International Conference on Biological and Cultural Diversity: Diversity for Development Development for Diversity (8-10 June 2010, Montreal, Canada)

Working Document

A PROPOSED JOINT PROGRAMME OF WORK ON BIOLOGICAL AND CULTURAL DIVERSITY LEAD BY THE SECRETARIAT OF THE CONVENTION ON BIODIVERSITY AND UNESCO

Introduction

- 1. 2010 International Year of Biodiversity (IYB) provides an effective point for reinforcing the implementation of the three objectives of the Convention on Biological Diversity. These three objectives also highlight the linkages between biodiversity as the core of sustainable development promoting human well being. This is a golden moment to also promote the recognition of the inextricable links between biodiversity and cultural diversity, particularly as 2010 is also the International Year of Rapprochement of Cultures (IYRC). The IYRC aims to promote reciprocal knowledge of cultural, ethnic, linguistic and religious diversity and to foster dialogue for sustainable development based on recognition of and respect for knowledge, including traditional knowledge and the knowledge of indigenous peoples.
- 2. 2010 can thus be seen as the Year that celebrates the diversity of life on earth in all its forms but also 2010 raises the alarm over the unprecedented changes its main biological and cultural components are currently facing. From genes, species, ecosystems, landscapes and seascapes, to languages, practices, traditions, artistic expressions and belief, value and knowledge systems, these diversities are facing unprecedented changes, including loss. The impact of reduction in bio-cultural diversity on the resilience of the planetary systems is profound. In the current global change context, the loss of biological diversity, with the simultaneous loss of languages, knowledge systems, and specific ways of life, has resulted in new challenges for coupled social-ecological systems.
- 3. To address these challenges, it is critical that the links between biological and cultural diversity encompassing, *inter alia*, languages as repositories of knowledge and practices, tangible and intangible heritage related to nature, modes of subsistence, economic and social relations and belief systems are taken into consideration in policy development at all scales.
- 4. Because of their respective mandates, the Convention on Biological Diversity (CBD) and UNESCO's Conventions and Programmes dealing with biological and cultural diversity (Annex 1) are in a unique position to focus attention on the links between biological and cultural diversity at especially international levels. The recent coming into force of the 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage and the 2005 UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions underlines the value in strengthening the ties between the work of UNESCO and that of the CBD at the interface of biological and cultural diversity.
- 5. The importance of better collaboration between UNESCO and the CBD on interconnected biological and cultural diversity was noted by the Conference of the Parties of the CBD, in decision IX/27, paragraph 8, which: "[the COP] requests the Executive Secretary to continue to liaise with the conventions, organizations and initiatives with which the Secretariat of the Convention on Biological Diversity has already signed or is in the process of signing memoranda of cooperation, including in particular the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003) and the Convention on the Protection and Promotion of the Diversity of Cultural Expressions, with a view to advancing implementation of the Convention in accordance with the decisions of the Conference of the Parties, including the development of joint activities as appropriate."
- 6. It is in this context that the present International Conference on Cultural and Biological Diversity: Diversity for Development- Development for Diversity, jointly organized by UNESCO and the Canadian National Commission for UNESCO, the Secretariat of the Convention on Biological Diversity, UNEP and

the Canada Research Chair in Ethnoecology and Biodiversity (University of Montreal), in partnership with the International Economic Forum of the Americas, takes place. The main objectives of the Conference are:

- (a) To bring together civil society, representatives of indigenous and local communities, policy makers, scientists and intergovernmental and development cooperation agencies,
- (b) To exchange knowledge and practices linking biological and cultural diversity; and
- (c) To provide elements for a programme of work to be jointly implemented by UNESCO, the SCBD and other partners.
- 7. The purpose of this document is to provide the participants of the Conference with some background information and guidance to assist their reflections and discussions, in meeting the Conference objectives.

Definitions

Biological diversity

8. The Convention on Biological Diversity (CBD)¹ defines biological diversity as: "The variability among living organisms from all sources, including inter alia terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems." The Ecosystem approach of the Convention makes it clear that biological diversity has to be seen in the context of peoples relations with nature, and that people are part of biodiversity.

Cultural diversity

9. According to the UNESCO Declaration on Cultural Diversity (2001)² "Cultural diversity is considered to encompass "all communities in the world, each of them with their own identity determined by ethnicity, history, language, religion and art". It "widens the range of options open to everyone; it is one of the roots of development, understood not simply in terms of economic growth, but also as a means to achieve a more satisfactory intellectual, emotional, moral and spiritual existence." Cultural diversity may be understood as, but not limited to, diversity in: (1) practices (rituals, production systems and knowledge transmission systems); (2) ways of living together (social systems including institutions, legal systems, leadership and tenure systems); (3) value systems (religion, ethics, spirituality, beliefs and worldviews); (4) knowledge (know-how and skills); (5) languages; and (6) artistic expressions (art, architecture, literature and music).

Local, Indigenous or Traditional Knowledge

10. Local, indigenous or traditional knowledge systems bridge the gap between biological and cultural diversities. These complex and dynamic arrays of knowledge, know-how, practices and representations guide human societies in their innumerable interactions with the natural milieu (Nakashima and Roué 2002). Article 8(j) of the Convention on Biological Diversity gives particular recognition to this cultural dimension of biodiversity, as do all of UNESCO's cultural conventions.

Landscape

11. The landscape concept recognises the constant interplay between people and their natural surroundings, and more specifically the manner in which human societies shape the land and are in turn, shaped by it. The concept of *cultural landscapes* as recognized within the framework of the World Heritage Convention, underlines the significance of this encounter between biological and cultural diversities.

Biocultural diversity

12. The inextricable link between biological diversity and cultural diversity received international recognition through the Declaration of Belem (1988). Loh and Harmon (2005)³ define Biocultural diversity as the total sum of the world's differences, no matter what their origin. This concept encompasses biological diversity at all its levels and cultural diversity in all its manifestations. Biocultural diversity is derived from the myriad ways in which humans have interacted with their natural surroundings. Their co-evolution has generated local ecological knowledge and practices: a vital reservoir of experience, methods and skills that help different societies to manage their resources. Diverse worldviews and ethical approaches to life have

¹ Convention on Biological Diversity http://www.cbd.int/

² UNESCO Declaration on Cultural Diversity http://unesdoc.unesco.org/images/0012/001271/127160m.pdflink

³ Loh, J. and Harmon, D., 2005. A global index of biocultural diversity. Ecol. Indic. 5(3):231-41.

emerged in tandem with this co-evolution of nature and culture. The biocultural concept is critical to making progress on building mutual understanding and support between these two diversities.

Links between biological and cultural diversity-State of research and policy work

- 13. Over the past several decades, the academic community has given considerable thought and effort to explore the complex interface between biological and cultural diversity building on improved communication and collaboration with indigenous and local communities. This research area is characterized by a very rich array of disciplines, concepts and epistemologies. Ethnoecology, as it emerged in the 1950s under the leadership of Conklin (1954), has examined the understandings and representations that peoples in various cultures possessed with respect to their natural environments. Ethnoscience examined in great depth the complex systems of classification developed in different cultures as they apprehended the bio-physical diversity that surrounded them (e.g. Berlin 1992; Ellen 1993; Friedberg 1979). Studies in traditional ecological knowledge focused on peoples' knowledge and interactions with the ecosystems in which they lived and which they also shaped. These fields provide a kaleidoscope of perspectives on the interlinkages between nature and culture, referring to anthropological, sociological, biological, historical, geopolitical and resource management terms. Some of these sub-disciplines are cross-cutting fields that explore the boundaries of different disciplines, particularly between the natural and social sciences, to generate new theories, methods and applications.
- 14. More recently, "biocultural diversity" has arisen as an area of transdisciplinary research concerned with investigating the links between the world's cultural and biological diversity, focusing on, inter alia, correlations between biodiversity and linguistic diversity in specific regions and localities⁴. Blending elements from the disciplines of landscape ecology and anthropology are important in determining future directions for these studies.
- 15. The investigations on the role of languages have allowed for considerable insights in the relationships between linguistic diversity and biodiversity, including crop diversity. However, a recent review article suggests that in spite of the growing scientific efforts, the degree to which biological diversity is linked to cultural diversity is only beginning to be understood⁵. Systematic research and empirical work that focus on these linkages is still limited, although interdisciplinary research in ethnoscience, ethnobiology, ethnoecology, and ethnolinguistics has developed methods to address linkages between biological and cultural diversity. Many conceptual and methodological aspects of researching interactions between biological and cultural diversity need further elucidation.
- 16. At the same time there is increase in practical expertise in the development and application of integrated approaches to landscape management practices, which build on the links between biological and cultural diversity. These are represented by concepts such as cultural landscapes, terroirs, biosphere reserves, Satoyama, globally important agricultural heritage systems and several others.
- 17. On the policy side, several intergovernmental processes, policy instruments and international scientific assessments (e.g. CBD, the Ramsar Convention on Wetlands, the Convention concerning the Protection of the World Cultural and Natural Heritage or the World Heritage Convention, Convention on Migratory species, Convention ion International trade in Endangered Species, International Convention on the regulation of Whaling, United Nations Forum on Forests, Convention for the Safeguarding of the Intangible Cultural Heritage, Landscape Convention, the Millennium Ecosystem Assessment), have made explicit reference to cultural drivers when dealing with biological diversity and vice versa. They have corroborated the importance of the very complex interface between cultures and ecosystems, whose sustainability and resilience depends on the maintenance of their interconnectedness.

5 Pretty J., Adams B., Berkes F., Ferreira de Athayde S., Dudley N., Hunn E., Maffi L., Milton K, Rapport D., Robbins P., Sterling E., Stolton S., Tsing A., Vintinner E. and Pilgrim S., 2010. The intersection of biological diversity and cultural diversity: towards integration. Conservation and Society, 7(2): 100-112.

⁴ Maffi, L., ed., 2001. On Biocultural Diversity. Linking Language, Knowledge and the Environment. Washington & London: Smithsonian Institution Press.

18. A number of international instruments, institutions and initiatives are of particular relevance to indigenous and local communities, traditional knowledge, and more recently, language issues. They include but are not limited to the CBD, Agenda 21, The Earth Charter Initiative, the International Labour Organization's Convention on Indigenous and Tribal Peoples (ILO 169), United Nations Permanent Forum on Indigenous Issues, World Intellectual Property Organization, United Nations Declaration on the Rights of the Indigenous Peoples, The United Nations Development Programme (UNDP), The World Bank, the United Nations Conference on Trade and Development (UNCTAD), IUCN/CEESP Programme of Work, and UNESCO. Within these fora, there is work in progress to produce comprehensive guidelines and measures to conserve and manage biological and cultural diversity, to develop indicators, define proper methodologies, set research agendas and educate the general public. However, there remains a need to create better linkages among these initiatives and expand their focus on a wider range of expressions and outcomes of interactions between components of diversity. While the process needs to be dynamic, adapted to specific contexts and responsive to change, connections between national and international frameworks need to be established, promoted and maintained.

Knowledge gaps and priorities for research, practice and policy

- 19. Recognizing that together biological and cultural diversity hold the key to environmental and social sustainability, in 2007, UNESCO, in collaboration with The Christensen Fund, organized an international workshop focusing on concepts, methods and experiences related to the linkages between biological and cultural diversity. The workshop was convened to provide guidelines for more systematic studies of the linkages between biological and cultural diversity, and recommendations for future research, policies (and UNESCO's work) in this area. It provided guidelines for conceptual and methodological frameworks that are needed to define the dynamic interface between biological and cultural diversity and ensure that diversity in its full complexity is taken into consideration in the design and implementation of conservation and sustainable development models, policies, strategies and actions⁶.
- 20. The principal recommendation of the Workshop was that: If diversity is to become an integrated part of decision and policy making processes, then the separately evolving biological and cultural diversity agendas need to be systematically linked and the conceptual, practical and normative aspects of the links between biological and cultural diversity need to be assessed at local, national, regional and international levels.
- 21. A set of recommendations was provided for: future policy work, future research and future work of UNESCO on the links between biological and cultural diversity (Annex 2). Based on the results of the workshop and recent scientific, practical and policy work related to the links between biological and cultural diversity, the following areas of work were identified as critical in advancing the knowledge on the links between biological and cultural diversity with a view of ensuring that diversity finds a central place in the policy agendas:
 - Links between biological and cultural diversity as the core of sustainable development;
 - Knowledge systems: Recognition, transmission and protection;
 - Biocultural landscapes including their dynamics and management;
 - Values of diversity;
 - Measuring diversity and its values;
 - Cultural and biological resilience;
 - Biocultural landscape responses to change;
 - Normative frameworks and instruments;
 - Educating about biological and cultural diversity.

⁶ http://unesdoc.unesco.org/images/0015/001592/159255E.pdf

TOWARDS A JOINT PROGRAMME BETWEEN UNESCO AND THE CBD

Mission

With CBD acting as global focal point for biodiversity⁷ and UNESCO acting as global focal point for cultural diversity, strengthen the linkages between biological and cultural diversity initiatives at international level, and to support development between interlinked provisions of conventions and programmes dealing with biological and cultural diversity at relevant scales.

Timeframe: To 2020 with mid-term review at the end of 2015.

General Principles of the joint work programme

- Under the leadership of SCBD and UNESCO, other relevant agencies should be actively involved through a possible establishment of an inter-agency support group on biological and cultural diversity;
- Full and effective participation of scientific community and indigenous peoples, minorities and local and traditional communities, especially women, in the establishment and implementation of the joint programme of work;
- A holistic approach consistent with the spiritual and cultural values of indigenous peoples and local and traditional communities;
- Promotion of intercultural dialogue and ecosystems approach to addressing the interlinked biological and cultural diversity issues.

Specific Objectives

- To build bridges between biological and cultural diversity agendas.
- To promote coordination between the Secretariat of the CBD, representing international conventions dealing with biodiversity and UNESCO, representing conventions and programmes dealing with cultural diversity.
- To explore conceptual/theoretical and methodological issues related to the links between biological and cultural diversity.
- To promote/encourage/catalyze the collection/compilation of information from on-the ground
 activities on the links between biological and cultural diversity using, appropriately designated sites,
 such as biosphere reserves and World Heritage sites. The information can serve as background for
 identifying good practices to feed into management and decision/policy making processes.
- To catalyze activities that could contribute to raising awareness on the importance of linking biological and cultural diversity in management and decision-making processes, bearing in mind the importance of resilience.

Possible Key Action Points

Building bridges between legal instruments

- Finalize in-depth desktop analysis of the provisions linking cultural and biological diversity in the texts operational guidelines and decisions of the CBD and UNESCO's cultural diversity-related conventions.
- Identifying gaps that need to be taken into account.
- Provide advice on implementation of interlinked provisions in a mutually reinforcing and

⁷ CBD's role as convenor of the Biodiversty Liaison group and member of the Joint Liaison Group is crucial here

coordinated manner.

Building the knowledge base

- Develop a common interdisciplinary conceptual and methodological framework for addressing the links between biological and cultural diversity and a set of guiding principles, including ethical principles, for the future research and policy work at the interface between biological and cultural diversity for present and future generations.
- Promote inter-cultural and inter-faith dialogues on biological and cultural diversity issues, as well as integration of scientific and traditional knowledge in respectful ways for the benefit of biodiversity and cultural diversity.
- Assess and synthesize knowledge on the ways in which cultural diversity has shaped and continue to shape biodiversity, including in sacred natural sites, cultural landscapes and traditional agricultural systems, as well as in urban contexts.
- Assess and synthesize knowledge on contemporary processes that reduce, modify and/or produce diversity through homogenization, hybridity and diversification.
- Support specialized work on the links between biological and cultural diversity, including the development of indicators and other means of measuring status, trends and values of diversity, by building and maintaining expert networks, providing platforms for exchange and sharing of data, ideas and information.
- Deepen our knowledge on the role of sacred sites (as biodiversity hotspots) and sacred species and their role in maintaining and promoting cultural and biological diversity, building on the on-going work in this area.

Raising awareness, educating, acting

- Develop communication materials and other tools to raise awareness on the importance of the links between biological and cultural diversity for human and environmental prosperity.
- Support the creation of regional UNESCO chairs for further systematic study and enhancement of Bio-Cultural diversity, as well as development of pedagogical guidelines for students as well as local decision makers, including in cities and urban environments.
- Launch a pilot project in UNESCO designated sites, biosphere reserves and World Heritage sites to test and apply the knowledge on the links between biological and cultural diversity to management and governance practices.

All the actions will be carried out in line with the relevant Declarations and guidelines including

- The Universal Declaration of Human Rights;
- The UNESCO Universal Declaration on Cultural Diversity;
- The Universal Declaration on Bioethics and Human Rights
- The Earth Charter

- The Yamato Declaration on Integrated Approaches for Safeguarding Tangible and Intangible Cultural Heritage;
- The UNESCO/IUCN Guidelines for the Conservation and Management of Sacred Natural Sites;
- The CBD Akwé:Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessment Regarding Developments Proposed to Take Place on, or Which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities;
- The Code of Ethical Conduct to ensure respect for the cultural and intellectual heritage of indigenous and local communities relevant to the conservation and sustainable use of biological diversity⁸.

⁸ This draft code is expected to be adopted by the Parties to the Convention on Biological diversity at COP 10, Nagoya Japan, in October, 2010.

Annex 1 Biodiversity and cultural diversity in UNESCO and the CBD

In the Convention on Biological Diversity (1992), several Articles and many Decisions pertain to the connection between biological and cultural diversity:

- The Preamble to the Convention recalls the "intrinsic value of biological diversity and of the ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its components."
- Article 8(j) of the CBD states that each contracting party should "[s]ubject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices."
- Annex 1 to Article 7 of the CBD (species and ecosystems of cultural importance need to be conserve)
- Ecosystem approach (the primary framework for implementation of the Convention) recognizes that humans with their cultural diversity are integral part of many ecosystems. Principles 1 and 5 and maybe others
- Role of protected areas
- The programme of work on Article 8j and the Akwe:Kon guidelines
- Access and Benefit Sharing
- The strategic plan of the Convention has established GOAL 9: <u>Maintain socio-cultural diversity of indigenous and local communities</u>.
- Furthermore the Convention has a rich history of decisions spanning almost twenty years, recognizing the important of cultural diversity in achieving the goals of the CBD.

<u>UNESCO</u> Conventions, declarations, programmes, activities and initiatives relevant to the links between biological and cultural diversity include, although are not limited to the following:

<u>UNESCO Universal Declaration on Cultural Diversity (2001).</u> In the Declaration, the notion of cultural diversity conveys a rich spectrum of ideas and concepts, some of which relate to biological diversity.

Convention for the Safeguarding of the Intangible Cultural Heritage (2003). The Convention acknowledges knowledge and practices concerning nature and the universe are one of the domains in which the intangible cultural heritage is manifested. It also states that the intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity.

World Heritage Convention - Cultural Landscapes (1992) The World Heritage Committee at its 16th session adopted guidelines concerning the inclusion of cultural landscapes in the World Heritage List. To date, 54 properties on the World Heritage List have been classified as cultural landscapes: "the combined works of nature and of man", illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal.

The Seville Strategy for Biosphere Reserves (1995). The International Conference on Biosphere Reserves adopted a series of recommendations which together form the Seville Strategy for Biosphere Reserves designated under UNESCO's Man and the Biosphere (MAB) Programme. The strategy identifies the specific role of biosphere reserves in achieving a new vision of the relationship between conservation and development taking into account cultural and natural dimensions of both conservation and development.

The Local and Indigenous Knowledge Systems Programme (LINKS). Intersectoral UNESCO program

launched in 2002 that seeks to empower local and indigenous communities in biodiversity governance through recognition of their knowledge, know-how and worldviews — as they relate to the natural environment. The program also seeks to maintain the vitality of local knowledge within communities by enhancing their inter-generational transmission. Key areas of work include (i) documenting and mobilizing indigenous knowledge for biodiversity management, natural disaster reduction and climate change response and adaptation; and (ii) developing pedagogical resources and methods to reinforce local and indigenous knowledge within formal and non-formal education systems. <u>UNESCO activities related to languages and linguistic diversity.</u> UNESCO has been mandated to coordinate the work on one of the CBD biodiversity related indicators, namely "Status and Trends of Linguistic Diversity and Numbers of Speakers of Indigenous Languages", chosen to inform on the focal area "Status of traditional knowledge, innovations and practices", thus recognizing the fundamental linkage between language and traditional knowledge related to biodiversity.

<u>UNESCO</u> activities in the area of social and human sciences, including its work on bioethics and the ethics of the environment.

Tokyo International Symposium 'Conserving Cultural and Biological Diversity: The Role of Sacred Natural Sites and Cultural Landscapes' (2005): the Tokyo symposium on 'Conserving Cultural and Biological Diversity: The Role of Sacred Natural Sites and Cultural Landscapes' was organized by UNESCO with UNU, CBD, FAO, UNPFII, and IUCN as partners. The symposium provided the floor for presenting case studies on sacred natural sites and cultural landscapes worldwide, adopted the "Tokyo declaration" and formulated recommendations on the use of guidelines for decision-makers for the management of sacred sites.

Annex 2

Recommendations of the 2007 International Workshop on the Links between biological and cultural diversity

For future policy work:

At the international level

- Integrate cultural diversity in Multilateral Environmental Agreements, including those dealing with biodiversity, desertification and climate
- Integrate considerations on biological diversity in international treaties dealing with cultural diversity

At the regional level

- Environmental directives
- include the interlinkages between biological and cultural diversity in nature conservation and management
- revise the official list of protected habitats
- adjust management directives for protected areas network
- revise monitoring tools
- Rural development directives
- include the interlinkages between biological and cultural diversity in the sustainable development model
- Cultural heritage directives
- include the interlinkages between biological and cultural diversity in the conservation and valorisation of cultural heritage

At the national level

- Identify cultural values in the territory defining their significance, integrity, and vulnerability
- Manage the process of data collections and collation
- Monitor and manage the process of transformation
- Ensure research development in order to increase knowledge and gather evidence so as to limit actual and potential negative impacts on cultural heritage
- Define criteria and indicators for their management
- Define planning tools and management techniques

At the local level in the context of rural and urban development plans:

- Including biological and cultural diversity in the rural economy (e.g.: favour the role of cultural values for the competitiveness of rural territory and make obvious the link between biological and cultural heritage and tourism, by using marketing promotion techniques
- Including biological and cultural diversity in the improvement of the countryside (e.g.: restoration and management of traditional landscape patterns, as well as their extension, density, structure and species composition, with specific attention to those threatened by the abandonment of traditional management practices)
- Promoting biological and cultural diversity for the quality of life in rural and urban areas (e.g.: support local population to promote services linked to cultural and ecological values of biodiversity).

For future research

- A clear conceptual framework for assessing the links between biological and cultural diversity needs
 to be developed to guide the future work in this area and link it with on-the-ground research and
 policy
- A common methodological framework needs ton be developed based on holistic, interdisciplinary, multi-scale, participatory and collaborative research approaches
- Theoretical and conceptual research needs to be coupled with on ground research in collaboration with all the relevant stakeholders, starting with the local population
- The future research agenda on the links between biological and cultural diversity needs to focus on the following priority areas:
 - Principal units and appropriate scale for diversity research
 - Contemporary processes that reduce, modify and/or produce diversity through homogenization, hybridity and diversification

- Impact of demographic shifts and population dynamics on diversity
- Development of a value-based system on which to valorise diversity
- Dynamics of knowledge, including its reproduction, transmission, loss and rediscovery
- Process of emergence and recognition of the concept of diversity in policy agendas.
- Results from scientific research on the links between biodiversity and cultural diversity need to be regularly communicated beyond the scientific community in order to ensure that the most relevant and timely knowledge can be mainstreamed in practice and policy.

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