

The ADVANCE Approach

Co-generating and integrating climate risk information to build resilience for conservation, development, and disaster risk reduction

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The ADVANCE Partnership Adaptation for Development and Conservation

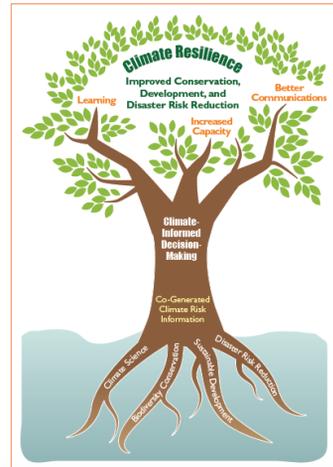
- Launched in 2015 by World Wildlife Fund (WWF) and the Columbia University Center for Climate Systems Research (CCSR) at The Earth Institute.
- Facilitates planning and decision-making by providing new ways of generating and integrating climate risk information into conservation, development, and disaster management.
- Pilot countries: Bhutan, Colombia, Kyrgyzstan, Myanmar, Nepal, Tanzania, and others.



CCSR

Introduction

- Climate scientists and specialists in development, conservation, and disaster risk reduction engage with stakeholders to produce and use appropriate climate risk information.
- Climate risk information is:
 - Tailored to local decision-making needs
 - Communicated in manner that is easy to understand and use
 - Integrated at the project level
- Capacity building



Co-Generating Climate Risk Information

- Scientists and specialists interact with stakeholders to identify needs and provide guidance.

Steps of the ADVANCE Approach

- 1) Analyze context
- 2) Develop learning questions
- 3) Gather climate data and initiate projections
- 4) Get feedback on initial climate risk information
- 5) Produce revised climate risk information
- 6) Provide guidance on integration into planning and decision-making
- 7) Evaluate outcomes and follow up



Community workshop - Kyrgyzstan

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Steps 1 to 4



Nepal © Manishka De Mel

1. Analyze context

Stakeholders and external experts asked questions on topics such as project and stakeholders, scope of climate, ecosystems, and capacity needs.

2. Develop learning questions

All ADVANCE work is designed with explicit learning objectives that can be monitored and refined throughout project implementation.

3. Gather climate data and initiate projections

A series of climate-specific questions shared with knowledge providers and stakeholders; initial projections created using best available climate data.

4. Get feedback on initial climate risk information

Climate risk information is presented for stakeholder feedback at the first in-country workshop. Conduct survey.

Steps 5 to 7



Nepal © Ryan Bartlett, WWF

5. Produce revised climate risk information

Based on learning from the stakeholder engagement process, climate scientists revise the initial projections to better meet the needs of the project.

6. Provide guidance on integration into planning and decision making

Second workshop is held to present new information and help stakeholders understand the implications for project decisions. Conduct second survey.

7. Evaluate outcomes and follow up and initiate projections

Results of the two surveys administered from the beginning and end of the project are analyzed.

ADVANCE Survey for Project Evaluation

- Evaluation of the ADVANCE Approach is essential.
- Each project includes a component that is developed to assess learning, usefulness of climate risk information, and capacity building.
- A basic survey was developed to gather information about these outcomes at every ADVANCE workshop for each project.

The image displays four pages of a survey form. The top-left page contains introductory text and a table with columns for 'Project Name', 'Location', 'Start Date', and 'End Date'. The top-right page features a large table with multiple columns and rows, likely for recording survey data. The bottom-left page shows a table with columns for 'Project Name', 'Location', 'Start Date', and 'End Date', similar to the top-left page. The bottom-right page contains a list of survey questions and a table for recording responses.

Myanmar



A village in Yangon Division, Myanmar

MYANMAR NATURAL CAPITAL ASSESSMENT

ADVANCE is working with the Natural Capital Project in Myanmar to provide climate risk information for a nationwide assessment to support the country's green economy strategy.

Myanmar

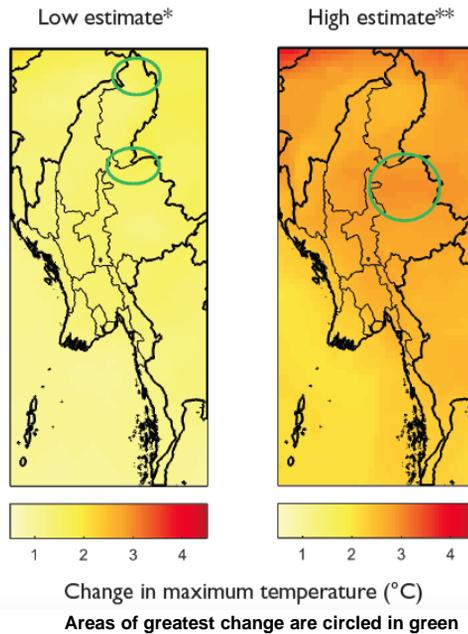
Department of Meteorology and Hydrology requested projections of **maximum temperature** as this variable is more useful than mean temperature change for many applications in tropical countries.

Projected change in maximum temperature (°C) in 2041-2070 compared to the 1980-2005 base period during the hot season (February to May).

* Low estimate refers to the 25th percentile of 21 climate model outcomes in greenhouse gas emissions scenario RCP 4.5

** High estimate refers to the 75th percentile of 21 climate model outcomes in greenhouse gas emissions scenario RCP 8.5

Data source: NASA NEX GDDP



Colombia



The ADVANCE team visit a mangrove forest in Nariño, Colombia

@ Stephen Kelly WWF-US

MANGROVE CONSERVATION IN COLOMBIA

ADVANCE is co-generating climate risk information with WWF Colombia and its local partners to guide conservation planning for mangrove forests along Colombia's Pacific coast.

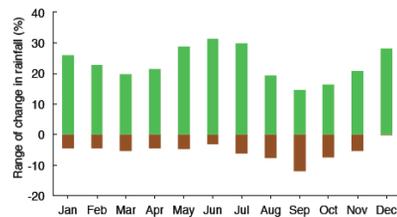


Colombia – Conservationists requested changes in rainfall for mangrove forests on the Pacific Coast

- Precipitation patterns can alter the mangrove productivity and distribution by affecting sediment transport and estuarine salinity.
- Stakeholder consultations revealed that changes in upland precipitation are important as vital sediments originate upstream.
- Precipitation projections for the upland watershed will be included in the revised climate risk information

Pacific coast of Colombia

Range of projected rainfall change by month 2041-2070 compared to the 1980-2005 base period



Data source: NASA NEX GDDP

Outcomes

- A major outcome of the ADVANCE Approach is learning.
- Learning component has multiple elements including stakeholder engagement, technical analyses, and local knowledge.
- Through the surveys administered at the workshops, the team documents key outcomes related to stakeholders such as:
 - Useful climate projections
 - Climate-informed conservation and development actions
 - Increased capacity



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Mangrove forest in Nariño, Colombia

Launch of The ADVANCE Approach

Thursday, May 12

11:30 – 12:30

Location: J.F. Staal Room

