

Swiss Confederation

21 SUSTAINABLE DEVELOPMENT

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MONET

Summary of indicators

1 Introduction

Each MONET 2030 system indicator is summarised with three symbols which encapsulate the information it provides and which allow a synoptic presentation of the indicator or a group of indicators (for example the list of all indicators of the system or the dashboard of the Federal Council's Sustainable Development Strategy SDS). The first symbol (see Figure 1) describes the trend targeted by the 2030 Agenda sustainable development goals (SDGs) or by the principle of sustainable development, the second the observed trend during a given period, and the third assesses the observed trend in relation to the targeted trend and indicates if the observed trend tends towards sustainable development or not.

2 Targeted trend

The targeted trend is defined by the frame of reference which the indicator is linked to. This frame of reference is composed of the SDGs and its targets adapted to the Swiss context and the principles of sustainable development. The SDGs and their targets as well as the principles of sustainable development indicate as a rule the direction sustainability should take (growth, stabilisation¹ or decrease). In the case of a quantified objective with a set deadline, the targeted trend corresponds to the theoretical path to be followed in order to achieve the objective by the set deadline.

In certain cases, the development targeted cannot be determined. The indicator is therefore not qualified (light grey box).

¹ In fact, stabilisation corresponds to an upper threshold that must not be exceeded.

Targeted trends						
Growth	Decrease	Stabilisation				
Observed trends						
↗ Growth	Decrease	→ No marked change				
Assessment of observed trend in relation to targeted trend						
Positive (towards sustainability: observed trend = targeted trend, 🔽 🗷, 🔽 🖄 or 🔜 🖄)						
Negative (moving away from sustainability: observed trend ≠ targeted trend, ▶↗↗, ↗♪ or ➡↗)						
Unchanged (no marked change, $\blacksquare \Rightarrow$ or $\blacksquare \Rightarrow$)						
No assessment						

Figure 1: Symbols used

3 Observed trend

The calculation of the observed trend depends on the presence or absence of a quantified objective with a set deadline as well as on the periodicity and length of the time series.

a) For the indicators without a quantified objective with a set deadline the observed trend corresponds to the change in % calculated during the period analysed, i.e. between 2000 or the date of the first available value if later than 2000, and the latest available value. To reduce the influence of particular values on the initial x(t₀) or final x(t₁) years, the ratio between average values of the last three available years and the average of the initial value x(t₀) at time t₀ and of its two adjacent values x(t₀₋₁) and x(t₀₊₁) are in fact used, according to the formula:

Change in % =
$$\left(\frac{\frac{x(t_{1-2}) + x(t_{1-1}) + x(t_1)}{3}}{\frac{x(t_{0-1}) + x(t_0) + x(t_{0+1})}{3}} - 1\right) \times 100$$
 (1)

Whereas t_0 = 2000 or date of first value collected if it is later than 2000 and t_1 = the last year of the time series.

When the indicator has a periodicity greater than one year or when the time series has less than 6 measures, the change is the ratio between the last available value of the indicator (or final value $x(t_1)$ at time t_1) and the initial value $x(t_0)$ at time t_0 according to the formula:

Change in % =
$$\left(\frac{x(t_1)}{x(t_0)} - 1\right) \times 100$$
 (2)

b) For the indicators with a quantified objective with a set deadline, the observed trend is the ratio between the average annual change of the observed indicator between a final value x(t₁) at time t₁ and an initial value x(t₀) at time t₀ and the theoretical average annual change to reach the target x(t_z) at the set date t_z (also called theoretical path). Therefore, the observed trend corresponds to the deviation from the theoretical path (in %) according to the formula:

Deviation from theoretical path in % =
$$\frac{\frac{\mathbf{x}(t_1) - \mathbf{x}(t_0)}{t_1 - t_0}}{\frac{\mathbf{x}(t_z) - \mathbf{x}(t_0)}{t_z - t_0}} \times 100$$
(3)

In certain cases, the development observed cannot be determined due to technical reasons or the length of the time series. The indicator is therefore not qualified (light grey box).

4 Assessment

The comparison between the targeted trend and the observed trend makes it possible to assess or evaluate the observed trend. It depends on the presence or absence of a quantified objective with a set deadline.

a) For the indicators without a quantified objective with a set deadline, the observed trend is positive if it corresponds to the targeted trend as defined by the SDGs and its targets adapted to the Swiss context or the principles of sustainable development, negative if the opposite is the case and unchanged if its change in trend is less than +3% and greater than -3% (see Figure 2), except in duly documented cases. This threshold is replaced by the indicator's confidence interval, when it is known. These exceptions are mentioned under "Remarks" under the table that documents the assessment of each indicator (see below).

If the targeted trend is stabilisation, the observed trend is positive if it is less than +3% and otherwise it is negative. There is no unchanged observed trend in this type of case (see Figure 3). Stabilisation corresponds in fact to an upper threshold that must not be exceeded. The theoretical scenario of a lower threshold that must not be crossed does not exist in the current system of indicators.

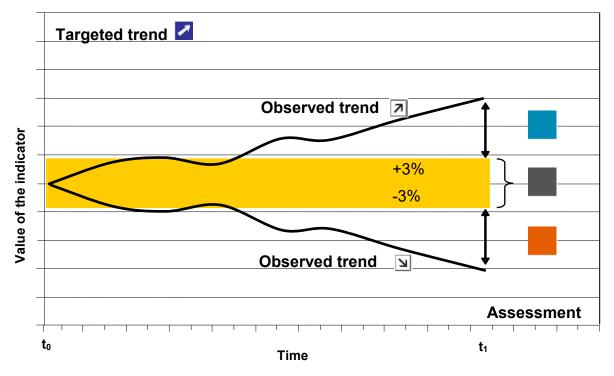


Figure 2: Assessment of an indicator without a quantified objective with a set deadline

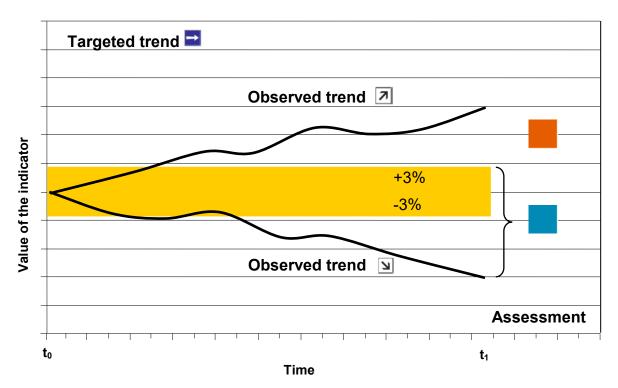


Figure 3: Assessment of an indicator without a quantified objective with a set deadline whose targeted trend is stabilisation

b) For the indicators with a quantified objective with a set deadline the targeted trend corresponds to the theoretical path to reach or exceed the objective at the required date (see Figure 4). The observed trend is described as positive if it is greater than or equal to 97% of the targeted trend. It is unchanged if it is between 97% and 0% of the targeted trend. It is negative if it is less than 0%.

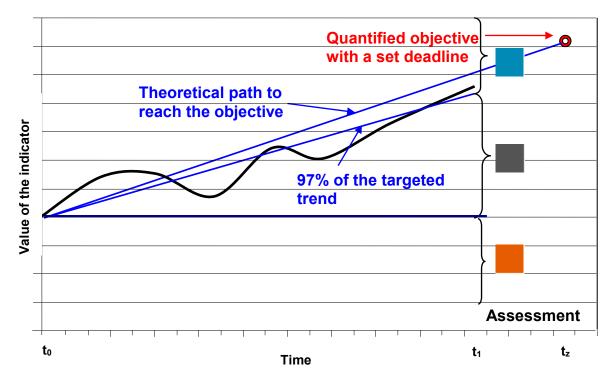


Figure 4: Assessment of an indicator with a quantified objective with a set deadline

5 Documentation of the assessment of the indicator

All the elements necessary for the assessment are included in a table that accompanies each indicator (see Tables 1 and 2, hypothetical examples). Under the heading "Objectives" are the target related to a SDG or the sustainable development principle(s) that define the targeted trend. The headings "Initial value" and "Final value" specify the year or the years t of the variables xt which are used to calculate the change or the deviation from the path. The "Remarks" heading makes it possible to provide additional explanations about the assessment, such as details about the evaluated variable or variables, the presence of a confidence interval or the precise definition of the quantified objective with a set deadline. The heading "Change in %" of the table is replaced by "Deviation from the theoretical path in %" when the indicator refers to a quantified objective with a set deadline (see Table 2). In this case too, the quantified objective with a set deadline is described under the heading "Remarks".

Table 1: Documentation of the parameters used for the assessment of an indicator without quantified objective with a set deadline (hypothetical example)

Targeted trend	Objectives	Initial value	Final value	Change in %	Observed trend	Assess- ment
Growth	2.5	2000	2010	2.5	No significant change	Unchanged

Remarks: -

Table 2: Documentation of the parameters used for the assessment of an indicator with a quantified objective with a set deadline (hypothetical example)

Targeted trend	Objectives	Initial value	Final value	Deviation from theoretical path in %	Observed trend	Assess- ment
Decrease	95% until 2020	2000	2010	85	Towards theoretical path	Unchanged

Remarks: Objective of XY strategy: 95% of people aged 25 reach a particular level of education.

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