

## **Announcement of Opportunity**

### **Advanced Institute on Global Environmental Change and the Vulnerability of water resources in the context of the Millennium Development Goals**

**Intensive seminar session: September – October 2007 at UNESCO-IHE,  
Delft, The Netherlands**

**Research phase: 2007/2008**

**Final Synthesis Workshop: October 2008**

**Application Deadline: 10 March 2007**

START, in partnership with the Global Water System Project (GWSP), and with financial support from the Norwegian Agency for Development Cooperation (NORAD) and the International Foundation of Science (IFS) invites applications for Institute Fellows to participate in the Advanced Institute on **Global Environmental Change and the Vulnerability of water resources in the context of the Millennium Development Goals** to be hosted by UNESCO-IHE Institute for Water Education in Delft and the Institute for Environmental Studies, Vrije Universiteit Amsterdam.

The Advanced Institute will have three components: (1) a three-week long intensive Seminar to be held at **UNESCO-IHE, Delft, The Netherlands**; (2) one-year research grants for successful Institute Fellows; and (3) a synthesis workshop that will follow completion of the research.

#### **(1) Intensive Seminar**

In the Seminar, Institute Fellows will examine the relationship between climate change and water not only in physical terms but also in terms of the processes of policymaking. Although the seminar is aimed at providing a global overview, it is expected that the students will focus on issues of concern to the specific region/ area from which they come in order to develop top quality research proposals. One of the key purposes of this institute is to promote multidisciplinary research combining social and natural sciences. The Institute will thus aim to actively find students from both the natural sciences as well as the social sciences. These students will be encouraged and enabled to work together and form multi-disciplinary pairs or small groups.

Mentors will assist Institute Fellows to elaborate and refine a research pre-proposal submitted as part of his/her application to the Advanced Institute. Institute Fellows who successfully complete the Seminar and who prepare a high quality research proposal will be eligible to receive a 1-year research grant of \$10,000 to \$15,000 (USD) to carry out their proposed research (with possibility of renewal). During the year of research, mentors will provide guidance to the Institute Fellows and a list-serve will be established to facilitate communication among Institute Fellows about their research. A synthesis workshop will be

held approximately 18 months following the Seminar at which Institute Fellows will present their results and discuss their research experiences.

#### Intensive Seminar Aims:

The goals of the seminar are to:

- a) Enhance broad based understanding of the natural science and social science dimensions of global environmental change and its relationship with the vulnerability of water resources;
- b) Provide training of key skills;
- c) Help participants form multidisciplinary research questions and teams;
- d) Give directions for research, open up windows, and enhance networking possibilities to improve research capabilities;
- e) Seriously help to structure, prepare and refine their research proposals that will lead to publications;
- f) Bring the research results into the public domain;
- g) Lead eventually to improved science based decision-making; and thereby also
- h) Contribute to the scientific goals of the Earth System Science Partnership.

The curriculum of the Seminar will include the general topics outlined below.

#### Outline of seminar:

The three-week seminar is designed to include a number of complementary elements. These are:

- The opportunity to get to know each other, each others' disciplinary perspectives and research ideas; and thereby help participants develop multi-disciplinary teams focusing on common research questions;
- Bringing participants up-to-date with the latest information from the natural and social sciences on various relevant subjects; delivered by the experts in the different fields;
- Training in the use of a number of research tools that can contribute to an integrated assessment of the key issues;
- Training in proposal writing; and
- Student presentations of their evolving research ideas.

The first week will focus on the science of climate change and water respectively, and also discuss key governance issues in the area of climate change and water. It will provide room for discussion of how these link up to the Millennium Development Goals (MDG). It will provide training on scenario analysis, cost benefit analysis, geographical information systems, decision support systems, training in undertaking literature reviews and assessments, stakeholder analysis and participatory integrated assessment. A key feature will be training in writing proposals.

The second week will focus on six crosscutting themes. These include: 1) magnitudes and mechanisms of global environmental change and downscaling to Africa' 2) linkages and feedbacks between climate change and water looking at both physical and institutional

aspects' 3) resilience and adaptation in particular examining the interactions between physical and institutional aspects' 4) uncertainty and risk management, 5) legality, legitimacy and accountability and 6) a closer examination of how ecosystem goods and services will be impacted.

The third week will look at the issues at a global, regional and local scale, both separately and with the intention to integrate the information generated. It will focus primarily on ensuring that the research proposals generated are of high quality and can pass the standards of peer review.

## **(2) Research Grants**

Application to the Advanced Institute will include a pre-proposal describing what kind of research the applicant would like to conduct. During the Seminar, Institute Fellows will be given guidance to elaborate and refine their research proposals. They will be encouraged to write proposals in pairs and if necessary in groups. Final research proposals submitted after the Intensive Seminar session will be evaluated for their relevance to the topics, multidisciplinary, scientific merit and feasibility for successful completion within one-year and the allotted budget. IFS will consider providing a research grant of \$10,000 to \$15,000 (USD) for proposals that are evaluated highly through a scientific peer-review process.

The faculty and international advisory committee for the Advanced Institute will serve as mentors to advise Institute Fellows on the implementation of their funded research projects. Institute Fellows must also arrange for a senior scientist from their sponsoring institution or other local organization to serve as a second mentor for the Fellow's research. A list-serve will be established for Institute Fellows to communicate with each other and mentors about their research progress, methods, difficulties encountered and their solutions, and preliminary findings.

## **(3) Final Synthesis Workshop**

A Synthesis Workshop will be held approximately 18 months following the Seminar to reunite Institute Fellows who have successfully completed their research. Each Fellow will be asked to prepare a paper on their research in advance of the Synthesis Workshop, to present the paper at the workshop, and to submit the paper to a peer reviewed journal for publication. The workshop will also provide time for Fellows to discuss their research experiences and lessons learned and to consider how their research on vulnerability to global environmental change might be applied to lessen vulnerabilities. The intent is to schedule the Synthesis Workshop in conjunction with another international scientific meeting in which Institute Fellows might also participate and thereby gain greater benefit.

## **Eligibility**

The Advanced Institute is open to young scientists and professionals, 35 years of age or younger on 10 March 2007. They must be citizen and resident of a country in Sub-Saharan Africa. The Advanced Institute will be multidisciplinary and applicants with backgrounds in social science, natural science, engineering, management and public policy are invited to

apply. Applicants must at a minimum have a masters' degree and 2-3 years professional experience or have completed a PhD degree or be enrolled in a PhD program.

Applicants will be required to submit a form with their home organization's formal endorsement for participation in the Institute and commitment to support the applicant. Support by an institution would entail that the application has enough time to conduct the research sponsored by the Advanced Institute. The sponsoring institution should also if possible appoint a mentor to provide scientific guidance for the conduct of the applicant's research project in the year following the Advanced Institute and to provide other in-kind support for the research (e.g. work space and access to computers, data and other facilities). No financial commitment by an applicant's sponsoring organization would be required except that they continue to pay the salary of the applicant.

### **Selection Criteria**

A total of 25 applicants, who are resident in and citizen of Sub-Saharan Africa, will be selected to be Institute Fellows. Participation in the Institute will be determined through a competitive process guided by the Institute co-directors and an international advisory committee. The student must demonstrate that he/ she:

- Has a post-masters' degree with several years of professional experience or a PhD;
- Is younger than 35 at the time of application;
- Has education or work experience in the area of climate variability and change and/or water related problems and solutions;
- Has demonstrated ability to initiate and conduct research;
- Has research interests in areas related to and familiarity with the topics of Global Environmental Change and water resources management
- Is endorsed by applicant's home institution;
- Has future professional plans, commitment to work in the developing world, and potential for future leadership;
- Has a good quality **Research Pre-Proposal** that is submitted with the application; and
- Has English language speaking and writing skills (the Institute will be conducted in English; all application materials must be submitted in English).

Areas of research interest, disciplinary expertise, work experience, and geographic and cultural knowledge and experiences will be considered to select a group of Institute Fellows with complementary interests, expertise, backgrounds, and perspectives that will contribute to the success of the institute. In particular, the Institute will seek to balance the country/ regional, gender and disciplinary representation. Researchers from the **Natural, Social Sciences, Humanities and Engineering** are encouraged to apply.

## **Financial Support**

Costs of participation in the Seminar and Synthesis Workshop, including roundtrip Apex airfare, housing, local transportation, medical insurance and a small subsistence allowance will be paid by the Advanced Institute sponsors. Research grants are available as described above. Selection for participation in the Seminar does not guarantee award of a research grant or participation in the Synthesis Workshop.

## **Institute Staff**

The Institute will have some of the most well known researchers in the field teaching the subjects. These will include experts from the Scientific Steering Committees of START, the Global Water System Project (GWSP), the Global Environmental Change and Human Security Project (GECHS), and the Institutional Dimensions of Global Environmental Change Project (IDGEC) as well as staff from UNESCO-IHE, Vrije Universiteit of Amsterdam, and the International Foundation for Science. It will include experts from the Intergovernmental Panel on Climate Change, the Millennium Ecosystem Assessment and the World Water Assessment Project. It will include a balance of international scholars and those who have focused specifically on Africa.

## **Application Deadline and Instructions**

All application materials must be received by Advanced Institute Secretariat at UNESCO-IHE in Delft, The Netherlands no later than 15 March 2007(postmarked 10 March 2007). In addition, the **Application Form** and the **Research Pre-Proposal/Concept Note** must be emailed on 10 March 2007 as per instructions. Applications received after the deadline and incomplete applications will not be reviewed. Prospective applicants are encouraged to forward their applications as early as possible.

Please follow the procedures below to apply to the Advanced Institute:

- 1) Read eligibility requirements and decide if they apply to you. If you have questions, please contact the coordinator at UNESCO-IHE – details below.
- 2) Download and print the electronic Application Documents from the START website ([www.start.org](http://www.start.org)). Your full application packet must include the following:
  - a. Cover letter including motivation
  - b. Curriculum Vitae
  - c. Application Form (from the START website)
  - d. Concept paper/ pre-proposal,
  - e. Professional Reference Form (2 references required) (from the START website)
  - f. Institutional Support Form (from the START website)
- 3) Adhere strictly to all page limits indicated below. Failure to do so will be interpreted as lack of ability to identify essential information and write concisely and will be judged unfavorably in the review of your application.

- 4) Complete the **Application Form**. Please fill in ALL the information requested.
- 5) Arrange for TWO references to each complete the **Professional Reference Form**. The completed Professional Reference Forms may be mailed directly to UNESCO-IHE by the References or given to the Applicant in a sealed envelope (to preserve confidentiality) for inclusion by the Applicant with the application materials that he/she submits.
- 6) Arrange for the **Institutional Support Form** to be filled out and signed by an appropriate representative of the Applicant's home institution. The signed form will constitute an agreement by the home institution to sponsor the Applicant. The form can be signed by the home institution's Director, Department Head, or the Applicant's direct supervisor.
- 7) Prepare a one-page **Statement of Current Activities and Future Plans**. The statement should provide a brief summary (no more than one page) of your current research, academic, and professional activities and future research plans that are most relevant to your qualifications for the Advanced Institute.
- 8) Prepare a **Research Pre-Proposal/Concept Note**. The proposed research must be related to climate change and water resources management preferably in relation to attaining the MDG's. The advanced institute is multidisciplinary and will focus on integrating the social and natural sciences therefore we strongly encourage participants to include this in their proposals. Fellows from the natural sciences are encouraged to link to a social scientist and vice versa. The Pre-Proposal should include (a) a problem statement, (b) objectives of the proposed research, including any hypotheses to be tested, (c) a summary of methods you will employ, with references to relevant literature, (d) a statement of expected long-term benefits of the proposed research, (e) resources needed and how they will be employed, and (f) a list of collaborating individuals and institutions. The Pre-Proposal should not exceed 2500 words (excluding reference) and should be no more than eight pages. Proposed objectives should be achievable within one year of receipt.
- 9) Obtain and submit copies of the your **Official University Transcript** for the highest degree completed, listing courses taken and grades for each course. NOTE: For senior applicants, this requirement may be waived (contact UNESCO-IHE before the application deadline to request the waiver). Transcripts in a language other than English must be translated into English.
- 10) Submit copies of your current **Curriculum Vitae** (3 pages maximum) that summarize information about your education, employment history, publications and other activities that are most relevant to your qualifications for the Advanced Institute.
- 11) If not a native English speaker, submit **Proof of English language Proficiency**. This may include, for example, any Diplomas or Certificates of proficiency in the English language, or scores from the Test of English as a Foreign Language (TOEFL), or a note from the applicant's organization certifying proficiency in English language. A degree from an English language University is also acceptable proof.

- 12) Assemble all materials of your full application packet and mail the **ORIGINAL** of all materials (except the Professional Reference Forms) to: Advanced Institute (Prof. J. Gupta, UNESCO-IHE Institute for Water Education, P.O. Box 3015, 2601 DA Delft, The Netherlands).
- 13) In addition: Email the **Application Form** and the **Research Pre-Proposal/Concept Note** to: Advanced Institute (Prof. J. Gupta), [info@unesco-ihe.org](mailto:info@unesco-ihe.org). Deadline: 10 March 2007.

Once the selection process is completed, all applicants will be notified of the decisions by the Institute organizers. It is expected that the selection process will be completed by 20 April 2007. Notification of results will be done initially via e-mail (participants without access to e-mail will be notified by fax) and subsequently by regular mail.

Questions can be directed to [info@unesco-ihe.org](mailto:info@unesco-ihe.org)