Inter-American Institute for Global Change Research (IAI)
-Building Global Change Networks in the Americas-

UNFCCC, SBSTA 24
Special Side Event on Research Needs relating to the Convention
19 May 2006, Bonn, Germany

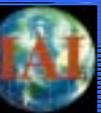Gerhard Breulmann, IAI Scientific Officer

Inter-American Institute for Global Change Research

IAI Member Countries

1. Argentina
2. Bolivia
3. Brazil
4. Canada
5. Chile
6. Colombia
7. Costa Rica
8. Cuba
9. Dominican Republic
10. Ecuador
11. Guatemala
12. Jamaica
13. Mexico
14. Panama
15. Paraguay
16. Peru
17. United States of America
18. Uruguay
19. Venezuela

Needs and priorities identified in the synthesis report
(FCCC/SBSTA/2006/INF.2)

- Among others: *Improving observations; enhancing research capacity; capacity building; improving access to existing data; developing country involvement; improving communication of research findings to policy makers, …*

IAI Objectives/Mission Statement *(addressing those needs)*:

- Augment the scientific capacity of the region
- Encourage research beyond the scope of national programs on scientific issues important to the region as a whole
- Facilitate informed action at all levels
- Provide information to policy makers in a useful and timely manner

IAI Activities

- Scientific networks across countries & disciplines *(at least 4 countries, interdisciplinary = nat. & soc. science)*

- Training & Capacity Building

- IAI Data & Information System (DIS)

- Targeted activities *(e.g., synthesis activities – IAI-SCOPE WS)*

- Joint Activities with other orgs & programs *(e.g. ESSP, START, FAO)*

Science/Research

Periodic Calls for Proposals

- **Calls are open & competitive**

- **Specifically targeting collaborative** *(across countries)* **and inter-disciplinary** *(nat. & soc. science)* **research**

- **IAI developed a sequence of programs that allows for** *gradual development of regional research networks*

Scientific excellence is guaranteed by the peer-review process. IAI task is not to control, but to steer the scientific process towards greater regional & policy relevance. IAI attempts to create dialogue and conditions under which good science becomes even better in a societal context

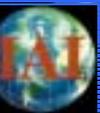# IAI Strategy for Research Network Development

Smaller Programs, target under-developed partners, filling gaps: e.g. PESCA '00 - '02

Expanding Sc. Capacity, targets developing Countries, 11 projects, 1 year, ~US$ 30K

Start - Up Grants (SG) `95 - `97

Assemble teams & plan research

37 projects, 1 year, ~US$ 50K/p

Initial Science Programs (ISP), I, II, III `96 - `02

Initial scientific activities, case studies

39 projects, 3 years, US$ 200K /p

Collaborative Research Network Program (CRN) `99 – `05

14 full Research Networks, institutions from at least 4 IAI member countries, up to 5 years, > US$ 1 Mio

2ⁿᵈ Round of Network Development

Small Grants I, 2001 – 2003, US$ 340K, 16 projects, Res, WS, TR, 18 months, ~ US$ 30K

Small Grants II, 2003 – 2005, US$ 640K, 22 projects, Res, WS, TR, 18 months, ~ US$ 50K

Collaborative Research Network Program (CRN II) 2006 – 2011, US$ 10.3 Mio, 12 projects in implementation stage, 5 years, < US$ 1 Mio/p (< US$200K/a)
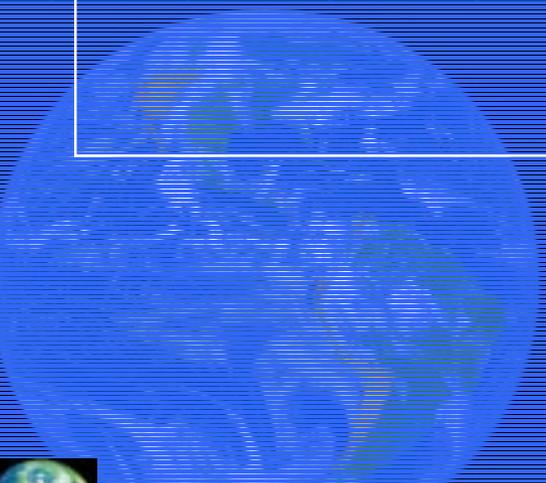
IAI Steering of CRN II:
- Combine projects into regional/thematic clusters
- Strengthen /develop weak components
- Smaller programs will fill-in gaps & integrate under-developed partners

Training & Capacity Building

- Development a new generation of regional GEC scientists

- Cap. Bldg. is integral part of all IAI projects

- IAI Training Institutes (thematic, 2-3 weeks, approx. 20 participants/institute; in collaboration with other organizations, e.g., OAS, FAO, IHDP, CENA, UM etc., always involve nat. & soc., medical scientists)

IAI Data & Information System (DIS)

- Provides access to all (meta)data/information on IAI projects

- Allows individuals and database managers to distribute their data (upon request to IAI)

- Potential as a regional database on Global Change Research & data

Policy Relevance of IAI science

- 10 years of IAI science, that has asked for science – policy interface
- Exercise to analyze this interface
- IAI-SCOPE synthesis workshop "Linking the Sciences of Environmental Change to Society and Policy - lessons from 10 years of research networks in the Americas", Ubatuba, Brazil, 27 Nov – 2 Dec 2005
- Meeting brought together 45 participants to analyze the science – policy process.
- Analysis to understand how to establish & improve such dialogue
- One Outcome will be a book to be published by IAI/SCOPE with Island Press in late 2006 (expected in time for ESSP OM, Beijing)

- Background papers & four x-cutting themes:
  - Science policy - generating and steering science for policy relevance
  - Making science credible, practical and operationally valuable to policy and society
  - Stakeholders: identification and integration into the science process (and enhancing the north-south dialogue)
  - Articulating science for different sectors of society

Mexico:

- extreme events (hurricanes, droughts)

- research on urban planning and climate change mitigation

- Capacity Building in Latin America & the Caribbean

Kam Biu Liu – Paleotempestology (past hurricanes):

- Will produce the first comprehensive paleotempestological record from the entire Caribbean region based on multiple proxies;
- Contributes to the expanding frontiers of paleotempestology by developing new proxies;
- Provides insight into climate mechanisms controlling Caribbean hurricane activity—vital for long-term forecasting;
- Integrates paleotempestological data with socio-economic data into web-based GIS tool; research results available to stakeholders and vital for risk management & vulnerability reduction;
- Publishes edited book on Caribbean hurricane activity as a tangible research product.

Graciela Binimelis De Raga - Tropical cyclones: current characteristics and potential changes under a warmer climate

Michael McClain – Caribbean Coastal Scenarios (IAI linked this with Liu)

To support sustainable development and coastal resource conservation in the Greater Antilles by

- improving understanding (through research) of the relationships between island-scale inland development and coastal ecosystems (freshwater and pollution inputs)

- stimulating and supporting national and regional dialogues on the consequences of current and plausible future development and management activities (awareness building and institutional/ stakeholder cooperation)

- building capacity to continue analytical and cooperative approaches into the future (post-CCS)

Laura Kenner – South American Emissions, Megacities and Climate

- Regional scale past, present and future climate change scenarios, with a unique emphasis on the evolution of air quality in South American megacities

- Comparable estimate and evaluation methodologies, as well as, reconciled local, regional and global scale emission inventories will be produced for South America

- A well established and enhanced research network, particularly in terms of educated human resources, able to better contribute to and lead global change research in the Americas within the framework of Earth System Modeling.

- IAI is attempting to incorporate the human health component

Opportunities

- SBSTA would be an ideal mechanism to facilitate the science – policy dialogue at a global level (generate a permanent forum at the science – policy interface)

- Joint Cap. Bldg., e.g. training courses (exposure of participants to institutions)

- SBSTA as a platform to promote participation of SIDS (Small Island Developing States) in the IAI research process

- IAI is open to research collaborations under its programs. The networks are encouraged to expand