

INTRODUCTION

National & Civil Government Interests in Space: Dissection of Africa's Position

AUTHOR(S)

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1-2 SENTENCE FRAMING

With satellite programs increasing within the continent, investment growing and a need for this data expanding, Africa's unique needs, has both strengths and weaknesses that will play a part in its space future.

By examining factors that will affect its utilization of open-source satellite imagery, we can understand how these dynamic will affect availability and usability in the region.

TIMEFRAMES & URGENCY

Common Spaces' Imagery would meet/supplement the Earth Observation needs of the region in a time where High-Res Satellite Imagery is needed the most and a growing capacity for its utilization is being realized. Below are some of its regional space based developments

- *African Space Agency(AfSA), as a continental Organ under the African Union (AU) under Agenda 2063.*
- *Establishment of Space Agencies in the region (5 in ten years)*
- *69 satellites launched, 30 active. 68 collaborative Programs. 65% EO Focused.*

STAKEHOLDERS

***Regional:** Individual Governments, Regional Blocs(EAC), African Space Agency, National Space Agencies (KSA, SANSA, NASRDA etc)*

***National:** Ministries, Parastatals, Policy makers, Politicians, Offices of Mandate, Individuals in Geo-businesses, Non-Governmental Organizations, Developers and Valuers*

***Sectoral:** Mobilization Communities(Humanitarian Mappers), Researchers, Space-utilizing Private Sector, Academia and Training, Journalists and Advocates, Community Actors.*

THE DECISION CHALLENGE

THE SITUATION

WHO IS AFFECTED?

The Government, its people and its economy.

Kenyan Floods 2026 – At-least 71 people have lost their lives nationwide, with Nairobi accounting for approximately 36 of those deaths. Over 147,000 people have been affected or displaced, and more than 12,000 households have sustained direct impact. Multi-agency rescue teams, including military support, have been deployed alongside the Kenya Red Cross and other humanitarian organizations.

Tanzania Post Election Violence - at least 518 people died of unnatural causes, including from gunshot injuries(Amnesty Int.). Satellite Imagery used in the identification of possible mass graves by investigative journalists. Human Rights

WHAT ARE THE DATA NEEDS?

- Imagery in Conflict and War torn regions, DRC, Sudan, Nigeria (Periodic Tasking)
- Disaster prone and Disaster Vulnerable regions i.e. Tana River County in Kenya, Mozambique coastal populations, DRC (Periodic Tasking for Resilience, Incident Specific)
- Climate Extreme Incidences (Incident Specific Tasking)
- Community Environmental Action (Incident Specific Tasking)

THE DECISION CHALLENGE

WHAT DECISIONS NEED TO BE MADE?

- A government ministry/special committee determining what amounts of funds to allocate in a rebuilding fund based on estimate analysis of damage and affected populations.
- A ministry issuing live-saving early warning alerts to the country.
- A local/Int' NGO deciding of what areas/people to receive relief aid/cash in the aftermath of a disaster and how to get it there within a volatile environment.
- The expansion of a commercial zone into a game reserve due to urban congestion and the court case against it.

WHY ARE THEY DIFFICULT WITHOUT THIS DATA?

Reliance on commercial data with numerous restrictions and limited sharing capacity within institutions even in human centric use cases like Drought, Flood or Pest and disease monitoring. The expenses and limitations of such an endeavor leads to use of more traditional approaches.

Without high resolution satellite data, the quality and accuracy of the data produced from analysis /digitization would be considered useful but not integral.

HOW WOULD SATELLITE IMAGERY BE USED?

- Used by Agencies, Ministries, Policy Advisors, Humanitarian organizations and even corporate industry in Pest and Disease Monitoring, Emergency Response (Evacuation, assessment, safety), Displacement monitoring, Early Warning, Climate Effect Monitoring, Urban planning and monitoring, and various for-profit opportunities(Multi-purpose).
- Enables a variety of players

IMPACT, RISKS & GOVERNANCE QUESTIONS

WHAT CHANGES

WITH OPEN IMAGERY

- Better and accessible Satellite data that would be used *effectively* in informing decisions, making a stronger case for sat data utilization.
- Expanded access and Reduced Barriers of Entry for young National space programs, Academia and Research and Local NGOs.
- Evolving capabilities — Journalism evidence, Community lobbying, Local government planning. No strings attached approach.
- Quality open data particularly in the humanitarian mapping space due to higher res imagery in historically unprioritized regions.
- A case for open sat programs by the African Space Agency and other programs. An example used in understanding its impact in the region.

POTENTIAL RISKS

- Misuse (surveillance, targeting, exploitation of resources) in Dual Use scenarios.
- Strict controls implemented (Internet access, Humanitarian action) as fall out from 'Sensitive' data made available to the public.
- Misinterpretation, Sabotage(Cyber-security) and misinformation — Intentional or unintentional
- Gatekeeping — a member acting as an authority to access of open sat data in the region.

GOVERNANCE QUESTIONS

- ? Does the need of sovereignty hinder the effective use of this data, or does it supplement its impact by increasing data availability and choice?
- ? What safeguards by Common Space establish long term collaboration and trust with abiding members (States)?
- ? Conflicting dependencies for the same data in the region i.e.(wars between two member states) and how that is handled. Propaganda born from such data.
- ? Risk of including/excluding countries with certain human rights track records.
- ? Empowerment of local indigenous communities to utilize such a resource to help protect and monitor their land right (Community land, Maasai)