

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

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CHALLENGES AND PROSPECTS IN AFRICAN SPACE SECTOR, WITH FOCUS ON CAPACITY  
BUILDING AND TECHNOLOGY. STUDY AREA WEST AFRICA.

**Abstract**

Tech literacy is the key to any fast growing economy in Africa. To make Space technology and innovation a real pillar for an integrated, prosperous and developed Africa, training and strengthening the young generation is of vital importance. Space science, policy and law should form a crucial part of STEM education to enable African innovators to create an environment for interdisciplinary and multidisciplinary research and innovation to drive economic growth. An increasing number of activities that drive economic growth in Africa are dependent on Africa's fledgling space economy. These activities range from agriculture, transportation, climate, location, health, education, banking etc depending on space application. Although Africa's space industry has recorded an impressive growth over the past few years, amongst others, there are still some challenges like lack of government willingness to promote space education, lack of finances to fund projects and programmes related to space education, including space outreaches, lack of qualified trained personnel's at secondary and university levels of study. Therefore, human capital is presently not available to explore the basics of this field for the young minds in a theoretical/practical and exciting way. To shore up the deficit and achieve universal primary and secondary education by 2030, one of the UN's Sustainable Development Goals (SDG), 19.6 million primary and secondary school teachers need to be hired in Africa. The shortages of teachers are more severe in Sub-Saharan Africa which accounts for about 17 million of the total number of teachers required than anywhere else. Therefore, our responsibility as individuals to passionately contribute to building our continent by promoting and working alongside other private agencies and institutes to accomplish a common goal. The most sustainable and reliable method to achieve this goal is to implement policies that encourage investment both financially and on an educational level into Africa's space economy. This article is focused on the downstream aspect of the space economy which covers the challenges and exploitation of space technology and its prospects to overcome this challenges faced in Africa in this 4th industrial revolution.