



INTER-AMERICAN INSTITUTE FOR GLOBAL CHANGE RESEARCH

Call for Proposals Integrated Research on Ecosystem Services under the Collaborative Research Networks (CRN3) program

Proposal Guidelines

IAI Directorate
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Introduction

Global change has now affected all ecosystems on Earth through processes of land-use change, climate change and resource acquisition. Ecosystems are vital for human well-being and development through the goods and services they provide. The interactions between ecosystem services, human needs and human effects on ecosystems are a core issue in global change and require much improved scientific understanding if they are to be managed in ways beneficial to human societies and ecosystem sustainability. This requires the ability to link expert knowledge with community understanding and other knowledge systems. The theory of ecosystem services therefore is closely linked to human endeavours and the social sciences; in fact several authors define ecosystem services principally by their service component relevant to human societies.

Obstacles to the implementation of such an integrated understanding include:

- Only if ecosystem services can be assigned a value, can their preservation be compared with the opportunity cost of development, land use change or resource utilisation, which may then serve to guide policy and legislation. The values of ecosystem services are too complex to simply be monetarised and other measures must be developed to guide decision making.
- Ecosystem services cannot be commoditised; they are tied to locale, to specific landscapes and environments and the loss in one region cannot normally be compensated by conservation or gains in other regions. A focus on carbon balances in public debate has obscured this relationship.
- Often those who benefit from and those who affect ecosystem services are not identical. For instance provisioning services used by traditional populations, that depend on biodiversity, may be eliminated by land-use change which generates economic benefits for different social actors. A lack of direct consequences from deteriorating ecosystem services to managers of such services implies that the management needed to sustain services lacks self-regulation. The use of and dependence on ecosystem services by cities is a particularly difficult - and therefore interesting -

theme, since the appreciation of such dependencies is usually weak in urban populations. To be able to make management more responsive to both benefits from ecosystem services and ecosystem degradation a societal mediation is needed which must be based on reliable data and knowledge both of the natural and human processes.

- Only an integrated characterization of ecosystem function, which includes knowledge about its services based on natural sciences and knowledge of the social and economic processes of recipients of such services, permits the identification of risk to sustainability and resilience of ecosystems and societies. This is needed as a basis for informed decision-making.

- The dependence of ecosystem services on ecosystem structure and function, and therefore on biodiversity, is often postulated but is only partly known and is likely to be highly non-linear. How such dependencies then affect cultural, social and economic processes and over what time and spatial scales is poorly understood.

A scientific programme examining ecosystem services under global change therefore must take into account such issues as the geographic specificity of services, downstream service provisions, the links between ecosystem functions and services, and biodiversity, access to such services and equity issues, and feedbacks from societal action on service provision. Under global change, a critical question is how the necessary changes in social and economic structures at local, national, to global levels are able to adapt and keep pace with the rapidly changing biophysical conditions given the inertia in the societal realm.

This makes substantial demands on scientific interdisciplinarity and co-operation. The IAI's CRN3 programme is designed to foster such interdisciplinarity and collaboration. Given the importance of ecosystem service provision and ecosystem degradation under global change we therefore here call for proposals specific to those themes. The expectation is that projects will provide a strong integration across disciplines and between the natural and social sciences, and provide strategies to engage decision-makers in a meaningful way. Project outcomes should provide relevant knowledge on the management of ecosystems, understanding of ecosystem services and inform decision-making required for sustainability.

Science for informed decision making requires the identification of knowledge users. Communication of science to users able to address societal impacts of global change needs to reconcile local realities with the search for "recipes" of adaptation. It needs to consider the communities that use or manage ecosystems services, and the political mechanisms by which new knowledge may be used. The partnership with stakeholders and their early inclusion in the project and its design, therefore, is needed to complement the multidisciplinary composition of the scientific team. The identification of stakeholders, clear identification of ways to engage them and of measures to assess their engagement will strengthen the scientific effort. An important element will be a broad (including institutional) capacity building as part of the network activities to address sustainability.

The present call supplements and expands the CRN3 program. It is issued in recognition of the importance of using, preserving, and managing ecosystems and their services under global change for the benefit of present and future generations. Teams that have responded to the original CRN3 call as well as new teams are invited to respond to this challenge and develop innovative research strategies that this complex task requires. Teams developing proposals should refer to the rules of the CRN3 call (except for the topical focus demanded under the present call). If the CRN3 guidelines below are not followed, proposals will not be considered.

CRN3 Program Description

Successful proposals will require excellent disciplinary science, interdisciplinary integration including natural and social sciences, international collaboration, a clear communication strategy, and capacity building to develop the next generation of GC scientists. The IAI considers that capacity development, outreach and science applications are an integral part of excellence in GC science. *It is unlikely that the promotion of graduate students alone will promise the needed level of capacity building needed to address ecosystem services.* Based on the IAI's mandate to build GC research capacity across the continent, all planned collaborations must demonstrate equitable participation in research by network members and open access and sharing of all results. This must be reflected in work plans and budget allocations.

Each proposal must involve at least four IAI member countries. The IAI's mandate is to promote science that cannot be conducted by any one country alone. The team needs to demonstrate that the synergy of working together internationally generates benefits for the region in a manner that cannot be accomplished simply by working within the boundaries of any one country. This will require a robust networking strategy.

After CRN projects are selected and implemented, the IAI will further enhance networks and promote collaboration between networks through capacity building and across-program synthesis activities involving both scientists and stakeholders. Regular workshops and assessments during the CRN program will keep interaction among all participants active and current.

The requirement of an early and ongoing dialogue between social and natural scientists, stakeholders and decision-makers in the development of projects, programs and networks, is fundamental for the success of this program. Proposals will have to demonstrate that this dialogue is an integral part of the proposed work and not just an add-on.

Proposal Review

The first step in the proposal review process will be a peer review by mail. This will be followed by a panel review with the participation of the IAI's Scientific Advisory Committee (SAC). The panel will use the records of the mail review as well as programmatic criteria to make recommendations to the IAI Directorate. **The main evaluation Criteria** in the proposal evaluation are:

- Scientific excellence, technical soundness,
- Extent to which the proposal addresses the theme of ecosystem services in an integrated way that promotes understanding from both natural and social sciences and provides an adequate communication strategy between the disciplines and with users of the science.
- Contribution to effective networking across the Americas, with teams representing the diversity of scientific knowledge from IAI Member States.
- Capacity building beyond the involvement of student research assistants
- Implications for policy and strategies to develop policy options
- Regional and gender balance, equitable participation in research and sharing of results

The following timelines apply:

15 November 2012: deadline for submission of proposals

15 December 2012: mail reviews due to IAI

17 January 2013: Project approval and Award Notification to PIs and Authorized Institutional Representatives (AIRs)

Award conditions

This program is part of the CRN3. The **project duration** of the CRN3 program is five years with annual renewal. Annual continuation of grants will be considered pending satisfactory performance as documented by approval of annual reports by the IAI, and subject to availability of funds. The performance of funded projects under CRN3 will be evaluated based on the **annual technical and financial reports** to be submitted by the project PI and the Grantee Institution, respectively. IAI Directorate staff may perform monitoring or auditing visits to any participating party throughout the program duration. During or after completion of the second project-year, an evaluation of the financial management of all projects will be performed. This audit will be a contractual obligation.

Under CRN3, **annual program meetings** will be held, and investigators from all projects are expected to participate in these meetings. These meetings will develop science summaries, communications, and syntheses, and are critical to strengthen the network of scientists, develop linkages between different projects, and exchange lessons learned. The IAI Directorate will provide separate funds for participation in these meetings.

All proposals must describe plans for **data management** and for open sharing of the products of research between team members, with the broader science community, and with the public. In accordance with the IAI-DIS Data Policy under CRN3 it will be a contractual obligation for all projects to contribute metadata and if appropriate real data to the IAI Data and Information System (DIS). Projects are expected to start contributing metadata to the DIS from the end of Project Year 1, and have initiated open dissemination of all project data, observations, and results. Failure to comply with this obligation by the end of Year 3 will lead to the suspension of payments.

Eligibility of participating institutions, countries and investigators for grants in the CRN3 program:

a) eligibility is limited to colleges, universities, professional societies, and not-for-profit and non-academic institutions, which have established research programs and are based in an IAI member country: Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Jamaica, Mexico, Panama, Paraguay, Peru, the United States of America, Uruguay and Venezuela. IAI priority is to provide funding to the science community of the Americas. Researchers and institutions based outside the Americas may not receive IAI funding. Funding to non-member countries within the Americas is subject to special approval by the IAI. The PI must be based in a grantee institution that is based in an IAI member country.

b) All proposals must be collaborative efforts with PIs and Co-Principal Investigators (Co-PI) representing institutions from at least four IAI member countries. Each PI may submit only one proposal. PIs may participate as co-investigators in up to two other proposals. PIs and Co-PIs must have contractual links to their institutions that are expected to last throughout the program duration. Principal Investigators must be vested in the system; the Authorized Institutional Representative must confirm this in writing. Visiting scientists are not acceptable as PI.

c) A rigorous evaluation will be made on the role of the PI, all Co-PIs and of networking interactions. Therefore the proposal must include a brief and clear description of the role of each participant in the program.

d) A change of the PI and/or Grantee Institution is only permissible under exceptional circumstances and must be approved by the IAI director and agreed to by the Grantee Institution and the Co-PIs. The inclusion of additional investigators after the project is initiated is encouraged, however, any changes proposed to the size or composition of the project team must have the agreement of the IAI Directorate and the co-PIs. PIs will be responsible for keeping the

IAI and the AIR informed on the inclusion of new investigators and/or changes of institutions and their role in the research project.

e) Support to graduate students and postdoctoral researchers should go preferably to nationals from Latin American and Caribbean IAI member countries.

f) Postdoctoral researchers may only be engaged if a mentoring plan is implemented: Each proposal that requests funding to support postdoctoral researchers must include, as a supplementary document, a description of the mentoring activities that will be provided for such individuals. IAI will not provide funding for postdoctoral researchers if the mentoring plan is missing. This plan should address items such as orientation, career counselling, preparation of grant proposals, publications and presentations, instruction in professional practices and technology transfer.

g) Approval of projects under CRN3 is subject to compliance with all contractual obligations resulting from past or ongoing IAI grants. This rule applies to all PIs, Co-PI's and institutions involved in a particular CRN3 proposal.

Funding

The IAI expects to make 3 awards under this ecosystem service call. The IAI encourages teams to seek complementary funding. Projects with researchers in the state of São Paulo are invited to apply to FAPESP, which may provide additional funding opportunities. Funding of proposals under CRN3 will be dependent on availability of funds.

The CRN3 program will consist of annual awards for 5 years, pending annual evaluation of satisfactory technical performance and proper financial management. The level of funding is limited to a total of US\$ 700,000 for the duration of the project. CRN3 awards will provide support for research activities, data management, computers and software, travel and workshops. Investigators time is expected to be a counterpart contribution, and only modest support towards their salaries may be approved with the IAI.

IAI encourages cost-sharing and in-kind contributions by project proponents through use of existing resources, such as employed staff, office space and equipment to the maximum extent possible, and through the implementation of joint financing arrangements. Projects are requested to report co-funding and additional funding obtained.

IAI funds may only be managed through institutionally controlled accounts and may not be deposited in any personal/individual bank accounts. Any violation against this clause will lead to the immediate termination of the project. In addition, IAI will only make awards to the PI's institution, i.e. the Grantee Institution. By contract, the Grantee Institution will be responsible for the transfer and accountability of funds to all Co-PIs in other institutions. No exceptions from this rule will be accepted, and the ability of the Grantee Institution to manage international project funds must be documented in the proposal. This institutional management ability will be assessed by the IAI prior to signing any grant agreement. Funds will be released to the Grantee Institutions on an annual basis. Funds for subsequent years will depend on approval of the technical and financial reports submitted, compliance with all contractual obligations and on any audits or site visits IAI or the US National Science Foundation (NSF), which the primary sponsor of this program, may make of the project. All funding will depend on the availability of funds. If the previous year's allocation has been significantly under-spent, IAI will not send funds until most of the remaining funds have been accounted for.

Guidelines for Proposal Preparation & Submission

To be eligible under CRN3, your Proposal must include all of the following sections and follow the prescribed format:

The main body of the proposal is limited to a maximum of 15 pages, 12 font Times New Roman or Arial.

1. First page: **Proposal Title, names of PI and co-PIs**, with their institutional and country affiliations and contact details.

2. Page two is to provide an **Executive Summary** of the proposed project (limit 1 page).

This is followed by a maximum of 13 pages containing:

3. Background and **Objectives** including overall justification of your proposed activity, hypotheses, and an explanation of specific objectives.

4. **Methodology**: detailed information on the methods and approaches to be used, including stakeholder consultations and involvement, and interdisciplinary integration.

5. **Expected Results**: outline expected results, milestones and timelines, and provide a description of the project's data and information management.

6. **Policy relevance**: explain the policy relevance and expected implications for decision making processes, the strategy to help develop and implement policy options, and the significance of the proposed activity for dealing with global change issues and their social and economic contexts in the Americas. Also provide an outline of the communication plan by which results will be made available to decision makers.

7. **Multidisciplinary and multinational collaboration**: explain the multidisciplinary and multinational approach of your proposed activity including the integration of natural and social science, enhancement of networks and partnerships etc.

8. **Contribution of each Co-PI**: provide a short explanation of the roles and contributions of each Co-PI, and provide a description of the role of different sites and countries in contributing to the project objectives.

9. **Capacity Building**: describe how your project will contribute to capacity building in the region through formal and informal education processes. This includes the role of students but also other stakeholders and the institutions involved. If you intend to engage post-doctoral fellows, a specific mentoring plan will be required to show how they will benefit from their participation, as mentioned above.

10. **Related work**: describe relationships of your proposed project which could enhance the dialogue with international assessments, UN Conventions, programs for Earth observation or other relevant research and policy endeavours.

11. **Work plan and timetable**: sketch how the activities will be organized and conducted indicating the timing and mile stones for each proposed activity.

On additional pages, please provide

Bibliography: References cited in the proposal

Appendices:

Appendix 1: Budget (USE FORM PROVIDED): please fill all sheets of the Budget Form. Strictly follow the budget guidelines outlined (below) and add justification pages as necessary. You must provide justifications for each item. The budget is prepared and approved by the grantee institution which will sign the grant agreement, and is therefore that institution's responsibility. IAI recommends that each institution involved in the proposal should provide the grantee with a detailed, formal and institutionally approved budget as part of the overall budget justification.

Appendix 2: List of collaborators and institutional representative (USE FORM PROVIDED): list the PI, and the authorized institutional representative of the Grantee Institution, and all Co-PI's (name, title, institution, contact details) of each participating

institution, together with the requested information about involvement in previous IAI activities. PLEASE NOTE – you must provide a duly signed commitment letter from each Co-PI. The letter from the authorized institutional representative of the Grantee Institution must indicate the institution's approval of the project and explain the PI's relationship to the Grantee Institution.

Appendix 3: Short CVs (Free Format): provide a short Curriculum vitae (max. 1 page) for the Lead PI and each Co-PI. Please compile all CVs into one file before submission. The submission system will not accept more than one file.

Budget

Budget conditions: CRN3 awards provide support for research, data management, travel, workshops, capacity building, and modest support for research salaries. Limited expenditures (up to 10% of the total project budget) for equipment and software are allowed. **No overhead may be charged**, but accountable itemized administrative expenses may be charged (up to 10% of the total project budget). IAI funds can only be managed through institutionally controlled accounts. IAI will only make awards to the lead institution, which will be responsible for disbursement to collaborating institutions.

IAI funding is not available to replace or supplement the pay of existing researchers who receive full time salary support. Under exceptional circumstances, modest support can be provided for investigators salaries. Requests for investigator salaries must be well justified in the budget. The requested amount of remuneration should be reasonable in consideration of the standards of the country and institutions, and subject to compliance with relevant laws of the country in which the part-time position is located.

The IAI recognizes that some institutions in the region have the practice of **topping-up the salaries** of those researchers who are able to attract external funds to the institution. The IAI may recognize the topping-up of salaries as a direct cost of the research activity if the institution demonstrates that it is part of its official policies, and that the amount charged to the project as salary for the investigator complies with its policies for salary complements and does not exceed its approved ranges. This institutional policy needs to be documented in the form of a formal and official letter from an institutional leader or administrative head, and appended to the budget justification section of the proposal.

Participating institutions may propose to strengthen their scientific capacity by hiring external **researchers on a part-time basis**. The cost of the participation of such personnel will be accepted by IAI provided that the institution demonstrates that:

- The participation of the professional is necessary to develop the research activity;
- The institution does not have this profile among its regular staff;
- The salary paid to the professional is according to its salary scale;
- The time supported by the grant funds is devoted 100% to the project; and
- There are administrative systems in place to control the attendance and the time charged to the research activity.
- The professional is from an IAI member country

Compensations for Students, and Scholarships: As a general policy, IAI encourages the capacity building of participation by graduate and post-graduate students in the sponsored research activities. The cost of the direct participation of students in the research activity is authorized under the following conditions:

- a) Students as Research Assistants:

- the participation of these students is necessary to support the development of the research activity;
- their academic background is according to the needs of the research activity;
- the contracts/scholarships for the students: term, amount, fringe benefits (if any), and tuition, are consistent with the organization's regular policies and practices;
- the time supported by the grant funds is devoted 100% to the project;
- there are administrative systems in place to control the attendance and the time charged to the research activity.

b) Students on Scholarships:

- the scholarships must be included in the budget for the approved proposal;
- the graduation theses and dissertations address the themes of the IAI funded research activity,
- the scholarships are consistent with the organization's regular policies and practices;
- the support goes to residents of IAI member countries, preferably from Latin American and Caribbean IAI member countries.

Travel / Workshops: Local and international travel for work or attendance to meetings relevant to the project objectives are authorized. Discounted / economy fares by the most direct route must be used. The IAI is required to comply with specific requirements of program sponsors. Details will be provided in the Grant Agreement.

Equipment: Purchase of equipment, tangible nonexpendable personal property having a useful life of more than one year and a cost higher than US\$1,500, will be authorized under the following conditions:

- the amount invested in equipment does not exceed 10% of the total grant;
- items of needed equipment must be listed individually with a short description and an estimated total cost (cost + taxes + transport insurance + shipping);
- an adequate justification for the purchase
- the equipment is necessary to achieve the proposal objectives
- the equipment purchased with the support of the IAI must be accessible to a large number of scientists and students, whenever possible, during and after the completion of the project

The IAI assumes no responsibility in the event of loss or damage to said goods or equipment. Any Grantee taking delivery of equipment purchased with IAI funds for the Project, whether purchased by the Grantee or by a Collaborating Institution, is responsible for undertaking all formalities and other administrative arrangements necessary for importing the equipment into the country in which the Research Work will take place. Ownership of any equipment by the PI's or co-PI's institution will be subject to successful completion of the project, documented through the IAI Directorate. The IAI assumes no responsibility in the event of loss or damage to said goods or equipment, and does not cover insurance at the final destination of the equipment.

Research Expenses / Materials and Supplies: This category includes all the necessary expendable materials directly related to the research activities. Costs related to purchase of equipment, equipment maintenance and office supplies cannot be included under this category.

Reasonable costs for computer supplies (ink, toner and paper) and computer maintenance, for equipments directly used in the research activities, can be included. The cost of hiring external computer services, necessary to the project, can be included under this category. Reasonable amounts for the leasing of computer equipment can be also included. If internal computer services costs are charged to the project, a justification based on established institutional computing processing costs will be necessary.

Communications: The IAI will authorize reasonable amounts charged as communications costs. Under this category, call and communication charges will have to be according to the institution's

policies. Internet access may be charged only with authorization by the IAI if the institution does not have this access through its local network.

Publication / Documentation / Dissemination Costs: This category includes the costs of documenting, preparing, publishing, disseminating and sharing research findings and supporting materials. Page charges for scientific journal publication can be authorized when they report research results from activities supported by the IAI and this support is explicitly acknowledged.

Administrative Support / Office Supplies: In general, IAI expects that the administration of the grant is performed by the established administrative structure of the grantee. If the complexity of the research network created for the project requires hiring or contracting additional administrative support, this direct charge will be authorized on a case by case basis and should be brought to the attention of the IAI at the time of proposal submission. For consideration, direct charges must meet the following conditions:

- this additional administrative position or service is necessary for the financial and administrative management of the research activity;
- the salary or fees paid are according to accepted scales;
- the salary time supported by the grant funds is devoted 100% to the administration of the grant; and there are administrative systems in place to control the attendance and the time charged to the research activity.

In the case that salary compensations are being paid, the rules for topping-up of salaries will apply, provided that the necessity to pay this compensation has been proved.

Reasonable direct charges for office supplies, exclusively used for the activities of the grant, are authorized.

Overheads: No overheads or indirect costs are permitted. If the grantee charges direct administrative costs, these costs will be limited to a maximum that must not exceed 10% of the total grant.

Funding for Cuban participants and travel to and from Cuba: Funding for activities in Cuba, or for travel to and from Cuba must be detailed in a separate budget, so that IAI may provide funds from separate non-NSF sources.

Letters of Commitment

Letters of commitment must accompany your proposal for the PI and all Co- PIs. The letters of commitment must be properly counter-signed by an Authorized Institutional Representative (AIR) of the respective institution. The letters of commitments must include the full project title, the name of the PI or Co-PI and specify that the institution commits itself to administer project funds received under the grant. The letter must also include any in-kind contributions provided by the respective institution. The AIR may not be the PI or Co-PI and should be the dean, rector of the faculty/school, grants administrator, or equivalent or superior authority, who can commit institutional in-kind contributions and investigator's time to the project. Commitment letters must be appended to the proposal when submitted, or sent by the deadline as PDF to CRN3admin@dir.iai.int

Acceptable Formats: .doc, .odt or .pdf (preferred)

Spacing, paper and font size, margins: single-spaced, A4 size, 12-point font (Times New Roman or Arial), all margins 2,5 cm.

Language: proposals must be in English.

Duration of projects and timing: The maximum duration of funded projects under CRN3 is five years, pending satisfactory annual evaluation and external reviews.

To submit a proposal you will first need to obtain an ACCOUNT and PASSWORD for which you must register at <http://iaibr1.iai.int/CRN3> before November 1st. Instructions are provided on the site. If you have registered in the past, that registration can be used again. If you have problems obtaining an account and password or have lost them, please contact iaiweb@dir.iai.int well in advance of the submission deadline.

Complete proposals must be received by electronic submission to the IAI Directorate no later than 3 PM Sao Paulo (Brazil) time, Thursday, 15 November 2012 on the same IAI website: <http://iaibr1.iai.int/CRN3> which is open now.

Proposals that do not comply with all instructions in this document will not be evaluated.

Consultations: please direct all queries to
Program Manager, Ione Anderson: phone 55 12 3208 6869, ianderson@dir.iai.int;