



Working Group II Questions about the Report Climate Change 2014: Impacts, Adaptation, and Vulnerability

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Why was this report written?

The decision to prepare a Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) with three Working Group contributions and a Synthesis Report was taken by the member governments of the IPCC at their 28th Session in April 2008. Working Group II assesses impacts, adaptation, and vulnerability. Working Group I assesses the physical science basis of climate change, while Working Group III assesses the mitigation of climate change. The Synthesis Report draws on the assessments made by all three Working Groups.

How was the scope of the report decided?

An AR5 Scoping Meeting was held in July 2009 to develop the scope and outline of the AR5. This meeting involved climate change experts from all relevant disciplines and users of IPCC reports, including some government representatives. The resulting outlines for the three IPCC Working Group contributions to the AR5 were approved by the 31st Session of the IPCC in October 2009.

What is the Working Group II report about?

The objective of the contribution of Working Group II to the AR5 (WGII AR5), *Climate Change 2014: Impacts, Adaptation, and Vulnerability*, is to consider the vulnerability and exposure of human and natural systems, the observed impacts and future risks of climate change, and the potential for and limits to adaptation. The chapters of the report assess risks and opportunities for societies, economies, and ecosystems around the world. The 30-chapter report is divided into two volumes. Volume I focuses on global and sectoral aspects. It introduces the report with chapters that provide the context for the AR5, followed by those on natural and managed resources and systems; human settlements, industry, and infrastructure; and human health, well-being, and security. Volume I has a set of four chapters on adaptation. The final three chapters in Volume I synthesize information from Volume I and II chapters to provide multi-sector impacts, risks, vulnerabilities, and opportunities. Volume II chapters provide assessments on regions.

Who wrote the report?

Experts from around the world were involved in preparing the WGII AR5. They brought expertise in the many different disciplines necessary to produce a comprehensive assessment of impacts, adaptation, and vulnerability, according to the approved chapter outlines. The WGII AR5 has 243 Lead Authors and 66 Review Editors, who were elected in June 2010 by the WGII Bureau from a pool of more than 1200 nominations. 436 additional experts were invited by the Lead Authors of the report to be Contributing Authors, in order to provide additional specific knowledge or expertise in particular areas.

What process was followed for the development of the report?

The report was prepared in compliance with the IPCC Principles and Procedures, which specify each step, from scoping and nomination of authors through multiple steps of drafting and review until final approval and acceptance. The process is depicted in detail here: <http://ipcc-wg2.gov/AR5/ipcc-process/>.

In the assessment of literature, authors evaluate scientific, technical, and socioeconomic literature relevant to understanding climate change, its impacts and future risks, and options for adaptation and mitigation. At the beginning of the process, the IPCC decided that the assessment would include literature accepted for publication prior to 31 August 2013. A clear cutoff date ensures that authors and reviewers both have a chance to study the relevant literature. Calibrated uncertainty language is used to express a level of confidence in findings that is based on the strength of the scientific and technical evidence and on the level of agreement in the scientific, technical, and socioeconomic literature. More information on calibrated uncertainty guidance is available here: <http://www.ipcc.ch/pdf/supporting-material/uncertainty-guidance-note.pdf>.

How were the authors and review editors chosen?

In January 2010, governments and IPCC observer organizations were invited to nominate experts to work on the AR5. The WGII Bureau is responsible for the selection of authors and Review Editors for the WGII AR5. The WGII Bureau consists of the two WGII Co-Chairs and six WGII Vice-Chairs, who are experts elected by the Panel in September 2008 for their appropriate scientific and technical qualifications and experience. The Lead Authors and Review Editors for each of the 30 chapters of the WGII AR5 were selected from a total of 1217 nominations. All nominations were reviewed and their scientific and technical expertise was assessed in relation to the approved chapter outlines for the WGII AR5. The WGII Bureau then selected the lead authors and review editors, considering criteria including expertise, differing viewpoints and perspectives, geographic balance, and gender balance, and ensuring the involvement of experts new to the IPCC, in accordance with agreed-upon IPCC guidelines. The slate for the WGII AR5 was finalized in June 2010.

How was the report reviewed?

The IPCC depends on scientific reviews by independent experts. The WGII AR5 went through two extensive rounds of open expert and government review. The first Expert Review took place during the summer of 2012. 528 sets of comments were submitted by independent reviewers, with 19,598 review comments in all. A second review, the Expert and Government Review, took place in the spring of 2013. Expert reviewers and 33 governments provided 1271 sets of comments, totaling 28,544 comments. The Review Editors ensure that all substantive comments received during the reviews are given appropriate consideration by the author teams and that controversial issues are presented in a balanced manner. All comments, with corresponding reviewer information and author responses, will be posted on the Working Group II website after the report is published.

What is the scale of the report?

The final draft of the WGII AR5, which was made available to governments on 28 October 2013 for a final round of comments on the Summary for Policymakers, has over 2155 pages of draft text, 211 scientific figures and graphs, and 161 tables. It cites over 12,000 scientific references. Its component parts are a Summary for Policymakers, a Technical Summary, 30 chapters, a number of Annexes, and supplementary material. The WGII contribution was reviewed by 1729 experts* from 84 countries and 49 governments in a multi-stage process drawing a total of 50,492 comments.

What is new in the report?

The scope of the WGII contribution has expanded since the AR4. Ten new chapters have been added in the WGII AR5 to cover additional topics that have become relevant for understanding climate change impacts, adaptation, and vulnerability. These topics include detailed assessment of literature on adaptation – including the needs, options, experience in planning and implementation, opportunities, constraints, limits, and economics of adaptation. Oceans have been more extensively covered in two new chapters. New chapters on livelihoods and poverty, human security, and urban and rural areas have been added to cover socioeconomic, cultural, and regional planning aspects that are important in understanding the implications of climate change.

What information does the report draw on?

Author teams assessed thousands of sources of scientific, technical, and socioeconomic information, including scientific journals, industry journals, reports from governments and international bodies, and other relevant literature. Author teams evaluated sources used in their chapters to ensure consistency with the guidelines on the use of literature agreed upon by the IPCC. In order to be included in the WGII AR5, sources had to be accepted for publication by 31 August 2013, to allow time for assessment. Over 12,000 references are cited in the WGII AR5. This estimate does not include citations made to individual chapters from previous IPCC reports. All sources that are not commercially available will be made available to the public via an online library of Non-Journal Literature once the report is published.

Does the IPCC conduct its own research?

No, the IPCC does not conduct its own research. It reviews and assesses the most recent scientific, technical, and socioeconomic information produced worldwide relevant to the understanding of climate change.

Does the report offer policy solutions to governments?

IPCC reports are policy relevant, but never policy prescriptive. It is the role of the IPCC to inform governments about the most up-to-date scientific knowledge on an issue and, where appropriate, to highlight policy options to overcome challenges, but the IPCC never promotes one set of policy options over another.

*Reviewer statistics include expert panelists who participated in respective national reviews of the final draft of the WGII AR5 Summary for Policymakers. These data were compiled after the release of the IPCC Fact Sheet, prepared for the launch of the WGI AR5 (September 2013).