International Cooperation for Space Exploration (1) International Cooperation for Space Exploration (1) (1)

Author: Ms. Ruvimbo Samanga Space Generation Advisory Council (SGAC), South Africa

INVESTIGATING YOUTH CONTRIBUTION TO THE DEVELOPMENT OF THE AFRICAN SPACE INDUSTRY

Abstract

Africa has the largest demographic of youth in the world. 20% of Africa's population is between the ages of 15-24, which constitutes a fifth of the world's youth population. Despite these figures, very few African youth are involved in the STEM field, which is a concerning statistic in light of the future impact of the space industry in sustainable development, and the globe's gradual transition to a knowledge and data economy. The African space industry has largely reflected a traditional outlook, with space activities and programmes hinged around governmental and national space ambitions. In recent years, the private sector has begun to develop, lowering costs, raising innovation, and giving more space to youth participation and development of the African space industry. Take for example a South African start-up, Astrofica, which recently debuted its internship programme for high school students, amongst many other initiatives aimed at youth engagement and community outreach. One such other project is the HumbiSat satellite missions design programme, which is an entirely youth-led initiative to educate, build and launch the first Pan-African small satellite for Earth Observation, with the assistance of youth pioneers from different countries in Africa. We can also not do without mentioning the much esteemed work of the Space Generation Advisory Council, Africa region, which coordinate policy, education, entrepreneurship and innovation efforts across the region and the world, towards a capacity-building objective which is entirely lead by students and young professionals. In the grand scheme of development, the youth are the future beneficiaries of the critical steps being taken today, towards space sustainability for all. That said, we cannot underestimate the drive, innovation and enthusiasm that the youth have to contribute to this future, and to make a difference in their community's. This paper will investigate the successes and lessons learnt from lending a voice to the youth to determine continental affairs, featuring case studies on initiatives that are rewriting the narrative on the ability of African youth to participate in a space science and technologically driven world.