

CAPACITY BUILDING • TECHNOLOGY SOVEREIGNTY

CubeSats as a Step to **Build Capacity**

Three live programmes that put Ethiopian engineers on real flight hardware at nanosatellite cost, on a two-year clock.

Eden Abeselom

PILLAR 01 • WHERE ETHIOPIA STANDS

National Infrastructure

✂ Two Missions Flown, None Built Here

ETRSS-1 (2019) and ET-SMART-RSS (2020) proved Ethiopia can task, downlink and exploit its own spacecraft. Both were designed and assembled in China.

⚙ The Assembly & Testing Gap

SSGI is building an aerospace technology center for engineers to build CubeSats and aerospace projects.

2019

FIRST SATELLITE IN
ORBIT

21

ENGINEERS TRAINED
ABROAD

0

BUILT ON ETHIOPIAN
SOIL

ETRSS-1 • ET-SMART-RSS

Flown 2019 & 2020 — both built abroad



Project D.A.W.N.

The Ask: Anchor Ethiopia's Node

Phemotron Systems' Digital Africa-Wide Nanosatellite Network hands each country a 3U Pathfinder bus. Ethiopian university teams own the design, code and test campaign end to end.

What That Actually Buys Us

A full mission lifecycle for the price of a nanosatellite, multi-band IoT flight heritage, and a trained cohort that stays in the country.

3U

STUDENT-BUILT BUS

54

NATIONS IN THE NETWORK

2026

CONSTELLATION TARGET



Mission ShakthiSAT

The Pipeline Starts Before University

Space Kidz India provides 120 hours of satellite training for 12,000 girls across 108 countries. Ethiopian girls are also part of the mission.

Beyond-LEO Exposure, Near-Zero Cost

The mission flies a LEO demonstrator and an all-girls lunar CubeSat. Ethiopian female students were trained on the mission for a year.

12,000

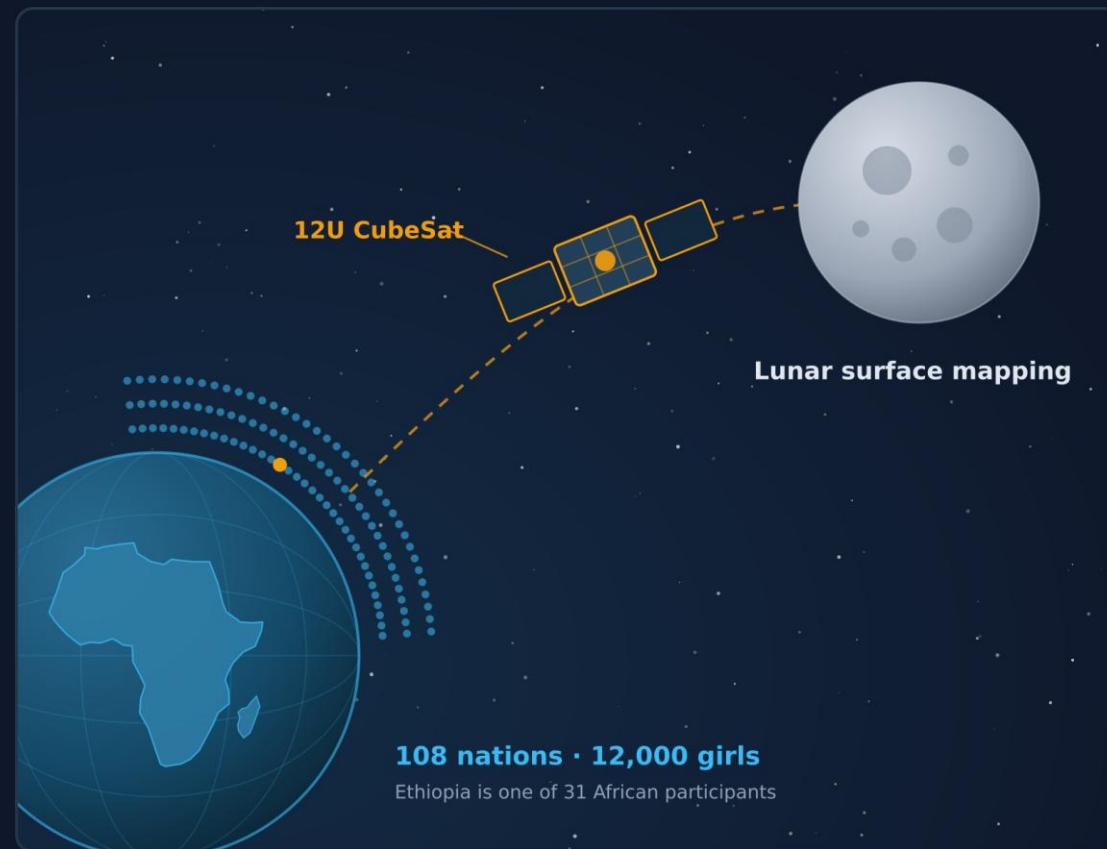
GIRLS IN TRAINING

108

PARTICIPATING NATIONS

1

LUNAR CUBESAT



QUESTIONS & DISCUSSION

Thank You

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