivered?' Should include appropriate details of quantity, quality, and time.  <i>e.g. Curriculum available</i> <i>Pupil-textbook ratio</i> <i>Number of teachers trained in new methods</i>	Sources of information and methods used to collect and report it (including who and when/how frequently).  <i>e.g. Evaluation reports for quality of textbooks and teaching methods</i>	Assumptions (factors outside the programme management control) that may impact on the activity-result linkage.  <i>e.g. Teachers and parents adopt new curriculum</i> <i>Paper incentives provided for teachers to enrol in training</i>
<b>Activities</b> The tasks that need to be carried out to deliver the planned results.  <i>e.g. 1. Develop syllabi and pedagogical materials</i> <i>2.1 Publication of textbooks</i> <i>2.2 Distribution of textbooks to schools</i> <i>3.1 Train teachers</i>	Sometimes a summary of resources/means is provided in this box.  <i>e.g. Inputs</i>	Sometimes a summary of costs/budget is provided in this box.  <i>e.g. Costs</i>	Assumptions (factors outside the programme management control) that may impact on the activity-result linkage.  <i>e.g. Stable exchange rate throughout the duration of the project</i>

The core of the logical framework is a series of connected propositions, as illustrated in *Figure 6.4*:

- If these activities are implemented, and these assumptions hold, then these results will be delivered.
- If these results are delivered, and these assumptions hold, then this specific objective will be achieved.
- If this specific objective is achieved, and these assumptions hold, then this overall goal will be achieved.

The logical framework matrix follows 'means-end' logic. It is based on a series of cause-and-effect relationships, as the following example shows:

- Teacher training (*activity*) leads to better teacher competence (*result*).
- Better teacher competence (*result*) leads to better teacher performance (*specific objective*).
- Better teacher performance (*specific objective*) leads to better student results (*overall objective*).

These relationships, however, are always subject to a series of *assumptions*, which need to be made explicit.

- Assumptions (described in the fourth column) are external factors (political, economic, physical, etc.) that can impact on the implementation of the programme while being outside the control of the project management.
- Most of those factors will already have been identified during the diagnostic phase, but others might come up during detailed programme design discussions.
- External factors can have a positive effect on the programme (for example, an awareness-raising campaign organized by an external agency) or a negative one (for example, the possible eruption of civil war). But since both are outside the programme management control, both imply a risk for successful programme implementation.
- The risk of each factor has to be assessed (for example, given a subjective rating on a five point scale from very low to very high) and possible mitigating factors explored. The assumptions at the activities level have to be defined first and then upwards at the level of results and programme objective. Once the different assumptions have been assessed and considered reasonable on the whole, the assumptions column should serve as the basis for careful **risk monitoring** during programme implementation.

## About the programme

This series of booklets arose from a collaboration between the Protect Education in Insecurity and Conflict (PEIC) programme, and two of UNESCO's education agencies, the International Institute for Educational Planning (IIEP) and the International Bureau of Education (IBE). This collaboration, and the overall framework which developed from it, build on the efforts and momentum of a wide range of stakeholders.

These booklets outline a planning process that serves to strengthen education systems so that they are better equipped to withstand shocks such as natural and man-made disasters, insecurity, and conflict, and, where possible, to help prevent such problems. They are the outcome of a programme which aims to support ministries of education, at central, provincial, and district levels, to promote education systems that are safe and resilient, and to encourage social cohesion within education policies, plans, and curricula. As *Education Cannot Wait*, a campaign launched as part of the UN Secretary General's Education First Initiative, recognized: 'No matter where a country is in its planning cycle there are opportunities to determine its priorities for conflict and disaster risk reduction and to integrate them into annual or sector plans'.

More specifically, the programme's objectives are:

- For a core team to catalyse collaboration between partners in order to consolidate approaches, materials, and terminology on the topics of planning and curriculum to promote safety, resilience, and social cohesion;
- To strengthen cadres, first, of planning, research, and training specialists (from ministries of education as well as international experts) in preparing for conflict and disaster risk reduction through education, and, second, of curriculum developers (again, from ministries of education as well as international experts) experienced in integrating cross-cutting issues into school programmes;
- To strengthen national training capacities through institutional capacity development with selected training institutes and universities.

The programme offers the following materials and booklets for ministries to consult:

- ***An online resource database/website*** containing resources on a range of related topics;
- ***Booklets and training materials on planning and curriculum to promote safety, resilience, and social cohesion;***
- ***Policy briefings*** for senior decision-makers;
- ***Case studies and practitioner examples***, which form part of the online database;
- ***A self-monitoring questionnaire*** to enable ministries of education to determine the degree to which conflict and disaster risk reduction are integrated into their current planning processes.

The booklets can be read independently. Readers seeking clarification on terminology, or the rationale for undertaking a process of promoting safety, resilience, and social cohesion, should refer to *Booklet 1: An overview of planning for safety, resilience, and social cohesion* and the accompanying *Glossary*.

SAFETY, RESILIENCE,  
AND SOCIAL COHESION:  
A GUIDE FOR EDUCATION  
SECTOR PLANNERS

### **Education for safety, resilience, and social cohesion**

With nearly 50 per cent of the world's out-of-school children living in conflict-affected countries, and an estimated 175 million children every year in this decade likely to be affected by disasters, there is a growing sense of urgency to support strategies that reduce the risks of conflict and disasters. Educational planning for safety, resilience, and social cohesion is increasingly recognized by the international community and national education authorities as an important strategy in many countries.

These booklets provide step-by-step advice for educational authorities on how to address safety, resilience, and social cohesion in education sector planning processes. Organized into six booklets and a glossary, these materials present each step of the planning cycle and suggest concrete actions to ensure that safety, resilience, and social cohesion are an integral part of each step.

## **MONITORING AND EVALUATION**

How will we know  
what we have done?

**UNESCO International Institute  
for Educational Planning**

7-9, rue Eugène-Delacroix  
75116 Paris, France

Tel.: +33 (1) 45 03 77 00

[www.iiep.unesco.org](http://www.iiep.unesco.org)