

ANNEX 7

Monitoring and indicators

INTRODUCTION

The purpose of this Annex is to provide guidance on the development of a framework to monitor results and impacts of actions (projects, programmes) on the environment, climate change and biodiversity against objectives. This responds to the demand to strengthen the EU's capacity to monitor and evaluate development results.

Indicators are used to measure the achievement of an objective. Indicators are also helpful in defining in more concrete terms what the objective or target really means, in particular when – in the formulation of an action – allusion is made to less tangible and measurable concepts such as 'biodiversity', 'climate change adaptation' or 'sustainable development'.

In principle, monitoring of results and effects or impacts would be part of the overall framework for measurement of results and performance for a particular policy, programme or action, used by the country or region concerned. An increasing number of countries have result measurement frameworks in place and are now reporting regularly on the state of their environment and sustainability at the national level using indicators, including indicators of greenhouse gas emissions. Partner countries are also increasingly adopting green accounting systems.

Wherever possible, country or regional result measurement frameworks should be used and annexed to the relevant policy, programming or Action Documents. In some cases, Environmental assessments, Country environmental Profiles and Strategic Environmental Assessments can provide the indicators and baseline values required for formulation and decision-making on actions.

However, in many cases, available frameworks do not include specific criteria and indicators for environment, climate change or biodiversity-related effects. In such cases, identification of specific indicators for integration into the cooperation results framework should be promoted. The evolving EU Development and Cooperation Results Framework may provide a starting point for doing so. This framework measures results at various levels, at each of which indicators can be identified.

The following two levels are directly relevant to environmental and climate change mainstreaming:

1. High-level development objectives.

A first opportunity or entry point for integration or mainstreaming of environment and climate change exists in the *programming phase*, notably the programming documents (the Multi annual Indicative Programme - MIP). Following the analysis of challenges and opportunities, relevant actions are identified and indicators that capture key environmental and climate change concerns included.

At this (impact) level, the EU is typically one out of several donors and the various actors contribute to a common higher, long-term goal. Indicators at this level may be internationally agreed, for example in relation to the Sustainable Development Goals or the Millennium Development Goals, and draw on data from international statistical systems. DG DEVCO has also developed Sector Notes, which provide lists of indicators that can be used in each sector.

The SDG global targets (see annex 1 of the guidelines) and the related indicators' framework provide a series of possible indicators against which the signatory countries are expected to report (see section 2 below).

Examples of indicators used at this level are *Ratio of area protected to maintain biological diversity to surface area* (MDG indicator 26; data by UNEP-WCMC), or *CO₂ emissions per capita and consumption of ozone-depleting CFCs* (MDG indicator 28; data by UNEP-Ozone Secretariat).

2. Development outputs and outcomes

A second opportunity or entry point for integration or mainstreaming of environment and climate change exists in the *identification and formulation phase*. Action Documents should provide relevant analysis of environmental and climate change concerns and opportunities for relevant action or attention. As soon as environment, climate change or biodiversity are identified as 'significant' or 'main' objectives or important cross-cutting issues, relevant indicators should be included in the results framework. The same applies, mutatis mutandis, in case of budget support or blending operations; in such cases, a discussion on inclusion of relevant indicators in the performance assessment framework, and possibly in the disbursement criteria, should be part of the policy dialogue.

At this (output and outcomes) level, the EU is more directly accountable for results from the actions (projects and programmes) financed, and hence the contribution of these actions to sustainability, environment and climate change or biodiversity objectives needs to be demonstrated. Indicators at this level are directly linked to the expected results and indicators outlined in multi-annual programming documents and, at a lower level, in the Action Documents.

Examples of indicators used at this level are *Length of coast line protected by rehabilitated or planted mangrove stands EU support for Guyana Mangrove Restoration* or *Number of people given access to improved public low-carbon transport systems* (Inter-American Development Bank). Where relevant, the SDG global targets can provide an inspiration for the indicators.

In any case, the indicators selected should be:

- The most aligned to the expected outputs and outcomes;
- Clearly defined;
- With a robust data sources, specific data collection for environment and climate change related objectives may be required;
- Aligned with the EU Results Framework indicators that already exist on Environment, Climate Change and Natural Resources⁽¹⁾;
- Aligned with indicators being measured by partner country strategy;
- Aligned with indicators being measured by other donors.

During the implementation phase, if the inclusion of the relevant environment, climate change and biodiversity indicators has not been correctly addressed during formulation, it can be reported during monitoring and evaluation reviews and corrected to contribute to the results reporting and feed back into the programming cycle and the policy dialogue.

GLOBAL-LEVEL INDICATORS

The main policy document for defining the international cooperation objectives (goals), targets and indicators is the UN 2030 Agenda for Sustainable Development, which has come into effect on 1 January 2016 and will guide decision-making over the next 15 years. As it defines Sustainable Development as an overriding objective, many

⁽¹⁾ See Staff Working Document on the EU Results Framework http://ec.europa.eu/europeaid/staff-working-document-launching-eu-international-cooperation-and-development-results-framework_en

of the (17) goals and (169) associated targets contain elements that refer to the environment, to climate resilience, to protection of ecosystems or to sustainable consumption and production, among others.

Indicators are being developed to follow-up and review the targets using a set of global indicators. These will be complemented by indicators at the regional and national levels, which will be developed by member states in addition to the outcomes of work undertaken for the development of the baselines for those targets where national and global baseline data does not yet exist. This framework is expected to address all Sustainable Development Goals and targets and provide quality, accessible, timely and reliable disaggregated data to help with the measurement of progress. Meanwhile, the *'Indicators and a Monitoring Framework for the Sustainable Development Goals - Launching a data revolution for the SDGs'* is the result of a collaborative effort of multiple organisations and individuals over 18 months, and sets out an indicator framework. The updates to this framework can be consulted at <http://unsdsn.org/indicators>.

This framework is particularly important as it contains indicators that will be measured and reported on at country and international level. Besides ensuring that these indicators are relevant for sustainable development, EU cooperation can be confident the indicators are well aligned with the national and regional monitoring systems and that there is likely to be a substantial commitment to ensuring data availability and quality and regular reporting.

An example of an indicator proposed in this framework, which could be used for mainstreaming of climate change adaptation concerns during formulation of programmes and actions, is presented in the text box below. It includes a definition of the indicator as well as methodological considerations related to data collection and analysis.

Indicator 6 (cross-reference): Losses from natural disasters, by climate and non-climate-related events (in USD and in lives lost)

Rationale and definition: Cities around the world are at growing risk from natural hazards, including extreme climate-related events that are projected to increase in frequency and severity as a result of climate change. Population growth and urbanization will also affect vulnerability and exposure.

This indicator measures losses, both lives lost and economic costs, due to natural disasters, disaggregated by climate and non-climate-related events. Extreme climate-related natural disasters include the following:

- hydro-meteorological events (storms, floods, mass movements (wet)); and
- climatological events (extreme temperature, drought, wildfire).

Non-climate-related natural disasters consist primarily of geophysical events (earthquakes, volcano eruptions, tsunamis, dry mass movements). Other disasters that may be climate or non-climate related include biological events (epidemics, insect infestations, animal stampedes). If in doubt, we propose that the events be categorized as “non-climate related.”

Effective adaptation and disaster risk reduction measures are needed to reduce the economic and social impact of natural disasters. Economic loss dimensions include damage at the replacement value of totally or partially destroyed physical assets; losses in the flows of the economy that arise from the temporary absence of the damaged assets; resultant impact on post-disaster macroeconomic performance, with special reference to economic growth/GDP, the balance of payments and fiscal situation of the Government, as per the Damage and Loss Assessment Methodology developed by UNECLAC.

Human losses would be measured by the number of persons deceased or missing as a direct result of the natural disaster, confirmed using official figures. The scale and duration of displacement would also be an important aspect of the human cost.

Disaggregation: This indicator can be disaggregated spatially (incl. urban/rural) and by the age and sex of those killed. Further opportunities for disaggregation are to be reviewed, including the socio-economic profile of those impacted.

Comments and limitations: Some biological disasters (epidemics, insect infestations, animal stampedes) can be climate-related. The indicator would need to specify clearly which of these events are considered climate-related.

Primary data source: Vital registration for the mortality (household surveys if not available), and administrative data (national accounts and statistics) to assess economic damage and loss.

Potential lead agency or agencies: Such an indicator could be reported by UNISDR working with FAO, WHO, the Centre for Research and Epidemiology of Disasters (CRED), and a consortium of reinsurance companies that track this data. The data is widely reported under the Hyogo Framework of Action.

SELECTION OF INDICATORS

Selection of indicators should take the following issues into consideration:

Logical chain – Results identified at level 1 (longer-term development impacts – as described above) should show a link to level 2 (outcomes and/or outputs) in order to be able to tell a coherent story of how the interventions contribute to sustainable progress at the higher level (*refer to EU Project and programme cycle management guidance for further details*). For example, should one of the selected indicators in a MIP be xxx, the related indicator at the level of an Action could be yyy (*the logic being that yyy contributes xxx*). Hence, during preparation of Action documents, it is useful to make reference to results and indicators defined in the MIPs and ensure consistency. Where causal links between the two levels are more difficult to capture and appropriate indicators are not available, providing a qualitative narrative alongside quantitative results reporting is an option to be considered.

Coverage – At the level of MIPs and of Actions in particular, it is important to keep the number of indicators manageable, so as to ensure the agency can effectively collect the data of adequate quality. Since most indicators will focus on the developmental effects, it is common practice to identify one or two indicators only that refer to the relevant Environment and Climate Change result.

Aggregation of results – Ideally, indicators to be included in the results framework can be aggregated across projects and programmes and, to the extent possible, make use of data produced by national statistics authorities. Where they are unavailable, data may be specifically collected by the projects' and programmes' monitoring mechanisms. In both cases, indicators have to be – as much as possible – of a quantitative nature, in order to allow for aggregation. An indicator should also be accompanied by methodological specifications which describe what should and should not be included during calculations for aggregation across projects, programmes, countries or regions. In some cases, use can be made of methodological work already carried out by other donors and by partner countries, who are often concerned with the same cross-cutting issues. The EU Results Framework already has indicators where results can be aggregated across projects and programmes. For Environment, Climate Change and Natural Resources these indicators are:

- Number of hectares of protected areas managed with EU support Number of Micro, Small and Medium Enterprises (MSMEs) applying Sustainable Consumption and Production practices with EU support;
- Number of countries/regions with climate change strategies (a) developed and/or (b) implemented with EU support.

Methodology notes have been created to ensure that there is consistent measurement of results. They can be found at <http://capacity4dev.ec.europa.eu/eu-rfi>

Baselines and targets – To allow for an assessment of results and effects, it is necessary to ensure that information about the starting point (*the 'baseline information' for a reference point in time*) is available. Based on such information, a target may be set, expressing the level of ambition.

Specific indicators and targets have also been defined to assess the degree of integration of environment and climate change into cooperation portfolios and the amounts of funds allocated to climate change, biodiversity and desertification. They are based on the so-called Rio markers.

The EU has committed to allocate 20 % of its budget 2014-2020 to **climate-related action**. The increase in climate-relevant spending across the development cooperation portfolio is to be achieved over the 2014-2020 budgetary period, and Rio Markers – which are part of the OECD DAC reporting procedures – are used to track progress. Annex 8 explains the concept and use of the Rio-Markers for environment, climate change and biodiversity spending.

In order to achieve the 20 % objective, all opportunities to integrate climate change concerns in actions and support measures should be seized and, once identified, substantiated in (1) the analysis of the context, (2) in objectives and results and (3) in corresponding activities.

Likewise, the EU has committed, under the UN Convention on Biological Diversity, to contribute to the **doubling of total biodiversity-related financial resource flows** to developing countries by 2015, and at least to maintain this level until 2020, and to mobilize domestic financial resources from all sources to reduce the gap between identified needs and available resources at domestic level⁽²⁾. This requires mainstreaming of biodiversity throughout the EU budget. The European Commission is in the process of developing a baseline value and a methodology to track biodiversity related expenditure in the EU budget, including the international cooperation budget, similar to that developed for climate related expenditure, namely through use of the established OECD 'Rio markers' methodology (Annex 8), though the use of more precise methodologies in policy areas where these are available is not excluded.

Indicators are linked to the set targets and activities. At the level of actions, the decision whether or not to set targets for the indicators varies from action to action, according to the sector, donor and partner country context. While it is preferable to set targets for each of the indicators, this can be a challenging task. In principle, targets should be defined using a bottom-up approach and be driven by the frameworks and demand from partner countries.

⁽²⁾ Decision adopted by the Conference of the Parties to the Convention on Biological Diversity XII/3. Resource Mobilisation, COP XII, Agenda item 14, Pyeongchang, Republic of Korea, 6-17 October 2014.

“RACER” INDICATORS

RACER stands for “Relevant, Acceptable, Credible, Easy, Robust”:

Relevant

The indicator should have a strong correlation with the objective that we want to achieve; this means for instance that broad, composite indexes such as the Ecological Footprint⁽³⁾ or the Environmental Sustainability Index⁽⁴⁾ (ESI) should not be used to monitor the performance of specific sector policies or programmes; or, to give another example, when concerned with following the evolution of fish stocks, we should not monitor the fish catch only, since high fish catches may reflect a high fishing pressure as well as a recovery of fish stocks.

Acceptable

The indicator must be easily understood and should be accepted by all the stakeholders.

Credible

The indicators must be accessible to non-experts, unambiguous and easy to interpret.

Easy

It should be possible to collect the data with available resources, based on the principle of ‘proportionate analysis’; when we want to conserve forest biodiversity, for instance, we cannot envisage a census of all species living in the area but we have to identify species or ‘objects’ (like elephant dung) that are easily detectable; relative census methods should usually be preferred, since they are more cost-effective and usually sufficient to track changes in time.

Robust

The indicators should be sensitive enough to monitor changes therefore, it is important to select the indicators according to the time-lag between the action and the expected change; when we monitor environmental impacts, we should be aware that the change should be noticed before it is already too late to adapt the intervention; for this reason it is important not to rely on (a) old data; (b) indicators that, having been developed for comparing countries (such as the ESI) or situations, are not suitable for monitoring changes; (c) variables influenced by long-term impacts; (d) variables that are deeply affected by uncontrolled short-term changes hiding the expected long-term changes. For sustainable development, a major challenge is to find indicators that point to current progress towards long-term or future improvements: these indicators include indicators of ‘capital’ or ‘stock’ (e.g. of natural resources) and, from an economic perspective, the genuine saving rates (adjusted net saving⁽⁵⁾).

SOURCES AND FURTHER READING

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⁽³⁾ See: Global Footprint Network (<http://www.footprintnetwork.org/>) and WWF (www.wwf.org)

⁽⁴⁾ See: <http://sedac.ciesin.columbia.edu/data/collection/esi/>

⁽⁵⁾ See: <http://go.worldbank.org/EPMTVTZOMO>

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