Climate risk assessment and climate risk management plan

OVERVIEW

What is it?

A Climate Risk Assessment (CRA) is a prior assessment of a project to examine its climate risks in terms of project exposure, potential climate impacts and risk mitigation capacity.

Based on the CRA, a climate risk management plan (CRMP) is drawn up and serves to monitor risk mitigating actions. In many cases, it is possible to carry out a simplified CRA, which is based on rapid screening using available evidence.

What can it be used for?

The CRA results in recommendations concerning measures to reduce a variety of climate-related risks and optimise opportunities for ensuring that a project contributes to environmental and economic sustainability in the face of climate change.

Based on the CRA, a climate risk management plan (CRMP) is drawn up and serves to monitor risk mitigating actions. In many cases, it is possible to carry out a simplified CRA, which is based on rapid screening using available evidence.

The CRMP is used to ensure the risk mitigation measures get implemented and provides the elements to monitor key climate risk variables. A CRMP can be part of an Environmental Management Plan.

When can it be used?

The need for a CRA is determined by the environment and climate risk screening process.

The CRA and CRMP are prepared during formulation and the CRMP is implemented and monitored with the project.

Who can use it?

- The CRA is used by the EU involved in determining the feasibility of a project on climate risk grounds. It is especially useful for the project
 proponent to improve climate resilience and maximise opportunities for the project to contribute to low carbon development.
- The CRMP is used by the project proponent and the EU to monitor the effectiveness of the risk mitigation measures. The EU needs to ensure that the CRMP is reflected in the relevant contractual documents.

What are its strengths?

• It identifies opportunities to build climate resilience of a project, looking into the future risks from climate change that cannot be obtained based on historical data.

What are its limitations?

• There is limited experience in EU development cooperation on the application of CRA.

PRACTICAL APPLICATION

Key elements

The need for a CRA is determined by a screening process (Annex 3 of the Guidelines). A CRA consists of the following typical components: (A) screening; (B) scoping; (C) identification of potential climate risks to the project; (iv) identification of potential risks of the project increasing climate vulnerability of human populations and natural systems; (v) CRA report; (vii) preparation of a Climate Risk Management Plan (CRMP). Public participation should be integrated throughout the process.

Requirements

Data/information. Preparation of a CRA requires details of the project (e.g. location, technologies used, inputs). It also requires data on the projected changes in climate-related variables relevant to the project (e.g. temperature, precipitation, number of dry days in a year, wind speeds...) as well as the expected impacts of climate change (e.g. recurrence of drought, cold spells, heat waves, flooding, sea level rise, disease vector distribution...) Depending on the country and region such data may be readily available or difficult to obtain.

Time. The time required to prepare a CRA can vary, depending on the complexity of the project and the availability of climate projections and data. The type of project may determine the need for specific analyses that can be time consuming, such as modelling of runoff under different scenarios.

Skills. A CRA requires a team that covers areas such as climate change, risk assessment, adaptation and climate change integration/mainstreaming. Expertise on the relevant sector is necessary in the team.

Facilities and materials. N/A

Financial costs and sources. Given the limited of experience in the use of this tool in EU development cooperation it is difficult to establish an empirical base to estimate costs. An estimate would be in the order of 20-60 person days, depending largely on the availability of data.

Tips and tricks

The EU EIA Directive requires that an EIA also assessed the project's vulnerability to climate change. In this sense, the elements of a Climate Risk Assessment (CRA) can be incorporated into the EIA.

RESOURCES

Where to find it

The European Commission, Tools and Methods Series, 2016. Guidelines N. 6, Integrating the environment and climate change into EU international cooperation and development (Annex 9, Terms of reference for a Climate Risk Assessment)

Complementary guides, methodologies and tools

The World Bank: Climate and Disaster Risk Screening Tools

United States AID (USAID): Climatelinks: A Global Knowledge Portal for Climate and Development Practitioners

The International Institute for Sustainable Development (IISD), 2011. CRISTAL - Community-based Risk Screening Tool - Adaptation & Livelihoods