



United Nations
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Organisation
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la science et la culture

Organización
de las Naciones Unidas
para la Educación,
la Ciencia y la Cultura

Организация
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منظمة الأمم المتحدة
للتربية والعلم والثقافة

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PROCLAMATION OF AN INTERNATIONAL YEAR OF BASIC SCIENCES FOR DEVELOPMENT IN 2022

OUTLINE

Background: This item has been included in the provisional agenda of the 40th session of the General Conference following the decision of the Executive Board at its 207th session (207 EX/Decision 45).

Purpose: It presents the International Year of Basic Sciences for Development draft resolution which advocates a celebration in 2022 to highlight the important role that basic sciences play in the understanding of major societal and planetary challenges. The year will also provide an annual focus for the continuous assessment of the central role of basic sciences in people's lives. This document aims to the proclamation by the General Conference of this International Year following the endorsement by the Executive Board at its 207th session.

Decision required: Paragraph 14.



EXPLANATORY NOTE

INTRODUCTION AND MOTIVATION

1. Basic sciences, such as mathematics, physics, chemistry, life sciences, are curiosity-driven sciences which have also fundamental roles in our lives. They enable the necessary means and tools to address global socio-economic and environmental challenges, such as climate change, the water crisis, biodiversity loss, extreme events, and ocean deoxygenation.
2. Despite this, the crucial role of basic sciences is often poorly appreciated, if at all. Further awareness of the critical function of basic sciences needs to be built amongst relevant stakeholders including policy-makers, business and industry, international organizations, philanthropic foundations, universities, teachers and students, media, and the broader public.
3. Increased awareness of basic sciences is expected to lead to further opportunities for new discoveries which can improve human well-being within the framework of sustainable development.
4. Building upon the achievements of the International Year of Physics, the International Year of Chemistry, the International Year of Mathematics, the International Year of Astronomy, the international year of Light, the International Year of Periodic Table, it is time to plan for an International Year of Basic Sciences for Development (IYBSD).

THE IMPORTANCE OF BASIC SCIENCES FOR DEVELOPMENT

5. The 2030 Agenda, with its Sustainable Development Goals (SDGs), is the roadmap to global well-being for current and future generations. The SDGs indicate the directions towards better education opportunities, gender equality, clean water, affordable and clean energy, and a healthy environment, among other things. Basic sciences can help identify mechanisms to correctly use knowledge and carry out technology transfer.
6. Basic sciences can also enable international research cooperation and dialogue across disciplines and across countries, including developing countries.

OUTCOMES OF AN INTERNATIONAL YEAR OF BASIC SCIENCES FOR DEVELOPMENT (IYBSD)

7. The year will be structured around different events addressing, *inter alia*, the following cross-cutting themes:
 - Basic sciences for sustainable development
 - Basic sciences in African, Latin American, Asian and small island developing States
 - Youth and basic sciences
8. The IYBSD will promote inclusive collaboration in Fundamental Research by fostering gender-balanced and geographically diverse teams and networks.
9. The IYBSD will promote capacity-development opportunities as well as formal and informal education activities in the basic sciences. It will organize major conferences and workshops in different parts of the world, and in particular in developing countries. It will advertise existing or new initiatives of all sorts, distributed all over the world. The hope is to catalyse basic sciences renaissance in developing countries which could be helped, supported and celebrated regularly even after the year of the International Year of Basic Sciences for Development".

IMPORTANCE OF AN INTERNATIONAL YEAR OF BASIC SCIENCES FOR DEVELOPMENT FOR UNESCO

10. An International Year of Basic Sciences for Development is well in line with the International Basic Sciences Programme of UNESCO, which supports this initiative.

11. Basic sciences are very much connected to several programmatic areas of UNESCO, and in particular with the work of the Natural Sciences Sector (including the Abdus Salam ICTP and The World Academy of Science [TWAS] for the advancement of science in developing countries, and the many UNESCO centres and UNESCO chairs), as well with the activities with Education, Social and Human Sciences, Culture and Communication and Information Sectors.

12. Basic sciences contribute to peace through science diplomacy, large collaborations and through a shared ideal: improvement of knowledge.

13. Basic sciences are essential for sustainable development. As the year 2022 marks a number of benchmarks in history of basic sciences (200 years since the presentation of the “Difference engine”, 150 years since the beginning of the first oceanographical expedition, 90 years since the discovery of neutrons, 60 years since the presentation of the first visible light emitting diode, 50 years of the first extraction of the anti-plasmodial drug artemisinin, 40 years since the discovery of the first lunar meteorite on Earth, etc.), it will be a very good opportunity to promote, basic sciences for peace, education, youth, women and for developing countries. It is also intended to contribute to give a boost to the second part of the sustainable development agenda (2015-2030).

Proposed draft resolution

14. In light of the above, the General Conference may wish to adopt a resolution along the following lines:

The General Conference,

Having examined document 40 C/76,

Recalling that the Ministerial Round Table on The Basic Sciences: The Science Lever for Development, held during the 33rd session of the General Conference, called upon UNESCO to “place greater emphasis on promoting the basic sciences and science education with a view to the attainment of a science culture as a precursor of a knowledge-based society worldwide, through various means available at UNESCO, and in particular the recently launched flagship International Basic Sciences Programme” (document 185 EX/11),

Also recalling United Nations General Assembly resolutions 70/212 (22 December 2015) on International Day of Women and Girls in Science and 68/220 (20 December 2013) on science, technology and innovation for development, in which it recognized that full and equal access to and participation in science, technology and innovation for women and girls of all ages is imperative for achieving gender equality and the empowerment of women and girls,

Considering the Organization’s Global Priority Africa, and *recognizing* that science, as a universal public good is an important tool for the achievement of the African Union Agenda 2063,

Stressing the need to build on the potential of UNESCO’s International Basic Sciences Programme (IBSP),

Also considering the high value for humankind of basic sciences, and that enhanced global awareness of, and increased education in, the basic sciences is vital to attain sustainable

development, and to improve the quality of life for both men and women, all over the world, including developing countries in Africa, Latin America and the Caribbean, and Asia and the Pacific,

Stressing that the applications of basic sciences are vital for advances in medicine, industry, agriculture, water resources, energy planning, environment, communications and culture, and that basic sciences rupture technologies respond to the needs of humankind by providing access to information and increasing societal well-being, and promoting peace through improved collaboration,

Noting the broad and significant impact of recent initiatives of UNESCO's International Basic Sciences Programme (IBSP) and the enthusiastic support for an international year of basic sciences for development,

Recognizing that it is essential to ensure that existing gains from previous initiatives of UNESCO in science and education are effectively followed-up and strengthened,

1. *Welcomes* 207 EX/Decision 45;
2. *Invites* the Director-General to support all efforts leading the United Nations General Assembly to proclaim 2022 as international year of basic sciences for development.
3. *Recommends* that the United Nations General Assembly at its 75th session adopt a resolution declaring 2022 as United Nations international year of basic sciences for development.