

SOP for OOMF Indicator Framing

Background

This document lays down the Standard Operating Procedures (SOP) to be adopted by Ministries/Departments and DMEO, NITI Aayog for framing output-outcome indicators for CS/CSS schemes of the Government of India for inclusion in Output-Outcome Monitoring Framework (OOMF).

Methodology for framing indicators

The approach to be adopted to frame the indicators for any CS/CSS scheme should be based on the principles of relevance, exhaustiveness and accuracy. The indicators framed should be **relevant** to the scheme i.e. should be a part of the scheme design and objectives, should be **exhaustive** in covering various aspects of the scheme's implementation mechanisms as well as intended objectives and should **accurately** represent the outputs and outcomes of the scheme. The first step, will naturally begin by an in-depth study of the guidelines/EFC-SFC memorandums, etc. of the scheme i.e. the design documents for the intervention. Based on the same, the subsequent steps can be undertaken.

The suggested approach for defining indicators is divided into two sub-steps:

- A. Delineating Outputs and Outcomes
- B. Defining Indicators for identified Outputs and Outcomes

We will now look at the above two steps in detail:

- A. To delineate the scheme outputs from outcomes, it is recommended that we may think about the following questions, **in sequence**, for a scheme under consideration and answer them in the background:
 - What are the key target groups that this programme aims to improve?
 - What performance improvement/s do we expect from the target group/s due to the scheme/intervention? – **Outcomes**
 - How is it that the proposed scheme/intervention intends to bring about the above performance improvements? – **Outputs** -In simple terms:
 - What are the key constraint/s to improved performance of the target group/s above that this intervention aims to address? How this intervention aims to resolve the factors which limit or restrict target group(s) from performing better?
 - What are the root causes behind these key constraints above that this intervention aims to address and how?
 - What activities is the proposed scheme/intervention conducting to eliminate these constraints/bottlenecks? – **Activities**
 - What inputs/resources are being deployed to conduct these activities? - **Inputs**
- B. To define indicators for identified Outputs and Outcomes, it is proposed to use the **Logical Framework (Logframe) tool**. A sample of the Logframe is given below:

	SCHEME SUMMARY	INDICATORS	MEANS OF VERIFICATION	RISKS / ASSUMPTIONS (Not mandatory in the context of framing indicators)
Goal	10% increase in the number of Grades 5-6 primary students continuing on to high school within 3 years.	Percentage of Grades 5-6 primary students continuing on to high school.	Comparison of primary and high school enrolment records.	N/A
Outcome	Improve reading proficiency among children in Grades 5-6 by 20% within 3 years.	Reading proficiency among children in Grades 5-6	Six monthly reading proficiency tests using the national assessment tool.	Improved reading proficiency provides self confidence required to stay in school.
Outputs	1. 500 Grade 5-6 students with low reading proficiency complete a reading summer camp	Number of students completing a reading summer camp.	Summer camp attendance records.	Children apply what they learnt in the summer camp.
	2. 500 parents of children in Grade 5-6 with low reading proficiency help their children read at home.	Number of parents helping their children to read at home.	Survey of parents conducted at the end of each summer camp.	Children are interested in reading with their parents.
Activities	1. Run five reading summer camps, each with 100 Grades 5-6 students who have low reading proficiency.	Number of summer camps run.	Summer camp records.	Parents of children with low reading proficiency are interested in them attending the camps.
	2. Distribute 500 "Reading at Home" kits to parents of children attending summary camps.	Number of kits distributed.	Kit distribution records.	Parents are interested and able to use the kits at home.

An example logframe by Tools4dev

Based on the above, we can clearly identify the indicators and also map the current as well as possible means of measurement for the same. A reference on the types of indicators is given in **Annexure I**. Guidelines on how to select indicators follows:

Selecting Indicators¹

The impact of selection

¹ <http://web.undp.org/evaluation/documents/methodology/rbm/Indicators-Paper1.doc>

What type of indicator is best to use? The choice makes a difference. If the wrong thing is measured, or if it is measured in the wrong way, the data may be misleading and the quality of decisions could be affected. The choice also may have unforeseen consequences—some positive some negative. When a country changed its system for hospital funding from one based on the number of drugs doses administered to one based on the number of patients treated, doctors became more friendly to patients but also wrote fewer prescriptions for medicine. And when a police force changed its result indicator from number of arrests to number of convictions, for example, constables became less inclined to detain people on the basis of vague suspicion.

The challenge in selecting indicators is to find measures that can meaningfully capture key changes, combining what is substantively relevant as a reflection of the desired result with what is practically realistic in terms of actually collecting and managing data.

The SMART way to select indicators

The following criteria and questions may be helpful in selecting indicators. As a memory aid, the acronym “SMART” summarizes key criteria, asking “Is the indicator specific, measurable, attainable, relevant and trackable?”

Specific:

- Is it clear exactly what is being measured? Has the appropriate level of disaggregation been specified?
- Does the indicator capture the essence of the desired result?
- Does it capture differences across areas and categories of people?
- Is the indicator specific enough to measure progress towards the result? For example, using the indicator “increase by 20 per cent in number of criminal complaints filed” may reflect a more effective justice system OR an increase in crime.

Measurable:

- Are changes objectively verifiable?
- Will the indicator show desirable change?
- Is it a reliable and clear measure of results?
- Is it sensitive to changes in policies and programmes?
- Do stakeholders agree on exactly what to measure?

Attainable:

- What changes are anticipated as a result of the assistance?
- Are the result(s) realistic? For this, a credible link between outputs, contributions of partnerships and outcome is indispensable.

Relevant:

- Does the indicator capture the essence of the desired result?
- Is it relevant to the intended outputs and outcome? To judge the relevance of indicators, the CO may have to identify the target groups and their needs, expectations and criteria.
- Is the indicator plausibly associated with the sphere of activity?

Trackable:

- Are data actually available at reasonable cost and effort?
- Are data sources known? CO should establish realistic principles, mechanisms and responsibilities for data collection.
- Does an indicator monitoring plan exist?

Be sensible and practical in applying these criteria. No one indicator will satisfy all criteria equally well. Ultimately, the choice of indicator is determined through a holistic assessment of validity and practicality. The selection of indicators is an iterative process, building on consultations between programme managers, stakeholders and partners. The process of selecting an indicator takes several steps including brainstorming ideas, assessing each one and narrowing the list (using the criteria above) and, finally, making an indicator monitoring plan.

Selection criteria for indicators				
Indicator selection criteria	Outcome	Poor proposal for an indicator	Why indicator is inadequate	Possible refinement of indicator <i>(within a given timeframe)</i>
Specific or “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.
Specific or “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. The <i>purpose</i> is to create employment growth.	Increase from 200 to 500 in number of people <i>employed</i> by trained micro-enterprises.
Measurable or “Practical”	Enhanced capacity of school planning system.	Improved job prospects for those who leave school early.	Job prospects can only be assessed when students graduate – many years from now. No baseline/target.	Increase in school enrolment rate from 85% to 95%.
Attainable or “Clear direction”	Transparency in public sector finances.	Reduced number of corruption cases.	Transparency awareness may (at least initially) lead to number of prosecutions going <i>up</i> – not <i>down</i> . No baseline/target.	Policy and practice changed to make protocols of tender board meetings available for public inspection (yes/no).
Relevant or “Owned”	Local development planning	Increase from 50 to 200 in number of community funding	Beneficiaries do not care about how many proposals are <i>received</i> , but how many	Percent of local development funds actually allocated to community initiatives

Selection criteria for indicators				
Indicator selection criteria	Outcome	Poor proposal for an indicator	Why indicator is inadequate	Possible refinement of indicator <i>(within a given timeframe)</i>
	responds to priorities of the poor.	proposals submitted to local planning authority.	are <i>approved</i> .	(submitted by NGOs, CSOs) increased from 25% to 50%.
Trackable or "Data availability"	Professional standards and independence of media strengthened.	Quality of journalistic coverage in terms of independence, ethics, professional standards as well as coverage of vulnerable groups.	Too many elements in the indicator, all open to subjective judgment. No national data collection. No baseline. Can have professional standards without covering vulnerable groups.	Increase in number of media independently established and financed (from 2 to at least 6). Public survey results with satisfaction with ethical media coverage of at least 40%.

It is important to note that, in case of Outcome indicators, if the scheme is in early stages of its implementation, the means of measurement be detailed out, if it does not exist currently since it can be incorporated into scheme design and implementation.

Annexure I – Types of Indicators & Selecting Indicators²

Type of Indicators - Qualitative and Quantitative Expressions of Indicators

Signals and scales

Indicators can comprise a variety of types of “signals”—in other words, how the indicator is expressed—such as numbers, ranking systems or changes in the level of user approval. A signal also features a “scale” of observation. For example, the indicator “65 per cent of enrolled students graduate secondary school” features a percentage signal with a scale of 65 per cent.

Signals and scales lend themselves to indicators that express qualitative and/or quantitative information. Quantitative indicators are numerical. Qualitative indicators use categories of classification. (Some analysts define qualitative indicators as those that are based on individual perceptions, e.g. as given in response to survey questionnaires).

Examples of output and outcome indicator signals and scales			
Qualitative/Categorical Indicators			
Signal	Scale	Outcome indicator	Output indicator
Existence	(yes/no)	Local governance act passed/not passed	Policy recommendation submitted/not submitted
Category	(e.g. x <i>or</i> y <i>or</i> z)	Level of SHD policy focus “high”, “medium” or “low”	Poverty analyzed in “region east”, “west” or “nationally”

Quantitative/Numerical Indicators			
	Scale	Outcome indicator	Output indicator
Number	(e.g. 1, 20 or 5,000)	Number of new jobs created in small enterprise sector	Number of entrepreneurs trained
Percentage	(e.g. 12% or 95%)	Percentage share of rural population with access to basic health care	Percentage share of government budget devoted to social sectors
Ratio	(e.g. 1/3 or 125 per 100,000)	Ratio of female to male school enrolment	Ratio of trained female to male members of parliament

No one type of indicator or observation is inherently better than another; its suitability depends on how it relates to the result it intends to describe.

² <http://web.undp.org/evaluation/documents/methodology/rbm/Indicators-Paper1.doc>

Qualitative measurements of change

When a result is qualitative, it is still possible to develop an indicator that offers **some** measure of the magnitude of change. For example, if the proportion of people who perceive of local government management as “very participatory” increases from 40 per cent to 65 per cent over a certain period of time, this increase provides some measure of the **degree** of qualitative change.

This kind of numerical expression of qualitative considerations may also be obtained through indicators that use rating systems that rank, order or score given categories of attributes. An example might be an **average**, as follows: “With regard to responsiveness to their own needs, on a scale from 1 to 10, people in rural areas give an average score of 2.5 to central government and 6.2 to their local council”. Another alternative is to present a result as a **distribution**, as follows: “With regard to responsiveness to their own needs, the proportion of people in rural areas who rate central government 3 or less is 60 per cent, and the proportion who rate their local council 5 or better is 65 per cent”. A special variant of a distribution is captured by the **Gini Coefficient**, which measures dispersion on a scale from 0 to 1. Where all observations are the same, the Gini coefficient is 0; where they are all different the Gini is 1.

In the example above, outcome-level change is measured in response to public action. This is done through a “proxy” measure: changing levels of end-user approval (or client satisfaction). Such an indicator is particularly helpful when the public actions involve capacity development or direct public service delivery. The perceptions of end-users regarding public service delivery gets straight to the issue of whether the services are wanted, useful and effectively delivered. The satisfaction of end-users (or clients) has the advantage of some comparability. Results may be compared:

- Between different kinds of service;
- Between separate locations;
- Over time.

This approach is not without its problems, however. Clients may not always be easy to identify, and their perceptions of satisfaction with services is subject to influences other than the service itself.

Combining qualitative and quantitative

Indicators may **combine** quantitative and qualitative observations. In a programme aimed at increasing access to social services, for example, the indicator includes a baseline in which 10 per cent of people had access to a particular kind of service (now or some time in the past). The target is for 30 per cent to have access to an improved service, by a certain date in the future. In another example, an advocacy activity aimed at policy change may use an indicator that includes observing parliamentary passage of a desirable legal change (yes/no) and that also includes the new law being supported by an increased allocation of 15 per cent more resources than was previously the case, by a certain date.

An index is a composite indicator, formed by amalgamating two or more different measures into one, such as the Human Development Index. With indices, “weight” must be attributed to components according to their relative importance. In other words, if one of the component attributes is inherently more important than another, it should be assigned a heavier weight or share of the combined measure.

An indicator may be expressed as something to be minimized or something to be maximized, e.g. working to maximize the number of doctors per population of 1,000 is the same as working to minimize the number of people per doctor.

Advocacy and policy results

Qualitative assessments are often required when measuring the success of UNDP efforts related to advocacy, coordination and upstream policy advice and dialogue.

Qualitative observation of advocacy and upstream policy results	
Policy result type	What can concretely be observed, Data sources
Change in policy priorities	<ul style="list-style-type: none"> – Change in relative shares/composition of budget – Cabinet decision, ministerial policy declarations – Accession/signature of UN conventions and international accords
Enactment of new legislation	<ul style="list-style-type: none"> – Passage by legislative body, confirmed for example by the Parliamentary Gazette or Hansard – Record of Cabinet decisions
Establishment of new institutions, practices and programmes	<ul style="list-style-type: none"> – Establishment of posts – Allocation of budget – Commencement/availability of service – Revision of public service code – Conditions and prices of service delivery – Client charter commitments – Client satisfaction levels (as surveyed)
Access to information	<ul style="list-style-type: none"> – Availability of publications, records in print, on Internet – Access-to-information laws passed
Participation in decision-making	<ul style="list-style-type: none"> – Number of civil society organizations (CSOs) invited to comment on policy drafts – Discussion forums convened

If indicators are multi-dimensional, they often need to be **disaggregated**, or broken down, in order to reveal differences between their various components. These separate findings related to gender, geographic location, socio-economic group (age, ethnicity, religion, income level). The level of disaggregation should reflect the area of operation or target group pertaining to a goal or set of interventions.