

## **South-South Biodiversity Science Project kicked off Science Culture Construction in Latin America**

### **Abstract:**

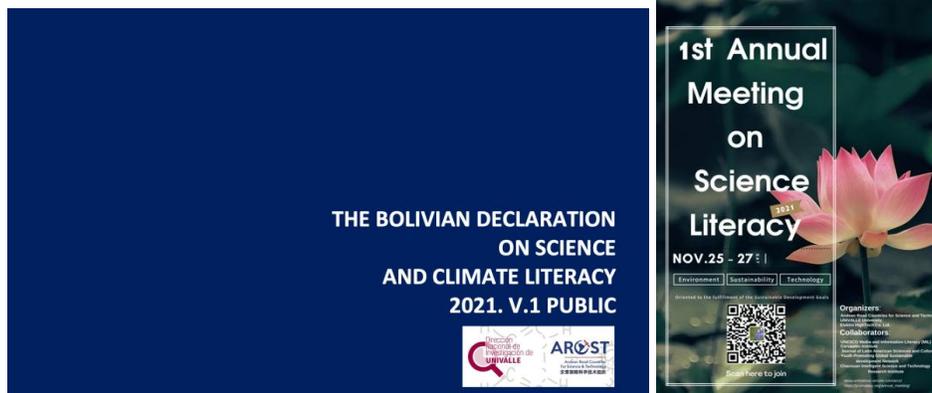
The “South-South Biodiversity Science Project (SSBSP)” are joined efforts to start the first of the four phases for the Science Culture Construction (SCC) through Science Popularization to raise awareness of climate change in Latin America. The project Science Culture Construction in Latin America aims to develop a foundation to develop the scientific cause to build a community with a shared future for mankind.

**Key words:** South-South Biodiversity Science Project , Biodiversity conservation, climate change, Latin America

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The “South-South Biodiversity Science Project (SSBSP)” proposed by the “China Conservation and Green Development Foundation (CBCGDF)”, in conjunction with the “Green Science Project (GSP)” proposed by the “Andean Road Countries for Science and Technology (ARCST)”, and the “Climate Change Awareness Project” proposed by the “Universidad Central del Valle del Cauca (UCEVA)” have joined efforts to start the first of the four phases for the Science Culture Construction through Science Popularization to raise awareness of climate change in Latin America. This conjunction of projects is the first response to the declaration on science and climate literacy issued on November 27, 2021, as a conclusion of the first international annual meeting on science literacy held in the Plurinational State of Bolivia. The event was celebrated at Universidad Privada del Valle. The declaration counts on the support of professors, researchers, and academicians from different countries, including China. (If you wish to support the first declaration on science and climate literacy with your signature, please send an

email to [editorial@journalasc.org](mailto:editorial@journalasc.org). To see the text of the declaration, please refer to the following link [https://journalasc.org/annual\\_meeting/](https://journalasc.org/annual_meeting/))



Cover page of the first declaration on science and climate literacy issued as a result of the first annual meeting on science literacy in Latin America, November 27, 2021.

CBCGDF, ARCST, and UCEVA with the framework of UNESCO MIL have created a project that includes educational, pedagogical, scientific, and even technological tools to promote the Science Culture Construction through the collaboration of three projects, the South-South Biodiversity Science project, the Green Science Project and the Climate Change Awareness Project proposed by each one of the participants aforementioned. The project counts on the support of the local Colombian government. Different stakeholders gathered to support the project “Science Culture Construction through Science Popularization to raise awareness of climate change in Colombia.”

The framework of the project has been designed to be implemented in four phases. It will include 35 workshops in different Universities all over Colombia. The courses are customized according to the audience, students, professional, government officials, etc. The current framework has been designed by a multidisciplinary team of expert educators, psychologists, engineers, researchers, and scientists over the last two years and it is expected to be fully implemented until December 2023. The team of experts is composed of members of CBCGDF, ARCST, and UCEVA, with the technical support of the High Tech company ELEKTRO. The project will reach 3500 students in different regions of Colombia and it will be expanded into other countries in the Latin American region.



The Science Culture Construction Project focuses on 8 of the 17 goals of the agenda for sustainable development.

Under the direction of professors José Gabriel Pérez C. and Mary Luz Ojeda S. professors from UCEVA and senior advisors from the Andean Road Countries for Science and Technology (ARCST), the project began. The first workshop was held on August 22, 2022, in Valle del Cauca Colombia. About 101 university students from the Environmental, Systems and Electronic Engineering majors, teachers, and members of the local government attended. The main topics discussed were related to climate change, green information technologies, and carbon footprint. The workshop was designed for students of the three engineering careers at UCEVA. At the end of the session, and to empower the participants to promote change, they were invited to apply the knowledge acquired in their homes, communities, and families, as part of their commitments. These commitments are based on the "Quantum leap to green actions" which is a tool developed by our multidisciplinary team to engage the public in a broader sustainability mission, which offers an opportunity to impact society in general and promotes commitment to action against climate change.



Group photo of the participants of the first workshop “Science Culture Construction through Science Popularization to raise awareness of climate change in Colombia.”

The second workshop was held at the EAM University in the city of Armenia, department of Quindío, Colombia, on August 25. Around 47 students from Software and Mechatronics Engineering majors of EAM University participated. The main topics discussed were related to

the use of technologies to reduce CO<sub>2</sub> emissions both at home and in offices. Energy efficiency to take care of the Colombian energy matrix and reduce CO<sub>2</sub> emissions. The promotion of projects to generate clean energy with low CO<sub>2</sub> emissions from unconventional systems such as solar and wind. Application of good Green IT practices to reduce CO<sub>2</sub> emissions with the use of technology. Generate technological projects of environmental sustainability at the University that represent actions to face climate change and contribute to the protection of biodiversity. Additionally, commitments similar to those proposed in our first workshop related to "Quantum leap to green actions" were shared with the students.



Group photo of the participants of the second workshop celebrated for the construction of the Science Culture Construction through Science Popularization to raise awareness of climate change in Colombia

We believe that “for every interested practitioner to implement the Science Culture Construction through Science Popularization to raise awareness of climate change, building awareness is the first step to engaging their community and ensuring action.” and that is what we are doing with all our partners and collaborators in Latin America.



CBCGDF and ARCST participated virtually in the first and second workshops for the construction of the Science Culture Construction through Science Popularization to raise awareness of climate change at UCEVA and EAM in Colombia on the 22nd and 25th of August 2022 respectively.

## Turning commitments into actions and the Quantum leap to green actions

Actions have to be taken today by putting commitments into practice through a culture of sustainability to accomplish net zero emissions by 2050 or sooner. A more systemic, industry-wide transformation necessitates changes in legislation that encourage society to adopt sustainability.

Science can lead the world on climate change. Out of any industry, science has the resources and the culture of innovation to meet the climate challenge head-on and inspire the rest of the world to follow in its footsteps. From lab managers to researchers, funding bodies, manufacturers, and everyone in between, we all have a critical role to play in biodiversity conservation and green development.

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## References

1. Ren FJ (2008) A brief review of science popularization policies of the People's Republic of China. *Popular Science News*, 16 December (in Chinese).
2. Ren FJ (2009a) Science popularization policies in China's previous planning of science and technology. In: Li ZH (ed.) *Theoretical and Practical Studies of Science Popularization in China*. Beijing: Popular Science Press, pp. 60–64 (in Chinese).
3. Ren FJ (2009b) A preliminary discussion of the types, systems and historical development of China's science popularization policy. In: Liu L and Chang J (eds.) *Theoretical and Practical Studies of Science Popularization in China*. Beijing: Popular Science Press, pp. 220–224 (in Chinese).
4. Ren FJ and Yin L (2018) *Practice of Communication and Popularization of Science and Technology*. Beijing: China Science and Technology Press, pp. 1–24 (in Chinese).
5. Ren FJ and Zhai JQ (2014) *Introduction to Science and Technology Communication and Popularization*. Beijing: China Science and Technology Press, pp. 232–235 (in Chinese).