

UN Office for Outer Space Affairs Capacity-building Programmes

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United Nations Office for Outer Space Affairs

Education Day

Space Solutions for Sustainable Agriculture & Precision Farming

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UNITED NATIONS
Office for Outer Space Affairs



United Nations Office for Outer Space Affairs



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VISION

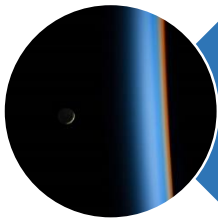
Bringing the
benefits of space to humankind

MISSION STATEMENT

The core business of the Office is to
**promote international
cooperation**
in the use of outer
space to achieve development goals



Unique Roles of UNOOSA



CAPACITY-BUILDER: UNOOSA brings the benefits of space to humankind by building space capacity of non-space-faring countries.



GLOBAL FACILITATOR: UNOOSA plays a leading and facilitating role in the promotion of the peaceful uses of outer space.



GATEWAY TO SPACE: UNOOSA is the main UN agency on space matters and facilitates the coordination of UN activities using space technology to improve lives around the world.

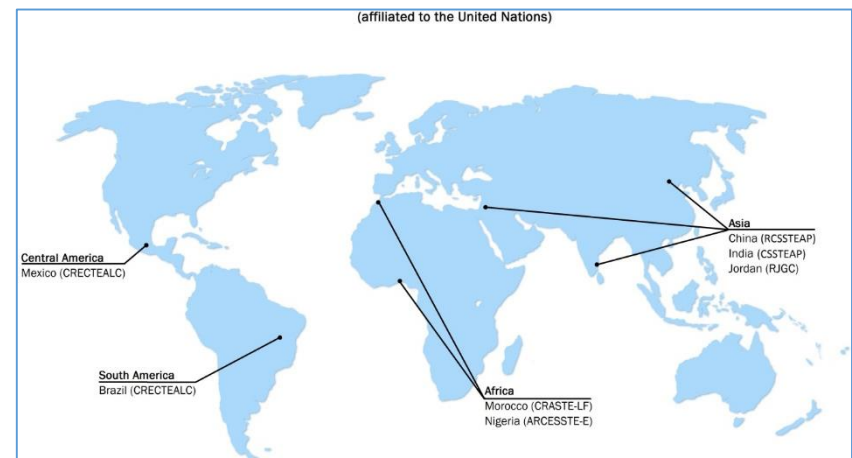


Space4SDGs – SDG 4: Quality Education



- <http://www.unoosa.org/oosa/en/ourwork/space4sdgs/>
- 6 **Regional Centres** for Space Science and Technology Education to facilitate the development of local capacities in the field of space technologies

- UN/Japan long-term fellowship programme on nano-satellite technologies - Kitakyushu, Japan
- UN/Italy long-term fellowship programme on GNSS and related applications - Torino, Italy
- Fellowship programme for the Drop Tower experiment series - Bremen, Germany
- Unispace Nanosatellite Assembly and Training by ISRO - Bangalore, India





Capacity-building Network (CBN)

OBJECTIVE

to support the mandate of the Office in enhancing education, training opportunities and raising public awareness of the importance of space activities and the Sustainable Development Goals (SDGs)

RATIONALE

creation of a collaborative framework, supporting the aforementioned objective for governmental or non-governmental entities, in particular educational institutions and NGOs



IMPLEMENTATION

- a network of institutions delivering capacity building and awareness raising activities related to space and the SDGs
- the 2030 Agenda for Sustainable Development and the Space for Development Profile as guiding frameworks for the expected contributions of the CBN members

EXPECTED OUTCOMES

- to reduce fragmentation and streamline information on space-related capacity-building activities
- to identify gaps in the aforementioned activities and cover them with either activities of the Office or new activities carried out by CBN members



Access to Space for All Initiative



OBJECTIVES:

- To help developing countries to become space emerging nations and enter the space family through the facilitation of satellite deployments
- To expand capabilities in space-related education, technology innovation and science research and application sectors
- To make contributions to the international cooperation and socio-economic development and to the 3G diversity (gender, geographical, generation)



Access to Space for All – Focus on Youth

Support youth to gain knowledge and practical skills by offering opportunities to conduct experiments in:

- **Microgravity:** the Zero-Gravity Instrument Project and the Drop Tower Experiment Series
- **Hypergravity**



To date, over 20000 individuals have benefitted from training activities offered by the Programme on Space Applications, the main implementation tool of Access to Space for All.



Access to Space for All – Orbital Opportunities

ORBITAL OPPORTUNITIES

- KiboCUBE
- China Space Station
- Dream Chaser



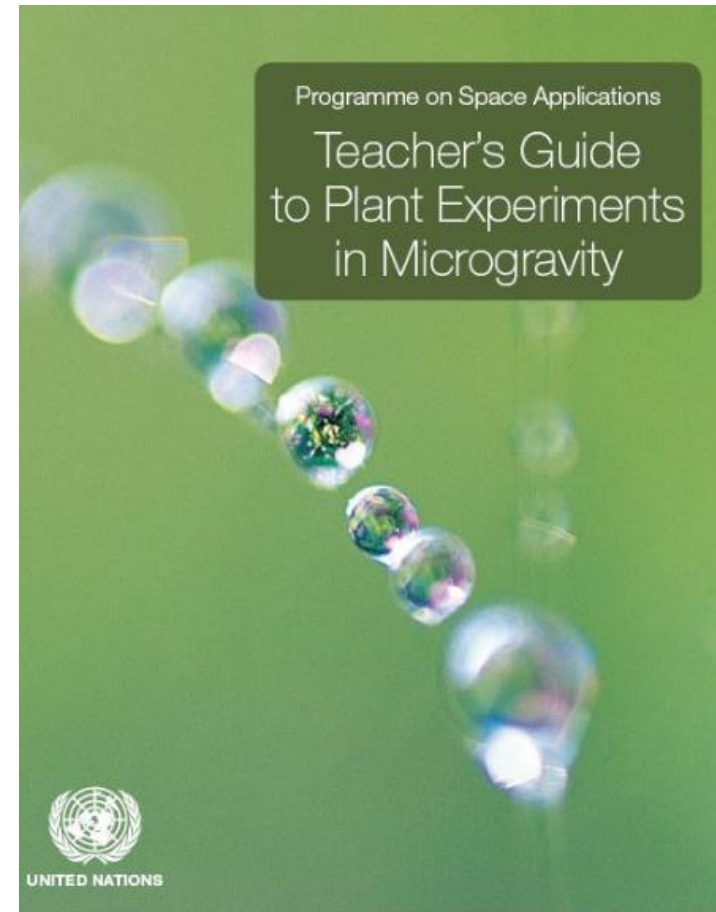


Zero-Gravity Instrument Programme (ZGIP)

Initiated in 2012; a fixed number of microgravity-simulating instruments, called Clinostats, have been distributed to selected schools and institutions worldwide

Objectives: To provide unique opportunities for students and researchers to observe natural phenomena of samples under simulated microgravity conditions on the ground, and to inspire them to undertake further study in the field of space science and technology. The project is also aimed at creating datasets of plant species with their gravity response

Materials: "Teacher's Guide to Plant Experiments in Microgravity" with step-by-step instructions to teachers and students to perform experiments on plant growth using the clinostats in a school laboratory.



THANK YOU



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