## ANNOUNCEMENT OF OPPORTUNITY

## IAI Training Institute on Land Use Change Analysis and Water and Food Security in the La Plata Basin Region

April 06-15, 2011 – Asuncion, Paraguay

**Objectives:** The goal of this Training Institute is to provide scientific information and knowledge to support land use planners, decision-makers, and stakeholders on rural development, land use change and conservation in the La Plata Basin (LPB) region. Scientific information and data on land use, hydrology, and climate will be integrated to guide sustainable social and economic rural development in the region. Participants will also become familiar with data analysis tools and evaluate the consequences of land use change on water and food security.

The Training Institute will explore the interactions between natural and human components of agroecosystems in the LPB, taking advantage of an interdisciplinary approach for land use change analysis using existing data sets. We will assess risks and opportunities offered by increasing global demand for agricultural commodities and biofuels, and the impacts of agricultural expansion and intensification on ecosystems goods and services. Emphasis will be on the interactions between land-use, ecosystems, climate and hydrology. Through lectures, discussions, case studies and hands-on exercises, we will explore climate, social and economic contexts and their links to drivers of land use change. We will also seek to encourage communication and collaboration between the scientific and policy communities and explore the science-practice interface. Presenters and participants will both contribute to the discussions and outputs for a mutually beneficial learning experience.

**Program:** The following themes will be addressed:

- 1. Concepts on environmental change:
- Ecosystems goods and services
- Land cover and land use change, natural and human factors
- 2. Interactions between land-use, ecosystems, climate and hydrology: natural and agricultural ecosystems;
- 3. Alternatives of energy generation from ecosystems, including biofuel crops and natural ecosystem biomass;
- 4. Land cover and land use change effects on water and nutrient cycling;
- 5. Decision Support Systems to help agriculture and natural resource industries mitigate risks associated with climate variability and change;
- 6. GIS technology as a tool of landscape analysis.

The 10 day program of the Training Institute has interacting components: lectures, discussion sessions, and practical exercises. The lectures will help participants obtain a progressive understanding of the theoretical background and the multi-scale interactions of climate, ecology, biodiversity, hydrology, land use, economics, and social development. This will be complemented with hands-on training. A field trip may be part of the program to allow participants to interact directly with stakeholders (e.g. farming cooperative or a water resources agency involved in decision making on land and water use).

<u>Participants</u>: The Training Institute is designed for professionals and young scientists in all relevant disciplines coming from IAI member countries, particularly from the La Plata Basin region: practitioners working on land, water and environmental planning; decision-makers formulating rural development policies; and scientists working on land use, water and climate issues. Participants will come from government agencies, universities, research centers, non-governmental organizations and the private sector.

<u>Site and Date</u>: The Training Institute will be held from 6-15, April, 2011 at the National University of Asuncion (UNA) in Asuncion, Paraguay.

<u>Application Process</u>: Applications must be submitted on-line at <a href="http://iaibr3.iai.int/twiki/bin/view/TIParaguay2011">http://iaibr3.iai.int/twiki/bin/view/TIParaguay2011</a>

Application requirements are listed at this web site.

Complete applications must be submitted no later than 9 February 2011, 14:00 hs São Paulo, Brazil. Applications received after this deadline or incomplete will not be considered. Decisions on the application will be communicated to all applicants by the end of February 2011. Further instructions and information about the Training Institute are available at the application website.

Language Requirement: The Training Institute will be conducted in English or Spanish and participants must be proficient in one and have a sound understanding in the other language.

Travel Support: Funds are available for travel support, including airfare, lodging and meals per diem. Travel arrangements will be made for all successful applicants through the IAI.

Any inquiries concerning this IAI Training Institute should be sent to: iai ti paraguay2011@dir.iai.int