

Poverty Monitoring Guidance Note 1 Selecting Indicators¹

Introduction

In order to track progress in implementing a poverty reduction strategy, it is necessary to select appropriate indicators, set targets, and have a system in place to measure, monitor, and analyze progress in the indicators selected. There are many possible definitions of the terms "goal", "indicator", and "target", but the following are used in this note:

- **Goals** are the objectives a country or a society wants to achieve; they are often expressed in non-technical, qualitative terms, such as "eradicate hunger", "reduce poverty", and "increase literacy".
- **Indicators** are the variables used to measure progress toward the goals. For example, progress toward eradicating hunger can be measured by looking at the number of underweight children among children under the age of five; progress towards achieving universal primary education can be tracked using the net enrolment ratio in primary education.
- **Targets** are the quantified levels of the indicators that a country or society wants to achieve at a given point in time—for example, a country could set a target of less than 10% of underweight children, or a target of 80% net primary enrolment ratio by 2015.

This note summarizes good practice in selecting indicators; companion notes focus on setting targets, on the data sources for poverty monitoring, and on issues around the setting up of a monitoring system.²

Types of indicators

Once a goal has been set, indicators can be used to monitor progress at various stages: inputs into, outputs from policies and programs (intermediate indicators); outcomes and impacts on households and individuals (final indicators).

Intermediate indicators:

When an indicator measures a factor that contributes to the process of achieving an outcome or impact, we call it an "intermediate" indicator. Intermediate indicators can be further divided into "input" or "output" indicators, depending on the stage of the process. What is important is that inputs and outputs are not goals in themselves; rather, they help to achieve the chosen goals.

- **Input indicators** measure the various financial and physical resources dedicated to a goal. For instance, to raise literacy levels one may need more money for schools and teachers, better textbooks, and so on. Public expenditures on classrooms and teachers are an example of an input indicator.
- **Output indicators** measure the goods and services that are produced by the inputs. For instance, the number of classrooms built and teachers trained are examples of output indicators. Outputs are typically fully under the control of the agency that produces them; so, for example, the number of schools built is an output, because it is directly under the control of education or other public

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² See www.worldbank.org/poverty, under Topics, Poverty Monitoring.

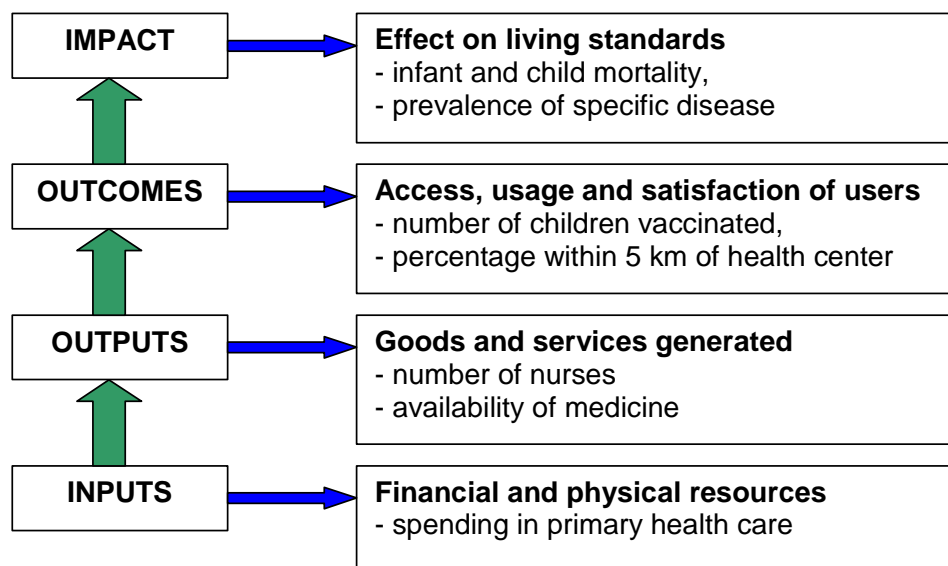
authorities. On the other hand, the number of children going to the schools is an outcome, because it depends on the behavior of children and their families.

Final indicators:

When an indicator measures the effect of an intervention on individuals' well-being, we call it a "final" indicator. For example, literacy may be considered one of the dimensions of well-being, so an indicator measuring it—say, the proportion of people of a certain age who can read a simple text and write their name—is a final indicator. Sometimes final indicators are divided into "outcome" and "impact" indicators:

- **Outcome indicators** capture access to, use of, and satisfaction with public services, such as use of health clinics, and satisfaction with the services received; access to credit; representation in political institutions and so on. These are not dimensions of well-being in themselves, but are key elements which contribute towards well-being. To continue with the example above, the number of children going to school, or the repetition rate, or the number of children who complete the primary school cycle are examples of outcome indicators.
- **Impact indicators** measure key dimensions of well-being such as freedom from hunger, literacy, good health, empowerment, and security. These are the ultimate goals of public policies and programs. For instance, literacy rates or scores at standard tests can be used as indicators of impact in the case of primary education.

Figure 1 illustrates the various types of indicators in the case of the goal of "Improving child health".



Monitoring final indicators helps to judge progress towards the goals set. However, it is also important not to neglect intermediate indicators when selecting indicators to monitor because:

- Final indicators are the result of several factors, many of which are outside the control of policymakers and program administrators. Intermediate indicators, on the other hand, generally change as a result of actions by the government and other agents. They allow to monitor the implementation of policies and programs.

- Final indicators generally change slowly over time, while intermediate indicators change more rapidly. Hence, intermediate indicators can give an indication, if not of what is happening with well-being, at least of what is happening with some of its determinants. This can allow corrective action to be taken while a program is being implemented.
- Information on intermediate indicators is often easier to collect. In particular, routine data collected by various government agencies can provide important information on inputs and outputs, and are generally collected regularly. On the other hand, information on outcomes and impact generally require surveys. These are typically carried out less often, and collection and processing time can delay the availability of the information.

It is critical to monitor indicators at the various stages, in order to understand the link between inputs, outputs, outcomes and impacts, and to identify where changes or additional efforts might be needed. For instance, assume that expenditures on primary education increase, but literacy does not improve over time as expected. There could be various reasons for such failure: was the money actually spent for the planned activities (did inputs translate into outputs)? Were schools built and textbooks made available but no additional children came to school (did outputs translate into outcomes)? Were the children in school but not learning (did outcomes translate into impact)? Only with a clear assessment of the progress made at the various stages can a diagnosis be made and better policies and programs designed, for example better public expenditure management, measures to promote attendance, quality of teaching, and good health of children.

Final and intermediate indicators should be complemented with other selected indicators to measure overall country performance and account for the context in which the poverty reduction strategy is being implemented. For example, indicators measuring exogenous factors that are likely to impinge on outcome indicators such as rainfall or external demand for a country's goods should be included in the monitoring system.

Finally, it is important to underline that quantitative and qualitative indicators can be combined and typically complement each other, with qualitative indicators helping to explain patterns and to measure notions of quality and satisfaction.

Qualities of indicators

Good indicators share a number of features. These features can be used as a checklist when deciding which indicator to use. Indicators should:

- **Be direct, unambiguous measure of progress**, i.e. more (or less) is invariably better. For instance, immunization coverage is less ambiguous than household expenditure on health, because an increase in such expenditure could be a good thing – if it means that households have more resources to get healthcare – or a bad thing – if it means that disease incidence has increased.
- **Vary across group, areas, and over time**. For instance, child malnutrition is more likely to vary quickly over time than life expectancy.
- **Have a direct link with interventions**. For instance, vehicle-operating costs depend on road quality but also on many other factors, such as international petrol prices. It might therefore not be a good indicator for progress in the roads sector.
- **Be relevant for policy making**, i.e. at the level of disaggregation relevant for decision-making. For instance, if expenditures are decided at the regional level once a year, the indicator should be disaggregated at the regional level, and monitored on a yearly basis (see below for more on disaggregation).
- **Be consistent with the decision-making cycle**. For instance, use indicators at intervals which match the decision making process, i.e. that can be available in time for budget discussions.

- **Not be easily manipulated or blown off course by unrelated developments.** Some indicators can be very sensitive to external or exogenous factors and should be avoided. Others can be easily manipulated (e.g. where there is self-reporting, or where incentive structures are such that one might be tempted to under or over-estimate the result). For instance, some administrative data such as data on enrolment in schools or number of visits in health centers are sometimes used to allocate subsidies and budgets, and local authorities might have an incentive to over-report in order to obtain higher grants.
- **Be easy to measure and not too costly to measure.** For instance, the number of deaths is typically easily recorded, while the number of cases of specific diseases is harder to track accurately. In addition, when large surveys are necessary, monitoring is more costly and requires more time.
- **Be easy to understand.** For instance, poverty incidence is easier to understand and to communicate than poverty depth.
- **Be reliable.** For instance, scientific, objective indicators are more reliable than indicators that depend on the interpretation of the user. This is related to the above discussion on “manipulation”.
- **Consistent with data availability and data collection capacity.** This ensures that indicators will be measurable at the times and level selected (see below the steps to choose indicators).

Disaggregating indicators

Aggregate, country-level indicators are useful, as they give an overall picture of where a country stands in comparison with others and of progress over time. However, they tend to mask significant differences, which are important for the design of good policies and programs. The choice of indicators and the decision on their level of disaggregation are usually considered at the outset, based on the goals that a strategy aims to achieve, on the types of public policies and programs planned to achieve these goals, and on data availability. Indicators can be disaggregated along various dimensions, including location, gender, income level, and social group, provided here as examples.

- **Disaggregation by geographic areas:**
 - Distinguishing between urban and rural areas is often relevant, as well as further disaggregation among urban areas by size, since small cities often tend to be more similar to rural areas than to large cities (for example, in terms of the importance of agriculture). Generally, it is useful to track the capital city separately because it is characterized by higher average income, better availability of services, and a larger share of employment in services.
 - Administrative units—states, regions, provinces, districts, municipalities, villages, and so on—can also be used to disaggregate. Ideally, this should be done for each administrative level with decision-making power over resources.
 - Relevant indicators can also be disaggregated along geographic zones characterized by different soils, rainfall, topography, and consequently different agricultural practices, settlement patterns, ease of access, and so on.
- **Disaggregation by gender or age group.** It is better to track indicators by gender when differences are important, for instance for those activities that tend to be carried out by women rather than men, such as water and wood fetching, or when women or men systematically fare differently (e.g. in education in some countries). Similarly, indicators should be disaggregated by age when relevant (e.g. for some labor market indicators).
- **Disaggregation by income, consumption, or asset ownership level** is often a useful way to see how indicators vary across the population, and to assess changes for different groups. Using multiple categories – such as quintiles or deciles – is usually preferable to a simple poor/non-poor disaggregation, because it categorizes the population in smaller groups, likely to be more homogenous and more relevant for policy making.

- **Disaggregation by social group.** In most countries there are significant differences across socially defined groups, whether along ethnic, tribal, religious, or other lines. The definition of the relevant groups will naturally vary across countries and for different indicators.

Finally, it is important to recognize that disaggregating indicators usually has political consequences and must be done carefully. Furthermore, monitoring indicators disaggregated by administrative area almost always requires complementary efforts to build capacity for monitoring and analysis in decentralized administrative units. The costs associated with multiplying the number of indicators by disaggregating them also have to be borne in mind. Finally, the level of representativeness of the data source can limit the degree of disaggregation; most surveys are representative down to a certain level, but not always to the lowest level required. The availability of data and resource constraints will often determine the level of disaggregation feasible.

Choosing among alternative indicators

Choosing indicators is ultimately a political process, in that it reflects priorities and induces accountability. In addition, on the technical side, the choice of indicators depends on the types of data available in a country. One way to ensure consistency between indicators and capacity is as follows:

- **Step 1:** In light of priorities and agreed strategy, identify indicators, establish the level of disaggregation, and the frequency of reporting.
- **Step 2:** Identify the sources of information that will be used to track each indicator.
- **Step 3:** From this list, draw a “calendar” of data collection tools necessary to ensure all indicators are measurable at the time and level selected.
- **Step 4:** Compare this “calendar” with the current data collection capacity, identify constraints (for instance, one might want to monitor the incidence of poverty every year for each district, but realize that the source of data for such indicator - typically a household budget/consumption survey - is only carried out every 5 years, and is only representative at the regional level). Draft a “reasonable” data collection plan.
- **Step 5:** Revise indicators in light of these constraints and the “reasonable” data collection plan.

After a few iterations, a smaller list of indicators (with level of disaggregation and frequency) and data sources can be drawn, together with plans for data collection.

In conclusion, selecting indicators is a political process, which needs to be undertaken in light of existing constraints. In general, it is preferable to select few indicators, covering the right questions, at the right level of disaggregation, of good quality, easily measurable within the current capacity.