

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Enabling the Future - Developing the Space Workforce (5)

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PROMOTING SPACE ACTIVITIES TO FOSTER THE YOUTH OF AFRICA - OUTCOMES OF THE
3RD AFRICAN SPACE GENERATION WORKSHOP

Abstract

The recent establishment of an African Space Agency, the ratification of the African Space Policy and Strategy, and the increase in space-focused activities and conferences are all indicators of the growing importance of the space sector within Africa. The continent's economy is largely based on the abundance of livestock, agriculture, human, and mineral resources, all of which can be managed using space-based technologies. However, the severe deficit in indigenous space-related skills is a major challenge for the African space sector. This deficit necessitates urgent investment in local skills development. Building on the success of their previous workshops, the Space Generation Advisory Council (SGAC), in support of the United Nations Programme on Space Applications, organized the 3rd annual AF-SGW in Addis Ababa, Ethiopia, on 30 November - 1 December 2019.

This paper discusses methods of enhancing the indigenous space workforce, and the use of space technologies in support of a sustainable African future, based on the insights and recommendations conceived by the delegates during the AF-SGW 2019 Working Groups. AF-SGW 2019 was a two-day workshop that brought together 51 students (bachelors, masters and PhD) and 21 young professionals from diverse fields (such as engineering, business, science, arts, medicine, education, and law), from 15 African nations, with a theme of "Africa Rising: Space Technology and Innovation for a Sustainable future". During the workshop, delegates interacted with 15 expert representatives from academia, business and space agencies in plenary and panel sessions, as well as through collaborative participation in smaller Working Group discussions. The interdisciplinary discussions focused on critical African space sector opportunities and challenges, space policy initiatives unique to the African region, and also on international/continental cooperation. Under the guidance of Subject Matter Experts (SMEs), delegates were able to collaborate and deliver unique perspectives and new ideas in each of the working group topics. These topics were: WG1 - Space Policy Law; WG2 - Space Business and Entrepreneurship; WG3 - STEAM and Outreach: The crucial role of the youth in the Space Sector; and WG4 - Space Technology to support the Sustainable Development Goals (SDGs).

The recommendations which will be presented include the development of an African Space Charter, optimizing available international opportunities while overcoming hurdles to local space business, encouraging the inclusion of space education at all levels in African curricula with methods to actively engage the youth, and the practical development of training opportunities to build space skills in Africa.