# INTER-AMERICAN INSTITUTE FOR GLOBAL CHANGE RESEARCH (IAI)

EC XIV November 26-27, 2001 Havana, Cuba

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### Report of the Working Group for Increasing Country Commitment to the IAI

### Composition of the group:

Chair: Carlos Ereño

Members: Ligia Castro, Lisa Farrow Vaughan, Anthony Chen, Eladio Zarate, Fernando

Ortiz.

### Objective:

- 1) To identify and analyze the possible causes of the decrease or lack of participation in IAI among countries of the Americas, and
- 2) Recommend strategies to increase active participation in and commitment to the IAI.

### Proposed methodology:

The Working Group will organize its task around several categories:

- A) Overall participation
- B) IAI Member Countries that have never contributed financially
- C) Countries that have made partial contributions
- D) Countries that have signed the Agreement but have not ratified
- E) Non-signatory countries in the region
- F) Other countries with declining participation, as appropriate

The Working Group's analysis and recommendations will be based upon data and information collected from the Directorate and the countries, as appropriate. The primary mode of operation will be email and telephone communications. However, for those cases when further understanding and clarification is necessary, members of the Working Group may conduct country missions. Following the collection of data, the Working Group will meet once to analyze information and prepare their conclusions.

The conclusions and recommendations will be presented to the  $14^{\rm th}$  EC meeting, in November 2001.

### Accomplished activities:

(The group carried out all their activities via electronic communication).

The group set a work schedule consisting in the activities listed below, and carried out via electronic communication:

- 1) Search for preliminary information.
- 2) Exchange of data and information among the members of the group and elaboration of the first recommendations.
- 3) Face-to-face group meeting to elaborate the report and define the eventual need for a mission (visit to a member country) before submitting the report to the EC.

4) The round for consultation to give final shape to the report for the EC and visit member countries if necessary.

To develop item 1 of the plan, the group have searched for preliminary information that would allow them to identify possible causes of the observed lack of interest in IAI activities shown by several member countries. The first proposed action was to prepare a list of questions, which would allow the group to identify the causes above mentioned.

Although the issues the group will analyze are oriented mainly to institutional aspects, it should be considered that in parallel to the task the group have been entrusted with, an External Review Committee is being set up, the terms of reference of which include an analysis of issues closely related to our activity. In fact, the results of the analysis are intended to nourish the External Review Committee activities, the conclusions of which are to be ready in a year, approximately.

To elaborate the proposed above list of questions, the consideration of the Suggested Questions for External Review, Institutional Development, as approved by the IAI CoP, has been very useful.

As a result of the discussion among the group members a list of questions was prepared and forwarded to the IAI Directorate in order to obtain basic information needed for the analysis the group was responsible for. The complete list of the information requested from the Directorate is included in Annex 1.

A face-to-face meeting of the group was scheduled in San José, Costa Rica, on October 17-18, with the support of NOAA, NSF, and UCAR. Unfortunately, the meeting had to be cancelled due to lack of quorum, and is planned to be held in the near future.

### Analysis of the obtained information:

A synthesis of the information provided by the IAI Directorate, according to the questions in Annex 1 is presented below.

### 1) Accession level to IAI of American countries

A list of IAI member countries and their status is presented in Annex 2. 19 American countries have joined IAI, although one of these countries, Bolivia has signed the agreement establishing the IAI but have never ratified their membership

The reason for Bolivia officially expressing their interest in being part of IAI but not completing the formalities should be analyzed. On the other hand, it can be seen that no new members have joined IAI since 1997, although several countries in America are in condition to become IAI members.

### 2) State of voluntary contributions.

The following table shows the evolution of payment of the voluntary contributions to the IAI Core Budget, and has been prepared based on the information contained in Annex 3.

Period	# of IAI member	# of countries that paid their contributions		
	countries	Total	Part	Debtors
1994/95-96/97	13	10	1	3
1997/98	18	9	3	9
1998/99	18	7	4	11
1999/2000	18	6	4	12
2000/01	18	2	2	16

It can be seen that IAI member countries actively participated up to 1997. Since then, although the number of member countries has increased, the number of contributing ones has not. A progressive decrease in contributions since 1998 is observed, it reaches a minimum in FY 2000/2001, where only two countries have paid the complete annual contribution, and other two have partially paid.

This constant decrease of income to the IAI operative fund can be due to many reasons that should be thoroughly analyzed in order to find the best mechanism that would allow reverting this trend.

3) Actions taken to activate contribution payment of debtor countries.

Answer from IAI Directorate still pending.

4) Other contributions apart from voluntary contributions, indicating date, amount, and objective.

Contributions to IAI projects/programs are shown in Annex 4. As can be seen, IAI member countries (\$ 22,091,100) have been responsible for most of the programmatic contributions, and only one IAI project has been supported by an international organization, GEF (\$ 2,738,000). Only one country (USA) made 79,2% of the country contributions to programs and the rest is divided into two countries (Brazil – 17,2% and Argentina – 3,6%).

On occasion of the last contribution made by the USA to support IAI programs, member countries were invited to join this effort, see Annex 5. However, no response was obtained from the member countries.

5) Agreements (or MOUs) signed with the IAI, signing date, general objective, implementation assessment.

Annex 6 contains a list of the agreements between IAI and several institutions. A synthesis of these 14 agreements is listed below:

Agreements with:

National Funding Agencies 7

Universities 3

Research Centers 3
International Programs 1

Agreements involve institutions from 9 member countries and a not ratified country.

Only two of the agreements have constituted a funding input to IAI programs. One of these was signed with one of the funding agencies (Argentina) and the other one, with a research center (INPE - Brazil).

### 6) Participation in IAI institutional activities.

Annex 7 is a list of participants in the meetings of EC (EC-V to EC-XIII) and CoP (CoP-IV to CoP-VIII) that have represented each country. From this list is a measure of the participation of member countries in institutional meetings.

### Participation of EC member countries

Countries	# of m	# of meetings		esentatives
Countries	EC (9)	CoP (5)	EC	CoP
Argentina	9	5	18	16
Brazil	9	5	15	15
Canada	9	5	10	7
Costa Rica	8	5	13	4
Cuba	9	5	11	6
Mexico	6	5	8	9
Panama	7	5	17	13
Uruguay	9	5	9	6
USA	9	5	36	26

### Participation of non EC member countries

Countries -	# of meetings		# of representatives	
Countries	EC (9)	CoP (5)	EC	CoP
Chile	1	3	1	3
Colombia	4	3	4	3
Domin. Rep.	1	1	1	1
Ecuador	1	3	1	3
Guatemala	1	1	1	1
Jamaica	1	3	1	4
Paraguay	1	1	1	1
Peru	1	4	1	7
Venezuela	4	3	9	3

# Participation of non IAI member countries

Countries	# of m	# of meetings		esentatives
Countries	EC (9)	CoP (5)	EC	CoP
Bolivia	-	1	-	2
Guyana	-	1	-	1
Honduras	-	1	-	1
Nicaragua	-	1	-	1

Participation of EC member countries in institutional activities has been significant. Participation of non-EC member countries in EC meetings has been occasional and partial in CoP meetings. Participation of non-IAI full member countries in these meetings has been minimal.

Information in Annex 7 also allows identifying those countries that have maintained their representatives in time, and those that have frequently changed their representatives.

### 7) Sponsored IAI institutional meetings.

Annex 8 shows the support given by member countries to the organization of institutional meetings -EC, CoP, and SAC. The following table is a synthesis of the information contained in Annex 8.

<b>Support from Country</b>	EC	CoP	SAC
Argentina	1	1	-
Brazil	2	1	3
Canada	1	1	1
Chile	-	-	1
Costa Rica	1	-	-
Cuba	1	1	-
Mexico	1	2	1
Panama	2	1	-
Peru	-	-	1
Uruguay	1	-	1
USA	2	1	7
Venezuela	1	-	-

As can be seen from the table, some countries have actively participated in the organization of meetings, while other ones have never sponsored an IAI meeting.

### 8) Participation in IAI programs.

Tables detailing participation of researchers per country and per IAI program/project are presented in Annex 9. As it has already been noticed on several occasions, participation of the different countries in IAI scientific activities has been uneven. Therefore, it would be appropriate to make a deeper analysis, looking for a relation between the loss of interest in IAI shown by some countries and the lesser participation they could have had in IAI scientific programs.

### 9) Participation in other activities sponsored by IAI.

Annex 10 is a list of different IAI supported scientific activities (workshops, conferences and seminars). The following table is a synthesis showing the number of meetings supported by each country.

<b>Supporting Country</b>	# of meetings
Argentina	9
Brazil	11
Canada	1
Chile	3
Costa Rica	3
Jamaica	1
Mexico	2
Panama	2
Paraguay	1
Peru	2
Uruguay	3
USA	15
Venezuela	1
Germany	1
Netherlands	2
Japan	1
South Africa	1
Switzerland	1
TOTAL	60

### 10) Training and education activities supported by IAI

A detailed report of the activities undertaken by IAI for increasing scientific capacity in the region in the frame of the Institute's scientific agenda can be found in Annex 11.

Although the obtained information does not allow quantifying the number of individuals from each of the member countries that has benefited from these training programs, the list of involved countries includes most of the member countries.

In a further stage of analysis, it will be necessary to establish the actual impact of this great training and education effort in the countries.

### 11) Country institutions linked with the IAI.

Annex 12 is a list of institutions associated to the Institute, and of those that are related to the IAI through a formal agreement.

A schematic drawing of national and international partnership for IAI is shown in Annex 13. This drawing also illustrates the permanent relation existing not only with national institutions but also with other national and international programs with interest in global environmental change.

### 12) IAI Country representative organizations.

Organizations that represent or have represented each of the member countries before the IAI are listed in Annex 14. An indicator of the interest of member countries in IAI has been considered the continuity of their representing organizations.

### 13) Institutional visits.

The last information the group requested from the Directorate was a report on all the institutional visits that were made, is contained in Annex 15, and lists the activities carried out since 1998.

### **Conclusions**

All the obtained information constitutes a rich basis for the work that the group established for Increasing Country Commitment to the IAI was entrusted with. This report represents a first input to the diagnosis of the detected problem, which should be object of a further analysis by the members of the group.

It is clear that this working group should continue to analyze the problem. If the EC considers it appropriate to complete the makeup of the group at its XIV Meeting, and to plan a new face-to-face meeting -as the one planned for October had to be cancelled, the group would report on their progress at the next EC meeting.

### **ANNEX 1: Information Requested to the IAI Directorate**

- 1) Dates of: a) signing of the Agreement, b) ratification, and c) from which the country should begin paying contributions.
- 2) State of voluntary contributions: amount paid, amount owed and date (at least approximate) in which contributions were made.
- 3) Actions taken to activate contribution payment of debtor countries, pointing who took these actions and the means by which they were undertaken (written, personal, telephone communication, or other). Indicate the approximate date of each one.
- 4) Other contributions apart from voluntary contributions, indicating date, amount and objective.
- 5) Agreements (or MOUs) signed with the IAI, signing date, general objective, implementation assessment.
- 6) Participation in IAI institutional activities, EC meetings in which the country was represented, composition of the delegation, representation nature (member of the Council or Observer), not attended meetings, while being a Council member.
- 7) Participation in IAI institutional activities, CoP meetings in which the country was represented, composition of the delegation, representation nature (Part of the Conference or Observer), not attended meetings, while being a Part of the Institute.
- 8) Sponsored EC and CoP meetings and dates.
- 9) Sponsored SAC meetings and dates.
- 10) Other IAI meetings sponsored by the country, such as seminars, workshops, courses, etc.
- 11) Number of PIs, CoPIs, taking part in IAI programs: Start-Up, ISP, CRN, and PESCA, also indicating the overall number of researchers involved in these activities (a person involved in more than one program should be counted once).
- 12) Number of participants in Courses, Summer Institutes, and/or other Training and Education activities sponsored by IAI.
- 13) List of the country institutions linked with the IAI, nature of the link.
- 14) Institutions/organizations that represent and/or have represented the country with the IAI
- 15) Institutional visits made, composition of the IAI delegation, visited authorities and organizations, date of the visit, assessment.

ANNEX 2: Countries that Ratified and/or Adhered to IAI Agreement (up to June 2001)

SIGNATORY COUNTRIES	DATE (m/d/y)	RA/AC/AD (m/d/y)	DEPOSIT (m/d/y)	INSTRUMENT
Argentina	05/13/92	11/03/93	02/24/94	RA
Bolivia	05/13/92	/ /	//	
Brazil	05/13/92	05/07/93	06/23/93	RA
Canada	05/13/92	//	06/15/93	AC
Chile	05/13/92	09/28/94	10/14/94	RA
Colombia	05/13/92	08/13/97	09/24/97	RA
Costa Rica	05/13/92	05/13/94	08/26/94	RA
Cuba	05/13/92	/ /	01/05/95	RA
Ecuador	05/13/92	10/16/97	11/24/97	RA
Guatemala	/ /	10/13/97	01/05/98	AD
Jamaica	/ /	07/31/97	09/10/97	AC
Mexico	05/13/92	06/30/92	04/27/93	RA
Panama	05/13/92	12/23/93	01//11/94	RA
Paraguay	05/13/92	08/27/96	10/08/96	RA
Peru	05/13/92	12/27/94	02/17/95	RA
Dominican Republic	05/13/92	07/29/97	09/04/97	RA
United States	05/13/92	/ /	01/12/93	AC
Uruguay	05/13/92	08/10/93	08/10/93	RA
Venezuela	//	03/06/96	06/14/96	AD

(RA = Ratification / AC = Acceptance / AD = Adhesion)

Source: OAS – June 2001

**ANNEX 3: State of Voluntary Contributions** 

# Periods 1994/95 – 1995/96 – 1996/97

Country	Expected	Paid	Unpaid
Argentina	40,000.00	40,000.00	
Brazil	90,000.00	90,000.00	
Canada	170,300.03	170,300.03	
Chile	10,000.00	10,000.00	
Colombia			
Costa Rica	10,000.00	10,000.00	
Cuba	10,000.00	10,000.00	
Dom. Republic			
Ecuador			
Guatemala			
Jamaica			
Mexico	40,000.00	38,205.12	1,794.88
Panama	10,000.00	10,000.00	
Paraguay	5,000.00	,	5,000.00
Peru	10,000.00		10,000.00
Uruguay	10,000.00	10,000.00	
USA	385,000.00	385,000.00	
Venezuela	5,000.00	5,000.00	
TOTAL	795,300.03	778,505.15	16,794.88

# Period 1997/98

Country	Expected	Paid	Unpaid
Argentina	35,000.00	20,000.00	15,000.00
Brazil	70,000.00	70,000.00	
Canada	100,000.00	100,000.00	
Chile	5,000.00	5,000.00	
Colombia	5,000.00	5,000.00	
Costa Rica	5,000.00		5,000.00
Cuba	5,000.00	5,000.00	
Dom. Republic	5,000.00		5,000.00
Ecuador	5,000.00		5,000.00
Guatemala	5,000.00		5,000.00
Jamaica	5,000.00	5,000.00	
Mexico	45,000.00	23,799.40	21,200.60
Panama	5,000.00	5,000.00	
Paraguay	5,000.00		5,000.00
Peru	5,000.00		5,000.00
Uruguay	5,000.00	5,000.00	
USA	485,000.00	485,000.00	
Venezuela	25,000.00	11,323.70	
TOTAL	820,000.00	740,123.10	79,876.90

# Period 1998/99

Country	Expected	Paid	Unpaid
Argentina	35,000.00	20,000.00	15,000.00
Brazil	70,000.00	70,000.00	
Canada	100,000.00	100,000.00	
Chile	5,000.00		5,000.00
Colombia	5,000.00	5,000.00	
Costa Rica	5,000.00		5,000.00
Cuba	5,000.00	5,000.00	
Dom. Republic	5,000.00		5,000.00
Ecuador	5,000.00		5,000.00
Guatemala	5,000.00		5,000.00
Jamaica	5,000.00	5,000.00	
Mexico	45,000.00	13,896.08	31,103.92
Panama	5,000.00	5,000.00	
Paraguay	5,000.00		5,000.00
Peru	5,000.00	3,000.00	2,000.00
Uruguay	5,000.00	,	5,000.00
USA	485,000.00	485,000.00	
Venezuela	25,000.00	8,960.57	
TOTAL	820,000.00	720,856.65	99,143.35

# Period 1999/2000

Country	Expected	Paid	Unpaid
Argentina	35,000.00	20,000.00	15,000.00
Brazil	70,000.00	70,000.00	
Canada	100,000.00	73,787.22	26,212.78
Chile	5,000.00		5,000.00
Colombia	5,000.00	5,000.00	
Costa Rica	5,000.00		5,000.00
Cuba	5,000.00	5,000.00	
Dom. Republic	5,000.00		5,000.00
Ecuador	5,000.00		5,000.00
Guatemala	5,000.00		5,000.00
Jamaica	5,000.00	5,000.00	
Mexico	45,000.00	40,000.00	5,000.00
Panama	5,000.00	5,000.00	
Paraguay	5,000.00		5,000.00
Peru	5,000.00		5,000.00
Uruguay	5,000.00		5,000.00
USA	485,000.00	485,000.00	
Venezuela	25,000.00	20,386.39	
TOTAL	820,000.00	729,173.61	90,826.39

# Period 2000/2001

Country	Expected	Paid	Unpaid
Argentina	45,000.00	20,000.00	25,000.00
Brazil	80,000.00	48,076.92	31,923.08
Canada	115,000.00		115,000.00
Chile	5,000.00		5,000.00
Colombia	10,000.00		10,000.00
Costa Rica	5,000.00		5,000.00
Cuba	5,000.00		5,000.00
Dom. Republic	5,000.00		5,000.00
Ecuador	5,000.00		5,000.00
Guatemala	5,000.00		5,000.00
Jamaica	5,000.00		5,000.00
Mexico	55,000.00		55,000.00
Panama	5,000.00	5,000.00	
Paraguay	5,000.00		5,000.00
Peru	5,000.00		5,000.00
Uruguay	5,000.00		5,000.00
USA	550,000.00	550,000.00	
Venezuela	30,000.00	•	30,000.00
TOTAL	940,000.00	623,076.92	316,923.08

# Accumulated (1994/95) to (1999/2000)

Country	Expected	Paid	Unpaid
Argentina	145,000.00	100,000.00	45,000.00
Brazil	300,000.00	300,000.00	
Canada	470,300.03	444,087.25	26,212.78
Chile	25,000.00	15,000.00	10,000.00
Colombia	15,000.00	15,000.00	
Costa Rica	25,000.00	10,000.00	15,000.00
Cuba	25,000.00	25,000.00	
Dom. Republic	15,000.00		15,000.00
Ecuador	15,000.00		15,000.00
Guatemala	15,000.00		15,000.00
Jamaica	15,000.00	15,000.00	
Mexico	175,000.00	115,900.60	59,099.40
Panama	25,000.00	25,000.00	
Paraguay	20,000.00		20,000.00
Peru	25,000.00	3,000.00	22,000.00
Uruguay	25,000.00	15,000.00	10,000.00
USA	1,840,000.00	1,840,000.00	
Venezuela	80,000.00	45,670.66	
TOTAL	3,255,300.03	2,968,658.51	286,641.52

**ANNEX 4: Other Contributions Apart From Voluntary Contributions** 

Program/Project	Amount (Funding) US\$	Source
GEF	2,738,000	UNDP
	310,000	NSF (USA)
	3,790,000	Brazil (software GIS SPRING and METVIEW)
SG	1,794,077	NSF (USA)
ISP	3,838,388	NSF (USA)
		NASA (USA)
		NOAA (USA)
CRN	10,000,000	NSF (USA)
	800,000	Argentinean Agency (Argentina)
	100,000	NOAA (USA)
PESCA	300,000	NSF (USA)
IAI/UM Summer Institute	814,935	NSF (USA)
SGP-II /	300,000	NSF (USA)
Workshops & Reports	43,700	NOAA (USA)

# ANNEX 5: Communication from IAI Directorate to increase the support to Program/project Budget

**IAIDIR-012/01** (March 08, 2001)

To: EC Representatives & IAI Country Representatives

C.c.: SAC Representatives & IAI Staff

Dear EC/CoP Representatives:

- 1) As you are all aware, at the last EC meeting held in San José (Costa Rica), December 45, 2000, Dr. Paul Filmer announced that the US National Science Foundation (NSF), on behalf of the US Global Change Research Program, was willing to consider, before August 2001, a proposal from IAI for an additional US contribution to IAI program/project budgets of the order of US\$ 300,000. But at the same time, the US delegation noted that the US support for IAI was coming under increasing scrutiny of the non-participation of other governments in the financial support of the Institute. A statement was also made that IAI would be in a different and much better situation today in terms of US support should the other member countries contributed to the IAI budget as it was agreed. I just would like to remark that, besides the United States, only Argentina has contributed in terms of financial support to IAI programmatic activities (CRN program) until now.
- 2) The Directorate staff and the SAC Chairman (Prof. John Stewart) will meet at the IAI headquarters during the second half of March to advance in a proposal of what should be the best use of these funds vis-à-vis the set of activities that had been already defined as needed to be accomplished in order to ensure IAI programmatic development (I am referring here to the set of goals and actions approved by the EC/CoP under the Vision and Strategy document (ECXI-CoPVII, Merida, Mexico, July 2000).

It is therefore of uppermost importance to know from you, what type (and amount) of support your country can make to IAI in order to further enlarge the funding basis of this next announcement.

Please, make any possible effort to have your country be an active supporter of this next IAI activity.

I think that we all agree that IAI was able to become in a short time a significant instrument to enhance capacity building and to promote collaborative research on global environmental change in the Americas. The time is now to increase our efforts to ensure the sustainability of our Institute.

Once again, thank you for your cooperation.

Sincerely,

Armando Rabuffetti

### **ANNEX 6: Joint Funding Research Agreement (JFRA)**

### 1. Agencia Nacional de Promoción Científica y Tecnologica (Argentina)

**SIGNED** (Framework Agreement/Convenio Marco) (English and Spanish) IAI = Dr. A. Rabuffetti / Ag. Nac. de Prom. Cient. y Tec. = Dr. Juan M. Dellacha Date = June 5<sup>th</sup>, 1998

**SIGNED** (Acuerdo Complementario - CRN) (Spanish) IAI = Dr. A. Rabuffetti / Ag. Nac. de Prom. Cient. y Tec. = Dr. M. A. Mariscotti Date = Oct. 1999

### 2. CATHALAC

**SIGNED** (Memorandum de Entendimiento) (Spanish) IAI = Dr. A. Rabuffetti / CATHALAC. = María Concepción Donoso Date = July 19<sup>th</sup>, 2001

### 3. CITMA (Cuba)

- Sep. 24, 1997 Draft of a Memorandum of Understanding sent by Dr. Humberto Arango.
- Nov. 13, 1997 Fax (IAIDIR-155/97) to Dr. Humberto Arango from Dr. Rabuffetti agreeing with the MOU and suggesting to include the names and positions of the people that will sign it.

### 4. CNPq (Brasil)

**SIGNED** (Letter of Understanding / Carta de Entendimento) (English and Portuguese)

IAI = Dr. A. Rabuffetti / CNPq = José G. Tundisi Date = June 5<sup>th</sup>, 1998

### 5. CONACYT (Bolivia)

- Jun. 29, 1998 – Fax to Dr. Rabuffetti from Lic. Renzo Abruzzese Antezana showing interest in the creation of an agreement.

### 6. CONACYT (Mexico)

- Sept. 29, 1997 Fax (IAIDIR-135/97) to Dr. Efrain Aceves from Dr. Rabuffetti including a draft of a Letter of Understanding and a "Posible Mecanismo de Cofinanciamento de Proyectos de Investigación".
  - Mar. 03, 1998 Fax (IAIDIR-30/98) to Dr. Efrain Aceves from Dr. Rabuffetti sending again the IAIDIR-135/97.

### 7. CONICIT (Venezuela)

**SIGNED** (Memorandum of Understanding / Memorandum de Entendimiento) (English and Spanish)

IAI = Dr. A. Rabuffetti / CONICIT = Manuel Martínez Date = Sep. 1999

### 8. CONICYT (Chile)

**SIGNED** (Memorandum de Entendimiento) (Spanish) IAI = Dr. Rabuffetti / CONICYT = Dr. Enrique D'Etigny Date = Jul. 25, 1997

### 9. Indiana University – ACT

**SIGNED** (Memorandum of Understanding) (English) **IAI = Dr. Rabuffetti / Indiana Univ. = George Walker / ACT = Emilio Moran**Date = Feb. 1998

### 10. <u>INPE-DIS</u>

SIGNED (Termo de Convênio de Cooperação Técnico-Científica) (Portuguese)

IAI = Dr. Rabuffetti / INPE = Marcio N. Barbosa

Date = Oct. 1997

### 11. INTA (Argentina)

- Nov. 21, 1997 – Fax from Dr. C. Scoppa to Dr. Rabuffetti including a Draft of a "Acuerdo General de Cooperación".

### 12. Universidad de la República – Facultad de Ciencias (Uruguay)

**SIGNED** (Memorandum of Understanding for the Installation, Use, and Maintenance of the IAI-DIS System / Memorandum de Entendimiento para la Instalación, Uso, y Mantenimiento del Sistema DIS del IAI) (English and Spanish)

IAI = Dr. Rabuffetti / Universidad de la República = Ing. Rafael Guarga + Dr. Ricardo Ehrlich

Date = Nov. 2000

**SIGNED** (Convenio de Cooperación entre la Comisión Nacional sobre el Cambio Global y la Universidad de la República – Facultad de Ciencias) (Spanish)

CNCG = Cr. Raúl Michelini / Universidad de la República = Ing. Rafael Guarga + Dr. Ricardo Ehrlich

Date = Nov.  $23^{rd}$ , 2000

### **13. WCRP**

**SIGNED** (Exchange of Letters) (English) IAI = Dr. Rabuffetti / WCRP = Hartmut Grassl Date = Jun. 1999

### **14. YALE**

SIGNED (Memorandum of Understanding) (English)
 IAI = Dr. Rabuffetti / Yale FES = John Gordon / Yale Univ. – Economic Growth Center = Robert Evenson)
 Date = July 1998

### **ANNEX 7: Participation in IAI Institutional Activities (EC and CoP meetings)**

(Ob) = participation as an OBSERVER)

### **Executive Council (EC) Members**

### Argentina

EC-V	B. Aires, Argentina	Juan Dellacha (Secretaria de Ciencia y Tecnologia)
EC- V	B. Alles, Algeliula	Carlos Ereño (Secretaria de Ciencia y Tecnologia)
		,
		Eduardo César Cédola (Com. Nac. Cambio Global)
		Gladys Mares
		Mario Nuñez
		Carlos Scoppa
EC-VI	Panama City, Panama	Carlos Ereño (Secretaria de Ciencia y Tecnologia)
		Eduardo César Cédola (Com. Nac. Cambio Global)
EC-VII	Arlington, USA	Carlos Ereño (Secretaria de Ciencia y Tecnologia)
EC-VIII	Montevideo, Uruguay	Carlos Ereño (Secretaria de Ciencia y Tecnologia)
		Eduardo César Cédola (Com. Nac. Cambio Global)
EC-IX	Ottawa, Canada	Carlos Ereño (Secretaria de Ciencia y Tecnologia)
		Marcelo Irigoyen (Embassy)
EC-X	Caracas, Venezuela	Carlos Ereño (Secretaria de Ciencia y Tecnologia)
EC-XI	Mérida, Mexico	Carlos Ereño (Secretaria de Ciencia y Tecnologia)
		Ezequiel Barakat (Embassy)
EC- XII	San José, Costa Rica	Carlos Ereño (Comisión Nac. de Cambio Global)
EC-XIII	Panama City, Panama	Carlos Ereño (Comisión Nac. de Cambio Global)
	-	
CoP-IV	B. Aires, Argentina	Carlos Ereño (Secretaria de Ciencia y Tecnologia)
	_	Eduardo César Cédola (Com. Nac. Cambio Global)
		Mario Nuñez
		Carlos Rinaldi
		Adolfo Rosellini
		Carlos Scoppa

### CoP-V Arlington, USA Juan Dellacha (Secretaria de Ciencia y Tecnologia) Carlos Ereño (Secretaria de Ciencia y Tecnologia) Jorge Osella Diego Guelar CoP-VI Carlos Ereño (Secretaria de Ciencia y Tecnologia) Ottawa, Canada Marcelo Irigoyen (Embassy) Carlos Ereño (Secretaria de Ciencia y Tecnologia) CoP-VII Mérida, Mexico Ezequiel Barakat (Embassy) CoP-VIII Carlos Ereño (Comisión Nac. de Cambio Global) Panama City, Panama Fernando Segre Carman (Embassy)

### Brazil

EC-V	B. Aires, Argentina	Antônio MacDowell (Min. Ciência & Tecnologia)
		José Luiz Aguirre (INPE)
		Joaquim Paiva (Embassy)
EC-VI	Panama City, Panama	Antônio MacDowell (Min. Ciência & Tecnologia)
		José Luiz Aguirre (INPE)
EC-VII	Arlington, USA	Antônio MacDowell (Min. Ciência & Tecnologia)
EC-VIII	Montevideo, Uruguay	Marcio N. Barbosa (INPE)
		Antônio MacDowell (Min. Ciência & Tecnologia)

EC-IX	Ottawa, Canada	Marcio N. Barbosa (INPE)
		Andre Lima (Embassy)
EC-X	Caracas, Venezuela	Antônio MacDowell (Agência Espacial Brasileira)
EC-XI	Mérida, Mexico	Antônio MacDowell (Agência Espacial Brasileira)
EC- XII	San José, Costa Rica	Antônio MacDowell (Agência Espacial Brasileira)
EC-XIII	Panama City, Panama	Antônio MacDowell (Agência Espacial Brasileira)
		Mary Kayano (INPE)

CoP-IV	B. Aires, Argentina	Lindolpho Dias (Min. Ciência & Tecnologia)
		Antônio MacDowell (Min. Ciência & Tecnologia)
		José Luiz Aguirre (INPE)
		Joaquim Paiva (Embassy)
		Eliana Zugaib
CoP-V	Arlington, USA	Lindolpho Dias (Min. Ciência & Tecnologia)
		Marcio N. Barbosa (INPE)
		Antônio MacDowell (Min. Ciência & Tecnologia)
		Philip Yang
CoP-VI	Ottawa, Canada	Henrique Valle (Embassy)
		Andre Lima (Embassy)
CoP-VII	Mérida, Mexico	Antônio MacDowell (Agência Espacial Brasileira)
CoP-VIII	Panama City, Panama	Katia Gilaberte (Min. Ciencia & Tecnologia – As. Int.)
		Antônio MacDowell (Agência Espacial Brasileira)
		Mary Kayano (INPE)

# **Canada**

EC-V	B. Aires, Argentina	Robert Halliday (Nat. Hydrol. Res. Inst. – Environ. Canada)
EC-VI	Panama City, Panama	Robert Halliday (Nat. Hydrol. Res. Inst. – Environ. Canada)
EC-VII	Arlington, USA	Fred Wrona (Environment Canada)
EC-VIII	Montevideo, Uruguay	Gordon McBean (Environment Canada)
EC-IX	Ottawa, Canada	Gordon McBean (Environment Canada)
		Bruce Angle (Environment Canada)
EC-X	Caracas, Venezuela	Gordon McBean (Environment Canada)
EC-XI	Mérida, Mexico	Gordon McBean (Environment Canada)
EC- XII	San José, Costa Rica	Béchard Georges (Embassy)
EC-XIII	Panama City, Panama	Mimi Breton (Environment Canada)

CoP-IV	B. Aires, Argentina	Robert Halliday (Nat. Hydrol. Res. Inst. – Environ. Canada)
CoP-V	Arlington, USA	Gordon McBean (Environment Canada)
	_	Fred Wrona (Environment Canada)
CoP-VI	Ottawa, Canada	Gordon McBean (Environment Canada)
		Bruce Angle (Environment Canada)
CoP-VII	Mérida, Mexico	Gordon McBean (Environment Canada)
CoP-VIII	Panama City, Panama	Mimi Breton (Environment Canada)

# Costa Rica

EC-V	B. Aires, Argentina	Patrícia Ramírez O. (Min. de Ambiente y Energia – Inst. Met. Nac.)
EC-VI	Panama City, Panama	Patrícia Ramírez O. (Min. de Ambiente y Energia – Inst. Met. Nac.)

EC-VII	Arlington, USA	Patrícia Ramírez O. (Min. de Ambiente y Energia – Inst. Met. Nac.)
EC-VIII	Montevideo, Uruguay	Patrícia Ramírez O. (Min. de Ambiente y Energia – Inst.
		Met. Nac.)
EC-IX	Ottawa, Canada	Eládio Zárate (Min. de Ambiente y Energia – Inst. Met. Nac.)
EC-X	Caracas, Venezuela	
EC-XI	Mérida, Mexico	Eládio Zárate (Min. de Ambiente y Energia – Inst. Met. Nac.)
EC- XII	San José, Costa Rica	Eládio Zárate (Min. de Ambiente y Energia – Inst. Met. Nac.)
		Jorge Amador (Univ. de C. Rica)
		Walter Fernandez (IAI SAC)
		Guillermo Vega F. (Inst. Met. Nac.)
		Gloria Villa (Min. de Ambiente y Energia)
		Roberto Villalobos F. (Inst. Met. Nac.)
EC-XIII	Panama City, Panama	Eládio Zárate (Min. de Ambiente y Energia – Inst. Met. Nac.)

CoP-IV	B. Aires, Argentina	Patrícia Ramírez O. (Min. de Ambiente y Energia – Inst.
		Met. Nac.)
CoP-V	Arlington, USA	Patrícia Ramírez O. (Min. de Ambiente y Energia – Inst.
		Met. Nac.)
CoP-VI	Ottawa, Canada	
CoP-VII	Mérida, Mexico	Eládio Zárate (Min. de Ambiente y Energia – Inst. Met. Nac.)
CoP-VIII	Panama City, Panama	Eládio Zárate (Min. de Ambiente y Energia – Inst. Met. Nac.)

# <u>Cuba</u>

EC-V	B. Aires, Argentina	Bárbara Garea (Min. Ciencia & Tecn. y Med. Amb.)
		Luis A. Barreras (Min. Ciencia & Tecn. Y Med. Amb.)
EC-VI	Panama City, Panama	Soledad Diaz (Min. Ciencia & Tecn. y Med. Amb.)
EC-VII	Arlington, USA	Bárbara Garea (Min. Ciencia & Tecn. y Med. Amb.)
EC-VIII	Montevideo, Uruguay	Bárbara Garea (Min. Ciencia & Tecn. y Med. Amb.)
EC-IX	Ottawa, Canada	Bárbara Garea (Min. Ciencia & Tecn. y Med. Amb.)
EC-X	Caracas, Venezuela	Bárbara Garea (Min. Ciencia & Tecn. y Med. Amb.)
		Luis A. Barreras (Min. Ciencia & Tecn. Y Med. Amb.)
EC-XI	Mérida, Mexico	Bárbara Garea (Min. Ciencia & Tecn. y Med. Amb.)
EC- XII	San José, Costa Rica	Bárbara Garea (Min. Ciencia & Tecn. y Med. Amb.)
EC-XIII	Panama City, Panama	Bárbara Garea (Min. Ciencia & Tecn. y Med. Amb.)

CoP-IV	B. Aires, Argentina	Bárbara Garea (Min. Ciencia & Tecn. y Med. Amb.)
	·	Luis A. Barreras (Min. Ciencia & Tecn. y Med. Amb.)
CoP-V	Arlington, USA	Bárbara Garea (Min. Ciencia & Tecn. y Med. Amb.)
CoP-VI	Ottawa, Canada	Bárbara Garea (Min. Ciencia & Tecn. y Med. Amb.)
CoP-VII	Mérida, Mexico	Bárbara Garea (Min. Ciencia & Tecn. y Med. Amb.)
CoP-VIII	Panama City, Panama	Bárbara Garea (Min. Ciencia & Tecn. y Med. Amb.)

# Mexico

EC-V	B. Aires, Argentina	José Tenório (SEMARNAP, INE)
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	Carlos Gay (SEMARNAP, INE)
		José Tenório (SEMARNAP, INE)

EC-VIII	Montevideo, Uruguay	Carlos Gay (SEMARNAP, INE)
EC-IX	Ottawa, Canada	Carlos Gay (SEMARNAP, INE)
		Rafael Martinez Blanco (SEMARNAP, INE)
EC-X	Caracas, Venezuela	Carlos Gay (SEMARNAP, INE)
EC-XI	Mérida, Mexico	Rafael Martinez Blanco (SEMARNAP, INE)
EC- XII	San José, Costa Rica	
EC-XIII	Panama City, Panama	

CoP-IV	B. Aires, Argentina	José Tenório (SEMARNAP, INE)
CoP-V	Arlington, USA	José Tenório (SEMARNAP, INE)
CoP-VI	Ottawa, Canada	Carlos Gay (SEMARNAP, INE)
		Rafael Martinez Blanco (SEMARNAP, INE)
CoP-VII	Mérida, Mexico	Julia Carabias Lillo (SEMARNAP, INE)
		Enrique Provencio (SEMARNAP, INE)
		Francisco Giner de los Ríos (SEMARNAP, INE)
		Rafael Martinez Blanco (SEMARNAP, INE)
		Abel Abarca (Sec. Rel. Ext. – Inst. Mexicano Coop. Int.)
CoP-VIII	Panama City, Panama	

### **Panama**

EC-V	B. Aires, Argentina	Aristides Lorlesse (Instituto Nacional de Recursos Naturales
		Renovables – Autoridad Nacional del Ambiente)
EC-VI	Panama City, Panama	Aristides Lorlesse (Instituto Nacional de Recursos Naturales
		Renovables – Autoridad Nacional del Ambiente)
		Maria Donoso – CATHALAC
		Enidd Soplada
EC-VII	Arlington, USA	Maria Donoso – CATHALAC
EC-VIII	Montevideo, Uruguay	Maria Donoso - CATHALAC (Ob)
EC-IX	Ottawa, Canada	
EC-X	Caracas, Venezuela	
EC-XI	Mérida, Mexico	Gonzalo Menéndez G. (Autoridad Nacional del Ambiente)
		Ligia Castro (CATHALAC) (Ob)
EC- XII	San José, Costa Rica	Ricardo Anguizola (Autoridad Nacional del Ambiente)
		Irina Madrid (Autoridad Nacional del Ambiente)
		Ligia Castro (CATHALAC)
EC-XIII	Panama City, Panama	Ricardo Anguizola (Autoridad Nacional del Ambiente)
		Maria Donoso (CATHALAC)
		Bessie Vasquez (Autoridad Nacional del Ambiente)
		Abdiel J. Bolivar Perez Z. (Autoridad Nacional del
		Ambiente)
		Adames (Analista Ambiental)
		Maria Amparo Garcia (Autoridad Nacional del Ambiente)

CoP-IV	B. Aires, Argentina	Aristides Lorlesse (Instituto Nacional de Recursos Naturales Renovables – Autoridad Nacional del Ambiente)
CoP-V	Arlington, USA	Fernando Eleta (Embassy)
	_	Lili Romero (Embassy)
CoP-VI	Ottawa, Canada	Maria Donoso (CATHALAC)
		Carlos Ozores (Embassy)
CoP-VII	Mérida, Mexico	Gonzalo Menéndez G. (Autoridad Nacional del Ambiente)
		Ligia Castro (CATHALAC)

CoP-VIII	Panama City, Panama	Ricardo Anguizola (Autoridad Nacional del Ambiente)
	-	Bessie Vasquez (Autoridad Nacional del Ambiente)
		Bolivar Perez Z. (Autoridad Nacional del Ambiente)
		Maria Amparo Garcia (Autoridad Nacional del Ambiente)
		Raul Gutiérrez Rivera (Autoridad Nacional del Ambiente)
		Luis Donderis L. (SENACYT)

# <u>Uruguay</u>

EC-V	B. Aires, Argentina	Raul Michelini (Comisión Nac. sobre el Cambio Global)
EC-VI	Panama City, Panama	Raul Michelini (Comisión Nac. sobre el Cambio Global)
EC-VII	Arlington, USA	Raul Michelini (Comisión Nac. sobre el Cambio Global)
EC-VIII	Montevideo, Uruguay	Raul Michelini (Comisión Nac. sobre el Cambio Global)
EC-IX	Ottawa, Canada	Raul Michelini (Comisión Nac. sobre el Cambio Global)
EC-X	Caracas, Venezuela	Raul Michelini (Comisión Nac. sobre el Cambio Global)
EC-XI	Mérida, Mexico	Raul Michelini (Comisión Nac. sobre el Cambio Global)
EC- XII	San José, Costa Rica	Raul Michelini (Comisión Nac. sobre el Cambio Global)
EC-XIII	Panama City, Panama	Raul Michelini (Comisión Nac. sobre el Cambio Global)

CoP-IV	B. Aires, Argentina	Raul Michelini (Comisión Nac. sobre el Cambio Global)
CoP-V	Arlington, USA	Raul Michelini (Comisión Nac. sobre el Cambio Global)
CoP-VI	Ottawa, Canada	Raul Michelini (Comisión Nac. sobre el Cambio Global)
		Carlos Gitto (Embassy)
CoP-VII	Mérida, Mexico	Raul Michelini (Comisión Nac. sobre el Cambio Global)
CoP-VIII	Panama City, Panama	Raul Michelini (Comisión Nac. sobre el Cambio Global)

# <u>USA</u>

EC-V	B. Aires, Argentina	Robert W. Corell (NSF)
	_	Katie Mastriani (NSF)
		Paul Filmer (NSF)
		Vanessa Richardson (NSF)
		J. Michael Hall (NOAA)
		James Buizer (NOAA)
		Lisa Farrow (NOAA)
EC-VI	Panama City, Panama	Robert W. Corell (NSF)
		Paul Filmer (NSF)
		Vanessa Richardson (NSF)
EC-VII	Arlington, USA	Robert W. Corell (NSF)
		Paul Filmer (NSF)
		Vanessa Richardson (NSF)
		Louis Brown (NSF)
		David Lund
EC-VIII	Montevideo, Uruguay	Robert W. Corell (NSF)
		Paul Filmer (NSF)
		Vanessa Richardson (NSF)
		Elizabeth Martín (US MAB – US Dep. Of State)
EC-IX	Ottawa, Canada	Robert W. Corell (NSF)
		Paul Filmer (NSF)
		Vanessa Richardson (NSF)
		Lisa Farrow (NOAA)

EC-X	Caracas, Venezuela	Robert W. Corell (NSF)
		Paul Filmer (NSF)
		Vanessa Richardson (NSF)
		Lisa Farrow (NOAA)
EC-XI	Mérida, Mexico	Margaret Leinen (NSF)
		Paul Filmer (NSF)
		Vanessa Richardson (NSF)
EC- XII	San José, Costa Rica	Paul Filmer (NSF)
		Vanessa Richardson (NSF)
EC-XIII	Panama City, Panama	Paul Filmer (NSF)
		Vanessa Richardson (NSF)
		Louis B. Brown (NSF)
		Lisa Farrow Vaughan (NOAA)

CoP-IV	B. Aires, Argentina	Robert W. Corell (NSF)
		Katie Mastriani (NSF)
		Paul Filmer (NSF)
		Vanessa Richardson (NSF)
		J. Michael Hall (NOAA)
		James Buizer (NOAA)
		Lisa Farrow (NOAA)
CoP-V	Arlington, USA	Robert W. Corell (NSF)
		Nancy Maynard
		Rick Piltz (US Global Change Res. Program)
		Paul Filmer (NSF)
		Vanessa Richardson (NSF)
		Louis Brown (NSF)
		Gene Topley
		Peter Backlund (White House Office of Sc. & Techn. Policy)
CoP-VI	Ottawa, Canada	Robert W. Corell (NSF)
		Paul Filmer (NSF)
		Vanessa Richardson (NSF)
		Louis Brown (NSF)
CoP-VII	Mérida, Mexico	Margaret Leinen (NSF)
		Paul Filmer (NSF)
		Vanessa Richardson (NSF)
CoP-VIII	Panama City, Panama	Paul Filmer (NSF)
		Vanessa Richardson (NSF)
		Louis B. Brown (NSF)
		Lisa Farrow Vaughan (NOAA)

# **Member Countries - not EC members**

# **Venezuela**

EC-V	B. Aires, Argentina	
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	Abraham Salcedo (Min del Amb. Y Rec. Nat. Renovables) (Ob)
EC-VIII	Montevideo, Uruguay	Lelys Bravo (Univ. Simon Bolivar)
EC-IX	Ottawa, Canada	Lelys Bravo (Univ. Simon Bolivar)
EC-X	Caracas, Venezuela	Lelys Bravo (Univ. Simon Bolivar)
		David Pérez Hernandez (MARN)

		Ana Maria Silva (CONICIT)
		Edwin Rodriguez Santos (CONICIT)
		Ernesto Medina (IAI SAC)
		Hernán Perez Nieto (CONICIT)
EC-XI	Mérida, Mexico	
EC- XII	San José, Costa Rica	
EC-XIII	Panama City, Panama	

CoP-IV	B. Aires, Argentina	Abraham Salcedo (Min del Amb. y Rec. Nat. Renovables)
CoP-V	Arlington, USA	Abraham Salcedo (Min del Amb. y Rec. Nat. Renovables)
CoP-VI	Ottawa, Canada	
CoP-VII	Mérida, Mexico	
CoP-VIII	Panama City, Panama	Rudolf Romer (Min. Ciencia y Tecn., Dir. Rel. Int.)

# **Chile**

EC-V	B. Aires, Argentina	Carlos Elgueta (CONICYT) (Ob)
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	
EC-VIII	Montevideo, Uruguay	
EC-IX	Ottawa, Canada	
EC-X	Caracas, Venezuela	
EC-XI	Mérida, Mexico	
EC- XII	San José, Costa Rica	
EC-XIII	Panama City, Panama	

CoP-IV	B. Aires, Argentina	Carlos Elgueta (CONICYT)
CoP-V	Arlington, USA	
CoP-VI	Ottawa, Canada	Felipe Cousiño (Embassy)
CoP-VII	Mérida, Mexico	
CoP-VIII	Panama City, Panama	Juan Carlos Salazar Alvarez (Embassy)

# Colombia

EC-V	B. Aires, Argentina	
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	Jairo Sanchez (Inst. Hidrol. Meteor. y Est. Amb., IDEAM) (Ob)
EC-VIII	Montevideo, Uruguay	
EC-IX	Ottawa, Canada	Pabon Daniel (Inst. Hidrol. Meteor. y Est. Amb., IDEAM) (Ob)
EC-X	Caracas, Venezuela	Luiz R. Chaparro (Inst. Hidrol. Meteor. y Est. Amb, IDEAM) (Ob)
EC-XI	Mérida, Mexico	David Humberto Ojeda (Inst. Hidrol. Meteor. y Est. Amb. (Ob)
		IDEAM)
EC- XII	San José, Costa Rica	
EC-XIII	Panama City, Panama	

CoP-V	Arlington, USA	Jairo Sanchez (Inst. Hidrol. Meteor. y Est. Amb., IDEAM)
CoP-VI	Ottawa, Canada	Pabon Daniel (Inst. Hidrol. Meteor. y Est. Amb., IDEAM)
CoP-VII	Mérida, Mexico	David Humberto Ojeda (Inst. Hidrol. Meteor. y Est. Amb. IDEAM)
CoP-VIII	Panama City, Panama	

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# Dom. Rep.

EC-V	B. Aires, Argentina	
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	Moises Alvarez (Oficina Nac. de Planificacion, ONAPLAN (Ob)
EC-VIII	Montevideo, Uruguay	
EC-IX	Ottawa, Canada	
EC-X	Caracas, Venezuela	
EC-XI	Mérida, Mexico	
EC- XII	San José, Costa Rica	
EC-XIII	Panama City, Panama	

CoP-IV	B. Aires, Argentina	
CoP-V	Arlington, Usa	Moises Alvarez (Oficina Nac. de Planificacion, ONAPLAN
CoP-VI	Ottawa, Canada	
CoP-VII	Mérida, Mexico	
CoP-VIII	Panama City, Panama	

# **Ecuador**

EC-V	B. Aires, Argentina	
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	Fernado Ortiz C. (FUNDACYT) (Ob)
EC-VIII	Montevideo, Uruguay	
EC-IX	Ottawa, Canada	
EC-X	Caracas, Venezuela	
EC-XI	Mérida, Mexico	
EC- XII	San José, Costa Rica	
EC-XIII	Panama City, Panama	

CoP-IV	B. Aires, Argentina	
CoP-V	Arlington, USA	Fernando Ortiz C. (FUNDACYT)
CoP-VI	Ottawa, Canada	Fernando Ortiz C. (FUNDACYT)
CoP-VII	Mérida, Mexico	
CoP-VIII	Panama City, Panama	Fernando Ortiz C. (FUNDACYT)

# **Guatemala**

EC-V	B. Aires, Argentina	
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	
EC-VIII	Montevideo, Uruguay	
EC-IX	Ottawa, Canada	
EC-X	Caracas, Venezuela	
EC-XI	Mérida, Mexico	Hugo Figueroa (CONAMA) (Ob)
EC- XII	San José, Costa Rica	

EC-XIII	Panama City, Panama	
CoP-IV	B. Aires, Argentina	
CoP-V	Arlington, USA	
CoP-VI	Ottawa, Canada	
CoP-VII	Mérida, Mexico	Hugo Figueroa (CONAMA)
CoP-VIII	Panama City, Panama	

# <u>Jamaica</u>

EC-V	B. Aires, Argentina	
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	A Dale Robinson (Permanent Mission of Jamaica to the Org.) (Ob)
EC-VIII	Montevideo, Uruguay	
EC-IX	Ottawa, Canada	
EC-X	Caracas, Venezuela	
EC-XI	Mérida, Mexico	
EC- XII	San José, Costa Rica	
EC-XIII	Panama City, Panama	

CoP-IV	B. Aires, Argentina	
CoP-V	Arlington, USA	Antony Chen
		A Dale Robinson (Permanent Mission of Jamaica to the Org.)
CoP-VI	Ottawa, Canada	Sharon J. Miller (Jamaican High Commission)
CoP-VII	Mérida, Mexico	
CoP-VIII	Panama City, Panama	Dorothy Byfield (Scientific Research Council)

# **Paraguay**

EC-V	B. Aires, Argentina	Genaro Coronel (Universidad de Asunción) (ob)
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	
EC-VIII	Montevideo, Uruguay	
EC-IX	Ottawa, Canada	
EC-X	Caracas, Venezuela	
EC-XI	Mérida, Mexico	
EC- XII	San José, Costa Rica	
EC-XIII	Panama City, Panama	

CoP-IV	B. Aires, Argentina	
CoP-IV	B. Aires, Argentina	Genaro Coronel (Universidad de Asunción)
CoP-V	Arlington, USA	
CoP-VI	Ottawa, Canada	
CoP-VII	Mérida, Mexico	
CoP-VIII	Panama City, Panama	

# Peru

EC-V	B. Aires, Argentina	Pablo Lagos (Inst. Geofísico del Perú) (Ob)
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	
EC-VIII	Montevideo, Uruguay	
EC-IX	Ottawa, Canada	
EC-X	Caracas, Venezuela	
EC-XI	Mérida, Mexico	
EC- XII	San José, Costa Rica	
EC-XIII	Panama City, Panama	

CoP-IV	B. Aires, Argentina	Pablo Lagos (Inst. Geofísico del Perú)
		Jorge Zuzunaga
CoP-V	Arlington, USA	Pablo Lagos (Inst. Geofísico del Perú)
		Elvira Velasquez (Embassy)
CoP-VI	Ottawa, Canada	Pablo Lagos (Inst. Geofísico del Perú)
CoP-VII	Mérida, Mexico	
CoP-VIII	Panama City, Panama	José Antonio Bellina (Embassy)
		Alfredo Castro (Ministro de la Embajada del Perú en Panamá)

# **Not Member Countries**

# Bolivia

EC-V	B. Aires, Argentina	
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	
EC-VIII	Montevideo, Uruguay	
EC-IX	Ottawa, Canada	
EC-X	Caracas, Venezuela	
EC-XI	Mérida, Mexico	
EC- XII	San José, Costa Rica	
EC-XIII	Panama City, Panama	

CoP-IV	B. Aires, Argentina	
CoP-V	Arlington, USA	
CoP-VI	Ottawa, Canada	Javier Gonzales (Min. Desarrollo Sost. y Planificación) Aldo Ruiz (Embassy) (Ob)
CoP-VII	Mérida, Mexico	
CoP-VIII	Panama City, Panama	

# Guyana

EC-V	B. Aires, Argentina	
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	
EC-VIII	Montevideo, Uruguay	
EC-IX	Ottawa, Canada	
EC-X	Caracas, Venezuela	

EC-XI	Mérida, Mexico	
EC- XII	San José, Costa Rica	
EC-XIII	Panama City, Panama	
CoP-IV	B. Aires, Argentina	
CoP-V	Arlington, USA	
CoP-VI	Ottawa, Canada	Paulette E. Cornette (High Commission for Guyana) (Ob)
CoP-VII	Mérida, Mexico	
CoP-VIII	Panama City, Panama	

# Honduras

EC-V	B. Aires, Argentina	
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	
EC-VIII	Montevideo, Uruguay	
EC-IX	Ottawa, Canada	
EC-X	Caracas, Venezuela	
EC-XI	Mérida, Mexico	
EC- XII	San José, Costa Rica	
EC-XIII	Panama City, Panama	

CoP-IV	B. Aires, Argentina	
CoP-V	Arlington, USA	
CoP-VI	Ottawa, Canada	Rosalyn Martinez D. (Min. Rel. Ext.) (Ob)
CoP-VII	Mérida, Mexico	
CoP-VIII	Panama City, Panama	

# Nicaragua

EC-V	B. Aires, Argentina	
EC-VI	Panama City, Panama	
EC-VII	Arlington, USA	
EC-VIII	Montevideo, Uruguay	
EC-IX	Ottawa, Canada	
EC-X	Caracas, Venezuela	
EC-XI	Mérida, Mexico	
EC- XII	San José, Costa Rica	
EC-XIII	Panama City, Panama	

CoP-IV	B. Aires, Argentina	
CoP-V	Arlington, USA	
CoP-VI	Ottawa, Canada	Marina Stadthagen (Min Rel. Ext.) (Ob)
CoP-VII	Mérida, Mexico	
CoP-VIII	Panama City, Panama	

**ANNEX 8: Support of Institutional Meetings of the IAI** 

Executive Council (EC)	Date (dd/mm/yy)	Place		
EC- I	11/1/95 – 13/1/95	Washington DC, USA		
EC- II	24/4/95 - 25/4/95	Rio de Janeiro, Brazil		
EC- III	28/2/96 1/3/96	S. J. dos Campos, Brazil		
EC- IV	16/9/96 – 17/9/96	Havana, Cuba		
EC-V	9/6/97 – 11/6/97	Buenos Aires, Argentina		
EC-VI	19-20/11/97	Panama City, Panama		
EC-VII	04-05/06/98	Arlington, USA		
EC-VIII	23-24/11/98	Montevideo, Uruguay		
EC-IX	14-15/06/99	Ottawa, Canada		
EC-X	02-03/12/99	Caracas, Venezuela		
EC-XI	25-26/07/00	Merida, Mexico		
EC-XII	04-05/12/00	San José, C. Rica		
EC-XIII	17-18/07/01	Panama City, Panama		

Conference of the Parties (CoP)	Date (dd/mm/yy)	Place		
CoP- I	12/9/94 - 1/10/94	Mexico City, Mexico		
CoP- II	26/4/95 - 26/4/95	Rio de Janeiro, Brazil		
CoP- III	18/9/96 - 20/9/96	Havana, Cuba		
CoP- IV	12/6/97 - 13/6/97	Buenos Aires, Argentina		
CoP – V	04-05/06/98	Arlington, USA		
CoP – VI	17-18/06/99	Ottawa, Canada		
CoP – VII	27-28/07/00	Merida, Mexico		
CoP – VIII	19-20/07/01	Panama City, Panama		

Scientific Advisory Committee (SAC)	Date (dd/mm/yy)	Place
SAC- I	9/1/95 – 10/1/95	Washington DC, USA
SAC- II	22/4/95 23/4/95	S. J. Campos, Brazil
SAC- III	5/10/95	Montevideo, Uruguay
SAC- IV	17/1/96	Washington DC, USA
SAC-V	6/5/96 - 7/5/96	Ensenada, Mexico
SAC-VI	8/8/96 – 9/8/96	S. J. dos Campos, Brazil
SAC-VII	8/5/97 - 9/5/97	Ottawa, Canada
SAC-VIII	09-10/10/97	Miami, USA
SAC-IX	14-16/04/98	Santiago, Chile
SAC-X	26-27/10/98	Miami, USA
SAC-XI	19-20/04/99	Lima, Peru
SAC-XII	18-19/11/99	Tucson, USA
SAC-XIII	10-11/05/00	Miami, USA
SAC-XIV	27-28/11/00	Arlington, USA
SAC-XV	23-24/05/01	S. J. dos Campos, Brazil

# ANNEX 9: PI's and CoPI's of IAI Programs

# **Distribution by Countries**

COUNTRIES	PI's	CoPI's	TOTAL		
Argentina	9	49	58		
Brazil	6	53	59		
Canada	6	24	30		
Chile	4	34	38		
Colombia	0	10	10		
Costa Rica	0	13	13		
Cuba	1	6	7		
Ecuador	1	14	15		
Jamaica	0	3	3		
Mexico	6	38	44		
Panama	1	12	13		
Paraguay	0	4	4		
Peru	3	11	14		
Uruguay	3	14	17		
USA	32	82	114		
Venezuela	1	8	9		
Japan	0	1	1		
South Africa	0	1	1		
Germany	0	1	1		
France	0	1	1		
Bolivia	0	6	6		
Australia	0	1	1		
TOTAL	73	386	459		

TOTAL PI's: 73 TOTAL CoPI's: 386

**TOTAL INVESTIGATORS: 459** 

*Up Date – March 14, 2001* 

# **Distribution by Countries / Project**

COUNTRIES	SG		ISP 1, 2, 3		CRN		PESCA			TOTAL	
COUNTRIES	PI	CoPI	PI	CoPI	PI	CoPI	PI	CoPI	-	PI	CoPI
Argentina	4	27	5	21	2	24	2	0	<del>-</del>	13	72
Brazil	3	34	5	26	2	20	1	0	_	11	80
Canada	6	14	1	2	2	10	1	1	_	10	27
Chile	3	20	1	6	0	13	0	1	_	4	40
Colombia	0	3	0	4	0	8	0	0	_	0	15
Costa Rica	0	5	0	7	0	5	0	0	_	0	17
Cuba	0	1	1	2	0	0	1	3	_	2	6
Ecuador	0	6	0	4	1	8	1	2	_	2	20
Jamaica	0	0	0	0	0	1	0	5	_	0	6
Mexico	3	15	4	21	2	11	2	0	_	11	47
Panama	0	3	1	6	0	8	0	0	_	1	17
Paraguay	0	2	0	0	0	2	0	0	_	0	4
Peru	1	8	1	3	1	3	1	3	_	4	17
Uruguay	1	4	2	7	0	4	0	4	_	3	19
USA	15	40	18	40	3	35	1	0	_	37	115
Venezuela	0	1	0	5	1	3	1	2	_	2	11
									_		
Japan	0	1	0	0	0	0	0	0	-	0	1
South Africa	0	1	0	0	0	0	0	0	_	0	1
Germany	0	1	0	0	0	0	0	0	_	0	1
France	0	0	0	1	0	0	0	0	_	0	1
Bolivia	0	6	0	0	0	2	0	0	<del>-</del>	0	8
Australia	0	1	0	0	0	0	0	0	-	0	1
									-		
TOTAL	36	193	39	155	14	157	11	21	-	100	526

*Up Date – March 14, 2001* 

### **ANNEX 10: Other Meetings with IAI participation**

Each year the IAI supports a number of meetings—workshops, conferences, and seminars—designed to promote new multinational cooperation, develop scientific networks, exchange information, and build capacity in the Americas. The list below includes meetings that were organized or co-organized by the IAI directly, and other events, which were organized by other institutions and had the partic ipation of supported IAI scientists.

- 2001 Open Meeting of the Human Dimensions Community, October 6-8, 2001, Rio de Janeiro, Brazil (to be held)
- IGBP Global Change Open Science Conference, July 10-13, 2001, Amsterdam, the Netherlands
- 1st Latin American School in Ocean and Climate Modeling, October 16-27, 2000, Dichato, Chile
- Climate Outlook Fora-Pretoria Review Meeting, October, 2000, Pretoria, South Africa
- International Human Dimensions Programme (IHDP) Workshop, September 10-19, 2000, Bonn, Germany
- Long Term Ecological Research (LTER) Network meeting-Human Dimensions Issues in the Coastal Zone, August 4-5 2000, Snowbird, UT, USA
- Long-Term Ecological Research, August 2-4, 2000, Snowmass CO, USA
- Symposium on Impacts of Climatic Variations on Water Resources: A Focus on Border Regions, July 16-19, 2000, Santa Barbara, CA, USA
- Soils and Land-Use Change Field Course, June 29- July14, 2000, Rondônia, Brazil
- LBA Open Science Meeting, June 26–30, 2000, Belém, Brazil
- Hydrology Field Course, June 1–14, 2000, Rancho Grande, Brazil
- First Meeting of the Principal Investigators of the IAI Collaborative Research Network (CRN) Program, Miami, FL, USA, May 8-9, 2000
- Fourth Open Science Meeting on Land-Ocean Interactions in the Coastal Zone (LOICZ), November 15–18, 1999, Baia Blanca, Argentina
- Pre-Meeting on Latin Basins, November 11–13, 1999, Baia Blanca, Argentina
- Global Change System for Analysis, Research and Training (START) Workshop on Climate Variability and Agricultural Production (CLIMAG), September 27–29, 1999, Geneva, Switzerland

- Downscaling Workshop, September, 1999, Petrópolis, RJ, Brazil
- 1999 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, June 24–26, 1999, Kanagawa, Japan
- Science Forum—Building Collaborative Global Change Research in the Americas, June 16, 1999, Ottawa, Canada. This forum was organized by Environment Canada/Government of Canada on behalf of the IAI
- International Conference on the Impacts of Population and Markets on the Sustainability of Ocean and Coastal Resources, June 3–4, 1999, Seattle, WA, USA
- Seminar on the Impacts of the 1997-1998 El Niño/Southern Oscillation in the Southern South America Region—V Forum on Climate Prediction for Southern South America, March 24-26, 1999, Mariano Roque Alonso, Paraguay. This seminar was organized by the Southern Cone Rural Association
- Scientific Committee Panel on Climate Variability and Predictability (CLIVAR)/
  Variability of the American Monsoon System (VAMOS), March 15-18, 1999,
  Buenos Aires, Argentina. This panel was organized by the University of Buenos
  Aires and the Secretary of Science and Technology of Argentina
- IAI Science Symposium—10th Symposium on Global Change Studies. American Meteorological Society (AMS), 79th American Meteorological Society Annual Meeting, January 10-15, 1999, Dallas, Texa s, USA
- Industrial Transformation Workshop for Latin America, November 12-13, 1998, São José dos Campos, Brazil. Co-sponsors included the U.S. National Science Foundation, the Brazilian Academy of Sciences, the Industrial Transformation Project of the International Human Dimensions Programme (IHDP), and the Institute for Environmental Studies/Vrije Universiteit of the Netherlands
- Planning Meeting—The Impacts of Climate Change on Agriculture in Southern South America, September, 29-30, 1998, São José dos Campos, Brazil. Co-sponsors included the Cooperative Program for Agricultural Research of the Southern Cone (PROCISUR), Yale University, and the University of São Paulo
- Planning Committee Meeting for the Pan-American Climate Information System (PACIS), August 24-26, 1998, San José, Costa Rica. Organizers were the U.S. Office of Foreign Disaster Assistance (USAID/OFDA), the U.S. National Oceanic and Atmospheric Administration/Office of Global Programs (NOAA/OGP), the World Meteorological Organization (WMO), the International Research Institute for Climate Prediction (IRI), the Pan-American Health Organization (PAHO), and the National Meteorological Institute of Costa Rica
- Second Southeastern South America Regional Climate Outlook Forum—Climate
  Forecast for Southeastern South America: Outlook for July 1998-September 1998,
  June 16-17, 1998, Foz do Iguaçu, Brazil. This forum was organized and cosponsored by the Sistema Meteorológico do Paraná (SIMEPAR), Itaipu Binacional,
  and the International Research Institute for Climate Prediction (IRI)

- IAI Science Forum: Global Change in the Americas, June 3, 1998, Arlington, VA, USA—the U.S. National Science Foundation was a co-sponsor
- Climate Outlook Forum and Natural Disaster Preparedness Discussion, May 21–22, 1998, Kingston, Jamaica—co-sponsors included IRI, NOAA/OGP, University of the West Indies, and USAID/OFDA
- Climate Outlook Forum for the Mesoamericas, May 18–19, 1998, Panama City,
   Panama—co-sponsors included Centro del Agua del Trópico Húmedo para América
   Latina y el Caribe (Water Center for the Humid Tropics of Latin America and the
   Caribbean), IRI, NOAA/OGP, USAID/OFDA, and WMO
- Understanding Stratospheric Ozone and UV-Radiation: Past Accomplishments and Future Opportunities, March 9–11, 1998, Buenos Aires, Argentina—co-sponsors included the Argentinean Secretariat for Science and Technology and the U.S. National Aeronautics and Space Administration (NASA)
- IAI-PAGES Pole-Equator-Pole Transect 1 (PEP-I) Workshop, March 1998, Mérida, Ve nezuela
- Northeast South America Climate Outlook Forum, Applications Workshop and Conference, January 19–21, 1998, Fortaleza, Brazil—co-sponsors included Fundação Cearense de Meteorologia e Recursos Hídricos (Meteorology and Water Resources Ceará Foundation), INPE, IRI, NOAA/OGP, and WMO
- Southeast South America Climate Outlook Forum, Applications Workshop and Conference, November 9–12, 1997, Montevideo, Uruguay—co-sponsors included the Rural Association of Uruguay (ARU), IRI, NOAA/OGP, and WMO
- Pacific South America Climate Outlook Forum, Applications Workshop and Conference, October 28–30, 1997, Lima, Peru—co-sponsors included Instituto Geofisico del Peru (Peruvian Geophysics Institute), Instituto Nacional de Pesca (National Institute of Fisheries) of Peru, IRI, NOAA/OGP, Sea-Land Advisory Services Inc., and WMO
- Conference/Workshop on Integration of Caribbean Countries to the IAI, July 9-10, 1997, Mayaguez, Puerto Rico—co-sponsors included the U.S. National Science Foundation and CoHemis from the University of Puerto Rico
- IAI Principal Investigator Meeting, February 1-2, 1997, Long Beach, CA, U.S.A
- Reduction of Climate-Related Vulnerability in Mesoamerica, November 14-15,1996, Washington, D.C., U.S.A. (sponsored jointly by the IAI and the National Oceanographic and Atmospheric Administration [NOAA])
- IAI-ICSU Education and Global Change Workshop, May 20-26, 1996, Mendoza, Argentina

- IAI-Country Studies Program Vulnerability and Adaptation Workshop, April 26-28, 1996, Montevideo, Uruguay
- Conference on Integration of Central American Countries to the IAI, April 9-10, 1996, San José, Costa Rica
- IAI-NCAR Climate Change Modeling Workshop Part 2, February 26 March 8, 1996, Boulder, CO, USA
- IAI-GCOS Workshop, December 5-8, 1995, Vina del Mar, Chile
- IAI-START-WMO Atmospheric Chemistry Course Part 1, October 30-November 10, 1995, Buenos Aires, Argentina
- Workshop on Global Change Research in the Americas, August 28-30, 1995, Belém, Brazil
- IAI-Sigma Xi Networks and Remote Learning Workshop, July 26-28, 1995, Durham, NC, USA
- IAI-AMIGO Workshop, June 28-30, 1995, Stanford, CA, USA
- IAI-IGBP Workshop on Past Global Changes (PAGES), March 23-24, 1995, Mendoza, Argentina
- IAI-GCTE Workshop on Global Change and Terrestrial Ecosystems (GCTE) in Latin America, March 13-14, 1995, Buenos Aires, Argentina
- IAI-NCAR Climate Change Modeling Workshop Part 1, February 6-10, 1995, Boulder, CO, USA
- IAI-UNESCO Demonstration Workshop : GLOBESIGHT, September 19-23, 1994, Santiago, Chile
- The Study of the Impacts of Climate Change on Biodiversity, August 9-12, 1994, Guadalajara, Mexico
- The Comparative Study of Temperate Terrestrial Ecosystems, July 26-29, 1994, Durham, N.C., U.S.A.
- ENSO and Interannual Climate Variability, July 12-15, 1994, Lima, Peru
- Tropical Ecosystems and Biogeochemical Cycles April 47, 1994, São José dos Campos, Brazil
- Ocean/Land/Atmosphere Interactions in the Inter-Tropical Americas, February 7-10, 1994, Panama City, Panama
- High Latitude Processes, December 15-17, 1993, Buenos Aires, Argentina

- Comparative Studies of Oceanic Coastal and Estuarine Processes in the Temperate Zone, August 2-6, 1993, Montevideo, Uruguay
- IAI-HDP Workshop on Human Dimensions of Global Environmental Change, March 28-31, 1993, Taxco, Mexico
- Global Change Impacts on Latin America and the Caribbean, March 1-5, 1993, San Jose, Costa Rica
- ENSO and Seasonal to Interannual Variability: Socioeconomic Impacts,
   Forecasting, and Applications to the Decision-making Process, September 9-16,
   1992, Fortaleza, Brazil

Observation 1: This document was produced with information provided by the IAI staff (Director, former Scientific Officer, Communication and Training and Education Officer, Project Manager, program officer from NSF and historical records of the IAI).

#### **ANNEX 11: IAI Training and education activities**

A primary goal of the IAI is to augment scientific capacity in the Americas, as a means of better understanding the natural and social processes that drive large-scale environmental changes. Training and Education (T&E) is an obvious mechanism for doing this. In addition, T&E is crucial for developing effective networks of scientists and scientific institutions working collaboratively on global-change issues of regional importance. To date, the IAI has provided training and education opportunities to regional scientists through a variety of mechanisms, such as scholarships, fellowships, training workshops, short courses, etc.

The IAI, together with the National Center for Atmospheric Research (NCAR), the University Corporation for Atmospheric Research (UCAR), and the US National Science Foundation (NSF), organized a 2-week Workshop on Climate Modeling (held from February 26 to March 8, 1996, at NCAR in Boulder, Colorado). Twenty participants from ten countries attended this training workshop, which was focused on three main themes: (1) the physical theory behind climate studies, (2) the current state of numerical methods in modeling climate, and (3) the use of data, models, and visualization tools available at NCAR. A sub-theme, covered later in the workshop, was the current state of regional climate models and their relationship to global climate models. During the computer laboratory segment of the workshop, each participant had access to a Sun SPARC 10 workstation on which to complete exercises related to the lectures; they were also given instructions on downloading software from NCAR over the Internet for use on PC equipment at their home institutions. In addition, participants were offered some limited processing time on an NCAR supercomputer that could be used remotely once they returned to their home institutions. This experiment has allowed IAI and NCAR to assess the feasibility of running more extensive experiments on supercomputing facilities from remote locations.

Year	Number of Participants	Participating Countries	Theme
1996	20	10	Climate Modeling

• From 1995 to 1998, the IAI/GEF/WMO/UNDP's regional project, "Cooperative Activities to Support Global Change Research in IAI Countries," trained approximately 250 students from 130 institutions in Geographical Information System (GIS) techniques, with courses being offered in each of the project's member countries. In addition, 34 students from 15 countries were trained for 2 weeks in the use of METVIEW software; and 31 short-term fellowships (up to 6 months) were provided to students from 11 IAI member countries to study IAI Science Agenda themes in universities and/or research institutions in the region.

Voor	NT 1 C	Doutisinstins	
<u>Year</u>	Number of Participants	Participating Countries	Theme
1995-1998	250	Argentina, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Jamaica, Mexico, Panama, Paraguay, Peru, Uruguay, Venezuela and USA	Geographical Information Systems (GIS)
1995-1998	34	Argentina, Bolivia, Brazil, Chile, Costa Rica, Cuba, Dominican Republic, Ecuador, Jamaica, Mexico, Pan ama, Paraguay, Peru, Uruguay and Venezuela	METVIEW software
1995-1998	31	Argentina, Brazil, Colombia, Costa Rica, Cuba, Ecuador, Mexico, Panama, Peru, Uruguay and Venezuela	Themes of the IAI Science Agenda

• Through a Memorandum of Understanding (MoU) signed with the Anthropological Center for Training and Research on Global Environmental Change (ACT) of Indiana University, the IAI has co-sponsored the participation of 2 Latin American scientists to the ACT/Indiana University Summer Institute on Environmental Monitoring and Assessment Applications in the Americas (held at Indiana University, Bloomington, Indiana) for the period 1998–2003. The purpose of the Summer Institute is to share knowledge within the scholarly community about the human dimensions of global change research and how interdisciplinary research programs can be conducted. Participants included scientists from several countries who are already established research scholars, as well as younger scholars just starting their research on these topics.

Year	Number of Participants	<b>Participating Countries</b>	Theme
1998	2	Brazil, Mexico	Human Dimensions
2000	2	Argentina, Chile	Human Dimensions
2001	2	Ecuador, Peru	Human Dimensions

• The IAI and the University of Miami (UM), supported by the U. S. National Science Foundation, together have organized a Summer Institute on Interdisciplinary Science in the Americas for the period 1999–2001. This new initiative is specifically intended to strengthen communication and collaboration among natural and social scientists from the Americas.

Year	Number of	<u>Participating</u>	Theme
1999: First IAI/UM	Participants 20	Country 12 Participants	Interactions between
Summer Institute	20	from Argentina, Brazil, Canada, Chile, Costa Rica, Cuba, Jamaica, Mexico, Paraguay, The United States, Uruguay and Venezuela	Seasonal to Inter-annual Climate Variability and Human Systems
2000: Second IAI/UM Summer Institute	20	11 Participants from Argentina, Brazil, Canada, Colombia, Cuba, Dominican Republic, Jamaica, Mexico, Peru, The United States and Uruguay	Environmental and social implications of land-use and land-cover change in the Americas
2001: Third IAI/UM Summer Institute	participants expected + 1 observer from OAS	14 Participants from Argentina, Brazil, Canada, Chile, Colombia, Ecuador, Jamaica, Mexico, Panama, Paraguay, Peru, Uruguay, USA and Venezuela	Integrated Management of Water Resources in the Americas: Challenges and Emerging Issues

Regional Training Course on Climate Variability and Extreme Events for the Mesoamericas was held from February 10-22, 2001 in San Jose, Costa Rica. This initiative was a joint effort of the U.S. National Oceanic and Atmospheric Administration/Office of Global Programs (NOAA/OGP), the U.S. National Science Foundation (NSF). The U.S. Office for Foreign Disaster Assistance (USAID/OFDALAC), The World Meteorological Organization (WMO), The International Research Institute for Climate Prediction (IRI), The Regional Committee of Water Resources from Central America (CRRH), the University of Costa Rica and the IAI. The course draw the participation of professionals in the areas of meteorology, climatology, hydrology, agriculture, water resources management, health and disaster prevention and mitigation. The general objectives of the course were: to strengthen the regional capacity to address climate variability by fostering the practical use and application of climate forecasts in policy planning in agriculture, water resources, public health and disaster prevention; and to promote the exchange of knowledge and experiences among scientists and users of climate information.

Year	Number of Participants	<b>Participating Countries</b>	Theme
2001	28	Belize, Colombia, Costa	Climate Variability
		Rica, El Salvador,	and Extreme Events
		Guatemala, Nicaragua,	
		Panama, Honduras	

• One of the most important T&E activities supported by the IAI, begun in 1996, is the granting of fellowships to undergraduate, graduate, and post-graduate scientists associated with formal IAI science programs. The recipients of these grants not only are provided with financial resources to conduct their studies but also benefit from exposure to the scientific environment and from opportunities to link their degree studies with ongoing research activities—field trips, laboratory experiments, comparative studies in several countries of the region, and exchange of scientific data and knowledge with other investigators through the IAI network.

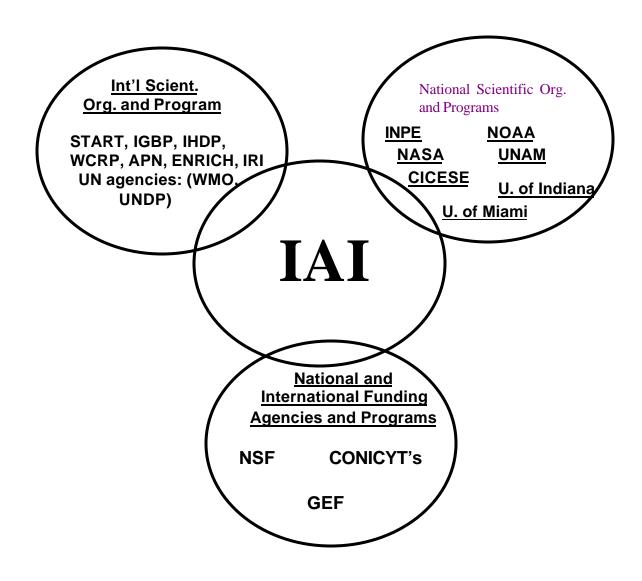
Program/Activity	Degree Level	Number of Students Supported	Theme
Initial Science Program	Bachelor Master Ph.D.	22 55 15	Themes of the IAI Science Agenda
Collaborative Research Network	Bachelor Master Ph.D.	7 5 17	Themes of the IAI Science Agenda

Observation 1: This document does not include specific T&E activities of IAI supported projects (ISP, CRN, PESCA, etc), such as projects training workshops and others. Such information is provided to the IAI Scientific Officer and/or Project Manager in each project progress report.

Observation 2: This document only includes information on IAI T&E activities that the Communications and Training and Education Officer manages directly or receives information from other members of the IAI staff (Director, former Scientific Officer, Project Manager, etc).

# ANNEX 12: List of the Country Institutions linked with the IAI

Associates of the Institute
CATHALAC
CIESIN
Joint Funding Research Agreement (JFRA)
Agencia Nacional de Promoción Científica y Tecnológica (Argentina)
CATHALAC
CITMA (Cuba)
CNPq (Brasil)
CONACYT (Bolivia)
CONACYT (Mexico)
CONICIT (Venezuela)
CONICYT (Chile)
Indiana University – ACT
INPE-DIS
INTA (Argentina)
Universidad de la República – Facultad de Ciencias (Uruguay)
WCRP
YALE



# ANNEX 14 - National Institutions/Organizations that represent/have represented (hr) the IAI member countries

ARGENTINA	Comisión Nacional para el Cambio Global (Secretaría de Ciencia y
	Tecnología)
BRAZIL	Instituto Nacional de Pesquisas Espaciais, INPE (Ministério de Ciência e
	Tecnologia)
	Agência Espacial Brasileira
CANADA	National Hidrology Research Institute
	Environment Canada
CHILE	Comisión Nacional de Investigación Científica y Tecnológica,     CONICYT
COLOMBIA	Instituto de Hidrologia, Meteorología y Estudios Ambientales, IDEAM
COSTA RICA	Instituto Meteorológico Nacional, IMN (Ministerio de Ambiente y
	Energia, MINAE
CUBA	Ministerio de Ciencia, Tecnología y Medio Ambiente
DOMINICAN REPUBLIC	Instituto Nacional de Protección Ambiental, INPRA
ECUADOR	Secretaria Nacional de Ciencia y Tecnologia, SENACYT
GUATEMALA	Comisión Nacional del Medio Ambiente, CONAMA
JAMAICA	University of West Indies at Mona
MEXICO	Instituto Nacional de Ecología, INE (Secretaría de Medio Ambiente, Recursos)
	Naturales y Pesca)
PANAMA	Instituto Nacional de Recursos Naturales Renovables, INRENARE (hr)
	Autoridad Nacional del Ambiente, ANAM
PARAGUAY	Facultad de Ciencias Exáctas y Naturales, FACEN (Universidad de
	Asunción, UNA)
PERU	Instituto Geofísico del Perú, IGP
URUGUAY	Comisión Nacional para el Cambio Global, CNCG
USA	National Aeronautics and Space Administration, NASA (hr)
	National Science Foundation, NSF
	National Oceanic and Atmospheric Administration, NOAA
VENEZUELA	Universidad Simón Bolivar (hr)
	Consejo Nacional de Investigaciones Científicas y Tecnológicas
	(CONICIT)
	Ministerio del Ambiente y de los Recursos Naturales Renovables,
	MARNR

#### **ANNEX 15 - National Institutional visits – Missions in IAI Countries**

#### Report of the Director to the EC-VII and CoP-V (Arlington, USA) – June 1998

In order to advance on institutional, programmatic, and financial aspects of IAI implementation, visits were made to various IAI countries by Robert Corell, Armando Rabuffetti, and Bradford Wilcox. Detailed information on the EC Chair's and Scientific Officer's visits is given in their respective reports. Here a summary of the IAI Director visits is given:

\* Costa Rica (February 5-6): Meetings were held with the Minister of Energy and Environment (René Castro Salazar) and with the Vice-Minister of Science and Technology (Eduardo Sibaja).

A key issue discussed with both governmental officials and with the IAI representative (Patricia Ramirez) was the need at country level to ensure a broad institutional participation in IAI activities. The idea of appointing a National Committee on Global Change was discussed and enthusiastically supported by the Vice-Minister Sibaja.

\* <u>Uruguay (April 16-17)</u>: A meeting was held with the Secretary of the President of the Republic. Following the resignation of Federico Garcia Brum as an IAI representative, the need of a continuation of effective country participation at the IAI level was strongly emphasized to the Secretary.

The actual and potential benefits for the country being part of the IAI were listed (information, training, equipment, direct financial support for research). Also, the benefits for the IAI and the whole region having a strong participation of the scientific community and decision makers of small countries, like Uruguay, were highlighted.

- \* Mexico (March 17-20): Last year CONACYT (Mexico) approved complementary funding for 3 research proposals awarded through the IAI Initial Science Program (ISP and II). Following this stimulating action, a meeting was held at CONACYT (Mexico) between the CONACYT Director of International Cooperation (Effrain Acenes), and the IAI Director, with the purpose of institutionalizing future relations between both organizations. It was decided to work on a letter of agreement, which allows: 1) to identify scientific areas of mutual interest, and 2) to identify mechanisms to review and to complementary support research projects.
- \* During the period between May 12 and May 17, Robert Corell visited <u>Venezuela</u>, <u>Chile</u>, and <u>Brazil</u> and met with IAI representatives, Principal Investigators of IAI projects, and national funding agencies. Brad Wilcox, in turn, conducted a 10-day travel over Peru, Bolivia, Ecuador, Colombia, and Venezuela visiting scientific institutions conducting global change activities, and seeking for possibilities of future coordination among them. He is traveling extensively within <u>Brazil</u>, especially in the Amazon area, in order to increase links of IAI with research institutions of the region.

## Report of the Director to the EC-VIII (Montevideo, Uruguay) – November 1998

a) The Director visited Dominican Republic between August 26 and 29. It was with great pleasure we could perceive the strong commitment of the National Planning

Office to promote and to coordinate IAI activities within the country, particularly among the university and technology research organizations.

The work that has been conducted during 1997-1998 by the National Resources Division of the Ministry of Agriculture in the country using the GIS SPRING software to update vegetation maps and land use needs to be highlighted.

b) With the permanent support and coordination given by the IAI representative, Patricia Ramirez, the Director visited the University of Costa Rica on August 24, 1998, and met the Vice-President for Research (Yamileth Gonzalez) and the Director of the Dpt. for Atmospheric and Oceanographic Sciences (Walter Fernandez). The possibility to develop an agreement between the University, the Regional WMO Center, and IAI for training activities was discussed and a draft proposal of agreement being sent to the University's authorities.

#### Report of the Director to the EC-IX and CoP-VI (Ottawa, Canada) – June 1999

The EC Chair and the IAI Director have visited IAI member countries with the main purpose of developing and/or increasing institutional arrangements between IAI, the country representatives' entity, and other national scientific and/or technological agencies.

<u>Argentina</u>: The EC Chair and the Director met with the President of *the Agency for the Promotion of Science and Technology* in February 99 to adjust implementation steps on the US\$ 800,000 support given by Argentina to the IAI CRN program as well as to define future joint activities in the region for specific themes of IAI Science Agenda.

<u>Paraguay</u>: A planned visit of the EC Chair to Paraguay in order to seek for increased involvement of scientists and institutions of that country in IAI activities was scheduled for the end of March. However, and because of the political troublesome which happened during that period in Asunción, the visit was rescheduled for the second semester of the year.

<u>Mexico</u>: The Director visited CONACYT (Mexico) on April 16 and met with Dr. Sylvia Ortega (Director of International Cooperation) to discuss mechanisms through which CONACYT (Mexico) could partially support projects involving the participation of Mexican scientists. Dr. Carlos Gay is now following up actions on this matter.

<u>Peru</u>: Meetings between the Director and authorities of CONCYTEC (*Consejo Nacional de Ciencia y Tecnologia*) and CONAMA (*Consejo Nacional del Medio Ambiente*) were held on April 20, while the Director was in Lima participating in the 11<sup>th</sup> SAC meeting. A brief presentation of what IAI is doing in the region and particularly in Peru was made. A MOU with CONCYTEC will probably be signed in the coming months.

Through arrangements made by Ronald Woodman (Peruvian SAC member) the Director had informal meetings with 2 senators (Carlos H. Leon and Luis Campos Baca) with whom the issue of voluntary country contribution mechanism and the importance of it to sustain IAI Administrative actions was highlighted.

<u>Costa Rica</u>: The Director met with the new IAI representative (Eladio Zárate) in San José on April 22. The IAI activities in Costa Rica and the achievements already accomplished by Costa Rican scientists and institutions under IAI projects were analyzed. Possibilities of higher institutional involvement of Costa Rican universities in addition to their present scientific participation within IAI were discussed and strongly encouraged.

### Report of the Director to the EC-X (Caracas, Venezuela) – December 1999

<u>Argentina</u>: The EC Chair, the IAI Director, and the CRN Manager have had another meeting with the staff of the *Agency for the Promotion of Science and Technology* to further adjust the implementation of the support given by Argentina to the CRN program.

Results: A complementary agreement to the Framework Agreement signed in Arlington in June 1998 has been signed: the projects to be co funded by the IAI and the Agency have been identified as well as the contributions from both the Agency and the IAI in each project. Also, the administrative procedures to the management of the projects have been agreed taking into consideration whether the project involved Argentineans PIs or Co-PIs (see annex 1).

<u>Venezuela</u>: The EC Chair and the IAI Director visited Venezuela on September 05-07, 1999. Meetings were held with the National Council for Science and Technology (CONICIT) and visits were made to the University of Simon Bolivar, The Universidad Central de Venezuela, the IVIC (Venezuelan Institute for Scientific Research), and the Ministry for Environment and Natural Resources. A presentation on IAI's institutional goals and programmatic and scientific activities was made to an audience composed of scientists and managers of research and educational institutions. Lelys Bravo and Abraham Salcedo permanently supported the entire visit.

Results: 1) A Framework Agreement between the IAI and the CONICIT has been signed to further advance in developing mechanisms for joint support of global change activities (see annex 2); 2) CONICIT's interest to be more associated with the IAI in the future has led this organization to host the X EC meeting; 3) Facilities to conduct workshops, conferences or short-training courses have been offered to the IAI from both the authorities of the IVIC and the Universidad Simon Bolivar.

#### Report of the Director to the EC-XI and CoP-VII (Mérida, Mexico) – July 2000

The EC Chair (Carlos Ereño) and the IAI Director visited member countries with the main purpose of developing and/or increasing institutional arrangements between the IAI, the country representatives' entities, and other national scientific and/or technological agencies. In some cases, they had the opportunity to meet new IAI representatives and/or other national authorities from institutions related to IAI activities (July 1999-June 2000).

Table 2 summarizes the main activities and results of these visits.

Table 2: IAI countries visited by the EC Chair and/or the Director, meetings, activities, and results.

Country	IAI personnel	Meetings	Main Activities and Results
Venezuela (Sept. 99)	EC Chair Director	<ul> <li>CONICYT</li> <li>Min. of Environ. and Nat. Res.</li> <li>IVIC</li> <li>Univ. Simon Bolivar</li> <li>Univ. Central</li> </ul>	<ul> <li>MOU between IAI and CONICIT.</li> <li>Follow-up on the stage of voluntary contribution.</li> <li>Facilities at IVIC offered to host IAI workshops, conferences, and short courses.</li> </ul>
USA (March 00)	Director	NSF-Geosciences	<ul> <li>Met NSF Assistant Director for Geosciences, Dr. M. Leinen.</li> <li>General discussion on IAI achievements and challenges.</li> <li>NSF grants for IAI programmatic activities.</li> </ul>
		• NOAA (OGP)	<ul> <li>Follow -up on IAI-NOAA         <ul> <li>(OGP) collaborative</li> <li>activities (Climate Outlook</li> <li>Forum, training courses).</li> </ul> </li> <li>Potential IAI-APN-NOAA         <ul> <li>(OGP) partnerships.</li> </ul> </li> </ul>
Panama March 00	Director	<ul> <li>Ministry of Foreign Affairs</li> <li>CATHALAC</li> <li>ANAM</li> <li>SENACYT</li> <li>City of Knowledge</li> </ul>	<ul> <li>Met IAI representative, R.         Anguizola.</li> <li>Discussion on possibilities of         CATHALAC becoming an         affiliated institution.</li> <li>Facilities in the City of         Knowledge offered to host         IAI workshops, conferences,         and short courses.</li> </ul>
Costa Rica	Director	Vice-Minister of Environ. and Nat. Resources	<ul> <li>Follow-up on the stage of voluntary contribution.</li> <li>Procedures to ratify CoP-VI Resolution # 7.</li> </ul>
(March 00)		<ul> <li>Regional Committee of Hydrological Resources / University of Costa Rica</li> </ul>	<ul> <li>Planning on a training course for Central America on Climate Var. and Extreme Events.</li> </ul>
Argentina (May 00)	EC Chair Director	Secretary for Science and Technology	<ul> <li>Follow-up on the Agreement between IAI and the Agency for Promotion of Science and Technology.</li> <li>Government commitment to continue to support IAI.</li> </ul>
Brazil (June 00)	Director	Executive Secretary for Science and Technology	• Follow-up on the stage of CNPq fellowships awards to IAI member countries.

Paraguay (June 00)	EC Chair	<ul> <li>IAI representative</li> <li>Ministry of Foreign Affairs (International Organization Division)</li> </ul>	Procedure to obtain the voluntary contributions from Paraguay (already available).
Uruguay (June 00)	Director	Ministry of Foreign Affairs	<ul> <li>Follow-up on the stage of voluntary contribution.</li> <li>Procedures to ratify CoP-VI Resolution # 7.</li> <li>Implementation of local IAI-DIS node.</li> </ul>

#### Report of the Director to the EC-XII (San José, Costa Rica) – December 2000

Director's remark

The Director would like to emphasize that (as already mentioned in previous reports), despite the efforts made by the IAI Directorate to permanently keep IAI representatives updated on IAI activities, the communication with member countries representatives is very variable, ranging from very strong and continuous to weak and discontinuous. For example, whereas some countries proceeded immediately to communicate the IAI about any changes in their official counterpart and representatives (like Panama, Costa Rica, Canada etc), there are other situations in which this communication is not made. Thus, the IAI Directorate become inefficient in keeping the necessary institutional linkage with its member countries, reducing also their possibilities to further involve in IAI activities.

The EC Chair and the IAI Director have already discussed and taken immediate actions in this matter. Antônio MacDowell (EC Chair) will be contacting the IAI member countries embassies in Brazil to help reenergizing its institutional connections. This action needs to be viewed as part of a broader strategy that, in the Director's opinion, has to be urgently adopted and which is to schedule an upper level meeting of member countries to restore full institutional participation in the IAI EC/CoP and to also advance on countries commitment in continuing to support IAI programs and activities.

#### Report of the Director to the EC-XIII and CoP-VIII (Panama) – July 2001

Missions to and Communications with the IAI Member Countries

The Director visited and/or contacted several IAI member countries during this period in order to: a) revitalize the participation of some countries that had shown decrease in their institutional linkage to IAI during the past years, b) request the delayed payments of due voluntary contributions, c) develop working agreements and/or obtain additional support for programmatic IAI activities. Because of the very diverse nature of IAI representations in each country, the approaches varied in each case.

Country	Objective(s)	Actions	Results
Mexico	<ul> <li>To strengthen its institutional participation;</li> <li>To advance on payments of due voluntary contributions;</li> <li>To develop a Joint</li> </ul>	Contact with high Government officials (José Sarukan) and scientists linked with the IAI (Ruben Lara)	Pending visit of IAI     authorities to Mexico     to meet with the     SEMARNAP     Secretary and the     President of     CONACYT;
Venezuela	Funding and Resource Agreement (JFRA). To strengthen its institutional participation and implement the MOU already signed in September 1999.	Contact with the President of CONICIT (Danilo Lopez).	• A JFRA model sent to Mexico.  The CONICIT President is studying ways to implement a JFRA similar to the one signed by Argentina in 1998.
Canada	<ul> <li>To meet with the new IAI representative (Denis Everell);</li> <li>To search for increased support of Canada to the IAI program/projects budget.</li> </ul>	Meeting with Michel Bêland (Environment Canada, Montreal) and a briefing on IAI activities and needs.	A briefing on IAI activities and needs to be made to D. Everell.
USA (NOAA/OGP)	<ul> <li>To expand the funding basis of the next IAI announcement of opportunity;</li> <li>To obtain support to conduct a synthesis analysis of results emerging from climate variability - ISP projects.</li> </ul>	Meeting with Lisa Farrow, Jonathan Pundsack, and Jim Buizer.	NOAA/OGP to consider a support to enlarge the funding basis of the next IAI announcement of opportunity.
Chile	To revitalize its participation at institutional level and update due voluntary contributions.	Institutional communications sent to various CONICIT officials.	No results yet.
Paraguay	To delineate mechanisms allowing the payment of due voluntary contributions.	Work with the University of Asunción to have part of the total due payment made to the IAI.	The University of Asunció n has authorized the School of Science to proceed with the payments (2 years) of the Paraguay's voluntary contribution (June 2001).

The IAI Director took advantage of the his participation in the <u>Meeting of Environment</u> <u>Ministers of the Americas</u> held in Montreal (March 29-30, 2001), to have brief meetings

with several high level authorities of Environmental and National Resources Divisions of various countries. They were:

- Ministry of Environment of Paraguay, Juan F. Facetti
- Secretary of Environment and Natural Resources of the Dominican Republic, Frank Moya Pons,
- Senior Assistant to the Ministry of Environment and Natural Resources of El Salvador, Edgar Hasbún,
- Executive Secretary of the National Commission of Protected Areas of Guatemala, Juan J. Narciso Chua.