

A woman is seen from behind, walking through a tea plantation. She is carrying a large, round, brown sack on her head and a woven basket on her back. She is holding a long wooden stick in her right hand. The tea plants are arranged in neat rows, and the ground is covered in green grass. The background shows a hilly landscape with more tea plants and some trees. The overall scene is bright and sunny.

**COMMUNITY-BASED RISK SCREENING TOOL —  
ADAPTATION AND LIVELIHOODS**

**CRISTAL**



*“CRiSTAL has not just helped us to identify adaptation measures that really confront climatic risks as communities perceive them, but the participatory process has also allowed us to generate a space for discussion among a wide range of stakeholders. The proposed solutions are not only technically sound but are also in line with the local culture and tradition, which is essential for successful implementation.”*

*—Tatiana Farfán de la Vega, CARE Peru*

# ABOUT CRiSTAL

CRiSTAL is a project-planning tool that helps users design activities that support climate adaptation at the community level. CRiSTAL stands for ‘Community-based Risk Screening Tool – Adaptation and Livelihoods’.

## OBJECTIVE

CRiSTAL helps users to understand:

- » How current and potential future climate hazards affect or may affect a project area and local livelihoods.
- » How people respond to the current and potential future impacts of these climate hazards.
- » Which livelihood resources are most affected by current climate hazards and which ones are most important for the response strategies.
- » How project activities affect access to, or availability of, these critical livelihood resources.
- » What project adjustments (revision of existing activities and/or design of new activities) can be made to support climate adaptation and reduce climate risk.

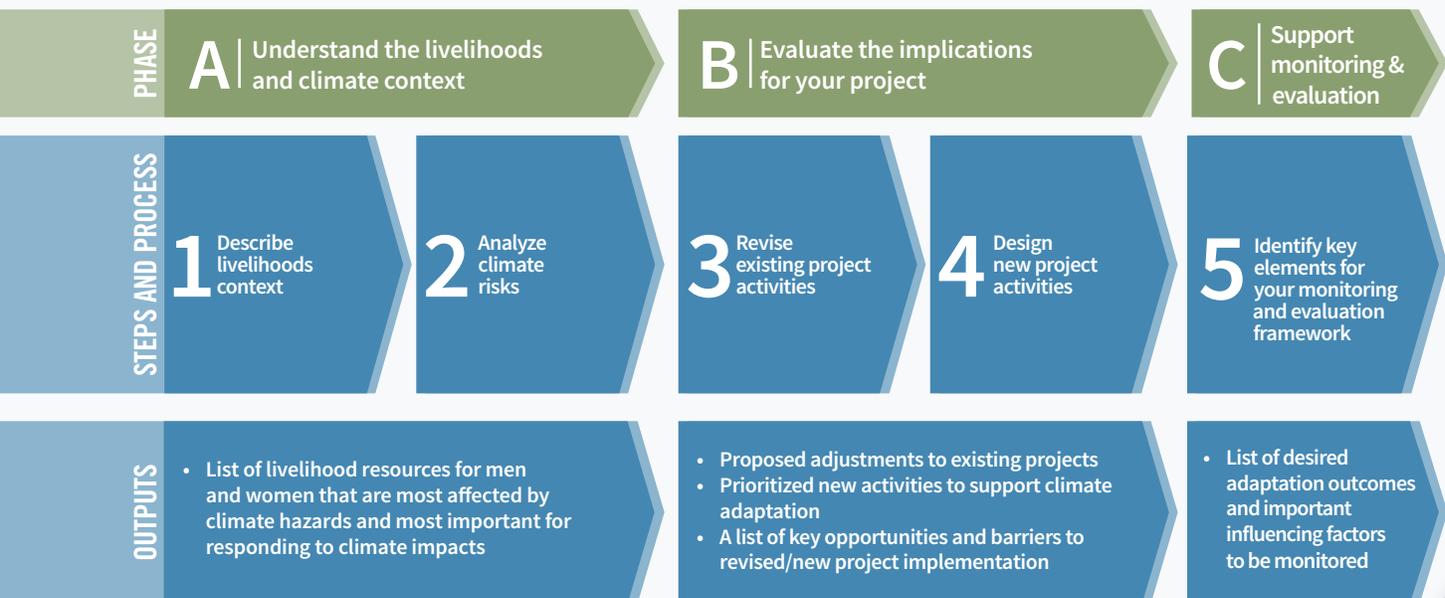
## TARGET USER

CRiSTAL targets project planners and managers working at the local and community levels. However, a wide range of other actors may also use the tool (including policy-makers and decision-makers).

## APPROACH

CRiSTAL relies on information collected through desk-based review, local stakeholder consultations and expert interviews. Community consultations using participatory methods are especially important for gathering information on local livelihoods and coping strategies.

**CRiSTAL guides users through a number of analytical steps, which are divided into the following three phases:**



Courtesy of Angie Dazé (CARE), 2007

While scientific information is required to characterize the climate context in Step 1, the remaining steps can be completed by collecting information through community consultations and discussions with other project stakeholders. Complementary tools, such as CARE’s Climate Vulnerability and Capacity Analysis framework, can help to structure such participatory exchanges.

## APPLYING CRISTAL

Once users collect the necessary information, they must enter it into the tool following a series of analytical steps that build on each other. At the end, users are provided with a systematic organization and presentation of:

- » Livelihood resources that are most affected by climate hazards and most important for responding to climate impacts from the perspective of men, women and different social groups.
- » Proposed adjustments to existing projects and new activities to support climate adaptation.
- » Desired adaptation outcomes and important influencing factors to be monitored.

Using this information, users can design and implement projects that safeguard and improve livelihoods in the face of climate risk.

The screenshot displays the CRISTAL software interface. The title bar reads 'File About Help' and the main title is 'CRISTAL Community-based Risk Screening Tool - Adaptation and Livelihoods'. A green 'Guidance' button is visible. The left sidebar shows a navigation menu with sections: 1. Introduction, 2. Project information, 3. Project activities, 4. Livelihoods context, 5. Climate risk analysis: Women in SHGs, 6. Climate risk analysis: Men on large dairy farms, 7. Climate risk analysis: biogas digester users, 8. Risk analysis summary, 9. Project revision, 10. New project activities, 11. Evaluation criteria, 12. Evaluation of new activities. The main content area is titled 'Identify and Assess Existing Response Strategies' and includes a 'FOCUS GROUP: WOMEN IN SHGS' label. Below this, it states 'Current Climate Hazard: Drought' and provides instructions: 'This step helps you identify effective and sustainable response strategies, including the livelihood resources needed to implement them.' The interface features a table with columns for 'IMPACT DESCRIPTION', 'CURRENT RESPONSE STRATEGY', 'SUSTAINABILITY', 'ALTERNATIVE STRATEGY', 'EVOLUTION', and 'REQUIRED RESOURCES'. Three rows of data are shown, each with a dropdown menu for the current response strategy. The 'REQUIRED RESOURCES' column includes checkboxes for 'Self-help group', 'Fodder', and 'Shed'. Below the table, there is an 'EXTERNAL RESOURCES' section with a text input field containing 'support from extension services to source more drought resistant fodder crops'. At the bottom, it shows 'Current Climate Hazard: high temperatures / excessive heat' and another row of data for this hazard.

## FORMAT

CRISTAL is a desktop application compatible with Microsoft Windows 7 operating systems and newer versions. It is currently available in English and Spanish. Translations of the tool in other languages will be released in the future.



## SERVICES PROVIDED BY IISD AND CRISTAL PARTNERS

**CRISTAL Training:** Training is provided to different types of decision-makers, tailored to their specific capacities and needs when it comes to local-level adaptation planning. Training programs can range from one- to four-day workshops. A four-day workshop includes consultations with communities, entering gathered information into the tool and a preliminary analysis of results. Training can be provided to groups of varying sizes and is available in English, French and Spanish.

**Training in community consultation and adaptation planning:** Specific training on the use of CRISTAL can be complemented by training on community consultation techniques and introductory sessions on climate adaptation planning.

**Participatory climate risk assessments:** CRISTAL partners work with public and private sector stakeholders to conduct climate risk assessments that lead to the identification of adaptation options for selected communities, sectors, and/or ecosystems. This can include: reviewing the latest information on climate risk; conducting community consultations; facilitating scenario exercises to devise adaptation strategies; and prioritizing and selecting adaptation options based on stakeholder-defined criteria. Results are validated and, where appropriate, fed into planning processes.

**Knowledge sharing and learning:** Since 2007 CRISTAL has been applied in over 30 countries in Asia, Africa and Latin America, leading to different experiences and results. This growing community of practice around CRISTAL is an important learning resource on local adaptation planning that can help to advance broader research and policy agendas on climate adaptation.

## GLOBAL RECOGNITION OF CRISTAL

In 2014 CRISTAL was recognized by the Intergovernmental Panel on Climate Change as a decision-support tool that can help with adaptation risk management. It has been included in various toolkits, guidance documents and resources available online that support adaptation decision-making, such as:

- *CARE's Toolkit for Integrating Climate Change Adaptation into Development Projects*
- *Climate Compatible Development Tools: A Guide for National Planning*
- *The United Nations Environment Programme's PROVIA Guidance on Assessing Vulnerability, Impacts and Adaptation to Climate Change*
- *The United Nations Framework Convention on Climate Change's Compendium on methods and tools to evaluate impacts of, and vulnerability and adaptation to, climate change*
- *World Bank's Climate Smart Planning Platform*

# SPECIALIZED VERSIONS OF CRiSTAL



*CRiSTAL Food Security helps integrate and monitor the climate resilience of a community's food system.*



*CRiSTAL Forests helps integrate climate adaptation into projects focused on forest ecosystems and forest-dependent communities.*



*CRiSTAL Parks helps integrate climate adaptation and risk reduction into Protected Areas management.*



Photo Credits: Alec Crawford

## FOR MORE INFORMATION VISIT [www.iisd.org/cristal](http://www.iisd.org/cristal)

- Download the different versions of CRiSTAL and their user manuals
- Access a robust database of reports that share experiences in applying CRiSTAL around the world
- View the events calendar showing upcoming training sessions and other activities

## CONTACTS

For more information about CRiSTAL and associated training opportunities please, contact:

**Daniella Echeverría**  
International Institute for Sustainable Development  
[cristal@iisd.ca](mailto:cristal@iisd.ca)

**Nicole Clot**  
HELVETAS Swiss Intercooperation  
[nicole.clot@helvetas.org](mailto:nicole.clot@helvetas.org)

