

## Community-based Risk Screening Tool– Adaptation and Livelihoods (CRiSTAL)

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*IISD, IUCN, SEI-US, and Intercooperation*

### Organization

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The **International Institute for Sustainable Development (IISD)** is a policy research institute dedicated to engage decision-makers in government, business, non-governmental organizations (NGOs) among other sectors in the development and implementation of policies that are simultaneously beneficial to the global economy, the global environment, and to social well-being. IISD is a Canadian-based non-for-profit that was founded in 1990.

The **International Union for Conservation of Nature (IUCN)** supports scientific research, manages field projects around the world and provides a neutral forum for governments, NGOs, United Nations agencies, companies and local communities together to implement policy, laws and best practises in development and conservation challenges. The union was founded in 1948 as the world's first global environmental organization, and is based near Geneva, Switzerland.

The mission of the **Stockholm Environment Institute (SEI)** is to support decision-making and induce change towards sustainable development around the world by providing integrative knowledge that bridges science and policy in the field of environment and development. The Institute was established in 1989 following an initiative by the Swedish Government to develop an international environment and development research. **SEI-US** is the American Centre for SEI and is a non-profit research organization affiliated with TUFTS University in Massachusetts.

**Intercooperation** is a Swiss-based non-profit engaged in development and international cooperation since 1982. It is a foundation governed by 21 organizations representing the development community, civil society and the private sector. Intercooperation is both an implementing and an advisory organization, providing professional resources and knowledge combined with social commitment for rural development. Its principal areas are natural resource management (agriculture and forestry), rural economy, and local governance and civil society.

The CRiSTAL method was financed by the **Swiss Agency for Development and Cooperation (SDC)**.

**Weblinks:** [www.iisd.org](http://www.iisd.org) ; [www.iucn.org](http://www.iucn.org) ; [www.sei-us.org](http://www.sei-us.org) ; [www.intercooperation.ch](http://www.intercooperation.ch)

### Bibliographical details

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The document is available from the CRA toolkit at: [www.proventionconsortium.org/?pageid=39](http://www.proventionconsortium.org/?pageid=39)

## Abstract

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Community-level projects are rarely designed with a look to the implications of climate change, especially how they might affect local adaptive capacity. Without a mechanism for assessing the role and impact of a project vis-à-vis climate adaptation, it is often difficult to design activities that actually foster adaptation and minimize maladaptation. This joint project between IISD, IUCN, SEI-US and Intercooperation aims to develop a decision support tool that helps **project planners and managers** better understand the links among **climate change, livelihoods** and their work.

The Community-based Risk Screening Tool – Adaptation and Livelihoods (CRiSTAL) is a decision support tool that draws on the Environmental Impact Assessment (EIA) model and the Sustainable Livelihoods Framework (SLF). CRiSTAL aims to provide a logical, user-friendly process to help users better understand the links between climate-related risks, people's livelihoods, and project activities. Specifically, CRiSTAL is intended to help users systematically understand the links between local livelihoods and climate; assess a project's impact on livelihood resources important to adaptation; and to devise adjustments that improve a project's impact on livelihood resources important to adaptation.

## Intended end users

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This publication is intended for **project planners** and **managers**.

## Geographical focus

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This publication is intended to be applicable and adaptable in **global** scope. It has been field tested in Mali, Bangladesh, Tanzania, Zambia, Nicaragua and Sri Lanka

## Type of Material

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This publication includes a **user's manual** for the Microsoft Excel®-based CRiSTAL **decision-support tool** that helps community groups, project planners and managers to:

- ♦ Systematically understand the links between local livelihoods and climate;
- ♦ Assess a project's impact on livelihood resources vulnerable to climate risk and important to coping;
- ♦ Devise adjustments that improve a project's impact on livelihood resources central to adaptive capacity.

## Language

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This manual is written in **English**. It is planned that the publication will also be available in **Spanish** and **French**.

## Scale of assessment

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The focus of the assessment is at the **community-level**.

## Type of assessment

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The CRiSTAL publication is a **guideline** which provides the conceptual framework and key concepts for identifying, analysing and assessing the links between community-level climate risks, livelihoods and development projects, but does not describe in detail the steps and tools required for actually carrying out a community-level assessment. While the publication is not intended to gather material, it is a framework for analysing information once it has been gathered.

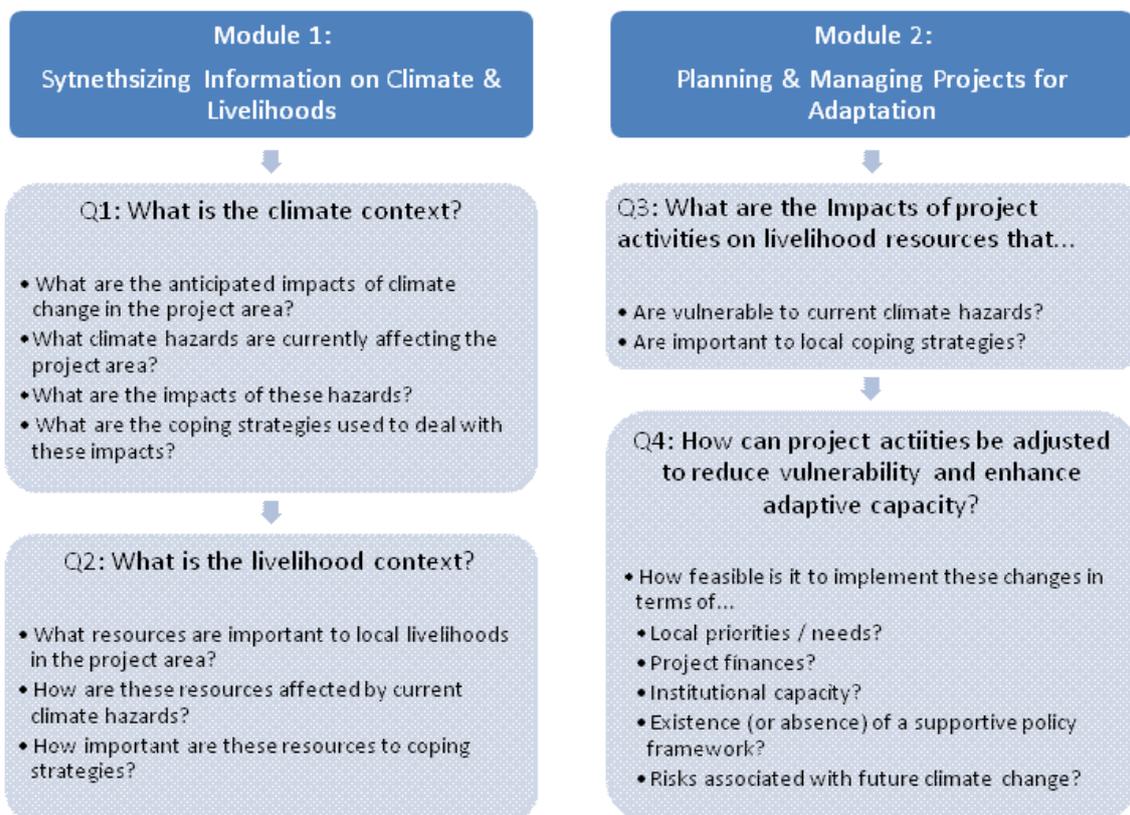
The developers of the CRiSTAL tool partner with other organizations specialised in gathering information such as CARE International and their Climate, Vulnerability, Capacity Assessment (CVCA) method. The CARE CVCA method offers participatory rapid appraisal (PRA) tools such as: hazard maps, historical timelines, ranking exercises for gathering information on local climate risks, assessing vulnerability and adaptive capacity.

CRiSTAL then provides a framework into which this CVCA-generated information can be fed for the purposes of informing project design/implementation.

## Analytical methods

This publication draws on the **Environmental Impact Assessment (EIA)** model and the **Sustainable Livelihoods Framework (SLF)**, CRiSTAL aims to provide a logical, user-friendly process to help users better understand the links between climate-related risks, people's livelihoods, and project activities. CRiSTAL is divided into two modules: the first is designed to help collect and organize information on the climate and livelihood context of the project area.

The second module then uses this information to help analyze how a project affects local vulnerability and adaptive capacity, providing a basis for devising project adjustments that foster adaptation to climate change. It is important to note that Module 1 must precede the use of Module 2.



*General Assessment methods include:*

- Stakeholder consultation
- Livelihood analysis

## Tools

The publication provides an overview of the guiding questions and framework to establish a community-level baseline on coping mechanisms and project activities influence climate change and livelihoods. Different **participatory tools** such as stakeholder and community consultations,

participatory workshops, and interviews are introduced to assist project planners and managers to gather information. The publication does not provide a detailed step-by-step “how to” for these participatory methods. A separate publication would be needed to understand this.

*Technical tools include:*

- Direct observation** (site visits)
- Secondary data** (Document Review and Internet research)

## Notes on methods

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This decision tool is available in multiple media in Excel through the IISD website, on CD-ROM and will soon be available as a hardcopy workbook. There are also powerpoint presentations and introductory support material available on the IISD website.

## Case studies / practical examples

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The following field test reports are available on the IISD website at:

[http://www.iisd.org/security/es/resilience/climate\\_phase2.asp](http://www.iisd.org/security/es/resilience/climate_phase2.asp)

- **Mali field test report**

This document summarizes the methodology and results from the first field test of CRiSTAL, which took place in Mali in September 2005. CRiSTAL was tested on an IUCN project on decentralized flood forest management in the Inner Niger Delta.

- **Tanzania field test report**

This document summarizes the results from the third field test in Tanzania, which took place in February 2006. CRiSTAL was tested on an Intercooperation-supported sustainable livelihoods project in Dodoma, which seeks to promote new income-generating activities in rural households.

- **Nicaragua field test report**

This report summarizes the results from the fourth field test in Nicaragua, which took place in May 2006. CRiSTAL was tested on two projects—the IC-supported project on sustainable hillside agriculture in northwestern Nicaragua, and an IUCN project on capacity-building for environmental management in the southeastern part of the country.

- **Sri Lanka field test report**

This report summarizes the results from the final field test in Sri Lanka, which took place in July 2006. CRiSTAL was tested on an IUCN integrated coastal ecosystem management project in the southwest region of the country.

## Resource people

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## Author of guidance note

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The ProVention Consortium contracted Stephanie Bouris to author this guidance note.

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