

Topics (T)

The Social, Communications, Economic and Cultural Dimensions of Environmental Change (9)

Author: Ms. Niki Sajjad

Space Generation Advisory Council (SGAC), Iran, niki.sajjad@ext.uni.lu

Mr. Finnegan Sougioultzoglou

National Oceanic and Atmospheric Administration (NOAA), United States,
finnegan.sougioultzoglou@noaa.gov

Ms. Faith Tng

Space Generation Advisory Council (SGAC), Singapore, Republic of, faith.tng@spacegeneration.org

Ms. Vatasta Koul

Space Generation Advisory Council (SGAC), India, vatastakoul@gmail.com

Mr. Parsa Bigdeli

Space Generation Advisory Council (SGAC), Iran, parsabigdeli77@gmail.com

Ms. Zineb BOUAOUATE

Space Generation Advisory Council (SGAC), Morocco, zineb.bouaoudate@hotmail.com

Ms. Y  lena Esslinger

University of Bordeaux, France, yelena.esslinger@gmail.com

Ms. Rachita Puri

United States, rachitapuri02@gmail.com

Mr. Pranav P R

Space Generation Advisory Council (SGAC), India, pranavkavitharavi1527@gmail.com

Mr. Viktor Kalman

Vienna University of Technology, Austria, viktorkalman@icloud.com

THE ROLE OF INTERNATIONAL YOUTH COMMUNITIES IN INCREASING SPACE-BASED DATA ACCESS FOR SOCIAL ENGAGEMENT IN CLIMATE ACTION

Abstract

Climate change poses a serious threat to our planet, requiring innovative solutions and partnerships to tackle. However, not everyone has the tools and knowledge to use climate data to develop necessary solutions. It is imperative that steps are taken to increase access to transparent information on climate change and opportunities to develop the skills necessary towards making the planet more sustainable.

Space technology and partnerships can potentially reduce geopolitical barriers by offering greater access to datasets that can inform climate-related decisions, such as weather patterns, greenhouse gas emissions, vegetation health, and ocean pollution. Technological advances have made access to satellite data more affordable and organizations such as the United Nations, Group on Earth Observations (GEO), and the Global Earth Observation System of Systems (GEOSS) provide data and services to developing countries at reduced or no cost. Despite these advancements, there are two fundamental barriers at present: (1) The lack of transparent datasets accessible to everyone, and (2) The requirement to have special skills in order to interpret datasets, which include satellite, climate, programming language, and geographic software competencies.

The ‘‘United Nations Sustainable Development Goals (UN SDGs) project’’ under the Space Safety and Sustainability project group of the Space Generation Advisory Council (SGAC) aims to tackle these two

problems. Being the largest global network of young space professionals, SGAC enables diverse members from around the world to discuss their unique challenges and perspectives through its advocacy activities. Climate change is affecting nations differently depending on the region's geography, economy, infrastructure, and government policy. Developed countries tend to have better access to datasets, educational opportunities, training, and resources to develop major climate projects. This paper portrays the importance of diversity within the team of young professionals for addressing the aforementioned challenges regarding access to data and data analysis tools to all and its effect on policy-making.

The research presented in this paper describes the work led by the UN SDGs team, which focuses on the UN SDGs Goal 13: Climate Action. The team has provided a platform to reduce inequalities by fostering collaboration between younger generations and industry leaders, finding gaps in data accessibility in different countries, building partnerships between developing nations and space-faring countries, providing workshops and webinars on data analysis, and offering guidelines for organizations to create equal opportunities for all to access space-based climate data.