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CEDRIG
Climate, Environment and Disaster Risk Reduction Integration Guidance

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Overview

1. SDC' rationale for CEDRIG
2. Aim and scope of CEDRIG
3. Modules and steps of the handbook
4. Experiences of CEDRIG applications

1. SDC's rationale for CEDRIG

Rationale

- Developing countries are particularly **vulnerable** to risks emanating from climate change and natural disasters
- Climate change and natural disasters **affect sustainable development and undermine core development priorities**, such as poverty alleviation
- Reduction of greenhouse gas emissions can be achieved by **low carbon development**

→ **Integrate** climate change, environment and DRR into SDC's development cooperation and humanitarian aid

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2. Aim and scope of CEDRIG

Aim of CEDRIG

CEDRIG supports SDC staff and their project partners in analyzing the following questions:

- Are activities **at risk** from disasters?
- Do activities **have an impact** on greenhouse gas emissions and/or the environment?

→ **Enhance resilience** and **reduce negative impacts** of activities

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2. Aim and scope of CEDRIG

Two parts of CEDRIG

Part I: Aim, Concept and Support Material of CEDRIG

- Rationale and framework of SDC's CEDRIG
- Key definitions and explanations
- Procedural information about the approach
- Supporting materials

Part II: CEDRIG Handbook

- Self-explanatory and hands-on guidance
- Guides the user through the process

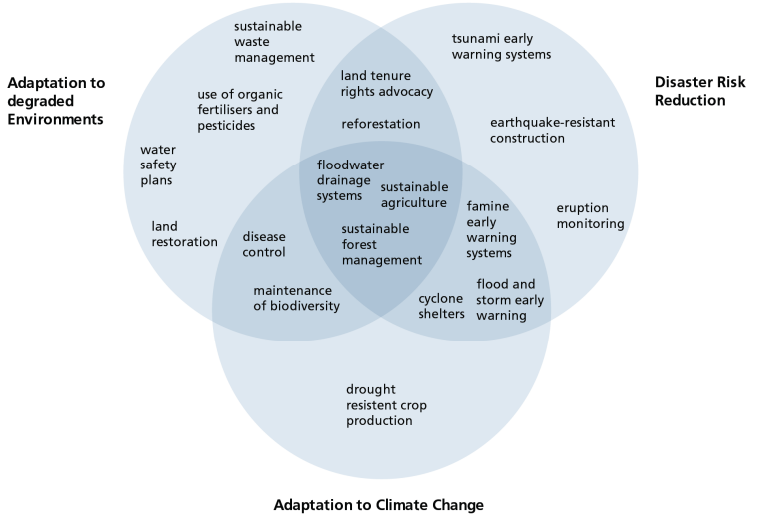
Aim

What to do

Results

2. Aim and scope of CEDRIG

Three thematic fields – one approach



Source: Adapted from Tearfund

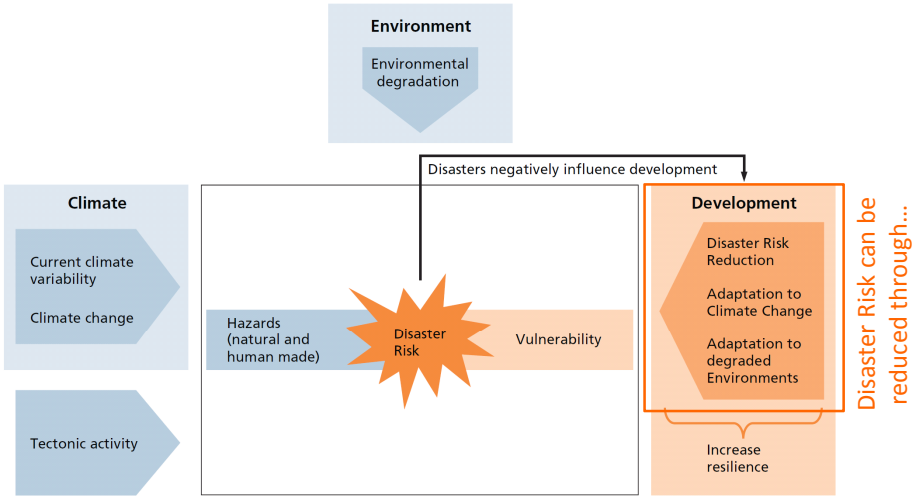
2. Aim and scope of CEDRIG

Two perspectives

Risk Perspective (risks for the activity)	Impact Perspective (impacts of the activity)
Assessing potential risks from disasters	Assessing potential impacts (on GHG emissions and/or the environment)
Adaptation to Climate Change	Climate Change Mitigation
Adaptation to degraded Environments	Environmental Impact Mitigation
Disaster Risk Reduction	

2. Aim and scope of CEDRIG

Risk perspective



Source: Adapted from IPCC 2012

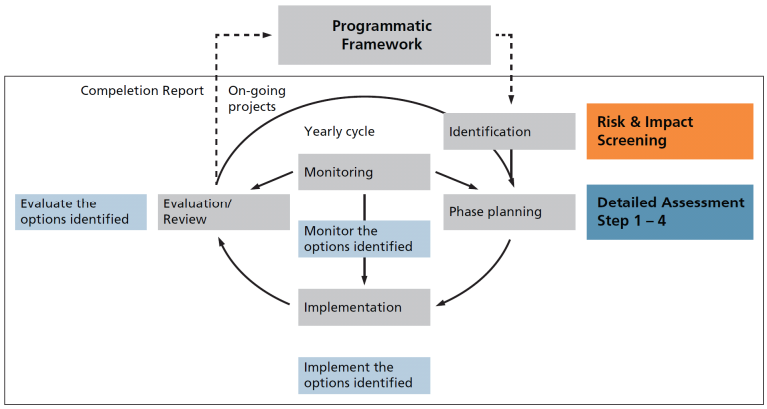
2. Aim and scope of CEDRIG

Principles of CEDRIG

Principle 1 – **OECD Guidance and Hyogo Framework for Action as references**

Principle 2 – **Modular and flexible**

Principle 3 – **Integration in SDC procedures and Project cycle**



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3. Modules and steps of the handbook

Modules of CEDRIG

Module 1:	**Risk and Impact Screening;** Filter leading to the decision if a Detailed Assessment shall be conducted
Module 2:	**Detailed Assessment at Strategic and Programmatic Level**; Only Risk Perspective
Module 3:	**Detailed Assessment at Project Level**; Risk and Impact Perspective

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3. Modules and steps of the handbook

Main features of the Modules

	Module 1 Risk and Impact Screening	Module 2 Detailed Assessment at Strategic & Programmatic Level Risk Assessment Lens	Module 3 Detailed Assessment at Project Level Detailed Risk & Impact Assessment
What for?	First screening	In depth assessment at strategic level	In depth assessment at project level
How?	Individually or participatory with involved project partners	Workshop with project partners	Workshop with project partners
Length?	Max. 1-2 hours	Team process 1.5 to 2 days, plus preparation time	Team process 2 to 3 days, plus preparation time
When?	Beginning of the planning process or new phase	As early as possible when strategy or programme is being planned	A early as possible (elaboration of project documents)

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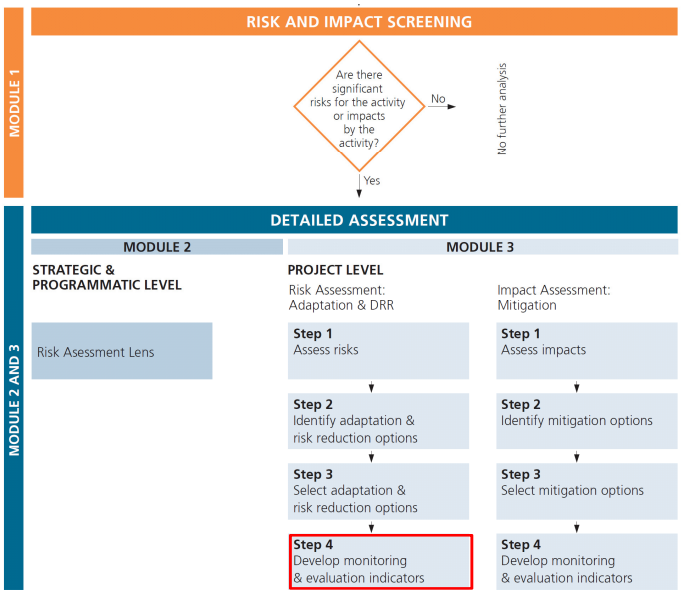
3. Modules and steps of the handbook

Process of the application of CEDRIG



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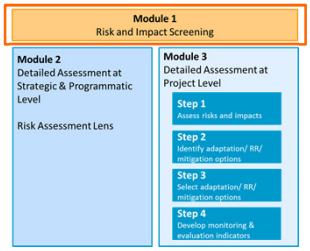
3. Modules and steps of the handbook

Module 1: Risk & Impact Screening



Aim

- Identification whether an activity is potentially at risk from disasters and whether it may have an impact on GHG emissions / environment

What to do

- Rough screening and overall estimation of potential risks and impacts, taking into account the exposure, hazards/impacts, vulnerabilities and capacities (screening list)

Results

- Overall risks and impacts are roughly estimated
- It is decided whether a Detailed Assessment shall be conducted

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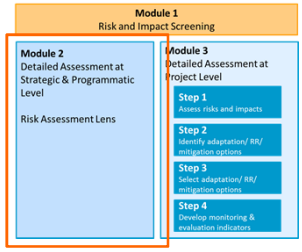
3. Modules and steps of the handbook

Module 2: Detailed Assessment at Strategic & Programmatic Level



Aim

- Assessment whether a strategy is at risk from disasters

What to do

- Context analysis
- Risk assessment of strategy, incorporation of disaster risk consideration into the strategy
- Strategy adjustments, if needed

Results

- Strategy adequately incorporating disaster risks

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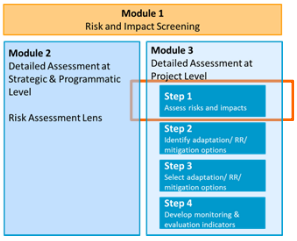
3. Modules and steps of the handbook

Module 3: Detailed Assessment at Project Level
Step 1: Assessing risks



Aim

- Assessment of possible disaster risks for the activity

What to do

- Data collection and analysis
- Identification of most relevant hazards (current, future), assets most at risk, vulnerabilities, impacts
- General, qualitative risk assessment

Results

- Overall risks are assessed

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3. Modules and steps of the handbook

Result of Step 1: Assessing risks

Field application of Bolivia's El Salto dam project

Risk and climate related opportunities assessment					
	Relevant current and future hazards to which the project is exposed	**Vulnerability**		**Most important impacts of hazards today and in the future**	**Risk / opportunity and general assessment**
		Assets mainly affected by these hazards	**Factors influencing current and future vulnerability and/or adaptive capacity**		
Project area / objective / main activity	Drought, not enough water, frost, pests	crops, livestock	weather forecast unpredictable, no or little education and capacity, soil erosion	migration, water scarcity, lower production yields	Utility of the dam, temporal migration, decreased incomes

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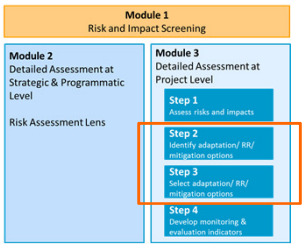
3. Modules and steps of the handbook

Steps 2 and 3: Identify and select adaptation/ risk reduction options



Aim

- Brainstorm and select possible adaptation/ risk reduction options

What to do

- Brainstorming of possible options
- Evaluation and selection of options according to key criteria

Results

- Most promising options are selected and included into the project

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3. Modules and steps of the handbook

Result of Step 2: Identify adaptation / risk reduction options

Field application of Bolivia's El Salto dam project

Possible adaptation or risk reduction options
▪ Establish local irrigation committee ▪ Train local leaders in CCA and DRR ▪ Hydrology in risk scenarios ▪ Efficient water use techniques (technical assistance) ▪ Recover local traditional crops resisting to drought ▪ Introduce new crops resistant to new pests ▪ Promote traditional measures (IWSM) ▪ Compensation for services to the watershed ▪ Structural measures resulting from new CC scenarios

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3. Modules and steps of the handbook

Result of Step 3: Select adaptation/risk reduction options

Field application of Bolivia's El Salto dam project

Assessment and selection of proposed options						
Options	**Effectiveness**	**Cost**	**Feasibility**	**Sustainability**	**Social acceptance**	**Overall evaluation**
Local irrigation committee: efficient use of the water and sustainable use of the dam	2 A strong and responsible water committee can assure an efficient use of water. Capacity building is necessary	2 Costs are low	1 Usually local communities have a high organization level. Should be possible	2 Ownership increases sustainability	2 Depending on how the committee is created and managed (transparency) the social acceptance can be high.	9 Good
Train local leaders in CCA & DRR	2 Increasing the knowledge in CCA & DRR of local leaders is very efficient to disseminate knowledge and good practices in order to achieve a better watershed management	2 Costs are low.	1 To find the right local leader can be difficult.	2 Ownership increases sustainability	2 Usually local leaders are respected and accepted.	9 Good
Promote traditional measures (IWSM)	2 The use of traditional measures of IWSM can be effective to decrease the risks (soil erosion, less water)	1 To promote the use of traditional measures with an integrated approach (IWSM) could be more expensive.	0 A plan for IWSM has to be done and this goes beyond the initial purpose of the project. Other projects should be implemented with this approach	2 IWSM is very sustainable	2 The use of traditional measures increases the local acceptance	7 Good but exceeds the possibilities of the project
Structural measures resulting from new CC scenarios (hydrology)	0 Many risks not directly related to the dam but to the management of the watershed (measures will not address the causes). Moreover high sedimentation is expected (soils erosions)	0 Infrastructural measures have higher costs	2 easy to implement	0 Causes are not addressed . It is not sustainable.	2 Local population will accept the project	4 Definition of CC scenarios can be difficult, the cost would be too high, is not a good option

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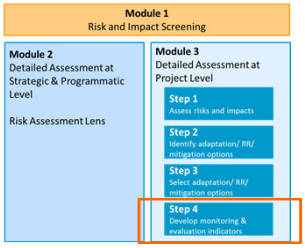
3. Modules and steps of the handbook

Step 4: Develop monitoring and evaluation indicators



Aim

- Define indicators for M&E regarding the success of options

What to do

- Defining new indicators or adjust impact, outcome and output indicators
- Defining control questions for planning phase and evaluation

Results

- Indicators are defined

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3. Modules and steps of the handbook

Result of Step 4: Examples of impact, outcome and output indicators

EXAMPLE 6 - EXAMPLES OF IMPACT, OUTCOME AND OUTPUT INDICATORS

	Impact	Outcome	Output
Policy development	› Increased overall resilience through implementing policy actions	› Legislators pass policy provision in favour of pro-environmental land-management/ agricultural practices etc. › National climate change and/ or DRR plan established and implemented › Climate change and DRR is mainstreamed in the local political institutions	› Number of mechanisms for coordination (e.g. evacuation, climate change) between sectors is established › Number of e.g. districts with a written policy that includes environmental issues or climate change adaptation into official planning
Capacity development	› Increased overall resilience reached through implementing capacity development activities	› Perceived change in ability to respond to future change achieved	› Number of early warning system installed › Number of trainings in soils conservation provided › Local emergency response team established
Awareness building	› Reduced vulnerability through awareness building measures	› Change in behaviour reached (e.g. watershed management, soil conservation in farming practices)	› Number of schools and students for awareness raising reached

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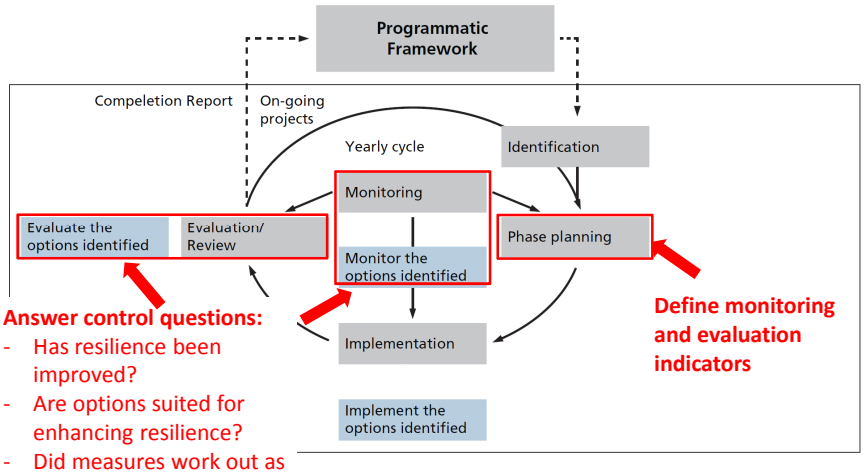
3. Modules and steps of the handbook

Monitoring and evaluation in project cycle



Answer control questions:

- Has resilience been improved?
- Are options suited for enhancing resilience?
- Did measures work out as intended?

Define monitoring and evaluation indicators

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4. Experience of CEDRIG application

Appreciation from the field

- Useful instrument to raise awareness and sensitize stakeholders
- Screening can be done without specific knowledge of the topic
- Detailed assessment should be done in a participatory workshop
- Tool can be applied at the project and strategic level
- Systematic approach to identify concrete measures and monitor them

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4. Experience of CEDRIG application

Main features - summary

- Supports practitioners in considering climate, environment and disaster risks broadly and systematically
- Practical guidance, not a cookbook
- Flexible, mainly qualitative and participatory instrument
- To be applied early in the planning process
- Integrated into standard procedures (mainstreaming purpose)

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