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“Space as a driver for socio-economic sustainable development”
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“Space Technology for Sustainable Development in Sudan” Initiative at University of Khartoum

RAYAN IMAM

SPACE RESEARCH CENTRE, UNIVERSITY OF KHARTOUM

RAYAN.IMAM@UOFK.EDU

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Last year's HLF:

Paper: "Space Research for Sustainable Development in Sudan"



Conclusion: **Yes**, Research at University of Khartoum has been utilizing space technology for sustainable development

SO..

► Why are we seeing the results of these researches and publications in terms of contribution to sustainable development activities in Sudan?

- we are not even aware of what we are doing
- We do not know who is capable of doing what
- We don't know what are our common challenges



Decided..

- ▶ To call for an initiative:

“Space Technology for Sustainable Development in Sudan”

**Phase I:
University of Khartoum**



This presentation

- ▶ Initiative preview
- ▶ Demonstrate how can this initiative play role in sustainable development in Sudan.



Description

- ▶ The “Space Technology for Sustainable Development in Sudan” is an initiative by young scientists at the Space Research Centre of University of Khartoum to bring together students, researchers and lecturers who utilize space technologies for sustainable development activities.



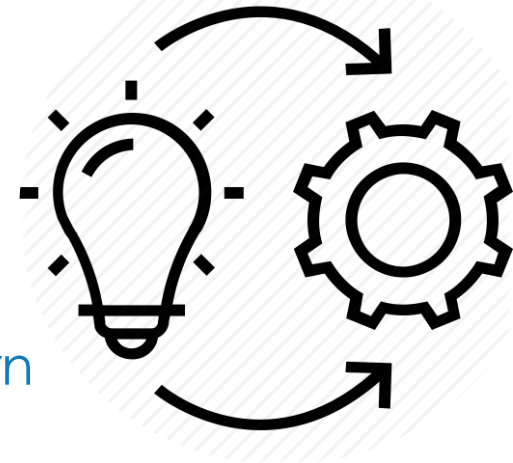
Objectives

- ▶ Raise awareness about the capabilities of space technology for developing countries.
- ▶ Build capacity in the utilization of space technology for sustainable development
- ▶ Bring together researchers and students who utilize space related data in their research.
- ▶ Identify common challenges for researchers at University of Khartoum and work to achieve solutions



Implementation Methodologies

- ▶ The initiative aims to achieve its goals through:
 - ▶ providing data needed by researchers for their research work
 - ▶ make it easy for researchers to access and use data by building strong connections with data providers and also with scientists.
 - ▶ organize conferences and workshops to allow researchers to learn from each other experiences
 - ▶ raise awareness about the capabilities of space technology for sustainable development in Sudan through conferences, workshops, forums and seminars.
 - ▶ provide training on using space data for the different research topics related to sustainable development (water, agriculture, wild life, health, quality education, etc).



Coordination Mechanism

- ▶ The Space Research Centre appoints a coordinator annually from its young researchers to communicate with all the students and researchers at University of Khartoum and also the extended network

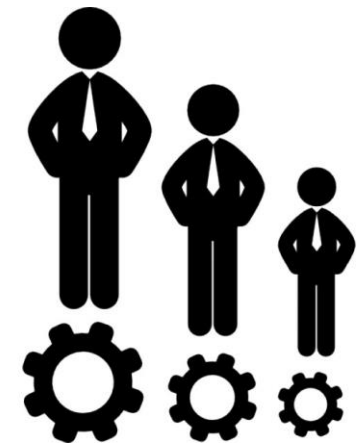
The initiative and the SDG goals



Partnerships for the Goals

Resources

- ▶ Students, Researchers and Lecturers at University of Khartoum with research activities in the fields of Satellite navigation, communication and/or remote sensing.
- ▶ Space Research Centre researchers and staff
- ▶ Faculty of Engineering Support.



Impact

- ▶ At University of Khartoum:
 - ▶ Vision of sustainable development is present in all our current and future research and activities
 - ▶ Generations of researchers who are aware of their role as engineers, scientists, doctors, etc in supporting SDGs through space tech and sciences.
 - ▶ Network of researchers and academics from different backgrounds: arts, engineering, science, agriculture, etc that have common ground and utilize the same tech to achieve the various SDGs.



Previous Activities

- ▶ So far, we have had many **meetings** that included researchers from many backgrounds. These activities helped us understand our strengths and weaknesses in utilizing space data and started shaping our network.
- ▶ We also held **open lectures** with the objective of relating space to our life in Sudan.



First Challenges identified

- ▶ One thing to notice about these studies that **usually** no money was paid by either University of Khartoum or the students to buy space related data whether it was remote sensing data or astronomy data.
- ▶ The studies relied either on free data, or data provided for researchers for free for research purposes.
- ▶ This usually resulted in delays in finishing the studies (waiting for data donors) or for the study to consider alternative periods of time, or to minimize the scope of the research (free data with less resolutions).
- ▶ Other researchers went to rely on aerial data despite their awareness of the limitations and in some cases they also narrowed the scope of the research in terms of time period and covered areas.
- ▶ In few cases, researchers went for external data analysis support.

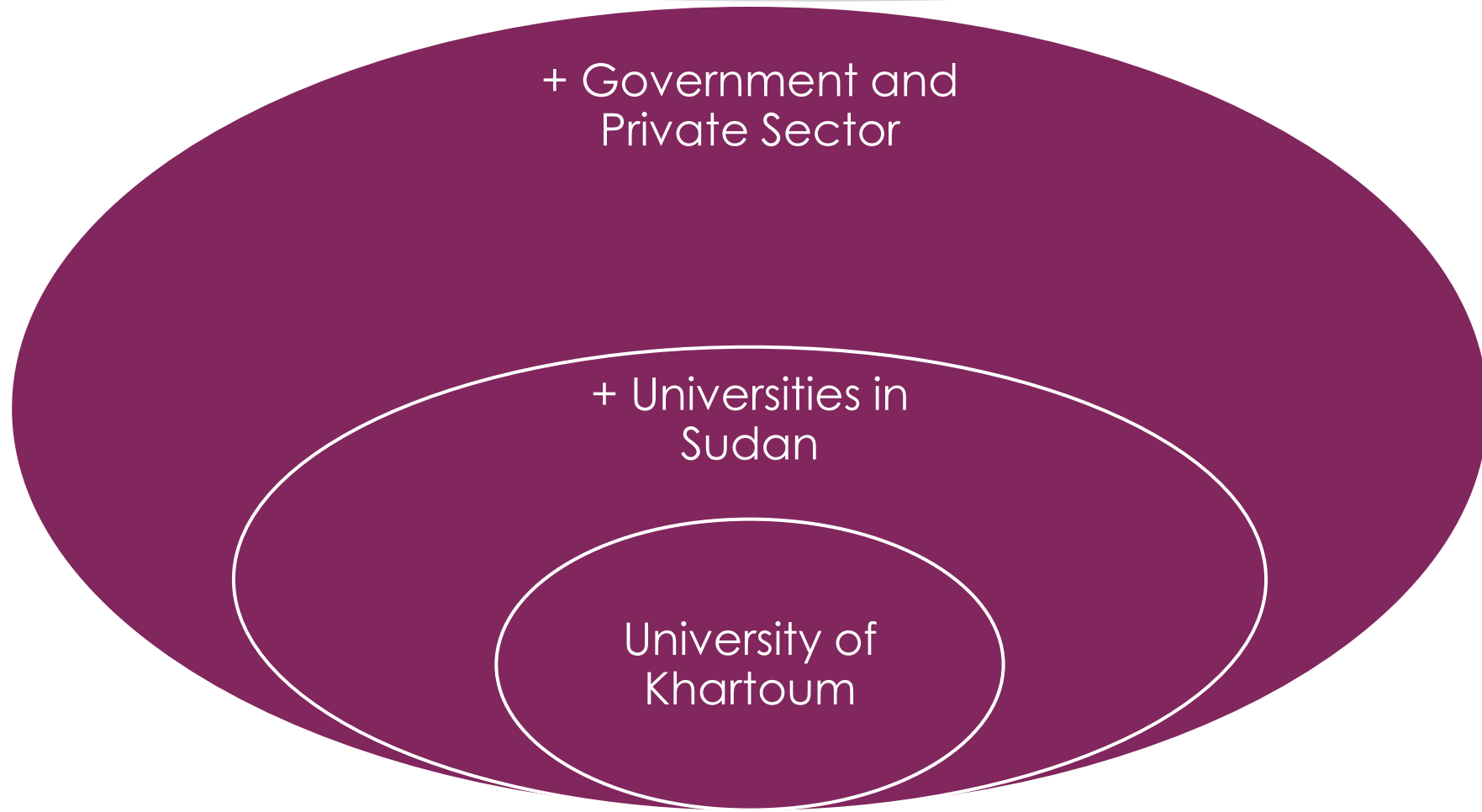


Near Future Activities

- ▶ First workshop: will be held in November for University of Khartoum Academics and Researchers.



Future: Scope Expansion Phases



Thank you..

Rayan Imam

Space Research Centre, University of Khartoum

Rayan.imam@uofk.edu

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Space.uofk.edu
Space@uofk.edu
[Facebook.com/cubesat](https://www.facebook.com/cubesat)