

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

GLOBAL RESEARCH PRIORITIES FOR VIA RESEARCH

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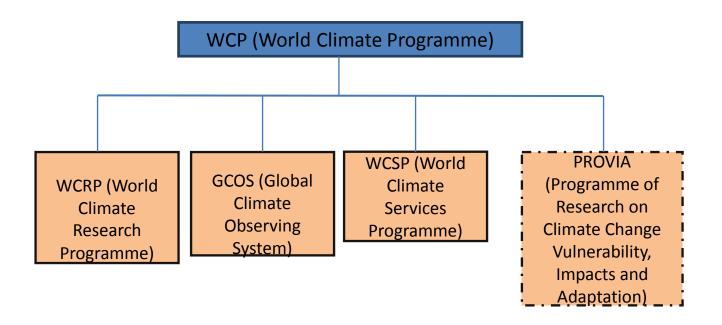
www.provia-climatechange.org



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

