

# MONITORING AT PROGRAMME AND PROJECT LEVEL – GENERAL ISSUES



TECHNICAL NOTE

2006

# Monitoring at Programme and Project Level – General Issues

Technical Note

MINISTRY OF FOREIGN AFFAIRS OF DENMARK

Danida

Monitoring at Programme and Project Level – General Issues

April 2006

*Publisher*

Ministry of Foreign Affairs of Denmark

Asiatisk Plads 2

DK-1448 Copenhagen K

Denmark

Phone: +45 33 92 00 00

Fax: +45 32 54 05 33

E-mail: [um@um.dk](mailto:um@um.dk)

Internet: [www.um.dk](http://www.um.dk)

*Design*

Technical Advisory Service

*Print*

Ministry of Foreign Affairs of Denmark

The publication can be downloaded or ordered from:

[www.danida-publikationer.dk](http://www.danida-publikationer.dk) or

[www.danida-networks.dk](http://www.danida-networks.dk)

The text of this publication can be freely quoted

ISBN 87-7667-450-9 (print version)

ISBN 87-7667-451-7 (internet version)

## Table of Contents

1. Introduction
2. Purposes of monitoring
3. The LFA as monitoring framework
4. Monitoring terminology – the DAC Glossary
5. Policy messages
  - 5.1. The Millennium Development Goals and the Poverty Reduction Strategies
  - 5.2. The Paris Declaration
6. Monitoring according to the Aid Management Guidelines
7. The “VPA indicators”
8. The monitoring challenge
  - 8.1. Introduction
  - 8.2. Levels of monitoring
  - 8.3. The indicators
  - 8.4. Data quality
  - 8.5. The cost of monitoring
9. The alignment and harmonisation challenge
  - 9.1. Introduction
  - 9.2. Aligning to inconsistent national objectives and indicators
  - 9.3. Aligning where indicators are lacking or of low quality
  - 9.4. Relying on a poorly functioning monitoring system
  - 9.5. Harmonisation with other donors

## Annexes

- Annex 1: The MDG monitoring framework
- Annex 2: The LFA matrix: Two examples
- Annex 3: The alignment linkages

## ABBREVIATIONS

AMG	Aid Management Guidelines
BFT	Technical Advisory Services (of Danida)
DAC	Development Assistance Committee (of the OECD)
Danida	Danish International Development Assistance
DOTS	Directly Observed Treatment Short Course
EFA	Education for All
GDP	gross domestic product
GoD	Government of Denmark
GoX	Government of X
HIPC	highly indebted poor country
HQ	headquarters
KVA	Quality Assurance Department (of Danida)
LFA	logical framework approach
MoA	Ministry of Agriculture
MDG	Millennium Development Goal (of the United Nations)
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
PPP	purchasing power parity
PRSP	poverty reduction strategy paper
SMART	Checklist: specific, measurable, achievable, realistic, time-bound
SPS	sector programme support
SWAp	sector-wide approach
UN	United Nations
VPA	annual business plan (of Danish representations abroad)
WUG	water user group

## 1. Introduction

The present Note is primarily aimed at supporting officers at the Danish representations and HQ responsible for preparing and managing Danish bilateral development assistance. It 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 Note offers a brief introduction to some central concepts in monitoring, to the relevant aspects of Danida policies and strategies, and to the monitoring context in our countries of cooperation. On this basis, the Note sets out to respond to some of the practical questions and challenges often faced when planning and managing programmes and projects at country level.

Given the Danish commitment to the international agenda of ownership, alignment, harmonisation, and managing for results, ideally, the staff at Danish representations and their consultants should not be in charge of designing monitoring systems or choosing monitoring indicators. This should be left to the relevant national institutions. On the Danish side, the task is rather to assess the systems and indicators, perhaps to assist in refining them, or to include activities in the programmes and projects conducive to enhancing the national monitoring capacity. In practice, however, national (including sector) monitoring frameworks and systems often beg more fundamental questions: how do we ensure proper monitoring of a programme or project? And how may this be combined with commitment to the international agenda?

This Note is part of a series of Technical Notes on monitoring and indicators. It is concerned only with general aspects of monitoring. As such, it is meant to supplement and to provide a common frame of reference for the other notes, which deal with individual sectors and cross-cutting issues. These notes focus on the choice of relevant and feasible monitoring indicators in their respective sectors and areas. Revised versions of the notes are expected to be out by May 2006.

Comments on this paper may be sent to Torben Lindqvist ([torlin@um.dk](mailto:torlin@um.dk)) with a view to revising the Note regularly.

## 2. Purposes of monitoring

Monitoring should be understood as a management tool. Even so, it may be carried out for various purposes. Learning, documentation, control, transparency, legitimisation, and improved decision-making are some of them. In the context of (Danish) development aid, the monitoring effort is guided by most of these purposes to some extent. In fact, the same monitoring exercise may serve different purposes for different stakeholders:

For programme managers, the primary purpose will usually be improved decision-making (i.e. immediate feedback of performance-related information into the management process), to a lesser extent documentation (substantiating progress reports submitted to national and donor authorities) and control (using the information to oversee the performance of staff and institutions involved in the implementation).

For the authorities in both the partner and the donor country, monitoring may serve the purposes of learning (feeding monitoring results into new programming), documentation (demonstrating results to political masters), control (using monitoring results as proxies for the performance of the

programme managers), and legitimisation (justifying the allocations given to them in the national budgets).

For the politicians appropriating the funds, monitoring results may serve the purposes of transparency (towards their voters and civil society), learning (reformulating development policies and strategies), control (monitoring the civil servants implementing the appropriations), etc.

Finally, for the target population of the interventions, the primary purpose of the monitoring effort will be control (over programme managers and authorities generally) – unless monitoring is conducted in a participatory manner, emphasising learning and better decision-making at target-group level. This latter possibility points to a further use of monitoring, namely as a tool for generating ownership, and thereby improved sustainability.

Accordingly, different stakeholders will need different types of monitoring outputs for the monitoring to serve their purposes. This ranges from highly detailed and possibly localised information at target-group level, via less detailed but rather frequent information at programme management level, general and less frequent (e.g. annual) information at national-authority level, to very general information at the global (e.g. UN) level.

In the context of monitoring Danida-funded programmes and projects, the primary aim is to make relevant information for decision-making and learning available at three levels: day-to-day management for immediate feedback into decision-making on practical programme implementation; the Steering Committee or similar overall management body for regular stock-taking and decision-making; and the higher echelons of management both in the relevant partner country institutions (relevant ministry, Ministry of Planning, Ministry of Finance, etc.) and in the Danish Ministry of Foreign Affairs, including the Danish Ambassador. Usually, a system well suited to meet these needs can also be expected to respond adequately to other relevant purposes.

### 3. The LFA as monitoring framework

The Logical Framework Approach (LFA) was developed as a project planning tool, and became widely used by most donor agencies for many years. In Danish development assistance, LFA was a standard piece of the toolbox until around 2000. Since then, it has mostly been applied implicitly or not at all. There are several reasons for this. However, in this paper, LFA is introduced only as a useful terminological reference.

In the context of monitoring, LFA provides a useful framework for keeping track of the various links in the “results chain” of a project or programme, right from the inputs invested to the final impact achieved.

The LFA typically distinguishes between the following levels:

The *development objective* indicating the expected long-term or final *impact* to which the programme/project will contribute.

The *immediate objectives* indicating the *outcomes* needed for achieving the envisaged development objective.<sup>1</sup>

The *outputs*, which are direct products of activities carried out, and which will lead to the needed outcomes.

The *activities* carried out in the programme/project.

The *inputs* needed to carry out the activities.

The LFA also stipulates the *risks* and the *assumptions* associated with the programme or project between each of the above levels, e.g. the risks that may prevent the achieved outcomes from leading to the expected impact, or the assumptions that need to hold true for the outputs to give rise to the envisaged outcomes.

Finally, at each level the LFA will typically include:

- a number of indicators by which to monitor whether the planned impact, outcomes, etc. have actually been achieved, and
- the means by which each indicator can be measured – the so-called “means of verification”.

All these elements are usually presented in an *LFA matrix*. See two examples of LFA matrices in Annex 2.

The LFA thus reminds us that monitoring (or, as phrased in the Paris Declaration, “performance assessment”) of development interventions needs to take place at all levels in order to track the achievement of results, during as well as after implementation. The LFA also provides a terminology to differentiate between the various levels.

#### 4. Monitoring terminology – the DAC Glossary

The above LFA terms are among those codified by DAC in its “Glossary of Key Terms in Evaluation and Results Based Management” from 2002. The major monitoring-related terms and definitions of the Glossary are presented in the box below. Note that, according to Danida’s Aid Management Guidelines, the terms and definitions of the DAC Glossary should also be used in Danish development assistance. The full Glossary can be downloaded from the DAC website: [www.oecd.org/dac](http://www.oecd.org/dac).

---

<sup>1</sup> In complicated cases, a level of *intermediate objectives* is sometimes inserted between the immediate objectives and the development objective.

Monitoring: A continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds.<sup>2</sup>

Indicator: Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor.<sup>3</sup>

Note that indicators, as defined by DAC, do not include targets. A *target* is not defined by DAC, but (in this context) signifies the value that an indicator is supposed to attain at a given point in time.<sup>4 5</sup>

--- --- ---  
The various levels in the results chain as illustrated by the LFA are defined as follows by DAC.

First, the upper-most level indicating the general and long-term objectives and impacts:

Development objective: Intended impact contributing to physical, financial, institutional, social, environmental, or other benefits to a society, community, or group of people via one or more development interventions.

Impact: Positive or negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended.

Then the levels relating to the shorter-term and the immediate results, respectively:

Outcome: The likely or achieved short-term and medium-term effects of an intervention's outputs.

Outputs: The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.

DAC also defines a term relating to all of the above levels:

---

<sup>2</sup> Monitoring and evaluation are often lumped together as a single concept. DAC however defines evaluation as follows: "The systematic and objective assessment of an on-going or completed project, programme or policy, its design, implementation and results. The aim is to determine the relevance and fulfilment of objectives, development efficiency, effectiveness, impact, and sustainability. ..."

<sup>3</sup> DAC also defines the term "performance indicator": "A variable that allows the verification of changes in the development intervention or shows results relative to what was planned." As can be seen, the meaning of the two terms is virtually the same.

<sup>4</sup> Example: Indicator: "Number of classrooms built." And target: "33 classrooms by end of 2007". The target is often broken down by year: "10 by end of 2005; 20 by end of 2006; 33 by end of 2007". Often, however, indicators encompass the targets, such as "33 classrooms built by end of 2007". This type of formulation would not be in accordance with the DAC definition of an indicator.

<sup>5</sup> Note that the monitoring framework of the MDGs (see Annex 1) refrains from assigning a target to each of the indicators. Instead, each target is meant to be monitored through several indicators, whose individual targets are not specified. This makes the significance of each indicator in monitoring the targets somewhat unclear.

*Results:* The output, outcome or impact (intended or unintended, positive and/or negative) of a development intervention.

And finally, the activities themselves, which are supposed to lead – directly or indirectly - to the results above:

*Activities:* Actions taken or work performed through which inputs, such as funds, technical assistance and other types of resources are mobilised to produce specific outputs.

## 5. Policy messages

### 5.1. The Millennium Development Goals and the Poverty Reduction Strategies

Danish development aid is intended to support the achievement of the MDGs as approved by the UN General Assembly in 2000. These consist of eight broad “goals” to be attained in all countries by 2015, broken down into 18 more specific “targets” and provided with a total of 48 “indicators”.<sup>6</sup>

The latter are meant as the framework for monitoring progress towards achieving the MDGs. Since all countries have committed themselves to continuously monitoring the MDG indicators, these constitute an important element in the national monitoring frameworks that must be referred to when monitoring Danish bilateral development aid. See below on the Paris agenda.<sup>7</sup>

In addition to supporting the attainment of the MDGs, Danish development aid serves to support the implementation of the national Poverty Reduction Strategies or similar processes and documents. In nearly all Danish partner countries, these are now the focal point of domestic as well as foreign-funded development efforts. Therefore, to the extent possible, the PRS objectives, with associated indicators and their targets, should, alongside the MDGs, make up the overall framework for monitoring Danish assistance in each country.

Usually, however, Danish support at the sector level and at the level of thematic issues (reforms, etc.) is not directly anchored in the PRS, but in the relevant sector policy, strategy, plan, etc. Consequently, monitoring needs to be based on these documents as well.

### 5.2. The Paris Declaration

The requirement to align Danish bilateral aid with national development frameworks follows from Danish endorsement of the international agenda on aid effectiveness, whose latest expression is the Paris Declaration of 2005.

The Paris Declaration<sup>8</sup> is composed of five main areas within which donors and partner countries commit themselves to move forward together: ownership, alignment, harmonisation, managing for results, and mutual accountability.

---

<sup>6</sup> See the MDG monitoring framework in Annex 1.

<sup>7</sup> In some sectors there are additional sets of internationally defined indicators, on which the countries are also committed to reporting regularly, such as the EFA indicators in the education sector. These, too, must be taken into consideration as part of the monitoring framework in the sectors concerned.

<sup>8</sup> The Paris Declaration on Aid Effectiveness, March 2005. See [www.oecd.org/dac](http://www.oecd.org/dac)

Monitoring features prominently in all these areas, whether explicitly or implicitly. However, in the area of Managing for Results, the monitoring implications of the Paris Declaration are spelt out in particular detail. Indeed, "Managing for Results" was the title of a whole conference held in Marrakesh in 2004, looking at ways of focusing aid management on the desired results (as opposed to the traditional input orientation of aid management). An essential aspect of this endeavour is the generation and use of information to improve decision-making.

Under this heading, the Paris Declaration includes a partner country commitment to "endeavour to establish results-oriented reporting and assessment frameworks that monitor progress against key dimensions of the national and sector development strategies; and that these frameworks should track a manageable number of indicators for which data are cost-effectively available".

The donors correspondingly commit to the following:

- "Link country programming and resources to results and align them with effective partner country performance assessment frameworks, refraining from requesting the introduction of performance indicators that are not consistent with partners' national development strategies."
- "Work with partner countries to rely, as far as possible, on partner countries' results-oriented reporting and monitoring frameworks."
- "Harmonise their monitoring and reporting requirements, and, until they can rely more extensively on partner countries' statistical, monitoring and evaluation systems, with partner countries to the maximum extent possible on joint formats for periodic reporting."

Since Denmark has subscribed, alongside all other major donors, to the Paris Declaration, all monitoring-related work in Danish development aid must obviously conform to these three fundamental commitments. Chapter 9 outlines some practical challenges in this pursuit, such as inconsistencies often found between objectives and indicators of the MDGs, the PRSs, and the sector strategies, as well as the uneven quality of PRSs, including their monitoring frameworks.

## 6. Monitoring according to the Aid Management Guidelines

In the Aid Management Guidelines, the concept of monitoring is part of the more general performance management<sup>9</sup>. Since 2002, Danida has developed a comprehensive performance management system, which includes tools and instruments pertaining to all levels: the corporate level (Danida as a whole), the level of country programmes, and the level of individual sectors, programmes and projects.

The formats and guidelines for the various performance monitoring<sup>10</sup> activities, on which the Danida performance management system is based, are found on the AMG website: [www.amg.um.dk](http://www.amg.um.dk).

The chief mechanism of performance monitoring at the corporate level is the production of Danida's Annual Report and the Annual Performance Report by KVA, which is based on material from the

---

<sup>9</sup> The closest DAC term is "results-based management" defined as: "a management strategy focusing on performance and achievement of outputs, outcomes and impacts."

<sup>10</sup> The DAC definition of performance monitoring: "A continuous process of collecting and analysing data to compare how well a project, programme, or policy is being implemented against expected results."

country and the sector/programme/project level. At the country level, the main tools are the annual assessments of each country programme and the VPA (Annual Business Plan) reporting submitted by each representation, as well as the Performance Reviews carried out by KVA.

Finally, at the sector/programme/project level, the main tools are the BFT- and embassy-conducted reviews of programmes (in Danida terminology: Sector Programme Support, SPS) and projects, including the “Assessments of progress of programme support”, the regular progress reports produced by each programme and project, and programme/project completion reports. The findings of these exercises and documents are largely based on the results from monitoring systems built into each individual programme and project, i.e. the systems at the centre of attention in the present Note.

The Guidelines on Programme Management and the Guidelines on Project Management detail at which stages in the programme and project preparation process the monitoring system should be designed and monitoring indicators selected. These publications also indicate which elements of the monitoring system must be described in the programme/project documents, and how to make use of monitoring results in progress reports. In line with the harmonisation agenda, however, the Guidelines uphold the principle of flexibility, allowing for adaptation to different monitoring set-ups, whenever programmes and projects can be prepared and implemented jointly with other donors.

## 7. The “VPA indicators”

As part of the overall performance management system, representations are required to include one indicator per programme component in their Annual Business Plans (VPA), and to report on these indicators as part of their VPA reporting to HQ. These indicators are not intended to add to those that have already been defined for the programme and project monitoring systems. Instead, one existing indicator (usually at the output level of the results chain) in each component should be selected for VPA reporting. The reporting of selected programme/project indicators in the VPA in combination with country programme and sector assessments is meant to provide Danida Management with an overview of progress achieved in country and sector programmes.

## 8. The monitoring challenge

### 8.1. Introduction

As in the case of all other programme elements, the form of monitoring varies widely depending on the scope and type of programme, project or component<sup>11</sup> to be monitored. Major variations concern the scope (sector-wide or limited to distinct aspects or areas), the degree of alignment and harmonisation, the existence and quality of the national strategic and monitoring framework, and the organisational capacity of the sector’s/area’s monitoring set-up, if any.

Consequently, there can be no standard recipe for monitoring. Nevertheless, this Chapter 8 sets out to present some general aspects of monitoring, notwithstanding the diversity of sectors, areas, and programmes. The diversity is taken into account in Chapter 9, which attempts to provide inspiration for handling a variety of situations with regard to alignment and harmonisation. Finally, the

---

<sup>11</sup> In the following, “programme” may refer to “programme”, “project”, and/or “component”.

Technical Notes concerned with individual sectors and cross-cutting issues seek to address these more specific challenges.

## 8.2. Levels of monitoring

As previously mentioned, monitoring must take place at all levels of the results chain (as it appears from the LFA matrices in Annex 2). However, the types of information and the frequency with which information can usefully be collected vary widely among the levels.

At the most overall level – the long-term impact level – monitoring often has to be conducted through occasional ad hoc surveys rather than regular data collection. This stems from the complexity of indicators typically associated with development objectives, requiring measurement of poverty levels, of changes in income, of vulnerability, etc. It is often impossible to measure such indicators through the collection of routine data, which makes them expensive to monitor. At the same time, they seek to measure rather slow developments, making it more appropriate to monitor changes with fairly long intervals, e.g. once every three to five years. A good example at the national level is the Household Expenditure Surveys conducted every five years in many countries to monitor the impact of the PRS on poverty levels.

At the outcome level, administrative data will often be available for monitoring, e.g. morbidity rates in the health sector, pass rates in education, crop yields in agriculture. Since such data is already part of the sectors' administrative information systems, it is cheap to exploit, and will usually be available on an annual basis.

At the output level, monitoring indicators tend to consist of highly tangible “products” (e.g. number of courses or workshops conducted, length of roads built or rehabilitated, number of teachers trained, quantities of drugs distributed, percentage of job descriptions revised). Therefore, data collection will be comparatively easy and can be done frequently, e.g. quarterly. At this level, some of the needed data will usually be routine administrative data collected anyway by the relevant sector ministry, district administration, etc. Other data may be programme-specific, and has to be collected outside the routine system.

Programme outputs are directly linked to programme activities, and therefore also to the programme budget. At the output level, therefore, the comparison between financial and physical progress – an indispensable aspect of monitoring – is normally straightforward (whereas the link between financial and physical progress is usually much harder to establish at outcome and impact level).

At the activity level, monitoring is even more straightforward, as is the link to the budget.

Another three aspects need to be monitored, although they may well not be formally included in monitoring systems, and formal indicators tend not to be formulated:

- Inputs. These have to be monitored in terms of their availability, timeliness, quality, and consumption. The accounts are the tool to monitor consumption of financial inputs.
- Risks. These must be monitored in terms of the degree of threat they pose to the attainment of the programme objectives. In turn, the monitoring findings must prompt considerations on how to mitigate the risks, in case they appear to grow worse.
- Assumptions. The validity of these must also be monitored and the findings used to judge the continued feasibility of the programme and its constituent parts.

Finally an important fact regarding the various levels of monitoring: obviously, the higher the level at which we look – starting at the input level and ascending until the impact level – the less the information collected will refer specifically to the achievements of our programme or project at hand. As long as our funding is separate from government and other donor funds, we will be able to track the effects of our intervention unequivocally at the activity and output levels. At the outcome and especially at the impact level, however, the achievements monitored are much less attributable to specific inputs. The government as well as other donors are intervening in the same sector or area, and other global, national and local dynamics also influence developments within the sector and target group, thus affecting the “achievements” reported by the monitoring system. It is true that this limitation varies, and in some cases we may still confidently claim to have been responsible for a good deal of the reported achievement. But it remains a fundamental fact that, strictly speaking, the results of Danish aid cannot be monitored at the levels that really count, i.e. their contribution towards overall development goals.

### 8.3. The indicators

Given the need for monitoring at all levels of the results chain, in principle, indicators are required at all levels. At some of the levels, however, indicators tend to be self-evident. Indeed, at the input level, there is no need for indicators, as the supply of inputs can be directly observed. If activities and outputs are highly specific in their formulation, indicators at these levels may follow almost by definition<sup>12</sup>. At higher levels, separate indicators always have to be chosen and formulated.

The more we align Danish aid with domestic strategies and systems, and the more we provide it jointly with other donors, the more the responsibility for selecting indicators rests with the national authorities, sometimes supported by the joint donor group. However, in cases of Danish non-basket support earmarked for specific activities (as in most programmes and components outside the social sectors and the reform programmes, and even in many within these), the identification of indicators remains, at most levels, part of the preparation process for Danish support.

## The quality of indicators

Good and relevant monitoring requires good and relevant indicators. There are various versions of the features that add up to good and relevant indicators. One is presented in the box below:

An indicator should be

Valid – Does the indicator directly represent the result it is intended to measure?

Objective – Is the definition precise and unambiguous about what is to be measured?

Reliable – Is the data consistent or comparable over time?

---

<sup>12</sup> An example: The activity “conduct 8 workshops for 200 farmers” already includes the targets, and the indicators are obvious: “Number of workshops conducted” and “number of farmers reached”. If the activity is just “training”, both targets and indicators need to be formulated in order to make the activity monitorable (and in order to come up with a budget!). In real life, the formulation of activities and outputs varies widely. Generally, they are less quantified and specific in overall documents (e.g. programme documents; sector strategies) and more quantified and specific – and often broken down into more detailed sub-activities and sub-outputs – in documents relating directly to practical implementation (e.g. annual work plans).

Practical – Can data be collected easily, on a timely basis and at reasonable cost?

Useful – Will the data be useful for decision-making and learning?

Owned – Do partners and stakeholders agree that this indicator makes sense?

Another concept is “SMART”, which stands for “Specific, Measurable, Achievable, Realistic (Relevant), and Time-bound”. Strictly speaking, the SMART features do not relate to indicators, but to results (i.e. objectives and outputs)<sup>13</sup>.

To be SMART means to be

Specific – Are you precise about what you are going to achieve?

Measurable – Are your objectives quantified?

Achievable – With a reasonable amount of effort and application, can the objective be achieved? Or are you attempting too much?

Realistic – Do you have the resources to make the objective happen? (men, money, machines, materials, minutes)

(Relevant) – Can the people with whom the objective is set make an impact on the situation? Do they have the necessary knowledge, authority and skill?)

Time-bound – Is there a completion date clearly stated or defined?

The SMART features make an objective or an output “monitorable”, thus highlighting how formulating good objectives and outputs is essential to the monitoring effort: Without SMART objectives and outputs, it becomes very difficult to choose and formulate relevant indicators for measuring progress. It is therefore worthwhile to formulate – or to seek influence on the formulation of – programme and sector objectives at all levels with a view to making them as SMART as possible.

---

<sup>13</sup> Again, depending on the formulation of the objectives or outputs. Objectives and outputs are sometimes unspecific (“Improved levels of income among farmers”) and sometimes quite specific (“The income of 1 million farmers increased by 10% after 10 years”). In the second case, the objective itself is SMART, while in the first case, it only becomes SMART by having an indicator (“Farmers’ level of income”) and a target (“10% increase with 1 million farmers in year 10”) attached to it. Both ways are frequent, but the SMARTness is always needed to enable monitoring.

There are several types of indicators. The most important are presented in the three boxes below:

*Direct and proxy indicators*

Direct indicators measure features or aspects of the expected results in a direct manner: The objective of having the road network properly maintained may be monitored directly by the indicator “number of kilometres of roads maintained”.

Proxy indicators measure something (slightly or very) different from the result itself, nevertheless thought to paint a reasonably good picture of the degree to which the result has been achieved. Proxy indicators are used when the result itself is difficult, expensive or impossible to monitor directly. A well-known (although very rough) proxy indicator of rural poverty, used by some micro-finance institutions, is the roofing quality of village houses. If combined with a few other proxy indicators that are equally easy and inexpensive to observe, e.g. the frequency of bicycles and the quality of clothing, this may actually be a rather reliable measure of poverty in many settings. It is, however, always essential to make explicit the assumptions under which a proxy indicator may be expected to serve its purpose.

Proxy indicators may be particularly useful when monitoring qualitative results. Thus, the road maintenance indicator above could possibly serve as proxy indicator of an objective like “improved maintenance capacity of the Ministry of Public Works”. This is an example of a qualitative result being monitored by a quantitative indicator, a very important aspect of monitoring, as most objectives, especially at higher levels, are qualitative by nature.

*Quantitative and qualitative indicators*

At times, qualitative results can hardly be measured by way of quantitative indicators – or it may be exceedingly costly to do so. In such cases, it is necessary to resort to qualitative indicators. While the monitoring of a quantitative indicator (“Number of kilometres maintained”) gives rise to a quantitative response (“36 kilometres”), a qualitative indicator (“Degree of staff satisfaction with the leadership”) gives rise to a narrative response (“General satisfaction with work planning and distribution of tasks, but widespread sense of job insecurity. Some expression of discontent with arbitrary promotions.”).

Qualitative statements like this one may be useful for some purposes. However, they cannot be aggregated (e.g. across departments in a ministry), and they may be difficult to act on: is the achievement good or less good? And of course, they are not useful if the targets are quantitative (“(Staff satisfaction increased by) 15% by end of 2005”).

Generally, therefore, one should strive to quantify even qualitative aspects. In the above example, the assumed objective (“Increased staff satisfaction with the leadership”) could, instead of the qualitative indicator, be broken down into quantifiable aspects by way of a number of quantitative indicators, i.a. “Percentages of staff satisfied/less satisfied/not satisfied with work planning”, “...with distribution of tasks”, “...with promotion practices”, etc. This would allow aggregation, and quantitative targets could be specified.

Indeed, the exercise of breaking down and quantifying qualitative objectives is often a highly useful process, serving to clarify and flesh out the exact meaning and most central elements of an objective.

### *Process indicators*

“Process indicator” does not feature in the DAC Glossary, but is frequently used. A process indicator relates to the implementation process rather than to its results. Therefore, it primarily concerns the input and the activity levels, sometimes also the output level of the LFA. Often, however, process indicators are formulated in order to monitor processes which are not specified as programme inputs/activities/outputs, but which rather relate to routine activities and processes in an organisation, a sector, etc. Such activities and processes may well be essential for the efficiency and effectiveness of organisations (and programmes), but they tend to be merely assumed to function. Examples might be the time needed to process an application, the regularity of staff meetings, the timeliness of internal information flows, the actual compliance with laid-down financial procedures, etc. An organisation (and/or its donors) may wish to focus attention on a number of such routines – considered as bottlenecks in the workings of the organisation – and to formulate indicators and set targets in order to monitor improvement.

## 8.4. Data quality

Reliable monitoring obviously requires reliable data. There are numerous reasons for quality failures of important data. One is the capacity constraint that characterises most administrations in the partner countries and which may influence, among other areas,

- the collection capacity (comprehensiveness, regularity, relevance, reliability of data collected),
- the data management systems and the information analysis (handling and storage of data, processing and exploitation of information, etc.),
- the publication of the data (regularity, comprehensiveness and ease of access, etc.), and
- the general transparency of the systems (where does the data actually come from, how is it processed? ...).

Part of the capacity constraint may stem from adverse incentives in the system, which would often merit closer attention. Is the obligation to report data regarded as a control measure? Do the individuals and units providing the data see the need, the point, their own interest in the exercise? Do those at the centre who receive the data use it to sanction people? Do they provide constructive feedback? Or do they monopolise knowledge?

Very often, the capacity and other systemic problems in monitoring – like those in other areas of management and administration – call for donor support to strengthen capacity and improve quality. Such support can often be built into programmes. If this is done, the following questions must be kept in mind:

- Is the proposed support aimed at a realistic amount and frequency of data collection?
- Does the support revolve around the sector’s/institution’s/... own monitoring needs and focus on making its own data collection and monitoring system work better?
- Does the support consider the place of the sector/institution in the national monitoring set-up? (E.g. the division of work between the sector/institution and the national statistical bureau; the role in monitoring the PRS and the MDGs; etc.).

## 8.5. The cost of monitoring

It is hard to devise a standard formula for the appropriate cost level of programme monitoring. Some might say that no more than 5% of the total programme budget should be spent in this field. Of course, the cost (to the programme) of monitoring varies widely depending on the method of data collection. Does the programme have access to the needed data from systems that already collect it for their own purposes, or does it have to collect it itself? In the latter case: are we talking about data that can be extracted from existing (administrative) systems or documents (such as the financial management system or reports from programme units to the programme HQ), or data requiring specific field studies to be collected?

There are various ways of reducing costs. One is to choose indicators that can be monitored using available data. This may imply some compromises, such as using less-than-optimal proxy indicators.

Another way of limiting costs is to work alongside other donors, jointly proposing indicators to the partner government/institution. This, too, may involve compromises, and the benefits and costs of these must be considered in each case.

Finally, but most importantly, what is “nice to know” is different from what we “need to know”. This distinction is fundamental in all monitoring, but has all too often been neglected, giving rise to overly costly and bulky monitoring systems, as well as to the collection of huge quantities of information that cannot be processed, and is therefore left unused.

It goes without saying that considerations of cost and relevance are equally valid when advising on establishing or improving sector or national monitoring systems.

## 9. The alignment and harmonisation challenge

### 9.1. Introduction

Aligning and harmonising monitoring is an important aspect of the general alignment and harmonisation effort. How to do so hinges crucially on the design of the institutional and management set-up of each programme. This includes the roles of advisers; the presence or absence of a Programme Management Unit or similar entity; the extent of alignment of programme objectives and targets to the national overall and sector framework; the degree of collaboration with other donors in terms of financing arrangements; etc.

On the other hand, there is hardly any programme design in which the alignment and harmonisation agenda cannot be taken just a bit further in the area of monitoring.

Other challenges concern the quality and consistency of the national systems with which to align, and the requirements and attitudes of other donors with whom to harmonise.

Some of these challenges are described below, together with suggestions on how to tackle them.

Firstly, however, it is worthwhile noting that, even if the problems of alignment and harmonisation pertain to all levels in the LFA, they tend to feature in different ways. As for indicators and targets,

alignment and harmonisation problems are usually confined to the levels of objective/outcome, whereas the levels of output, activity, and input are not affected (as indicators at these low levels rarely pose any problems). Even so, when the focus is on organisational set-ups meant to carry out the monitoring work, the problems may concern all levels: who will do the monitoring – an already existing national set-up, a national set-up to be created, one or more parallel systems run by the donor(s), etc.? Lastly, the monitoring of risks and assumptions usually does not constitute an alignment problem (as risks and assumptions are rarely part of national monitoring systems), whereas it may constitute a harmonisation problem (namely in joint financing arrangements, where donors should seek to understand and react uniformly to risks and assumptions).

## 9.2. Aligning to inconsistent national objectives and indicators

As mentioned previously, the national monitoring (“performance assessment”) systems, with which Danish-funded programmes and projects should be aligned, consist of the sector (or thematic area), the national, and the global (MDG) frameworks. Often, these are inconsistent. The objectives in the sector plan may differ from the sector objectives in the PRSP; the PRSP may not reflect the MDGs; the indicators in the sector plan may not match those in the PRSP and/or the relevant MDG indicators; the targets presented in the sector plan may deviate from those in the PRSP (if there are any at all). Inconsistencies may also pertain to sector-specific international objectives and indicators other than the MDGs (e.g. the education sector EFA framework).

Such problems remain the rule rather than the exception. However, the situation is generally improving, albeit slowly.

Basically, each inconsistency will have to be considered separately. To determine the way forward, the following questions may be asked, depending on the case:

Which is the most recent document? The PRSP or the sector plan? One or the other of two “competing” sector plans/strategies? The PRSP (in particular its targets) or the official development path towards the MDGs, if any?

Is the essence (of objectives, targets, indicators, ...) in the most recent document likely to be embraced in future updates of the other document(s), with which it is currently inconsistent? Can we, for instance, achieve formal recognition that the next version of the sector plan should use the formulations of the present PRSP? Which set of indicators is actually being monitored by the government? Are there plans to change this?

Several of these questions call for some kind of action by the Government. By the same token, they hint at the possibility of donor(s) assisting the government to do so. This may be possible during programme preparation, or could need to be postponed until the implementation phase, in the form of specialist consultancies, capacity-building activities, etc. In such cases, it may be necessary to make a preliminary choice of indicators, and have the programme itself conduct all or part of the monitoring for some time, until a functioning national/sector monitoring system is in place. This should be made explicit in the programme documentation and could even be stated in the Board appropriation note.

## 9.3. Aligning where indicators are lacking or of low quality

A slightly different matter is when there are no relevant indicators in either the PRSP or the sector plan, or both. Or when existing indicators are felt to be inappropriate.

In such cases, the required indicators have often been formulated by the consultants preparing the programme, without much consultation with the relevant government institution. This must be avoided: indicators are of no or limited use if they are not “owned” both by those supposed to use the monitoring results (the sector and programme leadership) and by those required to do the monitoring (e.g. the sector ministry). This takes on even greater importance the more we integrate our aid into the national structures and the less we rely on parallel programme structures.

If new indicators are created, these must arguably improve not only programme, but also sector management. If not, the need for the new indicator(s) should probably be reconsidered, perhaps even the very content of the component concerned. In any case, before introducing a new indicator, the data generated by the present monitoring system of the sector should be studied in order to align new data requirements with the present capacities of the system to the extent possible.

Sometimes, national indicators do not comply with internationally recognised formulations.<sup>14</sup> Convincing the government to shift to the corresponding international formulations is of obvious benefit as it enables the same monitoring to serve both international and national purposes.

As noted in Section 8.3., inferior indicators may also be derived from poorly formulated objectives. To rectify these, in turn, will usually require a revision of the entire document concerned (e.g. the sector plan). If time and other constraints preclude this course of action, it may be necessary to make do with the existing, less useful indicators, ideally with an agreement on subsequent amendment of the sector plan.

#### 9.4. Relying on a poorly functioning monitoring system

As previously mentioned, organisational set-ups tasked with monitoring (good or bad) indicators are often weak, e.g. in terms of human resources, procedures, incentives, or funding. In addition to affecting the relevant national and sector authorities, this poses problems to the programme management and the Steering Committee (including the Danish representation) in terms of the management information they need and the reporting requirements imposed on them.

Two main cases may be distinguished:

a. In programmes forming part of SWAps – and within these even part of joint financing arrangements (basket funds) or taking the form of budget support – there is no alternative to relying on the national/sector monitoring systems. In principle, a properly functioning monitoring system should probably be a precondition for entering into such arrangements at all. In practice, however, commitments to participate are made despite weak monitoring systems and the consequent flawed information on performance and achievement. While this problem can hardly be overcome in the short term, two mitigating courses of action can be taken from a medium-term perspective.

---

<sup>14</sup> A trivial example: internationally, the indicator “child mortality” is specified as being concerned with children between 0 and 5 years of age. As all countries are obliged to report on this indicator, neither a government nor a donor should operate with another age bracket, as this would require monitoring related to both specifications. Other examples are less trivial, and care should always be taken to adapt the specification of indicators to internationally accepted standards, if any.

One is to engage immediately in planning and implementing system- and capacity-building efforts with respect to monitoring. This obviously assumes, sometimes contrary to reality, that the monitoring problem is recognised by all parties as a central and not a peripheral concern.

In turn, the obvious (but not automatically realised) dangers in such endeavours include overambitious aims (with regard to the quantity and frequency of data collected and the sophistication of data processing) and proceeding with insufficient government involvement and ownership. Efforts to build monitoring systems have often been caught in these two traps.

The second mitigating step, supplementing the first, is to agree with the government and among donors that at least some ad hoc studies should be carried out regularly until the monitoring system has been sufficiently improved. Such studies could be based on small samples and focused on a few essential indicators. In many cases, the data needed for good monitoring is in fact present at field level, but is not fed into a functioning data transmission and processing system. In such cases, the data required can be obtained through sample-type field visits. In other cases it may be necessary to formulate proxy indicators in order to gain at least an impression of ongoing developments.

b. Programmes, projects and components less integrated into the national administrative system, operating with earmarked funds channelled through separate accounts, and/or financing relatively distinct activities (e.g. only operating in particular districts, or dealing with clearly delimited aspects or elements of a sector) may sometimes offer the additional option of developing and implementing a separate monitoring system, or, more accurately, of extending the programme's activity and output monitoring up to the outcome level.

In such cases, one important consideration is whether the monitoring system – including the procedures, the indicators, the data-processing software, etc. – can be designed so as to be useful to, and subsequently taken over by, the sector ministry. Or aiming even higher, whether the ministry itself can become the driver in establishing the monitoring system, using the Danish programme as a test bed for what will eventually become a sector-wide system.

One challenge tends to arise in such cases. The sector ministry will typically need (and be able to collect and process) considerably less data at the sector-wide scale than the programme will at its more limited scale. In other words, the programme “needs to know” a substantial amount of data that is, for the ministry, only “nice to know” (and therefore unfeasible to collect, given the limited capacity of the ministry and its data suppliers). Various compromises can be made, such as including the ministry's “need to know” information within the broader range of information to be used by the programme. In any case, support for a (feasible and sustainable) sector-wide monitoring system should be seriously considered as part of the programme.

## 9.5. Harmonisation with other donors

Donors have different approaches to monitoring and reporting. Therefore, when entering into collaboration with other donors, a common solution will often have to be negotiated. As situations will vary widely, little general guidance can be given here. Many of the above considerations will, however, be equally relevant here.

One overall key principle of harmonisation may be termed “alignment through harmonisation”. The principle follows directly from the fact that alignment should always be regarded as the first choice, while harmonisation is only the second choice, i.e. the fall-back position. When seeking

harmonisation, the longer-term vision of alignment should therefore guide the process. This is essentially the same observation as above: the harmonised system should, to the extent possible, be geared towards takeover by the relevant national/sector institution. While the existing or future national/sector capacity and needs should, as far as possible, determine the harmonised solution. This has repercussions for the capacity required (i.a. the level of ambition, the question of “need to know” vs. “nice to know”), the procedures set up (i.a. the degree of conformity with existing data collection and reporting schedules and with the existing division of responsibilities in the state system), and the software used to process the collected data and to issue monitoring reports (i.a. preference for software already used for similar purposes in the same or other government institutions, the use of less expensive local back-up, etc.). Needless to say, this approach requires very close collaboration with the government system. In that sense, it is already an important step towards alignment.