



**UNIVERSITY
OF JUBA**

CONCEPT NOTE

Establishment of Mayardit Academy for Space Sciences at University of Juba

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Introduction

More than 20 African space agencies or space related institutions have been established over the past five years (Munsami, 2022). More than ten African countries have launched satellites in the last 3 decades. The countries that have space programmes or have launched at least one satellite include: Sudan, Gabon, Angola, Ghana, Morocco, Kenya, Ethiopia, Algeria, Nigeria, Senegal, Zimbabwe, Botswana, Zambia, Namibia, South Africa, and Egypt. South Africa and Egypt are leading with Kenya and Ethiopia following closely behind.

The future of African prosperity and long-term economic growth, South Sudan included, depends largely on realizing socio-economic development and environmental sustainability. The UN Sustainable Development Goals and Africa Agenda 2063 both recognise the role that

can be played by space-based products and services in the attainment of continental and national priorities (Munsami, 2022). Africa Space policy (AUC, 2017) is among Agenda 2063's 15 key programmes. Satellite placed in geostationary orbits (some 36,000 km above the equator) can provide communication and internet connectivity, meteorological data for weather reporting and forecasting of climate-related events such as hurricanes and flooding, as well as remote-sensing applications needed for monitoring the state of natural resources and traffic congestions in urban areas, and facilitation of smart agriculture, among others.

Proposed Name(s):

Mayardit Academy for Space Sciences

Mission

- 1- To increasing public understanding on the contributions of space technologies to socio-economic development, inclusive economic growth, environmental sustainability, maintaining of security, navigation, and human progress
- 2- To advance scholarship in space science and technology
- 3- To promote the study of STEM by young people and increase the pool of women scientists
- 4- To provide advice to the government in development of space policies
- 5- To strengthen national capacity in forecasting, disaster risk management, and early warning systems

Vision

To be recognized as a national and regional centre of excellence in research and scholarship in space science and technology by 2030

Strategic Objectives

- 1- Spreading of STEM education
- 2- Increasing understanding and utilization of space-based products and services
- 3- Assisting the government in the development of space-related policies
- 4- Assisting in and laying the foundation to the establishment of a national space agency
- 5- Increasing enrollment in science, technology, engineering, and mathematics (STEM)
- 6- Increasing the number female in STEM at university
- 7- Supporting research and publication in space science

Governance

Policy guidance and oversight by Academic Board headed by the Vice Chancellor and membership of science –based schools, government, civil society, and private sector; and Administration headed by a Director, and heads of specialized departments.

Location

Top of the new lecture halls complex at customs campus

Needed Facilities

Library and space information centre, seminar and meeting rooms, an auditorium, GIS and Remote Sensing Centre, Weather monitoring station, seismic monitoring facility and earthquake early warning systems, data centre

References

African Union Commission (2017), African Space Policy: Towards Social, Political, and Economic Integration, October 2017.

https://au.int/sites/default/files/newsevents/workingdocuments/33178-wd-african_space_policy_-_st20444_e_original.pdf

Val Munsami (2022). Shooting for the Stars: Africa can rapidly change the fate of its citizens by using space technology. The World Today, Vol. 78, No. 4, August and September 2022, p. 32

Top Most Successful Space Programmes in Africa

<https://www.youtube.com/watch?v=pWuz935njPU>