West African Regional Workshop and Meeting of Country Coordinators

26th November 2015 CBSS, Nsukka, Nigeria

Notes from discussions

PROGRAMME - http://westafrica.astro4dev.org/2015/11/25/regional-workshop-and-meeting-of-country-coordinators/

PRESENTATIONS - https://www.dropbox.com/sh/ndeftcw5t7ggjzb/AAAVHoyzPBk3X-AuIX7346xwa?dl=0

- 1. Arrival/Registration of participants/ Skype connection opened 9:00 9:30 am
- 2. Introduction of participants by Bonaventure Okere
 - Opara
 - Okeke
 - Kevin (IAU OAD)
 - Eric
 - Zaka (Cote d'Ivoire)
 - Patrice (Gabon)
 - Zachary (Burkina Faso)
 - o Ofodum: in charge of optical at CBSS and member of TF2
 - o Romanus Eze
 - Head of IT division
- 3. Welcome Address by Director of CBSS

9:40 – 9:50 am

9:30 - 9:40 am

- Two events will be conducted in the next few days: science forum and inauguration
- This project has been on our minds a long time. We have received good support from OAD and now we have this office.
- Recognizes the hard work that needs to be done
- Recognition of the work of Prof Okeke in bringing us to this point and bringing Nigeria to this point in terms of astronomy and space science
- Thanks to the IAU for effort in sustaining the OAD and regional nodes requests Kevin to convey the thanks to IAU
- Tomorrow is the launch of the first Space Science Forum: to fund astronomy and space science research is not an easy task
- At the science forum will be the inauguration of the regional node
- 4. Message by President of African Astronomical Society(AfAS) 9:50 10:00 am
 - Reflects on the development of astronomy in Nigeria
 - Took part in the planning of SALT (Southern African Large Telescope)

- Brought people from Nigeria to HartRAO in South Africa and now Nigeria has well trained astronomers
- Accepted to serve as president of AfAS, chosen on a merit basis
- Several challenges:- Need more countries to be represented here
- Major constraint has been lack of funds
- Difficult to convince governments to fund astronomy
- Overdue that we should have a new president of AfAS
- 6. <u>IAU Strategic plan</u> by Kevin Govender

10:30 - 11:00 am

- Talk on the IAU OAD and strategic plan
- 5. TEA/COFEE BREAK

10:00 – 10:30 am

7. Report from Regional Office by Bonaventure Okere

11:00 – 11:30 am

- OAD has helped establish the website: http://westafrica.astro4dev.org
- Images from IAU strategic plan: emphasizes the importance of astronomy for development
- Recalls goals of the IAU strategic plan
- Africa has 3 regional nodes with some overlap with ROAD in Jordan
- WAROAD was awarded provisional approval in 2014 conditional on delivery.
- To get to that point required lots of meetings
- Agreement signed at IAU GA August 2015
- Every country in the region should have a country coordinator and officers for each of the three task forces
- Content of the Steering Committee of the ROAD: representatives of key institutions in the region, CBSS director and OAD director

Questions:

- Comment from Okeke: lot of work ahead but have full support of CBSS
- On the IAU seed funding, Okere said that this is already in place 5000 EURO per ROAD
- Eric: who appointed country coordinators? Okere: each country needs to appoint its own
- 8. <u>Astronomy Development in West Africa</u> by Patrice Okouma

11:30 am – 12:00 pm

- Speaking to the bullets on the presentation which are clear please access at above link
- Highlights importance of linking astronomy and space science

Questions:

• Okeke: agree on the importance of space science in the conversation with leaders

10. LUNCH BREAK 1:00 – 2:00 pm

9. Report from country Coordinators

3:00 - 4:00 pm

9.1. Ghana Report

by Eric Aggrey

- 32m dish converted from satellite communication to radio telescope as part of the African VLBI Network
- Leaders want to see the social impact so:
 - astronomy clubs
 - capacity development (interdisciplinary)

9.2. Cote d' Ivoire Report

by Zaka Zacharie

9.3. Nigeria Report

by James Chibueze

9.4. Burkina Faso Report

by Zacharie Kam

- Various education and outreach programmes
- Currently period of uncertainty in terms of government elections in 2 days
- Coming soon: meetings regarding planning around teaching observatory, etc (see presentation at above link for list)

9.5. Gabon Report

by Patrice Okouma

11. Round Table/Open discussion

4:00 - 5:00 pm

- Kevin: need to discuss plan for West Africa
- Okeke: 1m telescope in Burkina Faso not functional yet; 32m dish in Ghana is still being built; so no operational facilities currently
- James: We shouldn't wait for facilities need to collaborate more on capacity building.
 e.g. use telescopes like SALT and Sutherland; Ghana telescope should have first light mid 2016;
- Zacharie: don't have building therefore no first light need to resolve some political issues
- Bonaventure: these facilities can help with capacity building
- James: need science and technical working group for instruments in West Africa;
- Okeke: need to collaborate
- Eric: need the collaboration
- Okeke: collaboration between Burkina Faso and Ghana and Nigeria
- Zacharie: is there an optical astronomer in Nigeria? Ofodum is in charge of optical; it should be clear that it is not property of West Africa it will certainly be easier to give access to West Africa but it's not only a project of Burkina Faso it belongs to Canada,

- Venkat: shared presentation on JEDI programme, which trains the trainers (Joint Exchange and Development Initiative); workshop on topics of interest; similar workshops in West Africa in various areas surrounding radio astronomy; successful JEDI in Kenya;
- Patrice: regular summer schools can OAD fund regularly (biannually)
- Eric: don't see any obstacles for Ghana to have agreements with Nigeria etc.
- Zaka: Cote d'ivoire is a newcomer no astronomy currently so collaboration is vital for them;
- Okeke: countries in West Africa who are knowledgeable in Astronomy should help others
- James/Venkat: low cost receivers are a good possibility various technical aspects to consider - committee on science and instrumentation could address
- Patrice: DUT and MITRA have systems
- Patrice: MoU is possible with Gabon/Nigeria
- James: coincides with discussion about MOU between CBSS and Ghana for staff exchanges during installation procedures which will be useful for skills for Nigerian conversions
- Zacharie: useful to have a database of astronomers in West Africa
- Okere: survey is being designed for West Africa coming soon
- Zaka: on language challenge, easier to write than speak (Skype calls are more difficult than emails)
- Zacharie: language challenge is not a problem at university level so much as public and children need translation of resources

Summary of contributions to a plan for the WAROAD:

Objectives:

- Research collaboration
- Instrumentation collaboration
- Capacity building
- Education and Outreach
- Fundraising
- Networking and communication

Indicators:

- Producing joint papers
- · JEDI workshops for West Africa
- · Committees on research and instrumentation
- · Biannual summer school
- Travelling lecturers/sabbaticals
- Exchange programmes
- Approaches to ECOWAS, industry etc; facilitate MoUs
- Facilitate low cost instrumentation development e.g. MITRA
- Survey of astronomy in West Africa
- Regional workshops
- · Regular communication through newsletters/media/social media

Challenges:

- Funding: need funding for activities/travel/etc
- Communication: lack of responses from the region to emails/requests; should have regular Skype calls

- Support from high level policymakers/governments: need to get high level support
- Capacity: tasks may be too much for just the coordinator all parties should play a role and take responsibility for specific tasks
- Language in West Africa: may be challenging to work across English and French speaking countries; the employee hired for translations in Nigeria is not a first language French speaker so may still be a challenge;

Strategic Goals for 2021:

- 10 countries in West Africa should have astronomy introduced in their curriculum;
 additionally, all public universities in Ghana should offer astronomy
- All astronomers in West Africa should have skills in software
- Ghana should have 5 radio PhD level astronomers
- Instrumentation: small instruments; West African centre of excellence for instrumentation; operational 32m dish in Ghana; operational 1m optical in Burkina Faso; operational 1m optical telescope in Nigeria;
- At least one additional planetarium in West Africa
- All West African countries represented in this forum
- Astronomy labs set up in at least 5 West African countries
- At least 3 new PhD astronomers in each of the 5 countries represented here

Closing thoughts:

- James: look forward to working with other coordinators; this is just the beginning and will be hard but let's prepare the groundwork and start projects that people will sustain
- Venkat: take baby steps with specific targets so that credibility goes up; reach sky with baby steps and specific deliverables in short terms
- Zacharie: will work together to achieve these points, even if not 100% will achieve a lot; Burkina Faso will work with other countries to build something good for the region
- Zaka: thanks to everybody for the meeting; been good for our country; can plan new training programmes; will do a report on all we have learned here; will work hard to make the project a success
- Eric: thanks to OAD for the wonderful forum; has learned a lot; first thing will push is MOU between GSSTI and CBSS; will encourage everyone to make this a success
- Patrice: thanks to CBSS, OAD, stakeholders; add to what Eric says lead task will be to push for MOU between Gabonese Earth Observation Agency and CBSS/NASRDA; if we manage to have the biannual school it will put us on a strong path;
- Okeke: two key words: implementation and effort to source for funds; thanks to OAD for efforts and hard work; want to hear when next AfAS meeting can be:
- Patrice: do this by email first to individuals then public;
- Okeke: accepts to contact AfAS executive and then come up with a date.
- Okere: Thanks to Okeke for time; thanks to Muriel and Piero from IAU; thanks to OAD (lots of compliments); thanks to colleagues from CBSS;



Figure 1 Participants of the West African Regional Workshop, Novermber 2015