

International Group of  
Funding Agencies for  
Global Change Research

**IGFA**

Meeting Report No. 7

Kyoto, Japan  
October 29 - November 1, 1995

*The International Group of Funding Agencies for Global Change Research (IGFA) is an informal partnership of national agencies that fund global change research programs and other activities supporting such research. The purpose of the Group is to facilitate international global change research in the natural, social and economic sciences by bringing the perspective of these national funding agencies to strategic planning and implementation of such research.*

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## **Executive Summary of the IGFA Meeting**

The following summarizes the major conclusions of and actions taken by IGFA at its meeting, 30 October - 1 November, 1995, in Kyoto. This report is a somewhat expanded version of the "Summary Notes of Session Chairs" that was distributed at the Kyoto Meeting. This report adds sections on the opening of the meeting; the presentations by the host country; the discussions of the next IGFA Meeting; and the wrap-up of the Meeting. The "Summary Notes" have been edited to make the wording as consistent as possible and have been augmented in a few places to add balance with additional material taken from the detailed notes of the Meeting.

### **I. Opening of the Meeting and Welcome**

1. The Seventh Meeting of the International Group of Funding Agencies for Global Change Research (IGFA) convened on 30 October 1995 at 9:30 am at the Kyoto Grand Hotel in Kyoto, Japan. Dr. Robert W. Corell, IGFA Chair, opened the meeting. Dr. Corell introduced Mr. Kazuo Watanabe who welcomed participants on behalf of the host agencies of the Government of Japan.

### **II. Presentations by the Host Country**

2. Dr. Shuzo Nishioka discussed "Integrated Approaches to Global Environmental Research". He reported that the Center for Global Environmental Research of the National Institute for Environmental Studies of the Japan Environment Agency has as a major focus the development of integrated approaches to global change which include managing science; describing change; and transmitting information to policy makers.

3. Dr. Nishioka stressed the need to: involve in global change research experts from both developed and developing countries; develop a strong network to tie these scientists together; and generate an infrastructure which enables interested scientists to work with relative autonomy under loose national and/or international guidance. He indicated that within Japan there is a need to strengthen research capabilities in this area; to stimulate research to be incorporated into international research frameworks; and to establish the professional identity of research coordinators in order to achieve efficient integration.

4. Prof. Keiji Higuchi discussed new initiatives for global environmental research in Japan. In January 1995 the Advisory Group to the Prime Minister recommended development of a Global Environmental Strategy. The Science Council of Japan in 1995 recommended that global environmental change science be promoted within Japan and called for the establishment of a Core Research Institute and accompanying network. The Institute and the network will comprise the university research system in this area.

5. In response to a recommendation from the Geodesy Council, Japan is developing a GEWEX Asian Monsoon Experiment (GAME) which will include studies of interaction between the terrestrial ecosystem and the atmosphere in varying regimes, including tropical and upland plateau regions.

### **III. National and Regional Funding Processes, Structures, and Trends**

6. The discussions focussed on trends in the funding of global change research by national funding agencies. Members reported that within their countries budgets for global change research are generally following one of three patterns: (i) a few agencies expect to receive budget increases; (ii) most agencies have stable budgets;

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and (iii) some agencies are experiencing significant budget cuts. Agencies in both of the latter categories expect that their budgets in this area will come under increasing pressures in the future. In most countries global change research is supported by a number of agencies and such funding is coordinated through an interagency mechanism.

7. All agencies reported that their global change research budgets are coming under increasing pressures and constraints. Such pressures and constraints result in agencies being held increasingly accountable to their governments regarding how their funds are spent and, eventually, whether the programs supported by these funds: generate outcomes useful for secondary purposes, such as forecasting; provide input to national and international policy processes, such as for disaster prevention and mitigation; and/or assist to sustain development or improve economic competitiveness.

8. Constraints on budgets will require many agencies to not only continue to support the best possible research, but also provide increased justification to governments for their expenditures. Some agencies are being pressured to emphasize certain areas of research of an interdisciplinary nature. Similarly, funding agencies generally expect they will be asked increasingly to either identify or define themselves priorities for research in two aspects, first, between global change research and research in other areas and, second, among the various fields within global change research. Some agencies are experiencing pressure to emphasize integration and complementarity in their programs.

#### **IV. The IGFA Resource Assessment Survey**

9. Dr. Christian Patermann, Chair of the IGFA Working Group for the Resource Assessment Survey, reminded members that the main purpose of the resource assessment survey is to facilitate international coordination of global change research by providing an instrument for discussing resource requirements as well as resource allocations. He stressed that these surveys help indicate trends in national and international research and help identify shortfalls in funding expectations versus availability of funding.

10. Dr. Helmut Kuehr, Project Leader for the Survey, summarized recent developments regarding the survey process including results from a meeting of national contact points at the Birlinghoven Castle in February 1995. It was suggested that IGFA needs to identify the resources being provided for global change research by funding agencies not yet participating in IGFA. It was also suggested that the original timetable for finalizing the national lists of projects in categories I and II might not be realistic. A task group suggested the following revised procedure which was approved:

- To continue at full speed in collecting precise data at the project level in IGFA member countries;
- To ask national IGBP, WCRP, and HDP bodies to check and help categorize lists;
- To establish a small task group composed of Working Group members and IGBP representatives to conduct a pilot exercise for the detailed survey in which IGBP Core Project Offices would be involved;
- To carry out a review of the effectiveness and usefulness of the pilot exercise;
- To determine how to proceed further and to report on progress at the 1996 IGFA meeting;
- To represent statistics on the improved allocations survey to IGFA and relevant bodies by the end of 1996; and
- To present the final Second Resource Assessment in 1997.



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## V. The Major International Global Change Research Programmes

11. It was noted that coordination among the WCRP, IGBP and HDP is being facilitated through regular meetings of the scientific directors of the three programmes.

### ***The World Climate Research Programme (WCRP)***

12. Dr. Hartmut Grassl, Director of the WCRP, gave a very positive presentation on the WCRP agenda, identified key issues confronting the WCRP, and summarized ICSU's recently completed review of the Programme.

13. IGFA members welcomed and endorsed the recommendations of the ICSU review and undertook to assist, at the national level, in their implementation. The issues of primary concern were:

- Improvement of relations between core programmes of the WCRP, IGBP, and possibly the HDP (examples brought out in the WCRP review were IGAC-GEWEX, BAHC-IGAC, IGAC-ACSYS, etc.);
- Enhancement of the visibility of WCRP programmes and dissemination of outputs, especially at the policy level and with individual scientists;
- Development of a mature process whereby WCRP research provides information/ inputs to the national and international policy process; and
- Continued attention to the timely delivery of products and the financial envelope for support of WCRP activities.

### ***The International Geosphere-Biosphere Programme (IGBP)***

14. Dr. Chris Rapley, Director of the IGBP Secretariat, presented an overview of the Programme. He reported that the Meetings of the IGBP Scientific Advisory Committee and Scientific Committee held the previous week in Beijing had been very successful and had resulted in a number of important resolutions and recommendations. The SAC highlighted the substantial impact of changes in Asia on global processes and vice-versa. The SAC recommended that the IGBP: establish a financial committee; consider a number of topics for potential new projects; and improve direct interaction with IGFA. The SC/IGBP added a seventh core project - GLOBEC - and discussed the long-term future of the Programme.

15. Dr. Rapley noted that additional funding provided through IGFA for the IGBP Secretariat's upgrading of its communications and computer facilities had already generated benefits for the programme that far exceeded the cost of the upgrading. On the other hand, the lack of funding for priority IGBP core project planning activities is seriously hampering advancement of these projects.

### ***The evaluation of the IGBP***

16. The ICSU/IGFA/IGBP-sponsored review of the IGBP was discussed. It was agreed that the report includes some important recommendations which should be reviewed by all IGFA member countries. The evaluation committee recommended inter alia that START be strengthened; that the role of the SAC be considered; that IGBP strengthen its relations with the subsidiary bodies of the major new conventions, such

as the FCCC and the Biodiversity Convention; and that the relationship between IGBP and IGFA be re-examined, possibly by the officers of the IGBP and IGFA.

17. Concern was expressed, however, with regard to the balance and depth of the review itself, particularly with respect to core project activities. General comments were made regarding relations between IGFA and IGBP; IGBP's relations to the policy sector and the accuracy of some statements in the report; the need to focus on the timetable of programmes and importance of identifying end dates; and the need to focus on improved integration, collaboration and synthesis with other global change research programmes (e.g., WCRP and HDP).

18. IGFA decided to acknowledge in the record of its meeting that IGFA had received the final report and is acting as follows:

- The Chair will write to Prof. Hubert Curien, Chair of the Review Committee, and to Dr. James Dooce, as President of ICSU (the other co-sponsor of the review), thanking the Evaluation Committee for its work and outlining IGFA's intent to review the recommendations, both through IGFA member countries and as a body, with the goal of providing ICSU and the IGBP with collective recommendations for actions and follow-up;
- The Steering Committee and Secretariat are to:
  - Formally transmit the report, with the detailed core project reports, to all IGFA members, noting the Terms of Reference for the review;
  - Invite IGFA Members to (i) provide comments on the review, its recommendations, and related issues to the Steering Committee which will develop a synthesis of these comments and (ii) transmit their specific views to their IGBP National Committees, where appropriate;
  - Distribute the synthesis document for review and approval by all IGFA members; and
  - Transmit the approved synthesis to ICSU, in its capacity as parent of IGBP, by March 15, 1996.

### ***IGBP Core Project Offices (CPO's)***

19. Dr. Rapley underlined the following points regarding the resource needs of IGBP Core Project Offices, the details of which were summarized in a paper that Dr. Rapley had distributed earlier:

- IGBP is a programme involving thousands of scientists worldwide in research projects;
- The scientific management of this work is accomplished largely through dedicated voluntary efforts of a small number of key scientists;
- CPO's are crucial to support this voluntary effort;
- The document outlines the basic tasks and resource requirements in terms of personnel and funding (typically \$550K-\$750K); and
- Many CPO's are underfunded; much valuable time goes into fundraising of relatively small amounts.

20. He then presented some options to address this problem, including a "top slicing" of IGBP related research, secondments or finding new funding sources in industry and business.

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21. IGFA charged its Steering Committee with drafting a strategy and plan of action for addressing the needs and proposals identified in Dr. Rapley's paper. This strategy and plan of action should be completed in time for the SC-IGBP meeting in mid-June 1996. IGFA also agreed in future to address possible resource needs of WCRP core programme offices.

### ***IGBP inter-core-project coordination***

22. Dr. Rapley introduced this issue which had been raised in the IGFA meeting in Vancouver. He informed IGFA that IGBP had allocated \$250K for such activities last year through a process of competitive bidding by the core projects. New integrated field experiments are being developed such as the transects proposed by GCTE, IGAC, BAHC and PAGES, as well as the GEWEX programme of WCRP. Coordination of such an experiment requires secondment of a project scientist to an appropriate CPO. The SC-IGBP has also decided to synthesize the results of core project research, which would be done in the form of scientific project proposals.

23. It was concluded that inter-core-project coordination and integration activities should be defined in terms of project proposals, with clear and measurable outputs, which should be submitted to the most relevant funding agencies. IGFA's role would be to facilitate consideration of the decisions by different agencies on such proposals.

### ***The Human Dimensions of Global Environmental Change Program (HDP)***

24. IGFA Members were invited to discuss their views and those of other funding agencies in their countries regarding the HDP and especially the national funding of the HDP.

25. It was agreed that there is growing interest in and awareness of the importance of human dimensions research related to global change. Dr. Martin Parry, Chairman of HDP, and Dr. Ellen Wiegandt, Scientific Director of HDP, reported that (1) the HDP had set up a new management structure; (2) negotiations were underway between ICSU and ISSC on their possible co-sponsorship of the HDP; (3) the HDP Symposium had made progress in (a) bringing the HDP scientific agenda to the wide international community for their review and feedback and (b) linking human dimensions research to the core social science agenda; and (4) number of national committees for HDP is increasing.

26. There seemed to be consensus that there had been improvement, including the identification of some areas for programmatic focus. With respect to future funding of the centralized costs of the HDP, three sets of opinions emerged from the discussions:

- A small group of IGFA members are prepared to support HDP and perhaps increase their participation on the project level, either on the basis of a two-year pilot phase, or in general terms;
- Another small group questions the necessity of the HDP at this stage, because of the not-yet-defined programmatic and scientific goals and targets of the program. These IGFA members prefer to address national and other current international activities on a case-by-case basis; and
- The majority of members are willing to take a positive "wait and see" approach towards the HDP, but are not prepared to increase their monetary contributions to project funding at this time.

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27. Drs. Kazuo Watanabe and Shuzo Nishioka summarized human dimensions research underway in Japan and other countries of Asia and the Pacific.

28. IGFA agreed that the Chair should respond to the President of ICSU, summarizing the views of IGFA regarding the HDP. A letter was drafted and approved; signed by the Chair; and sent immediately to the President of ICSU via facsimile transmission (see Appendix A).

## **VI. The Relationship between Research Funding and Aid Agencies**

29. Dr. Roland Fuchs, Director of the International START Secretariat, made a presentation on START activities and Dr. John Marks, Chair of the IGFA Working Group on the Relationship between Research Funding and Aid Agencies, reported on IGFA activities in this area since the IGFA meeting in Vancouver. IGFA underscored the importance of engaging scientists, scholars, and decision-makers from all countries and communities in global change research and of the value of this research for wise sustainable development actions.

30. IGFA agreed to continue efforts to improve the dialogue with national and international aid agencies. Members consider this as a learning exercise and noted several approaches that might prove useful. Members agreed to reestablish an active working group which would be asked to develop as soon as possible a work plan for the coming year.

## **VII. Observations and Data for Global Change Research**

31. A progress report on development of the Global Observing System was presented by Dr. Thomas Spence, Director of the GCOS Planning Office. Dr. Yukio Haruyama, CEOS Observer, informed the group of recent CEOS activities and on the scheduling future satellite-based observation programs. Mr. Lou Brown, U.S., summarized the actions taken by the recent WMO Congress on international exchange of meteorological data as set forth in their resolution on this issue.

32. Mr. Steve Morgan, U.K., reported on progress in development of U.S.-U.K. bilateral arrangements for exchange of global change data, noting that the U.K., in line with other countries, continues to review relevant national data management policy. He explained that the proposed US-UK bilateral arrangement addresses all global change data not just meteorological data, and it is intended to complement existing national and international arrangements.

33. It was decided to reactivate the working group on observations and data to review and analyze issues relating to global observing and data systems and policies among the IGFA member countries. Concern was expressed about the scale and cost of new observing systems and that these should be developed in a manner consistent with internationally-agreed principles such as those developed by WMO. It was agreed that a revised workplan for the working group should be developed for review and approval by the Steering Committee at its next meeting.

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## VIII. Stability of Funding for Global Change Research

34. Dr. Marks introduced the following main trends resulting from earlier discussion of this item:

- National budgets for global change research are stable at best, but are mostly decreasing, with the exception of Japan and one or two other countries;
- The demand for accountability is increasing:
  - In terms of scientific output and value added; and
  - In terms of societal relevance;
- New developments in other areas of science are now being supported through "special" mechanisms; thus, national funding for global change research is increasingly being provided through "regular", as opposed to "special" funding mechanisms; and
- In many countries political interest is increasing in sustainable development, impacts, abatement and human dimensions.

35. These trends were generally recognized as defining the boundary conditions within which IGFA members, as well as scientists, have to operate. The challenge for IGFA is to play an effective role to achieve as much synergy as possible under these conditions. It was felt that the funding of global change research through "special" mechanisms had created a sufficiently strong capability in many areas of global change science, both in numbers and in quality, that such research could now compete successfully with other areas of research in completion for funding through "regular" mechanisms.

## IX. The Future Role of IGFA

36. Dr. John Stone, Canada, suggested that IGFA address issues of a science policy nature, a role broader than that for which it had originally been established. Mr. Morgan stressed the paramount importance to the UK of IGFA remaining informal. He emphasized that IGFA should become neither a super-funding agency nor a lobbying group.

37. Dr. Spence noted that GCOS is dealing with a community which lacks an IGFA. He suggested that an IGFA for global change including operational observations would be useful and proposed that IGFA consider this issue. Dr. Fuchs indicated that START has benefited from IGFA's suggestions how to deal with aid agencies. IGFA is thus fulfilling a unique and important role, but should not become involved in priority-setting for science which is a responsibility of the scientific community.

38. Dr. Rapley saw IGFA as providing a reality check on plans of the international research programmes. IGBP attaches great value to being able to brief IGFA on the progress in IGBP. He stressed the importance of having opportunity for informal contacts during IGFA meetings. Mr. Fred Eybergen, the European Union, indicated that the E.U. would like to see IGFA remain informal, fulfilling a facilitating rather than a coordinating role.

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39. It was proposed that IGFA is a forum to discuss:

- Strategic approaches to funding global change research;
- The context of and trends in national and international science policy for social science research;
- Specific actions to improve the coordination of efforts and to ensure synergy of activities;
- Providing advice to the international scientific community on the issues and criteria to be addressed when formulating programme proposals; and
- Other areas of mutual concern and interest.

40. It was suggested that IGFA concern itself with the whole suite of efforts in the complex arena of global change research, not just the three international global change research programmes -- the WCRP, IGBP, and HDP -- on which it has focussed thus far.

41. Dr. Patermann considered it important that IGFA consider ways to improve communication about the significance of global change research to policy, politics and the general public as well as improve the exchange of information amongst IGFA members with a view of learning from each others experience. He stressed the need to expand IGFA's membership to achieve a more balanced distribution of interests by reaching out to other continents.

42. In conclusion it was decided that a task group be set up and chaired by Dr. Robert Corell, U.S., to address this issue interessionally and to prepare a paper for discussion by the ad hoc meeting of the Steering Group in April 1996. This paper should also address the issue of expanded membership in IGFA. A number of participants volunteered to participate in the work, which is to be carried out primarily by correspondence.

## **X. Relations with the Organisation for Economic Cooperation and Development (OECD)**

43. It was reported that the OECD had convened in September 1995 a ministerial-level conference which addressed cooperation in megascience programs. Prior to that conference, the Chair of IGFA had proposed in a letter to the Chair of the Megascience Forum, that the leadership of the Forum and of the IGFA jointly explore the nature of a possible working relationship between the two bodies. The new Chair of IGFA was asked to meet with the Megascience Forum Chair as soon as possible and to report back to IGFA on this interaction.

## **XI. Arrangements for the Next Meeting**

44. The Chair reported that IGFA has received an invitation from Norway to hold the next meeting in Oslo. IGFA accepted this invitation with appreciation. The steering committee recommended and IGFA agreed that two-and-a-half days at the next meeting be allocated for business and three-quarters to one day for other activities; thus working towards a meeting that begins on Monday morning and ending at noon on Thursday.

45. It was agreed that the agenda should be based on the following comments:

- The resource assessment and global observing systems and related data management should be given special emphasis, with the IGFA Working Groups for these areas taking the lead in preparing for these agenda items;
- The Working Group on the relationship with aid agencies should report on its activities;

- There will be a report on the work in progress on human dimensions research;
- An agenda item on the integration of the three major international global change research programs would be useful, including integration/coordination among core projects;
- Norway should be invited to make a presentation on its national interests and activities; and
- Consideration should be given to IGFA efforts related to the IGBP; its centralized operations; and the support needed for these operations.

46. The steering committee and staff group decided tentatively to meet on an ad hoc basis in conjunction with the IGBP Congress in the spring of 1996. The staff group intends to meet two or three times over the coming year in addition.

## **XII. Election of Officers**

47. After it was noted that qualifications for the Chair include high quality competence and leadership; experience with IGFA and outreach; and outstanding credibility in the scientific community, Dr. John Marks was elected as Chair by acclamation.

## **XIII. Closure of the Meeting**

48. The participants acclaimed the Japanese hosts for this meeting for their graciousness, warmth, and effectiveness. Dr. Marks assumed the Chair and expressed IGFA's appreciation to Dr. Corell for his unique and exceptionally valuable service as the first Chairman of IGFA. The meeting was then adjourned.

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**Appendix A****Letter to ICSU and Report from the IGFA Working Group on Human Dimensions Research**

Kyoto, Japan November 1, 1995

Prof. J.C.I. Dooge, President  
International Council of Scientific Unions  
51, Bd de Montmorency  
75016 Paris, FRANCE

Dear Jim,

It is my pleasure, on behalf of the International Group of Funding Agencies for Global Change Research (IGFA), to report to you the results of IGFA's deliberations at its meetings in Kyoto this week concerning its interests in the continued development of scientific research across the fields of science concerned with the human dimensions of global change research.

IGFA is particularly pleased to receive your letter of October 24, 1995, outlining the results of the recent meeting of the ICSU General Committee wherein ICSU decided to offer to become a cosponsor of the Human Dimensions of Global Environmental Change Programme (HDP). IGFA congratulates ICSU for this decision to join the International Social Sciences Council (ISSC) in further development of this important programme. It is within this broad context that, on behalf of IGFA, we wish to respond to the specific inquiries you raised concerning the interests of IGFA and its members in the continued development of the HDP.

IGFA is an "informal partnership of national agencies that fund global change research programs and other activities supporting such research". Its purpose is "to facilitate international global change research in the natural, social and economic sciences by bringing the perspective of these national funding agencies to strategic planning and implementation of such research". Because of the profound importance of understanding the human dimensions of global change in its broadest context and the desire of IGFA to facilitate the involvement of scientists across all the appropriate fields of science in global change research, IGFA established in 1990 a Working Group on Human Dimensions Research (earlier called the Socio-Economics Working Group).

This Working Group, now chaired by Dr. Uno Svedin of Sweden, has been specifically charged with facilitating research efforts across the fields of science concerned with the human dimensions of global environmental change. Further, the Working Group was charged with interacting with and helping IGFA members more fully understand the issues surrounding the development of the Human Dimensions of Global Environmental Change Programme (HDP). Enclosed is a copy of Meeting Report No. 6, which provides an overview of IGFA's interests in and analysis of the HDP as well as IGFA's broader interests in research concerning the human dimensions of global environmental change.

At its Vancouver meeting (September 28-30, 1994), IGFA devoted a substantial part of its agenda to furthering IGFA members' understanding of the role and future of the HDP and committed itself, through its Working Group, to a continued dialog with the leadership of the HDP. Most importantly, IGFA established its view of a framework for the future development of the HDP which is outlined in Meeting Report No. 6. During the past



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year the IGFA members have continued to work closely with the HDP leadership on HDP issues. We are enclosing an internal IGFA Report from its Working Group on Human Dimensions Research that summarizes the work of this Working Group over the past year which outlines some aspects of IGFA interests in and concerns about the future of the HDP.

Finally, at its Kyoto meeting (October 30 - November 1, 1995), IGFA continued its efforts to understand the programme and its resource needs, including a focus on the HDP and ICSU's decision to offer to become a co-sponsor of HDP. To assist you in further understanding IGFA's perspectives on human dimensions research, the essential considerations of Kyoto meeting are:

- IGFA congratulates ICSU on its decision to offer to co-sponsor with ISSC the HDP and takes note of the conditions and framework for that co-sponsorship;
- IGFA acknowledges the growing importance of human dimensions activities with respect to global change research, on scales that range from regional and national levels to encompassing global scales. In this context, IGFA wishes to underline the manifold activities in IGFA member countries in these fields and offers the potential and experiences found in these activities in the continued evolution and development of the HDP;
- IGFA has made the continued development of human dimension of global change research a very high priority in its activities and remains strongly committed to this area of scientific research;
- IGFA has conducted an analysis of and recognizes the needs for continued efforts to assist in the development of the HDP. IGFA will continue these efforts, and to the extent appropriate, will work with ISSC/ICSU co-sponsorship of the HDP;
- IGFA is mindful of the critical importance of financial support of the HDP. IGFA has been briefed by the HDP leadership on their estimates of the centralized HDP financial requirements for the next year of operations.

As you are aware, IGFA is not a funding agency itself and hence does not make commitments on behalf of the countries that are members of IGFA. However, IGFA is an appropriate forum to provide insights into the potential support that IGFA member countries might provide to HDP. In this regard, the proposed HDP work plan for the next two years appears too ambitious in view of the resources likely available. Therefore, IGFA suggests that ISSC and ICSU, in concert with HDP, critically analyze the financial needs of the HDP through the development of a work plan and budget for activities for the planned two year development phase.

It is likely that such a revised program and budget for HDP, endorsed by the ISSC/ICSU partnership, could attract the interest of funding agencies, subject to the following considerations. IGFA recommends that the HDP consider designing its budget around two parts.

Part I of the Budget, a modest Core Budget, could be designed to provide the financial support for the Secretariat in Geneva. With the prospect of continued support for a major part of this budget by the Government of Switzerland, several IGFA members have expressed their willingness to continue to support the core budget at levels similar to those provided in the recent past.

Part II of the Budget, a Program Development Budget, could be designed to facilitate development of the highest priority research activities that require multi-national participation to address specific global-scale research issues that benefit from added value provided by the HDP. IGFA members, on a case-by-case basis, are more likely to be willing to entertain specific focused proposals (to one

or more countries) for support of such activities, especially if developed in cooperation with scientists involved with national and/or regional efforts and endorsed by the joint ISSC/ICSU partnership. Such proposals could address the needs for scientific planning activities and workshops, research coordination activities, travel/planning grants, etc. for specific research areas;

- IGFA is prepared to undertake an internal consultative process with interested members aimed at a concerted pattern of voluntary commitments directed toward supporting the proposed two year ISSC/ICSU HDP development effort; and
- The IGFA Steering Committee and its Working Group on Human Dimensions Research would be pleased to work with the ISSC/ICSU Partnership and the HDP leadership to develop these approaches to program and budget planning.

We commend ICSU in its efforts to work with the ISSC to enhance human dimensions research through the planned two year development phase of HDP. We deeply appreciate your consultations with IGFA. We hope that this letter provides the perspectives you sought in your approach to us. We look forward to working with you and the ISSC in the continued evolution and development of the HDP.

Sincerely,

***BoB***

Robert W. Corell, Chair

Cc: ISSC Executive Council  
HDP Steering Committee Chairman and Scientific Director

Enclosures:

IGFA Meeting Report No. 6  
IGFA Report from the Working Group on Human Dimension Research of October 28, 1995

28 October 95

## Report to IGFA from the IGFA Working Group on Human Dimensions Research

### 1. The Working Group's Plan of Work and Summary of Recent Activities:

The Working Group has had its immediate priority to prepare input for the IGFA Plenary Meeting in Kyoto on issues related to research on the human dimensions of global change. This report summarizes this input.

During the period since Vancouver IGFA has completely revised and updated its process and structure for dealing with the human dimensions of global change research. The restructured Working Group is now constituted and held its first formal meeting in conjunction with HDP Scientific Symposium in Geneva on September 20-23, 1995.

Prior to that meeting the WG Chair had been active in participating in meetings of the HDP Steering Committee to which the chair had been invited, at IIASA, Laxenburg, Austria, November 12 and 13, 1994; and in Oslo, April 11, 1995.

The WG chair also conducted an informal wrap-up session immediately after the international scientific conference on human dimensions research at Duke University, USA, June 1-3, 1995, which had been organized at the initiative of the National Social Science Council in the US. The wrap-up session was attended by about 30 experts including representatives of about ten countries and a majority of the organizers. This sessions reflected on the content and role of the conference at the US, as well as the world, level. The possibility of a future follow-up conference, maybe in Europe, was mentioned. At an informal breakfast meeting following the closing of the conference, the members of the WG present discussed their impressions of the meeting and future work.

These activities were reported upon at the first formal WG meeting in Geneva mentioned above.

The working group also recalled its mandate and concluded the following points to be especially important because they have immediate operational consequences.

The Working Group concluded that it:

- Needs to be aware of what is going on in the booming field of human dimensions research - in general and at all levels, international, regional, and national;
- Should make assessments with regard to the financing and organization of human dimensions research in areas of interest to IGFA Members and to advise IGFA on these matters. The relationship between science and policy, as well as institutional factors with regard to interdisciplinarity, should be given due attention.
- Needs to consider the possible new constraints on funding that the Group has been informed of;

- With regard specifically to the HDP, the WG should review the results of the HDP Symposium and other HDP activities and assess their implications for IGFA; and
- Should prepare a workplan for its activities beyond the Kyoto meeting.

## 2. General Survey of Tendencies:

At a very general level the need for Human Dimensions related research addressing global environmental problems seems to be increasing. This is matched in general terms by the distinct increase in activities in the research world covering a wide variety of relevant topics.

At the same time, the number of actors organizing such activities is expanding rapidly, mostly at national levels, but also at regional and other international levels. The character of global relevance for many of these activities still remains unclear.

The connectivity of levels (national - regional - global) was also seen as a strongly emerging trend. The Human Dimensions Programme (HDP) must be seen in this changing context.

Examples of actors at the regional level with interests in Human Dimensions issues include among others START, APN, ESF, and EU.

The WG considers that there is clear need to internationalize national human dimensions research, but it is not clear whether the HDP can live up to the aspiration to be the most appropriate vehicle for undertaking this task at the global level. With regard to the assessment of HDP developments it was concluded that the list of questions that the Working Group had developed at the Stockholm meeting is still relevant as a framework for scrutiny (see Section 3).

In addition to the pluralization trend the expansion of the need for a policy-relevant bridge between the scientific world and the policy world is evident. The IPCC needs and the indicated interests of UNEP expressed at the Geneva Conference are only examples in this domain. This is not to say that Human Dimensions research should be designed basically to serve such purposes. But this need at the international scene has to be addressed in one way or another by all science actors in the environmental domain, including those operating in the Human Dimensions area (e.g. HDP).

## 3. Assessment of Recent Activities, Especially Related to the HDP:

### 3.1. *The Geneva Symposium, September 1995:*

The HDP Symposium has brought out some very important points. First, it reflects the importance of research on the human dimensions of global change. Human dimensions research clearly stands on its own as a very important component of global change research and cannot be considered just an appendage of other global change research. Second, the plurality of interests in human dimensions research mentioned above was clearly seen. There is a clear recognition of the need for connectivity among such activities.

The WG recognized the achievement of the HDP to have arranged such scientific symposium with such a broad international participation and with the contributions from many outstanding scientists.

However, having stated that, and giving credit for the achievement, many questions were raised with regard to the exposure of specific HDP policy concerns. For example:

- The demonstration of a tendency for an increased topical diversity including even more interest realms suggested than before, instead of concentration and demonstration of specificity ("the concentration and specificity issue")
- The varying degree of maturity of topical realms within HDP, from LUCC, with rather consolidated activities, to areas almost still in the phase of outlines ("the program maturity development issue")
- The ambivalent relationship to national activities, despite a full session demonstrating the variety of organizational forms and ambitions (see more below) ("the value added issue")
- The remaining lack of clarity with regard to the "globalness" issue and what constitutes it as seen as a selection criteria for an international programme ("the programme issue")
- The unclear approach with regard to how human behavior could be seen to relate to global environmental problems ("the theoretical framework issue")

It seems as if the Symposium did not further develop and focus the HDP scientific agenda distinctly and did not clearly identify the added value that the HDP would bring to national efforts already underway. It is still not clear whether the HDP is actually a "program" in terms of connected elements within the framework of a common rationale.

These examples have been extracted in order to make more precise the sentiments expressed by the WG members present. They provide a rather coherent assessment of points of concern by the group, taking into account the difficult nature of the endeavor and the time development of other global programmes earlier, such as the IGBP and WCRP or similar activities.

### 3.2. *The HDP organizational development assessment:*

It appears that the HDP has made substantial progress with respect to its organization and operations over the past year. The programme has constituted their scientific steering committee; the new chair has started several processes of change; the new scientific director has consolidated operations; and a new workplan has been prepared. The new interim steering committee has met three times - in Laxenburg, Oslo, and Geneva. The HDP is now operating on a more open basis than in the past. For example, the Chair of the IGFA Working Group was invited to participate in the meetings of the HDP scientific steering committee in Laxenburg and Oslo and the IGFA Chair attended the Oslo meeting.

It is not clear how the HDP intends to move the national core of human dimensions research into the international community. The relationship between the HDP and national committees is not well-defined. As a result, the HDP lacks support from national programs in many other countries. The HDP also needs to promote developing country participation, working in conjunction with START.

### 3.3. *The scientific agenda:*

Progress with respect to the HDP scientific agenda has been disappointing. Planning for the proposed Land Use-Land Cover Change Programme (LUCC) is well-underway and appears to have substantial support, but there appears to be less advanced activity underway in other areas. While the Symposium indicated that there is substantial interest among social scientists in three areas not identified in the present HDP workplan - trade

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and environment; water resources; and human health and vulnerability - it is not obvious how the HDP might move into these new areas, nor in which way they would contribute to the specificity of HDP.

The Working Group considers that the strategies of the proposed six themes for the HDP do not yet seem clear except for LUCC. There is a risk for HDP's work to be compartmentalized, giving the impression that the program is more a set of individual projects than a coherent "program".

However, it must at the same time be recognized that the HDP has been very active over the past year, providing an emerging momentum for the program and involving new actors; the HDP has improved its vision and scientific rationale; and thus the program is less vague than was the case a year ago.

It could be suggested that the HDP specify a few major areas for its future activities and not be trying to add new topics without putting them very much into perspective.

#### 3.4 *Relationship with national and regional programs and committees:*

It is the consensus of the Working Group that national committees of Human Dimensions Research are pivotal to the international human dimensions effort. The Symposium indicated that the HDP is encouraging establishment of national committees and also encourages these committees to provide input to and interact with the HDP. However, the HDP does not seem to have a clear idea as to what they want from such committees or to which extent these committees may or may not influence the programme as a whole. It is recommended by the WG that the HDP be strongly encouraged to improve relations to national committees and creatively develop the roles of these, not only as recipients of the effects of already settled strategies. It is further recommended that the HDP improve its interaction with regional programs, such as those being developed inter alia by the European Union (EU) and the Inter-American Institute for Global Change Research (IAI).

#### 3.5 *Openness:*

As noted earlier, progress has been distinctly demonstrated in this area. For example the Symposium involved a number of outstanding social scientists not previously involved in the HDP. The nomination process for selection of the new HDP scientific steering committee has been completely revised and the new committee seems more balanced in terms of representation than before; and IGFA has been invited to participate in their activities.

#### 3.6 *Capacity Building:*

The HDP is interacting with START, but stronger support for and interaction with START is still in the future. It is important for the HDP to move more actively in this area, but capacity building in this area should follow, and not precede, the consolidation of the programme rationale.

#### 3.7 *Managerial issues:*

In general terms the interim scientific steering committee seems to have been very active; their meetings have been well-attended; the scientists involved seem to be developing a spirit of commitment to the program.

The interim steering committee has aggressively pursued the issue concerning the unclear terms of reference for the secretariats. It was reported that they had met during the Symposium and unanimously decided to

have one core secretariat only (in Geneva) which would report directly to the new steering committee. It was further reported that the new interim steering committee is of the view that, if these actions cannot be implemented within the ISSC structure, new arrangements for sponsorship of the HDP might have to be developed (see Section 3.8 as well). How this will work out is yet to be seen.

### 3.8 *The future role of ICSU relative to the HDP.*

A very special and important issue is the "parenthood" of HDP. ICSU's final decision with respect to co-sponsorship of the HDP is said to depend in large part on the ICSU assessment of what happened at the Geneva Symposium, but also other factors may come into play.

It has been reported that ICSU had been invited to designate four members of the new HDP scientific steering committee who have now served for close to one year in this capacity (Eckart Ehlers; Maurits la Riviere; Peter Liss; and Gilbert White). These members seem to have been very active in the committee.

The Working Group was informally asked if it would appreciate an ICSU decision to sponsor the HDP and the Working Group agreed, also informally, that it would. Such a step would strongly enhance the institutional basis from which the HDP could operate in the future.

### 4. Questions that Need to be Addressed by IGFA in Terms of the HDP at the Kyoto Meeting:

Questions which need to be asked are:

- Where do national and regional programs and issues fit in the HDP framework? It is suggested that the realm in which the HDP exists includes a broad range of strong focused national programs and a significant, and growing, group of regional programs. It seems essential that if human dimensions research and HDP are to be successful, they must build on the capabilities of such elements in joint cooperation.
- How do the funding issues enter? It is also important to consider the funding landscape for future human dimensions research with regard to funding agencies.
- How are the programme's structural problems addressed? Structural problems include interdisciplinarity and the peer review process.
- How are policy relevance and requirements addressed by HDP?

### V. Summary

The Working Group considers that:

1. it is important to address Human Dimensions research issues as a broader topic than the specifics of the HDP, although such issues are important. The "general funding landscape" has to be addressed.
2. the mechanisms through which science is developed should be given more IGFA attention within the framework of Human Dimensions research (i.e. what constitutes top-down approaches in different dimensions).
3. issues about policy relevance and what it means in terms of Human Dimensions research are very important.
4. the problems facing the HDP have to be considered in light of the improvements made during the last year as well as the program potential.

Participants in the Working Group Meeting in Geneva:

Participants in the Meeting were Dr. Paul Berendsen, the Netherlands; Mr. Louis Brown, IGFA Secretariat; Dr. Robert Corell, IGFA Chair\*; Dr. Hilleary Everist, U.S.A.; Dr. Julia Kundermann, Germany; Dr. Maurits la Riviere, ICSU\*\*; Dr. John Marks, the Netherlands\*; Dr. Cora Marrett, U.S.A.; Dr. Steve Morgan, U.K.; Dr. Uno Svedin, WG Chair; and Dr. Kazuo Watanabe, Japan.

\* participated in the first part of the meeting only

\*\* participated only in part of the meeting to provide ICSU input

Uno Svedin, Chair  
IGFA Working Group on Human Dimensions Research



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**Appendix B****Meeting Agenda**

IGFA Meeting: Kyoto Grand Hotel  
October 29 - November 1, 1995

**Sunday afternoon, 29 October**

2:00-6:00pm Ad hoc meetings of IGFA working groups as needed.

**Sunday evening, 29 October**

6:00-7:30pm Informal reception, Rose Room, Hotel third floor.

**Monday morning, 30 October**

9:30am (1) Opening of the meeting and welcome

Dr. Robert Corell, IGFA Chair, will open the meeting. Mr. Hironori Hamanaka, Director-General of the Global Environmental Department of the Japan Environment Agency, will present a welcome address.

9:45am (2.1) Presentations by the host country

Dr. Shuzo Nishioka will make a presentation on "Integrated Approaches for Global Environmental Research".

10:45am Morning Break

11:00am (2.2) Presentations by the host country (continued)

Prof. Keiji Higuchi will discuss "Global Environmental Science: New Japanese Initiatives".

12noon Lunch

Prof. Jiro Kondo, former President of the Science Council of Japan, will discuss "Japan's Role for Global Change Research: Past, Present and Future".

**Monday afternoon, 30 October**

1:30pm (3) Introductions to the action agenda

Chair: Dr. Robert Corell

The Chair will introduce the final draft agenda for adoption. The chair/lead for each agenda item (except agenda item 11 on stability of funding for global change research) will give a five-minute presentation to introduce the item to enable members and observers to prepare for the later full discussions on these items. The floor will be open to questions regarding the content of the item, but not to substantive discussions.

2:15pm (4) National and regional funding processes, structures and trends

Chair: Dr. Kirsten Broch Mathisen

This agenda item is intended to (a) bring IGFA up-to-date regarding the actual processes and structure for funding of global change research in member countries and in organizations and (2) serve as an introduction to agenda item 11 on the stability of funding for global change research.

Members and observers are invited to prepare summaries in writing of the processes and structures used in the member countries for the funding of global change research for distribution in advance of the meeting.

Participants will be invited to discuss their national and organizational budgets for global change research; the trends and patterns for such funding; and factors which are affecting such funding.

The discussions on this item will seek to identify advantages of particular processes and structures that might be applied in other cases. The discussions will also consider the extent to which national funding processes and structures relate to and fit with the international programs and the processes and structures they utilize for the planning and implementation of programs.

3:15pm (5) The IGFA Resource Assessment Survey

Chair: Dr. Broch Mathisen

Dr. Christian Patermann will summarize the progress to date in conducting the second resource assessment survey. He will present the new survey questionnaire; discuss the efforts made to initiate the survey and the responses to date; and review the staffing requirements for the survey. IGFA members will be invited to review the requirements for the survey and asked to provide full support for preparation of their national inputs to the survey.

3:45pm Afternoon break

4:00pm (6) The major international global change research programs

Chair: Dr. David Drewry

4:05pm (6.1) The World Climate Research Programme (WCRP)

Lead: Dr. Hartmut Grassl

Dr. Grassl will brief IGFA on recent developments in the WCRP; its relationships with other programs and organizations; and its future interactions with IGFA and its member agencies. Dr. Grassl will also report on the results of the review of the WCP, including the WCRP, recently completed by the WMO Congress.

4:45pm (6.2) The International Geosphere-Biosphere Programme (IGBP)

Lead: Dr. Chris Rapley

Dr. Rapley will identify issues of concern to the IGBP and IGFA, with emphasis on the roles and needs of IGBP core project planning and implementation. He will focus on issues related to the establishment and funding of core project offices and interproject activities. Dr. Daniel Vidal Madjar, ICSU, will summarize the ICSU/IGBP/IGFA review of the IGBP and the results of the IGBP Scientific Advisory Committee's (SAC's) discussions on this subject at their meeting the previous week in Beijing.

5:30pm Adjournment of the session

5:45pm Meet in Hotel lobby for taxis to reception and dinner at a traditional Kyoto-style restaurant.

## **Tuesday morning, 31 October**

8:30am Staff/Steering group meeting in Oshidori (half hour prior to start of meeting).

9:00am (6) The major international global change research programs (continued)

Chair: Dr. Christian Patermann

9:00am (6.3) The Human Dimensions (of Global Environmental Change) Program (HDP)

Lead: Drs. Martin Parry and Ellen Wiegandt

Drs. Parry and Wiegandt will summarize recent developments in the HDP, including selection of the new Steering Committee; discussions with ICSU on co-sponsorship; working group activities; development of networking with national and regional programs; and the Third Scientific Symposium.

9:45am (7) Research related to the human dimensions aspects of global change

Chair: Dr. Patermann

9:50am (7.1) Human dimensions research in Asia and the Pacific

Dr. Kazuo Watanabe and Dr. Shuzo Nishioka will discuss recent progress in human dimensions research, especially in the context of the Asia-Pacific Network for Global Change Research (APN), and human dimensions research in Japan.

10:30am Morning break

10:45am (7.2) Activities of the IGFA Working Group

Dr. Uno Svedin, Working Group Chairman, will report on recent activities of the Working Group. Issues to be addressed include interdisciplinarity; the relationship between national and regional programs; and the role of the HDP within human dimensions research.

The latter discussion will focus on (a) recommendations and questions addressed by the Working Group to the HDP regarding the HDP scientific program, organization, workplan, and funding at the Noordwijk, Stockholm, and Brussels meetings and (b) responses to these developed by the HDP, especially through the efforts of its steering committee and its Third Scientific Symposium.

12noon (6.4) The process for international review of major international programs

IGFA co-sponsored the recently-completed review of the IGBP and IGFA members have been active individually in the review of the WCRP recently completed by the WMO. Questions to be addressed include: Were these reviews effective? Did they achieve their objectives, including the objectives of funding agencies? Should similar reviews be undertaken in future for other programs? What mechanisms are available for such review? Are they adequate? When should such reviews be conducted?

12:30pm Lunch, Top of Kyoto Restaurant, top floor hotel

**Tuesday afternoon, 31 October**

1:45pm (8) The relationship between research funding and aid agencies

Chair: Dr. John Stone

Dr. John Marks will discuss his recent report on this subject. IGFA is asked to consider the directions that funding agency and aid agency programs are taking; to determine whether these streams are converging; and what actions IGFA might take to improve the relationship between research funding and aid agencies. Dr. Roland Fuchs will summarize recent progress by START in this area. Discussions will focus on IGFA's draft workplan in this area. BellaNet, a group of donors to global change research, is invited to present a summary of their activities in this area.

2:30pm (9) Observations and data for global change research

Chair: Dr. Kazuo Watanabe

Dr. Thomas Spence, Director of the GCOS Office, will present a progress report on the Global Observing System (GOS), including the Global Climate, Ocean, and Terrestrial Observing Systems (GCOS, GOOS, and GTOS). The results of the deliberations of the WMO Congress on international exchange of data will be presented. A report on progress made by the U.S.-

U.K. in developing an arrangement for exchange of global change data will be made. The IGFA draft workplan in this area will be presented for IGFA's review and approval.

3:15pm Afternoon break

3:30pm (10) Stability of funding for global change research

Chair: Dr. John Marks

Discussions will address national and regional organizational budgets for global change research, including estimates of future budgets; the general climate for science budgets in the member countries, for basic research, and for global change research. Presentations of specific examples are encouraged.

Discussions will also address funding of the major organized international programs, their planning, coordination and other centralized costs, including international planning/project offices; and funding of programs outside the major international programs.

5:00pm Wrap-up session (for IGFA Members only)

Chair: Dr. Corell

6:00pm Adjournment of the session

### **Wednesday morning, 1 November**

8:30am Staff/Steering group meeting, Oshidori Room (half hour prior to start of meeting).

9:00am (11) The role of IGFA and national funding agencies in the support of international global change research

Chair: Dr. Svedin

Members are invited to consider their and IGFA's role in funding and other support of the three major programs (WCRP, IGBP and HDP); individual projects, including core project offices; interproject activities; and programs (and projects) outside the three major programs.

Questions to be addressed include: Assuming that the results of the first resource assessment survey are correct and substantial national funding is being provided to programs not officially part of the three major programs, what should IGFA's future role be in the future? To what extent should IGFA be involved with exchange of information? Coordination of funding arrangements for such programs? Development of national and/or international strategies and tactics?

10:30am Morning break

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11:00am (12) Preparations for the next IGFA Meeting

Chair: Dr. Corell

The foci, dates and location for the next IGFA Meeting will be determined. IGFA has decided that the resources assessment survey should be a major focus of the 1996 meeting. It has been proposed that observations and data also be a focus for this meeting.

The IGFA Member from Norway has confirmed the offer to convene the 1996 IGFA Meeting in Norway, possibly in Oslo. IGFA members are invited to consider the possibility of hosting meetings in 1997 and 1998.

11:30am (13) Election of officers

An election will be held for the post of IGFA Chair and Vice-Chair. The present Chair is completing his second term. The Vice-Chair is expected to be the IGFA Member from the country hosting the next IGFA Meeting. The membership of the IGFA Steering Group will be reviewed and confirmed. The Steering Group consists of the Chair, Vice-Chair, Chairs of the IGFA Working and Task Groups, and Members co-opted to serve.

11:45am (14) Other Business

Participants are invited to propose other issues for future consideration by IGFA.

12noon Closure of the Meeting

12:30pm Lunch

**Wednesday afternoon, 1 November**

The IGFA Steering Group may meet over lunch to discuss implementation of the results of the meeting, especially during the next intercessional period.

The IGFA Staff Group will complete preparation of the draft report of the meeting.

## Appendix C List of Participants

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