

INTEROFFICE MEMORANDUM

18 May 1999

TO: OMG Members
All Resident Representatives

FROM: Herbert M'cleod
Director, OSG

Khalid Malik
Director, EO

SUBJECT: Suggestions and practical advice on selecting key results indicators

The identification and monitoring of key indicators is a critical element of the strategic results framework (SRF) which UNDP has introduced in the context of the multi-year funding framework (MYFF).

I understand that many of the participants at the SRF roll-out workshops that were held in all regions have requested more guidance on the selection of results indicators.

The attached note (which is also available on the Intranet at <http://intra.undp.org/osg/results/index.htm>) provides practical advice and suggestions in respect of selecting key outcome and output indicators for the SRF planning exercise.

The paper has been jointly prepared by the Evaluation Office (EO) and the Operations Support Group (OSG). As we expect to develop further guidance materials on indicators, EO and OSG would welcome your comments in respect of the current note.

Signposts of development:

Selecting Key Results Indicators

*- in the context of the UNDP strategic
results framework (SRF)*

Suggestions and practical advice from EO and OSG



13 May, 1999

INTRODUCTION

A major objective of the SRF exercise is to establish a systematic framework that will help UNDP to demonstrate credibly the difference that the organization makes to development.

Indicators are signposts of change – they enable us to verify both the status of development outcomes that UNDP seeks to influence as well as the progress with delivery of products and services for which managers are responsible.


The purpose of indicators is ultimately to support effective programme planning, management and reporting. Indicators make it possible not just to demonstrate results but can also help in producing results – by providing a reference point for monitoring and decision-making, stakeholder consultations and evaluation.

A word of caution is necessary: there is often a temptation to transform the measurement of change itself into a major exercise – and potentially a burdensome workload. This should be avoided. Indicators are only intended to indicate – not to provide scientific “proof” or explanations about detailed change in all aspects of the programme environment.

In selecting good indicators the critical issue is credibility - not precision in measurement. The challenge is to meaningfully capture key changes - combining what is substantively relevant with what is practically feasible to monitor. The measurement of change should not take precedence over programme activities that generate the changes to be measured. It is, at the end of the day, better to have indicators that provide approximate answers to some important questions than to have exact answers to many unimportant questions.

Within the SRF exercise, it was early on decided that results indicators would not be prescribed from above. This document offers practical advice on selecting indicators for SRF planning and reporting, and is part of a wider package of guidance materials. We hope that UNDP practitioners, programme stakeholders and national policy-makers will find it useful.

New York, 13 May 1999



Khalid Malik
Director
Evaluation Office (EO)



Herbert M'cleod
Director
Operations Support Group (OSG)

1. *Indicators are signposts of change*

Indicators are signposts of change along the path to development.

Whilst results define what we want to achieve, *indicators* are what we observe in order to verify whether, or to what extent, it is true that progress is being made.

In development, it is often difficult to make objective and exact observations of the “real” issue we are addressing. We therefore frequently rely on observations that *approximate* intended changes—using indicators that are commonly understood to be closely related, e.g. level of consumption expenditure as “proxy” for poverty, or proportion of parliamentarians who are female as “proxy” for empowerment of women in national decision-making processes.

The verification of results is dependent on having an idea of change over time. It requires clarity about the issue we are addressing before *and* after any set of interventions. The situation *before* a programme or activity is the baseline, and is the starting point for results monitoring. What the situation is expected to be at its end, is the target. Between the baseline and the target there may be several *milestones* – e.g. corresponding to expected performance at periodic intervals.

If wider access to education is our intended result, school enrollment may provide a good indicator. In terms of monitoring results, we may have a baseline of 55% enrollment in 1997 and a target of 80% enrollment in 2002.

2. *Indicators are a management tool*

The process of *defining* indicators can in itself help managers and stakeholders in initial problem analysis and articulation of results expectations.

By verifying change, indicators help us demonstrate progress when things go right and provide early warning signals when things go wrong.

The purpose of indicators is ultimately to support effectiveness throughout the process of programme planning, management and reporting.

Indicators make it possible not just to demonstrate results but can also help in producing results – by providing a reference point for monitoring and decision-making, stakeholder consultations and evaluation.

The key to good indicators is credibility - not precision in measurement. A quantitative observation is no more objective than a qualitative observation.

The challenge is to *meaningfully* capture key changes – by combining what is substantively valid with what is practically possible to monitor. Indicators fundamentally only indicate – they do not explain. Determining that change has occurred does not necessarily explain *why*.

But the observation of change should, at the end of the day, not take precedence over programme activities that generate the changes that are desired.

3. There are many types of indicators to be observed

There are several different types of signals that can form part of an indicator. These can be classified by how their observations are expressed:

<i>Qualitative indicators:</i>	<i>Illustrative Examples</i>
Existence (yes/no):	a) policy recommendation submitted/not submitted b) local governance act passed/not passed
Category (e.g. x <u>or</u> y <u>or</u> z)	a) poverty analyzed in “region east”, “west” or “nationally” b) level of SHD policy focus “high”, “medium” or “low”
<i>Quantifiable indicators:</i>	<i>Illustrative Examples</i>
Number:	a) of entrepreneurs trained b) of new jobs created in small enterprise sector
Percentage:	a) share of government budget devoted to social sectors b) share of rural population with access to basic health care
Ratio:	a) of female to male school enrollment b) of doctors per 1.000 people

No one type of indicator or observation is inherently better than another; its suitability depends on the nature of the intended result.

Results indicators often have dimensions that *combine* quantitative and qualitative observations. In addition, there is a time dimension.

For example, in a programme aimed at increasing access to social services, we may have an indicator that includes a baseline where ten percent of people had access to a particular kind of service (now or some time in the past) and a target of thirty percent having access to a different (better) service – by a certain date in the future.

Similarly, for an advocacy activity aimed at policy change we may have a result indicator that includes observing parliamentary passage of a desirable legal change (yes/no) and which also includes the new law being backed up by allocation of financial resources (again by a certain date).

4. How to set realistic targets

Target-setting must be based on thorough review of those factors that influence the development problem being addressed.

- Consider past trends
- How well do others do?
- Are there limits?
- Understand partner commitments and future plans

The key to establishment of targets is realism. Targets need to be reasonable in view of UNDP's resources, expertise and partnerships. Overly ambitious targets lead to disappointment when they are not met.

5. An idea of change can be found even if no baseline was specified in the past

Key results indicators should ideally be agreed among stakeholders when a programme is under formulation, and thereafter be integrated as a management function and serve as input to ongoing decision-making among stakeholders and partners.

However, it is a fact that for many of the activities that are currently ongoing, no baseline was specified at the time of programme formulation.

But this does not mean that the baseline does not exist. In some cases it may be possible, e.g. through annual review exercises, to retroactively find estimates of approximately where one was when the programme started.

Even when one *cannot* practically find data retroactively, it may still be possible to obtain a measure of change over time. In a relatively simplistic example - say in respect of local governance - one can ask a number of people:

Compared to (e.g.) three years ago do you feel more or less involved in local decision-making than?

If there is a clear tendency among respondents – either towards “more” or towards “less” – that does indeed give an indication of whether change has happened or not.

In cases where one is unable to *retroactively* establish any sense of change one should, of course, seek to establish a measure of where one is now – thus at least allowing for *future* assessment of change.

6. A meaningful yardstick of change can be made even for results that are essentially qualitative

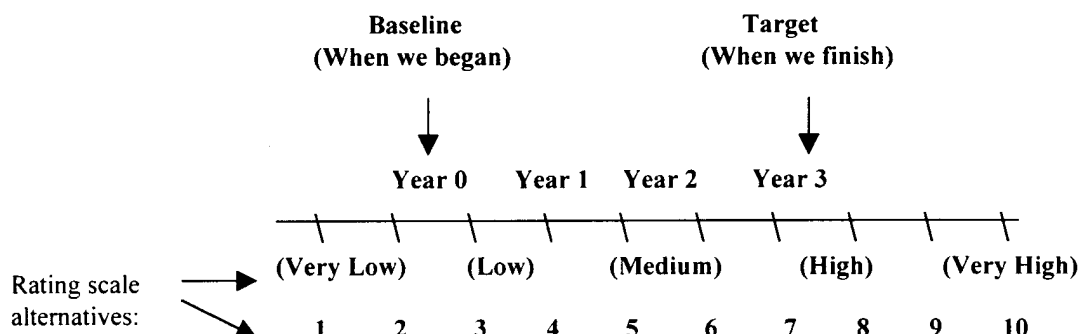
The nature of a result being qualitative does not preclude the development of an indicator that gives *some* measure of progress or magnitude of change. Having a measure of change over time allows us to set milestones along the journey of change from baseline to target.

Attitude surveys are one example of an instrument that can allow for some *quantification* of qualitative change.

If the proportion of people who perceive of local government management as “participatory” goes up from 40% to 65% (over a certain period of time) that *does* give some measure of the *degree* of qualitative change.

Rating scales and scoring systems are two other methods that allow for *transforming* qualitative observations into meaningful results indicators.

Rating scales: A representative group of observers can be asked, *at different points in time*, to rate their level of involvement in local government on a scale from 1 to 10 *or* according to the categories “very low”, “low”, “medium”, “high” or “very high”.



Responses can be presented as an *average* or a *distribution* – (say) “between year 0 and year 3, average of people’s rating for their own involvement is expected to increase from 2.0 to 7.5 on a 1-10 scale” or that “between year 0 and year 3 the proportion of respondents who consider their involvement to be high or very high will increase from 20% to 50%”.

Scoring system: An alternative, and for the current example perhaps less time-consuming approach, would be to develop a simple “scoring” system whereby a “value” is assigned to observable *attributes* of local government management that are considered to be associated with the desirable result.

Illustrative scoring system: Participatory local governance

Outcome: *Development planning responding to community priorities in 20 districts*

Indicator: *Increased average “participatory planning score” from 2.5 to 5.0 in 20 districts (over specified period of time)*

System for scoring each of 20 districts:

- Pamphlets about local planning process printed and distributed (yes=1, no=0)
- Villages invited by district council to submit development proposals (all=2, most=1, only a few=0)
- District planning meetings open to the public: (yes=2, no=0)
- Criteria and protocol of proposal selection published (yes=2, no=0)

The value of each of the above can (presumably) be determined from scrutiny of records at individual district planning offices (or programme records).

A district that can be observed to have all the desirable attributes gets a 7 score, one that has none gets 0. In-between are the districts that can report positively on *some* of the specified attributes.

At the time of the baseline, a tally of scores for all districts may yield a grand total of 50, and thus an average score of 2.5. The target could be to increase the average to 5.0 within xxx years.

The key to any qualitative scoring system is to ascertain that the identified attributes are truly characteristic of the desirable result. Moreover, the “values” assigned to the observable attributes may need to be “weighted” for relative importance. In the above illustrative example, a “yes” on production of pamphlets has been given a value of 1, whereas a “yes” on open planning meetings has been given a value of 2. The implication is that we consider open meetings to be more important than availability of pamphlets.

7. Invest in data sources and data collection – but don't overinvest

Information about some indicators is available from public records or simply “known” by good managers, say the passage of a critical piece of legislation. Information on outputs is often available from internal records—e.g. on people trained, policy recommendations submitted to national authorities, seminars conducted.

In other cases, data are not immediately available and may require development of instruments and/or establishment of routines for capturing information. There are a multitude of tools for data collection, including:

- Awareness/attitude surveys and questionnaires
- Expert panels
- Key informant interviews
- Focus groups
- Mapping techniques

The administration of data collection is, in its own right, an entire branch of social science. To get “valid” and “representative” data can become a large, complex and costly affair.

For example, asking everybody's opinion through a survey is rarely possible – even getting a smaller but representative “sample” of respondents can be difficult. Perhaps people in the area don't like responding to such questions, anyway – e.g. fearing that what they say will affect their future benefits.

In some cases, the introduction of a simple instrument somewhere in the programme management process can provide many of the answers we are looking for. For example, if a simple questionnaire is sent to entrepreneurs six months after they have completed training under a small business development programme – one can get information on whether they have started new firms,

taken on new staff and how much they have invested in local raw materials and supplies – different measures of outcome-level changes.

8. How do you select results indicators?

The essential challenge in selecting indicators is to find measures that can *meaningfully* capture key changes - combining what is substantively relevant with what is practically realistic.

The following criteria and questions may be helpful in selecting indicators:

- *Valid*: does the indicator capture the essence of the desired result?
- *Practical*: are data actually available at reasonable cost and effort?
- *Precise meaning*: do stakeholders agree on exactly *what* to measure?
- *Clear direction*: are we sure whether an increase is good or bad?
- *“Owned”*: do stakeholders agree that this indicator *makes sense* to use?

Indicator selection criteria	Outcome	Poor proposal for an indicator	Why indicator is inadequate	Possible refinement of indicator <i>(all assuming a span of dates)</i>
Valid	Job creation through micro-enterprise	Micro-capital finance available in 5 regions, up from 2.	Availability of finance is a <i>means</i> , not an end result. <i>Purpose</i> is to create employment growth.	Increase from 200 to 500 in number of people <i>employed</i> by trained micro-enterprises.
Practical	Enhanced capacity of school planning system	Improved job prospects for school leavers	Job prospects can only be assessed when students graduate – many years from now. No baseline/target.	Increase in school enrollment rate from 85 to 95%.
Precise meaning	Better understanding of UN mandates and UN work	Government officials, social leaders speak about UN	Who one should consider a social leader is arguable. No baseline/target.	Number of Parliamentary or media references to (specified) UN conferences or resolutions up from 10 to 30 per year.
Clear direction	Transparency in public sector finances	Reduced number of corruption cases	Transparency awareness may (at least initially) lead to no. of prosecutions going <i>up</i> – not <i>down</i> .. No baseline/target.	Policy & practice changed to make protocols of tender board meetings available for public inspection (yes/no).
“Owned”	Local development planning responds to priorities of the poor	Increase from 50 to 200 in number of community funding proposals submitted to local planning authority	Beneficiaries don’t care about how many proposals are <i>received</i> , but how many are <i>approved</i> .	Percent of local development funds actually allocated to community initiatives (submitted by NGO’s, CSO’s) increased from 25 to 50%.

One must be sensible and practical in applying these criteria - no one indicator will satisfy all criteria equally well.

9. *The process of selecting indicators*

The selection of indicators is necessarily an iterative process, which should build on consultations between programme managers, stakeholders and partners. In terms of the indicator selection process:

- brainstorm ideas
- assess each one, narrow the list (using *criteria* above)
- make an indicator monitoring plan

In selecting any indicator one should simultaneously develop an indicator monitoring plan, which clearly specifies data sources, frequency of data observation and monitoring responsibilities.

10. *Rather approximate answers to few important questions than exact answers to many unimportant questions*

The definition and monitoring of indicators can be made into an elaborate science – and a major workload. However, having a large number of different indicators has no merit in itself. It is more helpful to have approximate answers to a few important questions than to have exact answers to many unimportant questions.

A critical test of an indicator is how practical it is to monitor. Thinking of an indicator is one thing; actually finding, recording and presenting the data another.

For a programme providing training and advisory services to small scale enterprises (SSE's), there are many *possible* results indicators:

Menu of possible indicators - Outcomes:	Menu of possible indicators - Outputs:
Level (%) of unemployment	Training manual developed (Yes/no)
Number of firms registered in region	Regions w/ advisory centres established (x, y, z)
New firms started by trainees	Number of entrepreneurs who complete training
People employed by SSE's	Number of firms advised
Funds invested locally by SSE's	Number of advisors/trainers trained

The challenge is to select only key indicators; that are meaningful, practical and necessary.

For an SSE programme, it is arguable whether a high rate of *informal sector employment growth* (as an outcome indicator) would indicate job opportunities or not. An increase in the number of people having jobs is clearly good, but maybe growth in the informal sector is most essentially a symptom of *lack of opportunities in the formal sector*. But total employment growth would likely be too far removed from UNDP's intervention. Therefore, the number of new SSE's established and/or the number of jobs created by SSE's who have been provided with training could be appropriate as outcome indicators.

Illustrative indicator monitoring plan:				
Result Intended	Result Indicator	Data source	Frequency of observation	Monitoring responsibility
Outcomes:				
Enabling environment for private sector expansion	Increase in number of new firms registered in district (to/from, by date)	Chamber of commerce half-yearly report	Annual	Ministry of Commerce
Community prospects improved through income generation	New staff taken on by those SSE's trained (number, by date)	Questionnaire sent trainees 6 months after training	Half-yearly	Project Director
Outputs:				
SSE trainers recruited and trained	Trainers completing induction course and passing test (number, by date)	Project records	Quarterly	Project Director
Training facilities available to SSE's	SSE advisory centres functional (able to offer training) in 3 regions (by date)	Project records	Continuous	UNDP NPO

For *outcomes* that UNDP contributes towards in partnership with others, not all monitoring responsibilities have to fall on UNDP. But it is then critical that the partners agree on which indicators to monitor and that it is clear *who* among the partners have which monitoring responsibilities.

11. Usefulness of an indicator depends on timeliness and clear action implications

“A survey in one country showed a gap between knowledge about HIV/AIDS and practice. People knew about HIV/AIDS, but were not changing behaviors”.

In the above case, the discovery might lead to changes in an awareness programme *strategy* – e.g. towards a focus on safe sex practices.

“When the Health Ministry changed its system for hospital funding from one based on number of drug doses administered to the number of patients treated, there was an immediate difference in how doctors prescribed medicines and dealt with clients”.

This example shows the importance of indicator choice, which may itself affect behaviors.

“If after five years of advocacy the idea of an Ombudsman Office has still not been signed into law, UNDP may as well close the book on this initiative”.

An indicator target date can provide allow for making changes or reversing objectives.

12. Some final suggestions in selecting indicators:

In selecting indicators,

do:

- Look for signals that have clear meaning
- Make use of proxies, when needed
- Set targets that are realistic
- Agree with beneficiaries and partners
- Look for data that is easily available; avoid major data collection
- Keep data sources and monitoring responsibilities in mind

don't:

- Lose sight of programme objectives
- Assume that data will be available
- Set targets that cannot be achieved
- Impose or insist on any one indicator
- Overinvest in attempts to quantify
- Use indicators that need expert analysis
- Use more indicators than necessary

13. Further reference materials

Indicator definition and data collection methodology can be made into a science of its own. There exists a wide range of academic literature and reference materials on the identification and use of results indicators in the public sector and in the development context.

Among these, we have found some of the guides published by USAID in its Performance Monitoring and Evaluation TIPS series, to be practical and useful (downloadable in PDF format from: http://www.dec.org/usaids_eval/):

- * Guidelines for Indicator and Data Quality
- * Preparing a performance monitoring plan
- * Selecting performance indicators

In reviewing these or other reference materials one must be mindful that what suits one organization may not work in another. There is no one perfect method for dealing with indicators.