



**PROGRAMME OF RESEARCH ON CLIMATE CHANGE
VULNERABILITY, IMPACTS AND ADAPTATION (PROVIA)**

GLOBAL RESEARCH PRIORITIES FOR VIA RESEARCH

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SBSTA Research Dialogue

June 4, 2013

Bonn, Germany

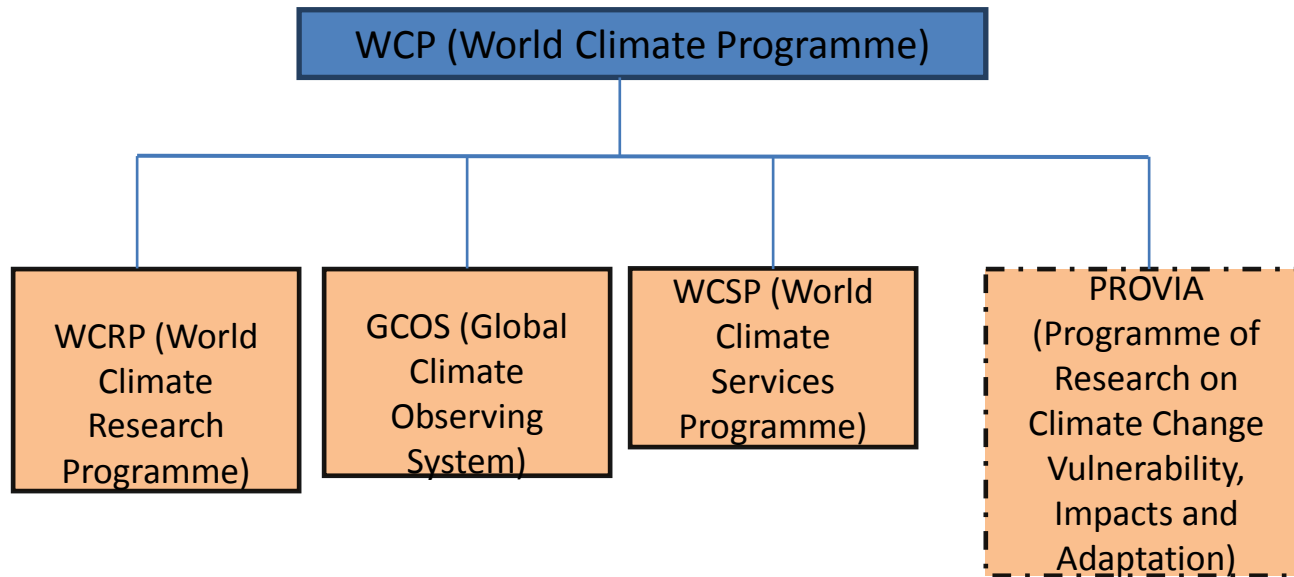
www.provia-climatechange.org



What is PROVIA?

- PROVIA is a global initiative which aims to provide direction, coherence, and capacity-building at the international level for research on vulnerability, impacts and adaptation (VIA)
- Parent organizations are UNEP and WMO; counterpart to World Climate Research Programme (WCRP)
- PROVIA responds to the urgent call by the scientific and policy communities for a more cohesive and coordinated approach, and the critical need to harmonize, mobilize, and communicate the growing knowledge-base on VIA

PROVIA's Place in the New World Climate Programme Structure



Note: UNEP proposal to include PROVIA as a fourth component of the World Climate Programme (WCP) is under consideration.

PROVIA Research Priorities Framework

Section A. Information to Support Policymaker Decisions

A.1 Identifying the Problem

A.2 Advancing Vulnerability Reduction and Adaptation Solutions

A.3 Developing Tools to Support More Inclusive Cost Estimates and Other Prioritization Criteria

A.4 Enhancing Communication and Stakeholder / Public Participation

PROVIA Research Priorities Framework

Section B. Systems and Regions

B.1 Key Systems

B.2 Human Well-being

B.3 Critical Geographical Areas

Section C. Emerging Topics

A total of 33 priority topics

A. Information to Support Policymaker Decisions

A.1 Identifying the Problem

- A.1.1: Formulate ***cost-effective indicator and monitoring systems*** for tracking impacts, changes and the crossing of thresholds related to climate, ecological, and socio economic systems.
- A.1.2: Develop a robust framework to ***define, measure, and map vulnerability and the most vulnerable groups*** (based on gender, age, poverty, and other factors), sectors, ecosystems and places in order to determine where adaptation is most needed.
- A.1.3: Improve understanding of risks and uncertainties related to the ***impacts of extreme climate events*** (including low-probability, high-impact events), non-linear impacts, and tipping points.

A.2 Advancing Vulnerability Reduction and Adaptation Solutions

- A.2.1: Research integrated approaches to climate change responses that ***maximize adaptation, mitigation, and sustainable development*** benefits while minimizing economic, social, environmental, and other costs.
- A.2.2: Identify economic, financial, political, legal, institutional, psychological, cultural, and religious ***factors that support, or act as barriers to, vulnerability reduction and adaptation***.
- A.2.3: Advance understanding of the ***opportunities and challenges of implementing adaptation*** (e.g., integrating adaptation into planning frameworks and budgets, coordinating activities across agencies and other entities).

C. Emerging Topics

- C.1:** Explore the potential for, and VIA implications of, **transformative learning** in social-ecological and other systems.
- C.2:** Investigate the potential **impacts of geoengineering** on VIA, including the potential for unilateral actions and unintended consequences.
- C.3:** Improve understanding of legal challenges related to climate change and the **role of law, legal tools, and legal principles** in promoting or preventing adaptation.
- C.4:** Apply a **systems approach** to the food-water-energy-security Nexus (and other systems) that considers cross-sectoral interdependencies and transboundary impacts and adaptation tradeoffs (e.g. potential conflicts between water use in agriculture and for energy generation).
- C.5:** Research **participatory processes** that enable stakeholders to explore mitigation and adaptation decisions; one example is the use of global and regional scenarios to explore the range of different **shared socio-economic pathways (SSPs)** associated with the Representative Concentration Pathways (RCPs), i.e., each scenario set containing emissions, concentrations, and land-use trajectories.

PROVIA Research Priorities

Outreach and Engagement

- ***Contribute to country and national group research agendas***
 - Governments of Thailand and The Gambia, EC, GIZ,
 - National Science Agencies and Adaptation Planning Groups
 - Distribution to all UN Countries
- ***Interactions with International Organizations***
 - WHO, WMO, CDKN, etc ...
- ***Present at Workshops and Conferences***
 - European Commission, CORDEX, Adaptation Futures
- ***Peer-reviewed Journal Articles***

PROVIA Research Priorities (2)

Outreach and Engagement

- ***Create deliverables and tracking system***
 - Streamline research priorities for donors in preparation for IPCC AR6
 - Unpack research priorities geographically, considering cross-cutting issues
 - Map PROVIA Research Priorities with existing VIA research activities to develop action plans
 - Track the progress and priorities in VIA research over the next five years