



The SDC Climate Change & Environment Network

# Reference Outcome Indicators (Climate, Environment and Disaster Risk Reduction)

## Supporting document for M&E

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 Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Agency for Development  
and Cooperation SDC

 SDC Network  
**Disaster Risk Reduction**

## 1. Background and aim

Climate change, environmental degradation and disaster risks pose challenges for development cooperation and hinder the achievement of development priorities. SDC strategies, programmes and projects need to be designed to increase resilience and to reduce vulnerabilities, greenhouse gas emissions and environmental degradation. Those concerns shall also be considered in the monitoring and evaluation system and the related indicator set.

The aim of this document is to provide a list of possible outcome indicators incorporating the following four themes; climate change mitigation (CCM), climate change adaptation (CCA), environment (E) and disaster risk reduction (DRR). The list of reference indicators shall be understood as a set which can/shall be adjusted or modified. The indicators might be used for the elaboration of Results Frameworks for country strategies as well as for programs and projects.

CC&E is not equally relevant in all strategies. In some strategies, climate change is one of the three focus themes and hence, important also in the sense of monitoring and evaluation. In other strategies, climate change is only indirectly relevant, however worth considering.

## 2. Scope of outcome indicators

The reference list is structured along four different Outcome Areas:<sup>1</sup>

- **Outcome Area 1: Strengthened integration of CCM/CCA/E/DRR into policies and institutions:** Is the institutional and legal framework strengthened? Are CCM/CCA/E/DRR topics considered in strategies, laws and policies?
- **Outcome Area 2: Strengthened awareness on and knowledge about CCM/CCA/E/DRR:** Is awareness and knowledge of the problem as well as on possible measures available on all relevant levels?
- **Outcome Area 3: Strengthened capacities to adapt to the adverse impacts of climate change, environmental degradation and disasters and to reduce greenhouse gas emissions:** Are target groups capable to use appropriate measures, tools, instruments to react to the adverse impacts of climate change, environmental degradation and disasters as well as to mitigate greenhouse gas emissions? Are they capable to take appropriate measures?
- **Outcome Area 4: Strengthened resilience (CCA/E/DRR) and reduced adverse impacts (CCM):** Is the resilience regarding the adverse impacts of climate change, environmental degradation, disasters strengthened? Are greenhouse gas emissions reduced due to the implementation of appropriate measures?

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<sup>1</sup> Based on the work of Helvetas Swiss Intercooperation 2013.

### **Areas of application**

The reference indicators can be applied for country strategies as well as for programs and projects. The wording of the proposed indicators is deliberately held general. As needed, the indicators might be adjusted or altered for the more specific project level.

### **Options regarding the relevance of CC&E themes**

CC&E themes can have different importance within a strategy or program/project and hence different kind of indicators might be of relevance:

- **CC&E as core theme:** The strategy or program/project has a specific focus on CC&E, e.g. climate is one of the three focus themes in the strategy. Hence, more specific CC&E indicators may be chosen to monitor and evaluate the strategy, program or project.
- **CC&E as transversal theme:** For strategies, programs or projects not explicitly focusing on CC&E, the topic might be included in a transversal manner. The success of strategies, programs or projects can be negatively affected, if CC&E is not adequately considered. In this case, more general indicators on integrating and mainstreaming CC&E topics are relevant.
- **CC&E as marginal theme:** There are strategies, programs and projects with no special focus or direct connection to CC&E topics. However, the topic might also be of some relevance for the success of the strategy, program or project, because there is a certain reference to natural resources, such as e.g. water, food security or rural development. For this category, rather general indicators are needed. The list provided can be used as source of inspiration.

### **Sectors**

The list of reference indicator does not comprise any sector specific indicators (e.g. for agriculture, water, health, etc.), but rather general formulations. However, the indicators might be altered and adjusted to specific needs. Some guidance is provided in the comment column.

### **Choice of indicators**

The list of reference indicators provides a guidance for the formulation of indicators. The formulation needs to be adjusted according to the needs of the strategy, program or project. The classification of indicators regarding the relevance of CC&E themes (core theme, transversal theme, marginal theme) is highlighted in three different colors (green, blue, grey) and is provided as a supplementary information. This classification is however not to be regarded final.

### 3. Proposed reference indicators

Table 1: Reference Outcome Indicator

Proposed reference indicators	CCM	CCA	E	DRR	Core theme	Transversal theme	Marginal theme	Comments
<b>Outcome Area 1: Strengthened integration of CCM/CCA/E/DRR into policies and institutions</b>								
<ul style="list-style-type: none"> <li>Number and/or quality of mentioned CCM/CCA/E/DRR priorities integrated into development policies, strategies and plans</li> </ul>								<ul style="list-style-type: none"> <li>Not yet the formulation of concrete policies, plans, programmes, but mentioning the topic in development strategies/plans</li> <li>E.g. policies, strategies and plans at national, sub-national or local level</li> </ul>
<ul style="list-style-type: none"> <li>Degree of implementation and/or quality of laws regarding CCM/CCA/E/DRR</li> </ul>								<ul style="list-style-type: none"> <li>E.g. laws regarding the reduction of GHG emissions from transport, energy, industry, the reduction of air pollutants</li> </ul>
<ul style="list-style-type: none"> <li>Degree and/or quality of participation of civil society organisations during the formulation of CCM/CCA/E/DRR strategies/policies</li> </ul>								
<ul style="list-style-type: none"> <li>Existence and/or quality of interministerial/intersectorial commissions working on CCM/CCA/E/DRR topics</li> </ul>								
<ul style="list-style-type: none"> <li>Number and/or quality of formulated and implemented strategies/policies regarding CCM/CCA/E/DRR</li> </ul>								<ul style="list-style-type: none"> <li>E.g. policies to reduce GHGs or air pollutants, to increase soil conservation, to increase waste water treatment</li> </ul>
<ul style="list-style-type: none"> <li>Number and/or quality of policies, plans or programmes including topics related to CCM/CCA/E/DRR</li> </ul>								<ul style="list-style-type: none"> <li>Existing policies, plans, programmes are adjusted</li> </ul>
<ul style="list-style-type: none"> <li>Amount/percentage of disbursements for CCM/CCA/E/DRR</li> </ul>								<ul style="list-style-type: none"> <li>Spending on different levels: E.g. national, sub-national, communal, city</li> <li>Consider whether the money is committed or disbursed</li> </ul>
<ul style="list-style-type: none"> <li>Number and/or quality of policy dialogues conducted targeting topics related to CCM/CCA/E/DRR</li> </ul>								
<b>Outcome Area 2 Strengthened awareness on and knowledge about CCM/CCA/E/DRR</b>								
<ul style="list-style-type: none"> <li>Number and/or percentage of policy-makers/governmental staff aware (and/or quality of awareness) of the relevance of CCM/CCA/E/DRR</li> </ul>								

Proposed reference indicators	CCM	CCA	E	DRR	Core theme	Transversal theme	Marginal theme	Comments
<ul style="list-style-type: none"> <li>Number and/or percentage of targeted stakeholders/population aware (and/or quality of awareness) of predicted adverse impacts of climate change/environmental degradation/disasters</li> </ul>								<ul style="list-style-type: none"> <li>Stakeholder refers to various institutions such as NGOs, private sectors</li> <li>Population refers to the local level such as communities, households, families, individuals</li> <li>Quality refers to e.g. one is aware of the full impact chain and its consequences it may cause for daily life.</li> </ul>
<ul style="list-style-type: none"> <li>Number and/or quality of targeted stakeholders/population aware(ness) regarding low carbon technologies, climate change adaptation measures, environmental protection or DRR measures</li> </ul>								<ul style="list-style-type: none"> <li>Stakeholder refers to various institutions such as NGOs, private sectors</li> <li>Population refers to the local level such as communities, households, families, individuals</li> </ul>
<ul style="list-style-type: none"> <li>Number and/or quality of outreach systems regarding information on CCM/CCA/E/DRR</li> </ul>								<ul style="list-style-type: none"> <li>E.g. network systems, information sharing systems, online platforms</li> <li>Quality refers to e.g. the accessibility to all relevant levels</li> </ul>
<ul style="list-style-type: none"> <li>Perceived vulnerability of targeted stakeholders/population to the adverse impact of climate change/environmental degradation/disasters</li> </ul>								<ul style="list-style-type: none"> <li>Perceived vulnerabilities refers to the degree stakeholders/population think that they are affected and vulnerable to the adverse impacts of climate change/ environmental degradation/disasters</li> </ul>

**Outcome Area 3: Strengthened capacities to adapt to the adverse impacts of climate change, environmental degradation and disasters and to reduce greenhouse gas emissions**

<ul style="list-style-type: none"> <li>Number and/or percentage of targeted stakeholders/population using information and tools to respond to CCM/CCA/E/DRR</li> </ul>								<ul style="list-style-type: none"> <li>Information and tools refer to e.g. tools for GHG accounting, tools for monitoring drought, information on air quality/air pollution, rain forecasting systems, flood/tsunami early warning systems.</li> <li>Quality aspect can also be included into the indicator</li> </ul>
<ul style="list-style-type: none"> <li>Number and/or percentage of targeted stakeholders/population using/applying low carbon technologies</li> </ul>								<ul style="list-style-type: none"> <li>E.g. green building measures are implemented, low carbon transport systems are implemented</li> <li>Quality aspect can also be included into the indicator</li> </ul>
<ul style="list-style-type: none"> <li>Number and/or percentage of targeted stakeholders/population using/applying specific risk reduction measures</li> </ul>								<ul style="list-style-type: none"> <li>E.g. farmers adapting their technologies, irrigation manner, population is acting risk sensitive</li> <li>Quality aspect can also be included into the indicator</li> </ul>
<ul style="list-style-type: none"> <li>Number and/or percentage of targeted stakeholders/population using/applying measures to reduce environmental degradation</li> </ul>								<ul style="list-style-type: none"> <li>E.g. farmers applying biological pest control (instead of chemical pest control)</li> <li>Quality aspect can also be included into the indicator</li> </ul>
<ul style="list-style-type: none"> <li>Number and/or percentage of targeted population implementing diversified income activities</li> </ul>								<ul style="list-style-type: none"> <li>Dependency on natural resource income activities makes one vulnerable, a general diversification of income strategies increases the overall resilience.</li> <li>Quality aspect can also be included into the indicator</li> </ul>

Proposed reference indicators	CCM	CCA	E	DRR	Core theme	Transversal theme	Marginal theme	Comments
<ul style="list-style-type: none"> <li>Number and/or percentage of targeted population applying climate resilient natural resource management practices</li> </ul>								<ul style="list-style-type: none"> <li>E.g. use of drought resistant crops</li> <li>Quality aspect can also be included into the indicator</li> </ul>
<ul style="list-style-type: none"> <li>Perceived change in ability to respond to future changes regarding climate/environmental degradation/disasters</li> </ul>								
<b>Outcome Area 4: Strengthened resilience (CCA/E/DRR) and reduced adverse impacts (CCM)</b>								
<ul style="list-style-type: none"> <li>Number and/or percentage of targeted population perceiving that they are safer regarding the adverse impacts of climate change/disasters</li> </ul>								<ul style="list-style-type: none"> <li>Safer compared to the situation before the intervention by the strategy, program or project</li> </ul>
<ul style="list-style-type: none"> <li>Increase in quality of natural resources/ increase in productivity and/or production (harvest)</li> </ul>								<ul style="list-style-type: none"> <li>E.g. increase in soil quality, water quality or increase in agricultural harvest</li> </ul>
<ul style="list-style-type: none"> <li>Number and/or percentage of targeted stakeholders/population benefiting from better quality of natural resources</li> </ul>								<ul style="list-style-type: none"> <li>Benefitting from enhanced waste management, treated wastewater, clean drinking water, cleaner air, reduced flood risk etc.</li> </ul>
<ul style="list-style-type: none"> <li>Tonnes of carbon dioxide equivalent (t CO<sub>2</sub>eq)</li> </ul>								<ul style="list-style-type: none"> <li>Reduced or avoided GHG emissions from different sectors such as energy, transport, building, industry</li> <li>Reduced or avoided GHGs emissions or GHG removals by sinks (including increased removals) – from Reducing Emissions from Deforestation and Forest Degradation (REDD) and other land use activities</li> </ul>
<ul style="list-style-type: none"> <li>Number and/or percentage of people affected by climate change/ environmental degradation/ disasters</li> </ul>								
<ul style="list-style-type: none"> <li>Total economic losses attributed to climate change/ environmental degradation/disasters</li> </ul>								
<ul style="list-style-type: none"> <li>Number of deaths arising from natural hazard events</li> </ul>								
<ul style="list-style-type: none"> <li>Number and/or percentage of targeted stakeholders/population record better quality of life</li> </ul>								<ul style="list-style-type: none"> <li>E.g. better quality of life due to better air quality, water quality, safety situation, access to resources</li> </ul>

## Literature

**Adaptation Fund 2011:** Project level results framework and baseline guideline document, Adaptation Fund Board, Fourteenth Meeting, Bonn, June 20, 2011.

**GIZ 2014:** Repository of Adaptation Indicators, real case examples from national monitoring and evaluation systems, Bonn, 2014.

**Green Climate Fund 2016:** Further development of indicators in the performance measurement framework, Meeting of the Board, Songdo, Incheon, Republic of Korea, 8-10 March, 2016.

**Helvetas Swiss Intercooperation 2013:** SDC Framework for CCA Monitoring and Evaluation, Bern, 16. October, 2013.

**IFRC 2006:** TRIAMS Working Paper – Risk Reduction Indicators, June 2006.

**ISDR 2008:** Indicators of Progress: Guidance on Monitoring the Reduction of Disaster Risks and the Implementation of the Hyogo Framework for Action, Geneva, 2008.

**UNPEI 2002:** Indicators for Environmental Monitoring in International Development Cooperation, June 2002