GOALS AND STRATEGIES FOR IAI DEVELOPMENT IN THE YEARS AHEAD

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Armando Rabuffetti

In this paper the most significant up-to-date IAI accomplishments are briefly reviewed. Next, the most urgent challenges for IAI are analyzed. Finally, some strategies to overcome these challenges and to ensure IAI's sustainability in the years ahead are discussed along with actions to be undertaken. Some of them are already in place and need to be further developed; others need to be initiated.

I wish that this paper can be analyzed by the country representatives coming to the EC/CoP meetings and that further actions can be implemented following their recommendations.
In any case, they will require a continued and coordinated effort among the various IAI organs, for which, I believe the IAI is fully prepared.

IAI Accomplishments

No doubt that IAI has already made significant advances towards the implementation of its programmatic structure and achievements as related to its main objectives and goals.

1) The number of countries that have ratified and/or adhered to the IAI agreement increased from 11 in 1995 to 18 in 1998.

2) 39 collaborative research and scientific activities are being conducted under the Initial Science Program, which cover the various themes of the Science Agenda. Scientific progress reports of these projects are available and in some cases articles were already submitted and accepted for publication in various scientific journals.

3) Planning activities conducted under the Start-up Grant Program are evolving into the preparation of medium to long-term collaborative research networks involving institutions of at least four member countries and covering the four new themes of the revised Science Agenda.
   Planning activities conducted at the design meetings and workshops dealing with the ENSO and Interannual Climate Variability theme, are also evolving into small pilot application or demonstration studies; some of them are already providing useful information for decision and policy makers.

4) Training and Education Activities involving post-doctoral, graduate and short-term training are on course and tend to increase.

5) The IAI/GEF/WMO Project has provided 16 countries with a minimum compatible data processing capability including the GIS Spring and METVIEW softwares and has also given opportunities for training on both software packages and other related global change areas as well.
   The IAI DIS is being implemented during 1998 in terms of its central node and hopefully pilot nodes in Costa Rica and Uruguay will also start to work very soon.

6) Joint Collaborative activities with other international organizations and programs have started, particularly in the ENSO and Interannual Climate Variability theme.

7) Efforts to enlarge funding basis of IAI for its project and program activities were initiated in mid 1997 and some initial promising possibilities are emerging.

8) IAI communication mechanisms and procedures are increasingly being implemented.

The most urgent challenges

However, the IAI is faced with some urgent challenges to be overcome in the near future. They are essentially related to the funding capacity of the institution vis-à-vis the potential of the scientific community to conduct research and the enlarged number of countries being part of IAI.

1) If we look at the number of proposals funded in each round of the ISP as related to the number of proposals ranked as Very Good/Excellent, it appears that IAI could fund between 50% and 60% of the proposals potentially fundable. This situation is likely to happen again with the CRN program.

   It is therefore a challenge for IAI not to lose in the future the possible participation of qualified group of scientists.

2) An analysis of the recommendations of the SAC panel which recently reviewed the 70 pre-proposals submitted under the CRN program (Scientific Officer's report) indicates that:

   a) 23 pre-proposals that were preceded by a Start-up Grant planning activity are adequately advancing in the setting of research network (this is also a measure of the effectiveness of the Start-up program to advance on IAI programmatic infrastructure implementation).
   b) However, only 10 of the 47 pre-proposals submitted as "new initiatives" i.e. (not preceded by a SG project) were encouraged to be developed as "full proposals". In most cases, though, it was not because of the lack of scientific excellence but rather because of weakness in the extent of the proposed network development.

   This shows that "another population of scientists", not necessarily involved in Start-up Grant planning activities, is now approaching IAI. Some of them proceed from countries participating in the IAI from its beginning but others are from recently ratified countries.

   The challenge for IAI is then to stimulate these new PI's and to engage them in IAI collaborative activities.

3) In terms of funding support for projects and/or programs activities, IAI is almost entirely dependent on the support provided by the US government through NSF grants.

   There is therefore an urgent need not only to enlarge but also to diversify the source of funds supporting IAI activities in order to build a long-term sustainable organization.

GOALS	Strategies / Needs / *(Actions)*
To implement the research network around the 4 themes of the Science Agenda, maximizing the number of VG/Exc. projects being part of the network	<u>Programmatically</u> IAI proactive role in identifying teams of common efforts, suggesting new teams and helping to develop more integrated (end-to-end) programs *(Action: SAC and Directorate)* <u>Financially</u> Need to increase at least by 50% the present funding support which today is only provided through NSF Grant: a) developing cofunding mechanisms with national funding agencies of science and technology; b) submitting some of the approved CRN projects – may be combining some of them – to external funding agencies (IDB, World Bank), foundations and private sector *(Action: Countries involved in the projects need to express support and promise cash and in-kind contributions).*
To enhance participation of scientists from most recent incoming countries and to incorporate new PI's in IAI collaborative activities.	Establish some sort of SG/ISP-like process; the proposal is to have a US$ 300,000 fund for a 2-year period to conduct planning and/or initial scientific collaborative activities (*support from member countries).*
To become part of larger interamerican or international initiatives	• Joint or complementary projects with international programs such as: IGBP, IHDP, WCRP, START, APN, ENRICH *(Action: SAC and Directorate).* • Participation in interamerican initiatives related to IAI scientific priorities. Examples: - IDB/WMO studies on socioeconomic impacts of ENSO; - Pan-American Climate information system (PACIS) initiative USAID/NOAA/WMO. *(EC/CoP endorsement; in-kind country contributions.)* • IAI might become responsible for the total or partial administration of regional projects related to global change issues. *(EC/CoP endorsement)*
To foster capacity building in the region.	• <u>Training and Education</u> To act as clearinghouse in front of opportunities for T&E that appears in the Americas *(Action: country representatives, SAC and Directorate).* To implement the IAI Summer School on global environmental change *(Joint Action: Directorate, SAC, NSF, Univ. of Miami).* • IAI to develop capacity building projects addressing scientific or technological priorities by **subregions**, to be presented to external agencies. Examples: - Co_2 emissions in the Amazon Basin; - Ozone and UV radiation ground-based measurements over South America; - Sustainability indicators for coastal management in the Caribbean and Central American region; • DIS implemented in the IAI Directorate and IAI member countries *(Actions: IAI, INPE, NSF, and country support).*

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To ensure dissemination of relevant institutional information: IAI activities and opportunities, scientific results, policy assessments.	• Continued actions of the EC/CoP representatives in the dissemination of institutional information throughout the country. • IAI to communicate effectively its funding relevant research *(Actions: Directorate, SAC, country representatives)*. • IAI to convene not only scientific meetings but also assessments meetings (for user and decision-makers). • Member countries to provide in-kind contributions through provision of infrastructural facilities and/or part-time assignment of staff to alleviate core budget restrictions. Examples: - UBA-Argentina: Newsletter; - INPE – Brazil: Editing and Printing of various documents; - NSF-USA: Printing the Annual Report and others.
To accomplish full membership of the countries of America	• Continuing the missions of the EC Chair and IAI Director to interact with governments, scientific community and funding agencies as appropriate. Particularly, concentrate efforts to enlarge memberships in Central America and Caribbean. • Need to adjust the IAI Agreement to facilitate participation of non-independent territories *(Action: EC/CoP)*.

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