



DS/SC-2/15/7

**Proposal for a Bellagio conference on the science/policy
interface in relation to crop germplasm**

Information note by the Joint Facilitation Unit

This document contains a concept note for a Bellagio conference. The CGIAR Consortium Office introduced the idea in consultation with the Chairperson of the DivSeek Assembly and prepared the note, with inputs from other members of the Joint Facilitation Unit.

The Committee is invited to consider the proposal and advise on the merits.



Conference, Practitioner, and Academic Writing Proposal Questions

Please answer the questions below or in a separate document. Please include your name and contact information on all submitted materials. After answering the questions, please upload it to your online application as an attachment.

Name: TBD

What is the purpose and goal of your project? (250 words)

The conference will explore the role of plant genetic resources in the context of the United Nation's Sustainable Development Goals (SDG). Achieving these SDGs will require producing enough food over the next 15 years to feed the planet's 9 billion people, including the ~800 million people who currently go to bed hungry every night. The largely untapped potential of plant genetic resources, which is explicitly acknowledged in the SDG, can contribute to enhancing agricultural productivity and climate resilience in an environmentally and socially sustainable manner. Global thought leaders in crop diversity and its role in agriculture will work with other experts to produce a position paper to advance an ongoing science-based global dialogue about how the informed use of plant genetic resources can help adapt agriculture to a changing climate and augment food and nutritional security, particularly in the developing world. Specifically, discussions will consider interactions between emerging scientific opportunities and policy challenges related to securing, managing and using plant genetic resources, with the ultimate goal of maximizing the contribution of crop diversity to the

resilience and productivity of agri-food systems. The *Diversity Seek* initiative (DivSeek) (www.divseek.org) is a new voluntary initiative of global players dealing with conservation, research and regulation of crop germplasm for food and agriculture. DivSeek partner organizations will convene the Bellagio meeting.

What forces are at play now that create an opportunity for positive change on the issue? (150 words)

Game-changing and potentially disruptive DNA-sequencing technologies, big-data platforms, high performance computing, image-based phenotyping methods, gene-editing techniques, and synthetic biology concepts are revolutionizing the way crop diversity is managed and used. Taken together, these technologies have the potential to promote a ‘decoupling’ between the biological samples conserved in genebanks and the exploitation of a rapidly growing informational domain associated with these samples in crop and animal breeding programs. This trend, sometimes referred to as the ‘dematerialization of genetic resources’, has led to renewed conversations about global stewardship and equity, both at the level of individual governments and in international fora. There is now a window of opportunity to propose and advocate innovative solutions to global commons policy issues to contribute to a food-secure future.

How does your work relate to the Rockefeller Foundation’s Focus Areas—advancing health, transforming cities, securing livelihoods, and revaluing ecosystems—or the wellbeing of humanity more generally? (150 words)

DivSeek is supported by a coalition of the *Global Crop Diversity Trust* (GCDT; www.croptrust.org), the *International Treaty on Plant Genetic Resources for Food and Agriculture* (ITPGRFA; www.planttreaty.org), the Consortium Office of the *Consultative Group on International Agricultural Research* (CGIAR; www.cgiar.org), and the *Global Plant Council* (GPC; <http://globalplantcouncil.org>). All these organizations contribute to securing farmers' livelihoods and the wellbeing of humanity in general, by enhancing the productivity, resilience, and sustainability of global agriculture through a greater and more informed use of crop diversity. GCDT is raising an endowment fund to secure the conservation of humanity's most important crop genetic resources in perpetuity. ITPGRFA regulates the exchange of and benefit sharing from crop germplasm, and the Global Information System on crop germplasm. CGIAR genebanks are the most significant global custodians, users and dissemination centers of crop diversity for agriculture in developing countries. GPC is a coalition of national, regional and international plant, crop, agricultural, and environmental scientific societies. It represents over 55,00 plant and crops experts across the globe with a mission to promote plant research, teaching and training around the world.

What is the impact on poor or vulnerable populations? (150 words)

DivSeek's mission is to support "...activities that harness the power of crop diversity for food and nutritional security and societal and economic benefits..." The DivSeek Steering Committee specifically promotes the participation of gene bank managers, scientists working with natural variation, and policy makers from developing countries in the initiative. The purpose of the endowment fund being raised by GCDT is to support genebanks in developing countries. Ongoing work of the CGIAR targets poor small- and medium-holder farmers and both rural and

urban consumers, particularly women and children, in Africa, Asia, and poverty hotspots in Latin America. ITPGRFA manages the Benefit Sharing Fund, which targets crop-diversity management in developing countries. The majority of the conference participants will be from developing countries. Together these factors will ensure that the impact of the proposed project will be primarily directed towards farmers in developing countries.

What is the specific phase of the project you will work on while at the Center? (150 words)

The goals of the workshop will be to identify a research agenda for collaborative actions that can shape new scientific policy, training and communication initiatives to accelerate the responsible exploration, characterization and utilization of plant genetic resources to augment the productivity and climate resilience of agri-food systems in the developing world. We will bring together experts from diverse intellectual communities, including policy makers, biological scientists, genebank managers, information technologists and education/communication specialists to craft the research agenda for a more efficient and equitable functioning of the existing global commons policy, which unleashes the potential of world's germplasm holdings to catalyze a new era of rapid crop improvement designed to enhance food and nutritional security throughout the developing world.

What outputs/products do you anticipate will result from your conference/residency (Please check all that apply)

- Book Chapter
- Article for Peer Reviewed Publication
- Article for General Publication

Strategic / Organizational Plan

White Paper

Grant Proposal

Policy Initiative

Private Report

Artwork

Poetry

Musical Composition

Translation

Other (please explain)

What are the goals for your conference/residency that will result from the outputs listed above? (Please check all that apply)

Generate/disseminate new knowledge/research

Develop or disseminate solutions to existing problems

Support creation of a new organization

Form new networks/alliances for problem solving

Enable emergence of new global initiatives through existing organizations

Inspire thought or action through artwork or literature

Other (please explain)

How will the outputs be disseminated and to whom? (150 words)

The conference outcomes will be published in peer-reviewed articles in authoritative journals in the field of Genetic Resource Policy, e.g. Nature and Science. The white paper will be distributed throughout CGIAR, Crop Trust, Global Plant Council, ITPGRFA and their partners. It will inform an emerging global research agenda on plant genetic resources policy and formulate a coordination mechanism for taking up such an agenda.