FIG WORKING WEEK 2019

22–26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"

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FIG Africa Regional Network - an academic network for Africa

Jennifer WHITTAL
Africa Regional Network

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Top-down approach through existing networks ...

- **In Africa**
  - ARUA: African Research Universities Alliance - arua.org.za
  - AAU: Association of African Universities
    www.aau.org – high level collaboration
  - PANGeA: Partnership for Africa's Next Generation of Academics

- **Collaboration 'Out-of-Africa' with Africa**
  - AGNESS: African-German Network of Excellence in Science
  - AAUN: Australia-Africa Universities Network

- **Political:** African Union (AU) - New Partnership for Africa's Development (NEPAD)

Or ....

Bottom-up approach through member (professional and academic) associations ...

- Identify domain-specific champions
- Link individuals – determine short term collaboration goals e.g. prepare papers for FIG WW Ghana 2021 and FIG Congress Cape Town 2022
- Report on goal achievement
- Extend network   **Or ....**

Hybrid ...

- Link the champions NOW, collaborate in the short term
- Identify support through the existing networks MEDIUM TERM

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What are the needs – results of a poll in Botswana:

Academics

Update content; modernize equipment; standardize curriculum across Africa; more practicals

Curriculum review and standardisation

Staff and student exchange programmes

Exchange

Industry and academia

Collaboration

Networking

Transitioning: into prof practice and from employee to business partner – planning for partnership

Knowledge developme... Tech theory and skills

Funding

Research

Marketing and awareness

Commissions

Communica... internal to geomatics

Mentoring

A vision for an academic African FIG-affiliate community

- Database of African academics in FIG member institutions

- Under the ARN banner

- Teaching

  - Identify common teaching areas to facilitate sharing

    - Notes, slides, workshop material etc.

    - Other resources such as curricula

- Research

  - Identify common domains of interest from online research profiles

  - Identify one paper to collaborate on and present paper at an FIG conference

**FIG ARAN:
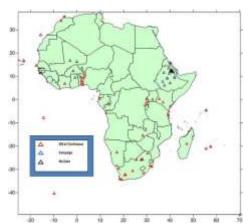FIG Africa Regional
Academic
Network?
(*aka* FIG YSAN)**

Domain-specific champions:

- Specific technology e.g. drone surveying?

- Land administration, cadastral systems, land development, and delivery of secure land tenure?

- Reference systems and CORS networks – AFREF?

- Offshore and coastal environments?

  - LWM and HWM determination

  - Height datum determination on (geoids) and offshore (hydroids of LAT)

  - Hydrographic surveying

- Other?

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Challenges

- **Expense** of academic membership – € 500 for 4 years
    - Roughly a **1/10** of the per capita salary in sub-Saharan Africa*
    - Roughly a **1/52** of the per capita salary in Europe & Central Asia**

    Much more costly for departments in Africa compared to other real costs – we cannot use the academic membership as a selection criterion
- Low and insecure salaries mean many academics also **practice** as land professionals – little time for research

*   https://data.worldbank.org/region/sub-saharan-africa-excluding-high-income?view=chart

** https://data.worldbank.org/region/europe-and-central-asia-excluding-high-income?view=chart

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Challenges

- **Internet connectivity** is poor and hinders

    – cloud computing, cloud storage and sharing of data

    – online meetings e.g. skype

    – access to data, papers, information

    – academics rely on private cell phone data bundles - expensive

- Behind in the **digital age**

    – much information is not digital – e.g. cadastral data

    – data is not current or complete hindering research

*   https://data.worldbank.org/region/sub-saharan-africa-excluding-high-income?view=chart

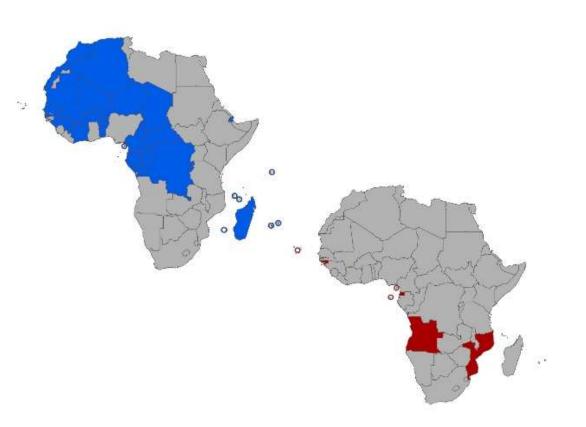** https://data.worldbank.org/region/europe-and-central-asia-excluding-high-income?view=chart

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Challenges

- **Languages**
  - Many local languages
  - National languages:
    - French
    - English
    - Portuguese
    - Arabic

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Proposals

1. **FIG RNA proposed 3 workshop thrusts for this term – one is on an FIG ARN Academic Network in conjunction with Comm 2; lead by J Whittal**
   - Hybrid approach
     - Use the data we have available and contact individuals
     - Identify champions and collaboration domains & aim for achievable short-term outcomes
     - Seek support through international academic networks
     - Work incrementally towards the long term vision: lecturer swaps, student exchanges etc.

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Proposals

2. Differentiated fees for academic membership of FIG:

- The fee currently payable by academic members is **500 € per four years**. If a member prefers to pay annually, the fee is **250 € per year**. *Academic members from countries listed by the World Bank as upper-middle-income economies shall pay*
310 € per four years. If such a member prefers to pay annually, the fee is 160 € per year. Academic members from countries listed by the World Bank as low-income economies or lower-middle-income economies shall pay 125 € per four years. If such a member prefers to pay annually, the fee is 65 € per year.

- *Submit a **formal proposal to FIG** ahead of budget cycle 2020*

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Proposals

3. **ARN Working Group on Geodetic Networks for Africa**
    - will provide an opportunity for overlap with the ARN Academic Network in the production of collaborative pan-African papers for FIG2021-FIG2022
    - partner with UNGGIM and Positioning and Measurement: Commission 5
    - lead – Stephen Djaba with Eldar Rubinov and others

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