

**Remarks of the
UNESCO Assistant Director-General for Natural Sciences
Gretchen Kalonji**

**At the Opening Session of the
International workshop on
Global Change in the Arctic and Co-production of Knowledge
27 to 29 September 2012, Paris, France**

Distinguished experts, both scientific and indigenous, ladies and gentlemen,

- Anthropogenic climate change is transforming the world that we live in.
- The Arctic regions are at the forefront of that change with temperatures rising at twice the global average.
- 2012 is expected to be a record year for the decline of the polar ice cap, surpassing the previous extreme attained in September 2007.
- This rapid and unprecedented change is an immense challenge for the peoples of the Arctic who are truly on the frontlines of climate change.

- But it is also an immense challenge for the global community, and also a challenge for science.

- It is increasingly clear that conventional and disciplinary science does not have the firepower required to confront the challenge of achieving sustainable development in a global context that is increasingly complex and that is undergoing rapid change.

- Earlier this year in the run-up to Rio+20, the UN Secretary-General Ban-ki-Moon chose UNESCO to take the lead in setting up a Science Advisory Board that is to provide policy advice at the highest level, based on the best available knowledge about global environmental challenges.

- While this decision brings first and foremost recognition and provides a great impetus to science, it is also an enormous responsibility. It's an engagement of the scientific community to provide sound counsel on global challenges of unprecedented proportion.

- In order to deliver on this demand, science will have to do no less than reinvent itself, to become more solution-oriented and to cut across the disciplinary boundaries that constrain innovative thinking and effective action.

- This was the main thrust of the international experts meeting organized by UNESCO with support from the Principality of Monaco in 2009 on 'Climate Change and Arctic Sustainable Development: scientific, social, cultural and

educational challenges”. Making the most of its broad transdisciplinary mandate, UNESCO brought together a wide range of experts from the natural and social sciences, as well as indigenous peoples, from across the circumpolar North.

- In a similar spirit, the central topic of your deliberations over the coming days relates to a theme that emerged in debates earlier this year in the framework of Rio+20. The concept of ‘co-production of knowledge’ found a certain resonance in the Rio debates and was echoed in discussions on emerging global initiatives such as IPBES – the Intergovernmental Platform on Biodiversity and Ecosystem Services - and also Future Earth, the new science-based initiative that is to draw into one the global efforts of the Human Dimensions programme, the Geosphere-Biosphere programme, Diversitas, and the World Climate Research Programme, amongst others.
- Even though the concept of ‘knowledge co-production’ remains elusive and has yet to be clearly defined, ... even though it is clear that it encapsulates different meanings for different people, it is interesting to witness the broad rallying of voices around this term.
- Perhaps because it underlines the need for new knowledge to be produced, and thus implicitly reaffirms that current knowledge is not enough?
- Perhaps because co-production underlines the need for partnerships in knowledge production, partnerships that cut across boundaries, not only among bio-physical science disciplines, but also between natural and social sciences.
- Perhaps also because partnerships in knowledge production reach out beyond the sciences to other knowledge systems, to knowledge holders amongst indigenous peoples and from local communities across the globe.
- In this regard, the Arctic regions provide leadership for the rest of the world. The Arctic, and in particular Arctic peoples, have engaged in numerous ground-breaking efforts at bridging between scientific and indigenous knowledge. Several decades of work on various forms of knowledge co-production have been carried out in Arctic settings, the most recent being the illustrious International Polar Year (IPY).
- This meeting brings together a unique ensemble of expertise from across the circumpolar North. Your deliberations here on knowledge co-production based on your in-depth and first-hand experience with environmental observing systems rooted in indigenous communities, will provide leadership for other

world regions and for emerging global efforts such as IPCC, IPBES and Future Earth.

- I wish you the all the best with your deliberations. And I congratulate you on the leadership that you will certainly be providing by blazing the trail for indigenous-scientific knowledge co-production that others will undoubtedly soon be following.