What the First Kenya University Nanosatellite Precursor Flight 1KUNS-PF means to the Country

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Introduction
Luigi Broglio Space Centre (BSC) located in Kenya is managed through a Bilateral Agreement between Governments of Kenya and Italy (1st April 1987). The infrastructure at the Centre include San Marco Platform (main off shore launch site), control platforms, data reception and communications ground station on the mainland.
San Marco Platform has been in use between 1967 to 1988 with a total of 27 launches.
An MoU signed in 2002 between University of Rome and University of Nairobi provided among other things collaboration in research and education of common interest specifically on utilization of space resources and capacity building.
Renewed efforts in 2015 in the MoU created a platform for the First Kenya University Nanosatellite (1KUNS)

Kenya’s Advantage Position with respect to Space Activities
Equatorial Launch Pads: 5 (Guiana Space Centre in Kourou, French Guiana) 6 (Alcantara Launch Centre, Brazil) 13 (Luigi Broglio Centre, Malindi, Kenya).

National Priority Areas
Four namely: Food Security, Affordable Housing, Manufacturing and Affordable Health for All.
Space Science and Technology viewed as an enabler.

Features of the 1KUNS-PF
Size:
• 1-U Cubesat (10cm x 10cm x 10cm)
Mass:
• 1.2kg
Payload
• Two commercial cameras located on opposite axis of the satellite for low resolution images of the Earth
• Audio upload and satellite broadcast receiver based on a mobile phone application.
Purpose
• capacity building in aerospace in Kenya, through the development of a complete space mission

Conclusions
Build capacity in space science and technology
Provide an environment for research and innovation
Draw lessons for new missions with a view to address the priority national agenda namely food security, housing, health, and manufacturing.
Promote partnerships and collaborations locally, regionally and internationally

References
1KUNS-PF 2018: https://1kuns-pf.rad0.fr/

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