Vision

To be a leading *Centre of Excellence* providing one-stop solution for quality geospatial science training, education and research and critical capacity for sustainable development in Africa.
Mission

To contribute to rapid development of member states in particular and Africa in general, through capacity building for timely delivery and responsible use of appropriate geospatial information.
Objectives:

• provide theoretical & practical training in Geoinformatics and applications.
• conduct seminars and courses
• carry out studies and research
• provide advisory and consultancy services
Academic Departments

(i) Photogrammetry & Remote Sensing (PRS)
(ii) Geographic Information Systems (GIS)
(iii) Cartography (CAR).
Evolution of Critical Capacity Training at RECTAS

Produced 1,522 trainees from 28 countries (1973-2010)

Distribution of Students

No of Students = 60

Francophone 40%
Anglophone 60%

Students enrolment at RECTAS
Strategy 1

Produce high grade experts in Geoinformatics application
Strategy 2

Enhance capacity & capability for research

\[ P = \sum_{i=1}^{n} (R_i D_i) \]

\[ P = R^{5.66} + D^{3.51} - C^{9.05} \]

*where:*

- \( P \) = estimated population
- \( R \) = net residential area
- \( D \) = population density
- \( C \) = constant

Urban Growth, Climate change, food security, disaster mgt
Declining Water Levels in Lake Chad, 1972-2007

Lake Chad, located at the junction of Niger, Nigeria, Chad and Cameroon, was once the sixth largest lake in the world. Persistent drought and increased agriculture irrigation have reduced the lake’s extent.

1987 Image show that lake Chad reduced to about one-tenth of what it was in 1972 image. 2007 image show some improvement but the extent of the lake is still smaller to what it was 2-3 decades ago.
Effects of conflicts...
Strategy 3

Equip graduates with capability to apply GI technologies.
Programmes

(i) *Geoinformation production & Mgt.*

- Technical Diploma - 18 months
- Technological Diploma - 18 months
- Postgraduate Diploma - 12 months

(ii) MSc Geoinformation Science
• MSc - Geoinformation Science

Specialisations:
– Disaster Management
– Environmental Mgt
– Land Resource Mgt
– Natural Resource Development
– Hydrology & Water Resource Mgt
– Meteorology & Climate Change
– Soil analysis & Agricultural Mgt
– Health & Social Development
Accreditation:

- CAMES (Francophone)
- NUC - MOU with FUTA (Anglophone)
Consultancy & Advisory Services:

*Short Courses:*

- Modular courses (3 weeks)
- Customised (1-4 weeks)
- Seminars & Workshops
- Projects (mapping, EIA, etc)
- Advisory missions (UN-SPIDER)
Consultancy

Mapping services

Sheet 303 SW1
ONUEKE
topo Map
1:25,000
Consultancy

Topographic mapping of Ondo State

Sheet 263 SE 3
ONDO Township
1:25,000
Consultancy:

provision of Satellite images, digital photos, etc.

Quickbird image of Akure
Short courses:

- RS/GIS applications military operations
- RS/GIS applications in geology/mineral resources exploration (Mines & Steel Dev.)
- Space-based appl. in Disaster Mgt (NEMA)
- GIS-Day seminar (11 Dec. 2008)
- AFREF workshop (2-5 Aug. 2009)
- AFREF workshop (9-11 Feb. 2010)
- GIS Workshop (June, 2010) for OSGOF
Advisory:

- GI application missions
- RS/GIS lab installations
- software licence
- instruments maintenance, etc.

Examples are:

✓ Installation of GIS laboratory in Univ.
✓ UN-SPIDER missions:
  (Lome - 2009; Dakar - Dec, 2009; Cameroon, ?)
Training Cost

• Regular Programmes
  - $4,500 per student
    - Tuition $552
    - Hostel $2,482
    - Stipend $828
    - Others $638

• Short Course:
  – $150 for 3 weeks

• Customised Course:
  - $50 per day

RECTAS Fellowship to Trainees of member countries
Prospects:
Int. & regional networks & partnerships for capacity building, research & GI applications.

Expertise:
• Research,
• Capacity building,
• International institutions
  - UN-SPIDER
  - RCMRD, GSDI, GMES
  - GARNET-E, IAEA-FGN,
  - CODIST, AFREF, etc.
Thank You