

**FIRST GLOBAL PRESENTATION**

# **SPACE EDUCATION PROGRAM IN NIGERIA: PAST, PRESENT AND FUTURE PROSPECT**

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# OUTLINE

2

## FIRST GLOBAL PRESENTATION

- **HOW IT ALL STARTED**
- **WHAT WE HAVE DONE SO FAR**
- **WHAT WE ARE DOING**
- **OUR FUTURE PLANS**
- **PLANS TO COLLABORATE WITH UNISEC-GLOBAL**
- **CHALLENGES WE MIGHT ENCOUNTER**
- **SUGGESTION ARE WELCOME**

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# HOW IT ALL STARTED

3

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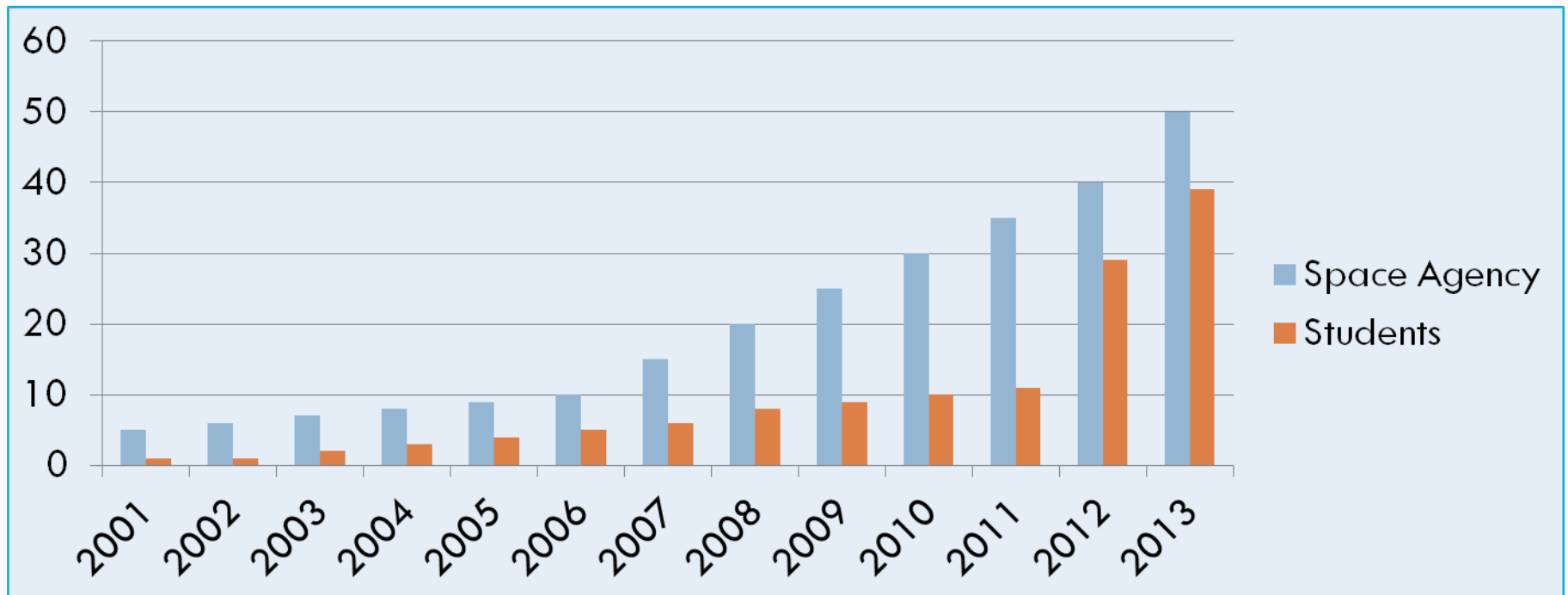
- In 1998, the Centre, African Regional Centre for Space Science and Technology Education in English was established by United Nation for capacity building in space Science and Technology Education within the English speaking countries in Africa
- In 1999, this centre was handed over to the Nigerian Government as one of the activity Centre of Nigerian Space Agency; National Space Research and Development Agency (NASRDA).
- The main objective of this centre is to promote space related education through her series of outreach programs to schools within the Nation.

# WHAT WE ARE DOING

4

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Over the years, the centre main focus on space education program has being on the primary and secondary schools because we believe in the slang –“Catch them young, they will be yours forever”



# WHAT WE HAVE DONE SO FAR

5

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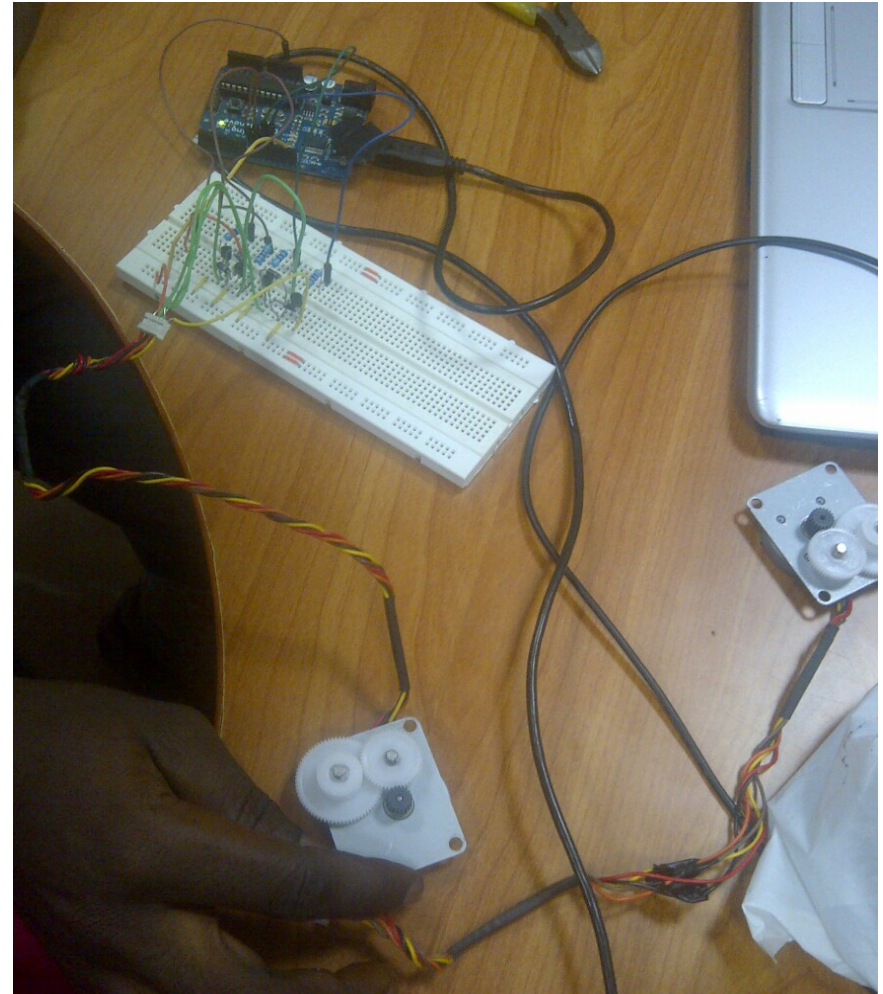


HIGH SCHOOL STUDENTS LEARNING HOW TO ASSEMBLE OPTICAL TELESCOPE





First amateur rocket launched



Writing a program to control stepper motor





Students working on an amateur  
radio telescope



Keplarian optical telescope with stand

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Cross section of students during 2012 space science community development



Cross section of AMASON members and staff of CBSS



## FIRST GLOBAL PRESENTATION



President of Africa Astronomical Society (AFAS) and some members of AMASON

## FIRST GLOBAL PRESENTATION



2012/04/28 21:37

Students observing the night sky with 25m CBSS optical telescope



2013 Astronomy summer school for west Africa students



# ACHIEVEMENTS IN TERMS OF STUDENTS INVOLEMENT IN PRACTICAL SPACE PROJECTS

11

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Staff of CBSS & AMASON members

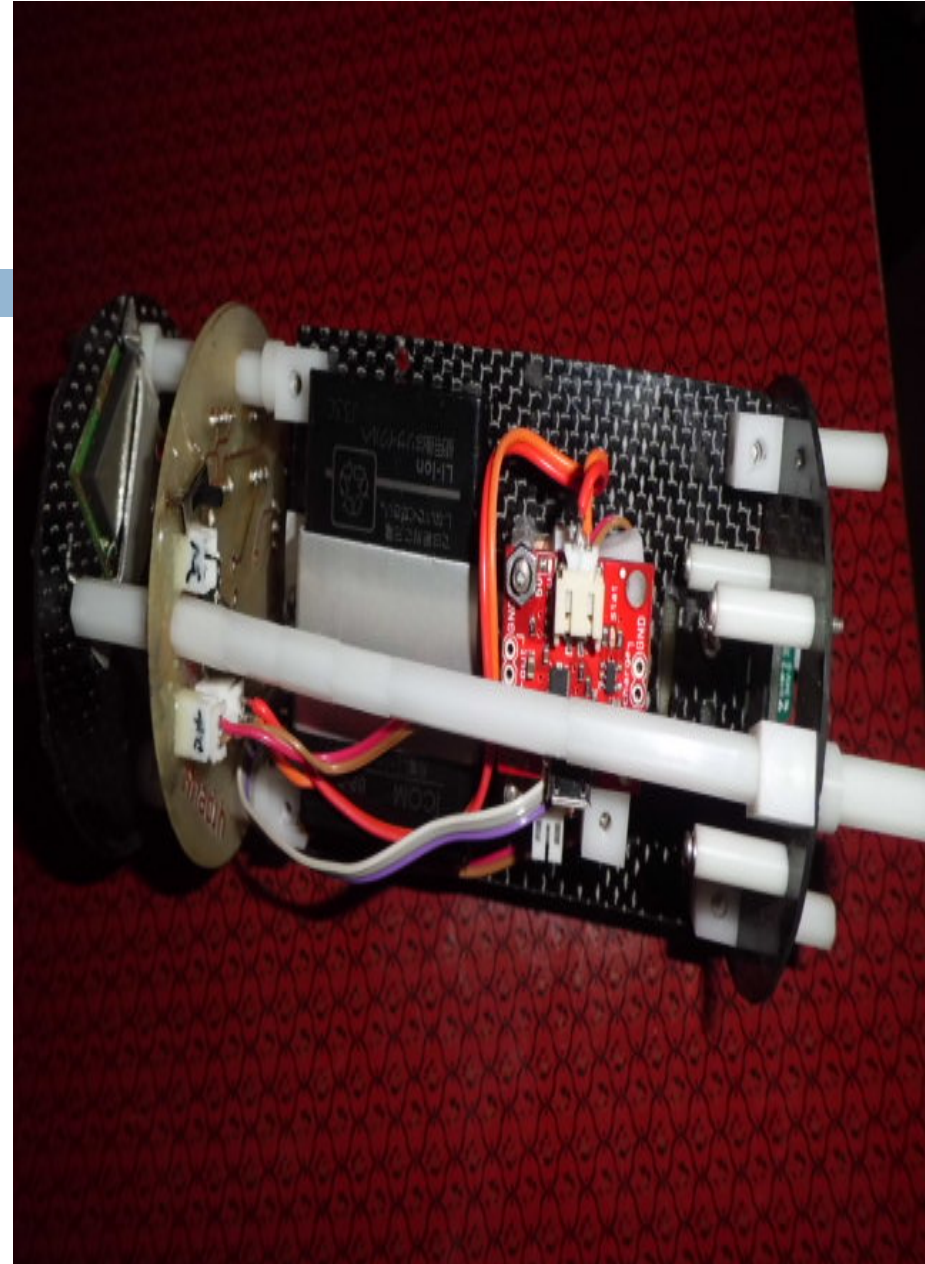


2012 Community development services <sup>12/6/2013</sup>





Can-Sat seminar by UNISEC Regional coordinator at UNN



Can-Sat circuit





Astronomy Summer School for west Africa students

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# WHAT WE ARE DOING

14

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- In addition to space education in primary and secondary schools, the centre is presently focusing on space education in the tertiary institution, about eleven (11) Institution from six (6) states of our of Thirty six(36) States within the Nation has signed up for our program.
- The centre is organizing seminar first to the faculty members of each of these tertiary institution to educate them on space related issues and our plans for their students in the nearest future



# WHY FACULTY MEMBERS?

15

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- Experience has showed us that most of our program that were targeted to students need our presence to strive; besides we might not always be in all the schools where we have our space program.
- To that effect, we intend to establish space clubs similar to UNISON , AMASON whereby the faculty members will be made to spear-head the activities of these societies
- After the seminar, we are planning a train-the-trainee program just like CanSAT Leadership Training Program (CLTP) to some selected faculty members representing those universities to equip them for the task of spearheading the activities of these clubs.
- We cannot achieve all these on our own, we want to collaborate with UNISEC-Global and all other participating nation in achieving these plans

# OUR FUTURE PLANS

16

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- To get involve in a massive outreach to various universities across the nation
- Encourage Nigerian tertiary institution to be developing space systems (Cansat and rockets) through their participation in UNISEC program
- Organize inter-regional competition within our nation and also nation wide competition among our universities on space system development and mini Mission idea Contest.

# OUR FUTURE PLANS

17

## FIRST GLOBAL PRESENTATION

- Engage multinational companies/organizations to support and finance students space activities in Nigeria
- We will strive to create a medium for knowledge transfer in practical space science projects from different part of the world to the young Nigerian students
- We will partner with other organization that promote space science education like space generation advisory council (SGAC), Astronomers without borders e.t.c

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# PLANS TO COLLABORATE WITH UNISEC GLOBAL

18

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- I. For us to overcome some of the challenges we might face in establishing practical space culture in Nigeria we want to collaborate with UNISEC GLOBAL
- II. We will also collaborate with other participating nations to tap from their experience and resources
- III. Through collaboration, we hope to achieve our mandate before 2025 following our road map

## ROAD MAP FROM 2014-2025

19

START OFF  
2014-2015

- 2014
- MASSIVE OUTREACH TO VARIOUS UNIVERSITY ACROSS THE NATION
- MARCH 2015
- SUMMER SCHOOL,
- NOV. 2015  
SPACE WEEK

2016-2018

- 2016-2017
- LAUNCH OF OUR STUDENTS CUBE-SAT AND CAN- SAT
- 2018
- START-UP SATELLITE AND ROCKET LABORATORY IN SOME NIGERIAN UNIVERSITIES

2019-2025

- 2019
- DEVELOP STUDENTS LAUNCH VEHICLE (Multi stage water rocket)
- 2020-2025
- UNIVERSITY STUDENTS SHOULD BE ABLE TO LAUNCH THEIR CAN-SAT FROM THEIR VARIOUS INSTITUTIONS

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## CHALLENGES WE MIGHT ENCOUNTER

20

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Some of the challenges we might encounter includes but not limited to the following:

- ❑ Rigid academic structure
- ❑ Motivation
- ❑ Funding
- ❑ Capacity building
- ❑ Culture



# CONCLUSION

21

- We have been able to explore in recent times some of the space related activities which involves the participation, encouragement of students in space science and space technology education
- Again, we identified few of the achievements that has been recorded
- we also have been able to identify some of the hitches and challenges militating against the frontiers of space science and space technology education in Nigeria

# CONCLUSION

22

- We also have look at ways to synergize by various actors in the field to achieve UNISEC mandate in Nigeria before 2020.
- We conclude by saying in emphatic way that Nigeria will achieve competence in space science and space technology education before 2025 as long as the road map of the National Space agency stands
- And the road map we are proposing for UNISEC Nigeria is strictly followed by collaborating with UNISEC GLOBAL and other participating nations.

# ACKNOWLEDGMENT

23

- I wish to use this opportunity to thanks the **JAPANESE Government**, and all other relevant bodies that sponsored my participation in this program
- The UNISEC-Global Point of Contact for Nigeria Mr. Nadih for his encouragement
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- Centre for Satellite Technology Development for giving me the privilege to do my one year national Youth services with them.
- To Mr. Okere, Obi IK and the entire staff of Centre for Basic Space Science (CBSS) for involving me in most of their activities as a student
- Finally to all participant present for your time and attention

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THANK YOU  
ARIGATOU

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24

SUGGESTIONS ARE WELCOME?



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*“ ...Suddenly, my heart told me that “you will be lifted into the orbit one day!” As I stretched I rediscovered that I was only day dreaming in my iron bed. My heart was full of bitterness and sadness; an elusive dream which I was told by everyone including my best friend had just reoccurred again. In the midst of confusion stands a boy whose dream as a kid was to become an Astronaut in the part of the world where little or nothing was known about space.*

*Every one was against his choice of study because virtually all were ignorant that such profession or carrier exists. Although, they are not to be blamed because the societies where we exist have not realized the importance of space to life on earth, rather, we are concerned with basic problems of life. This made it impossible for any child to think about space and space technology as a means of livelihood.... “*

“....As a child, my dreams were to be the first Nigerian to be lifted into the orbit from the continent of Africa. As a child I was told by my teacher that such dreams can never be realized but I never believed in ever; but, kept on keeping on, believing that one day my dreams will be realized. And behold UNISEC/ NASRDA will make that poor dream of my childhood a reality through Education, Research and Outreach in their quest to developing indigenous space capability in Nigeria. ...”