

Climate change assessments as a service to society: The BACC example

Scientific knowledge on environmental issues in the Baltic Sea region is scattered in research institutions all over Northern Europe, in a form largely unavailable to stakeholders, regional decision makers and the general public. A way to improve the situation is the establishment of comprehensive reviews. However, review articles or books mostly focus on specific topics and are authored by one or few “gurus”, portraying their specific view on the subject. Also, they are mostly addressed to the scientific community.

A different approach is followed by regional climate assessment reports, for which the BACC report (BALTEX “Assessment of Climate Change for the Baltic Sea basin”, 2008) is exemplary. The reports assemble the published scientific knowledge on climate change and the possible impacts on the environment in a specific region, including socio-economic implications. Next to the BACC report, a climate report on the metropolitan region of Hamburg was finished in 2010, and an extensive climate assessment on the North Sea area (NOSCCA) is in preparation. An update for the BACC report is currently in process (BACC II). The assessments are done by a team of lead authors who are responsible for grand chapters and recruit a number of contributing authors with a specific expertise for sub-chapters. For the first BACC book (2008), a total of 84 authors from the entire Baltic Sea region and beyond contributed to the report.

The essence of the assessment reports is the synthesis of material drawn comprehensively from the available scientifically “legitimate” literature (e.g. peer reviewed literature, conference proceedings, reports of scientific institutes etc.). Contributions from groups with a specific interest (multinational enterprises, insurance companies, NGOs, and the like) are not allowed to enter the report. Studies whose results and conclusions cannot be reconciled with a consensus view but which are of good scientific and technical standard are taken into account. The assessment thus encompasses the knowledge about what scientists agree on but also identifies cases of disagreement or knowledge gaps; authors are demanded to subordinate personal opinions as far as possible. This is an important standard for the regional assessment reports which follow the BACC concept.

In 2013, there will be a new climate change assessment report for the Baltic Sea, as an update to the BACC book. The new report (BACC II) will again document observed changes and describe future scenarios and possible impacts of climate change in the Baltic Sea region, but new aspects will also be treated. Sea level change in the Baltic Sea will be emphasized in more depth, as well as socio-economic aspects like the role of land use and urban areas, and the question of attribution of climate change on the regional scale. A comprehensible summary will make the essential information available to non-scientists.