

## Terms of Reference

# CONSULTANCY TO DEVELOP TRAINING MATERIALS ON TRANSDISCIPLINARY SCIENCE RELATED TO GLOBAL ENVIRONMENTAL CHANGE IN THE AMERICAS

#### BACKGROUND

The IAI sits at the intersection of science and policy. As a regional intergovernmental organization, with 19 member countries of the Americas (Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Jamaica, Mexico, Panama, Paraguay, Peru, United States of America, Uruguay and Venezuela), the IAI aims to provide nations with the tools and institutional capacities to better face the challenges posed by global change. Global environmental change (GEC) is defined by the IAI as the interactions of biological, chemical, physical and social processes that regulate changes in the functioning of the Earth system, including the particular ways in which these changes are influenced by and impact on human activities. This collaborative, multinational effort is guided by the understanding that global change is urgent, complex, dynamic, and with considerable uncertainties.

Innovative science and training approaches are needed to increase institutional and research capacities across the Americas. These efforts are grounded in the IAI's foundational principles, identified in the Strategic Plan: transdisciplinary (TD) science, participatory and inclusive design, innovative and solution based science, multi-scalar analysis and integration, open data/science, scientific outreach and knowledge mobilization, alignment with environmental governance frameworks, where appropriate, and strengthening capacities across the science-policy interface. For more details about the IAI's science agenda: <a href="https://www.iai.int/en/research/agenda">https://www.iai.int/en/research/agenda</a>.

IAI supports science that improves the Americas' ability to cope with and thrive under global change, making a positive impact towards the sustainability of the region. The following strategic areas have been identified: reduction of poverty and inequality; improving food, water, and energy security; climate change adaptation and mitigation; improved human health and wellbeing; conservation and restoration of biodiversity and ecosystems; clean air, water and soil. For more details about the IAI's strategic plan: <u>https://www.iai.int/pdf/en/Strategicplan-en.pdf</u>.

Transdisciplinary (TD) science is an approach that is problem driven and solution oriented, integrating knowledge, tools, and ways of thinking from multiple disciplines and actors to provide useful and actionable information for end users from public and private sectors. TD science requires an interactive and iterative co-creation process involving scientists and relevant stakeholders, including those most affected by the research, but not limited to: policy makers, indigenous peoples and local communities, youth and women, where appropriate and when intrinsic to the project design.



### **SCOPE OF WORK**

The IAI Directorate seeks a consultant team to develop training materials on TD science related to global environmental change (GEC) in the Americas. These training materials should aim to enhance the capacity of professionals across the Americas to conduct TD science and to bring TD science to contribute to the development of more effective public policies.

Training materials should aim to increase the inclusion of underrepresented groups in the IAI's science and capacity building activities, and should address other considerations of equity, diversity and inclusion in TD science. Training materials should target early to mid-career researchers and other professionals working in governments, academic institutions and private sectors having an interest in TD research on GEC at the science-policy interface.

Materials will be developed in close coordination with the IAI Directorate and key partners. The content should align with the IAI's science agenda (<u>https://www.iai.int/en/research/agenda</u>) and strategic plan (<u>https://www.iai.int/pdf/en/Strategicplan-en.pdf</u>). Please check the Small Grants Program (https://www.iai.int/en/post/detail/small-grants-program-sgp-hw) and the Annex of the Science Agenda for examples of TD research

(https://www.iai.int/administrador/assets/images/ckfinder/files/IAI%20Scientific%20Agenda\_2021.pdf)

#### Deliverables

- 1. Inception report with detailed work plan, developed and submitted for approval by the IAI Directorate.
- 2. A database of existing open access TD training material relevant for GEC in the Americas.
- 3. Coordinate with the IAI Directorate to produce a report with a series of TD science-policy case studies from IAI member countries, to highlight the use of scientific information to inform adaptation and mitigation strategies for key GEC challenges. Case studies will be authored collaboratively by scientists, policy practitioners and other stakeholders from the Americas.
- 4. A virtual asynchronous TD curriculum tailored for GEC in the Americas; content must include learning assessments. Training materials will showcase lessons learned, best practices in TD research, science communication skills, effective networking and partnership building, how to work across disciplines, how to write TD proposals, and responsible and ethical research conduct, among other topics. The curriculum will draw on practical examples and case studies from Deliverable 3, leveraging the experiences of IAI's network of scientists and policy practitioners. The consultant will work closely with the IAI Directorate to test the curriculum during the development stage. The curriculum will be hosted on a learning management system (LMS). The main contents should be available in Spanish and English (e.g., instructions, descriptions, assessments).
- 5. Design a training package in Spanish and English on TD science for GEC in the Americas, based on Deliverable 4. A virtual training will be presented via several live webinars, and



a more in-depth training will be presented in person in one IAI member country using a 'train the trainer' model. Travel and other expenses will be covered by the IAI Directorate, which will organize and manage the course.

- 6. Draft final report.
- 7. Final report.

#### **COSTING AND IMPLEMENTATION**

The consultancy is valued at approximately USD \$120,000, including local taxes, The intended start date is December 2021 and the period of implementation of the contract is twelve (12) months. No overhead may be charged, but accountable itemized administrative expenses may be charged.

#### REQUIREMENTS

Key experts on the consulting team should have the following expertise:

- At least 7 years of professional experience with GEC science-policy in the Americas
- At least 5 years of experience developing and conducting trainings on TD science
- At least 5 years of experience developing online curriculum with LMSs
- Experience working in Latin America and the Caribbean
- Fluency in English and Spanish, written and verbal

The lead organization submitting the proposal must be from an IAI Party (<u>https://www.iai.int/en/structure/focal-points</u>) and must be independent of conflicts of interest

Teams led by individuals from underrepresented groups are encouraged to apply.

Teams with representatives from multiple countries and experience in different sectors (schools of diplomacy and government, university, private sector, civil society) are encouraged to apply.

#### IAI POLICIES

The proposal should align with the IAI's policies as applicable.

Gender Policy:

https://www.iai.int/administrador/assets/images/ckfinder/files/Gender%20Policy%20on%20IAI%2 0Projects%20and%20Activities.pdf

Open data/open science: https://www.iai.int/index.php/en/post/detail/Open-Data