



# RECTAS

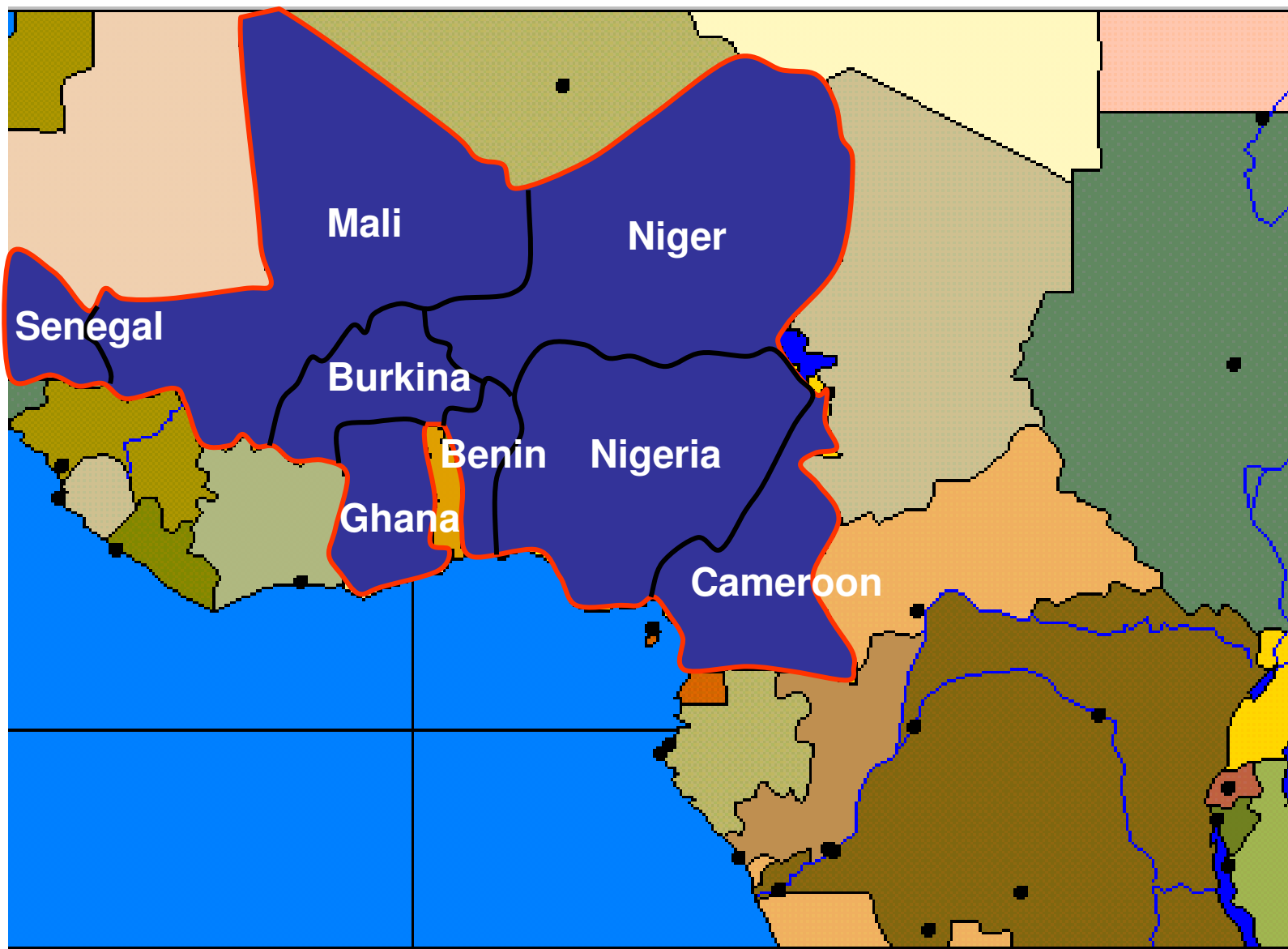
[www.rectas.org](http://www.rectas.org)

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## RECTAS: Capacity Building in Space Technology and Geospatial Data Applications

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# 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.



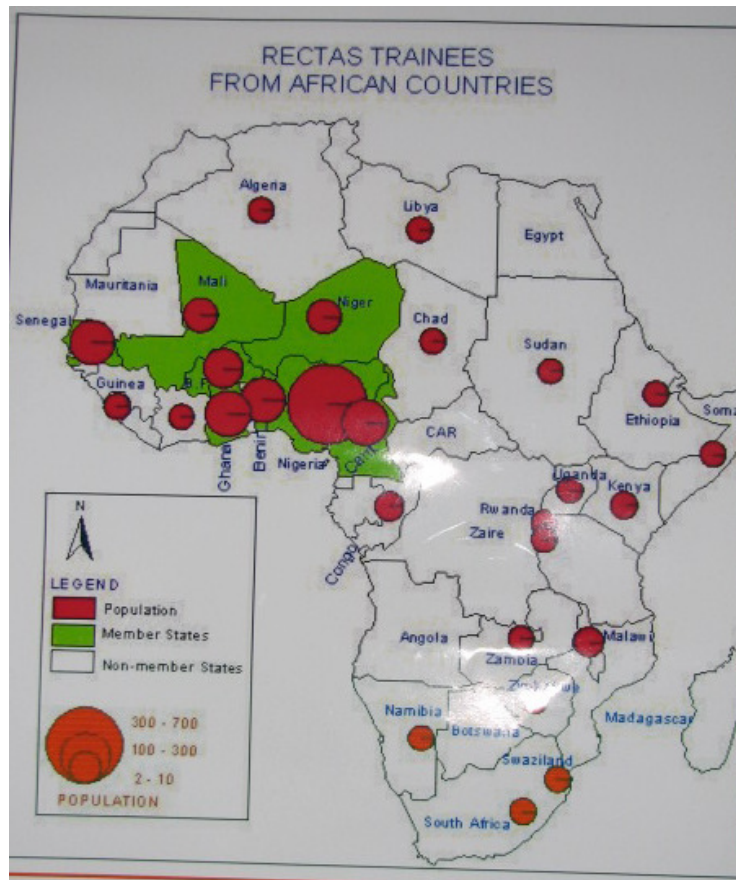
# Objectives:

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

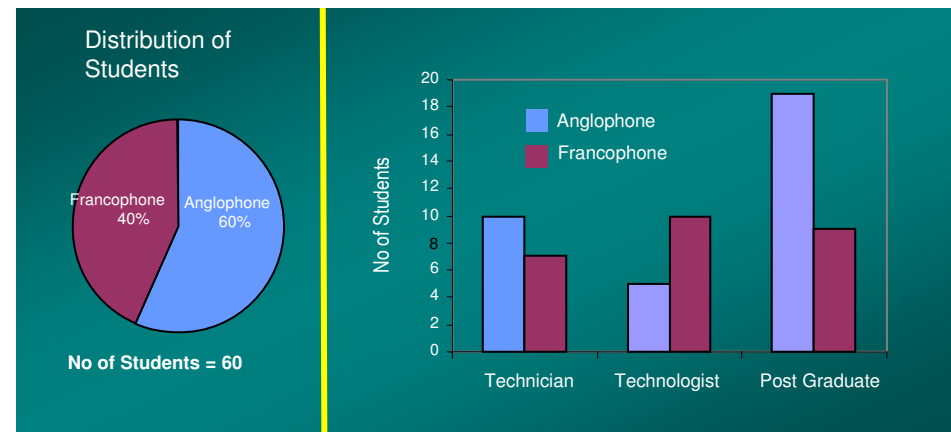
# **Academic Departments**

- (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)



Students enrolment at RECTAS

# Strategy 1

Produce high  
grade experts in  
Geoinformatics  
application



## Strategy 2

### Enhance capacity & capability for research

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

$$P = R^{e^{5.66}} + D^{e^{3.51}} - C^{e^{9.05}}$$

*where:*

P = estimated population

R = net residential area

D = population density

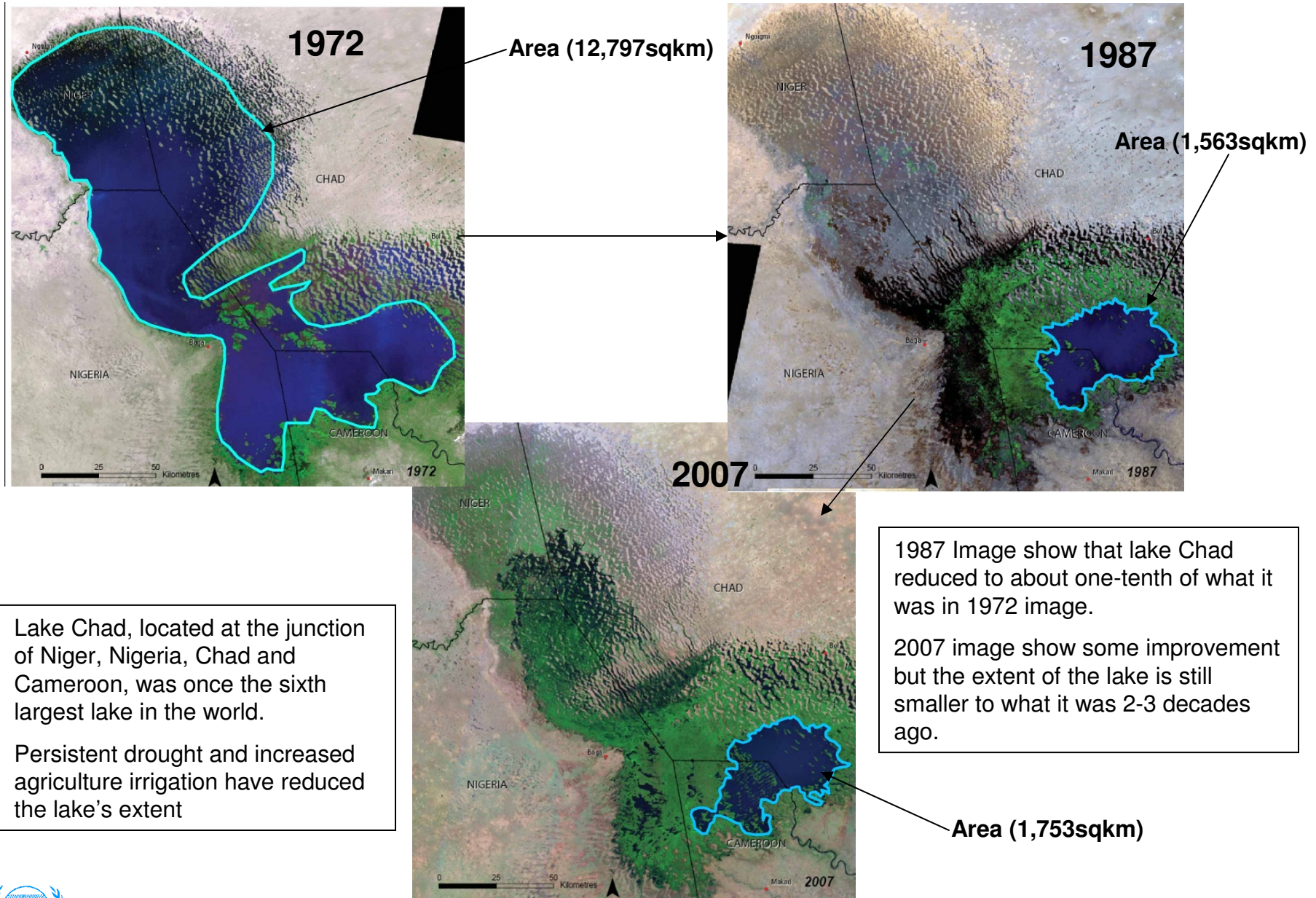
C = constant



Urban Growth, Climate change, food security, disaster mgt



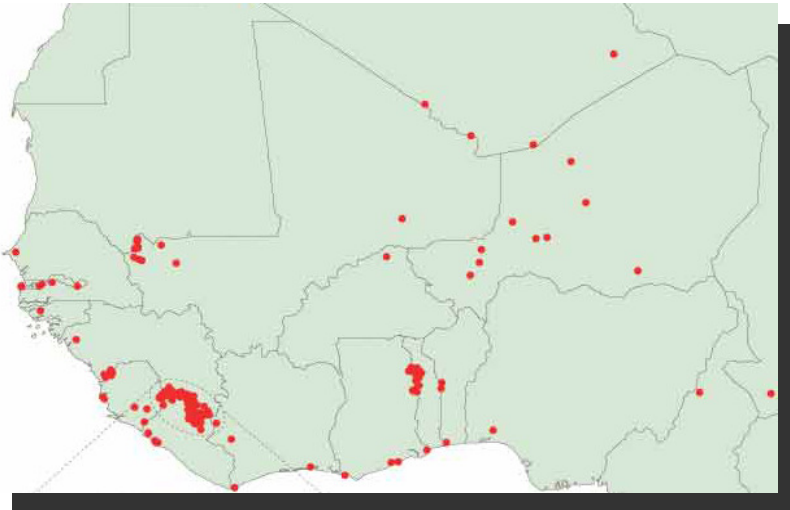
# Declining Water Levels in Lake Chad, 1972-2007



**RECTAS**



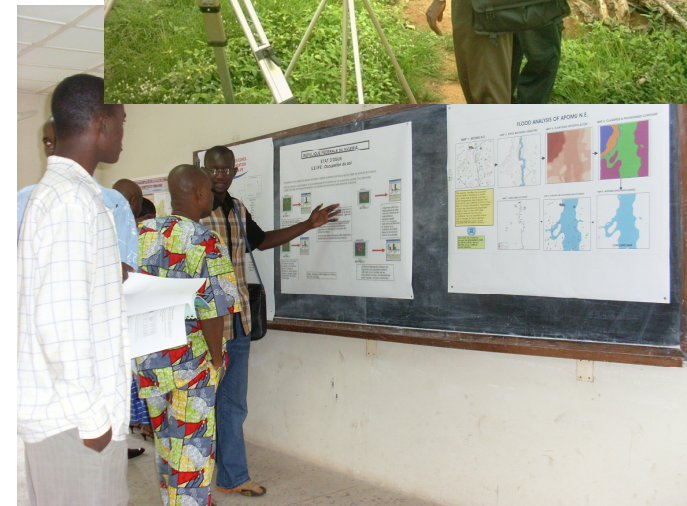
# Effects of conflicts...





# 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)

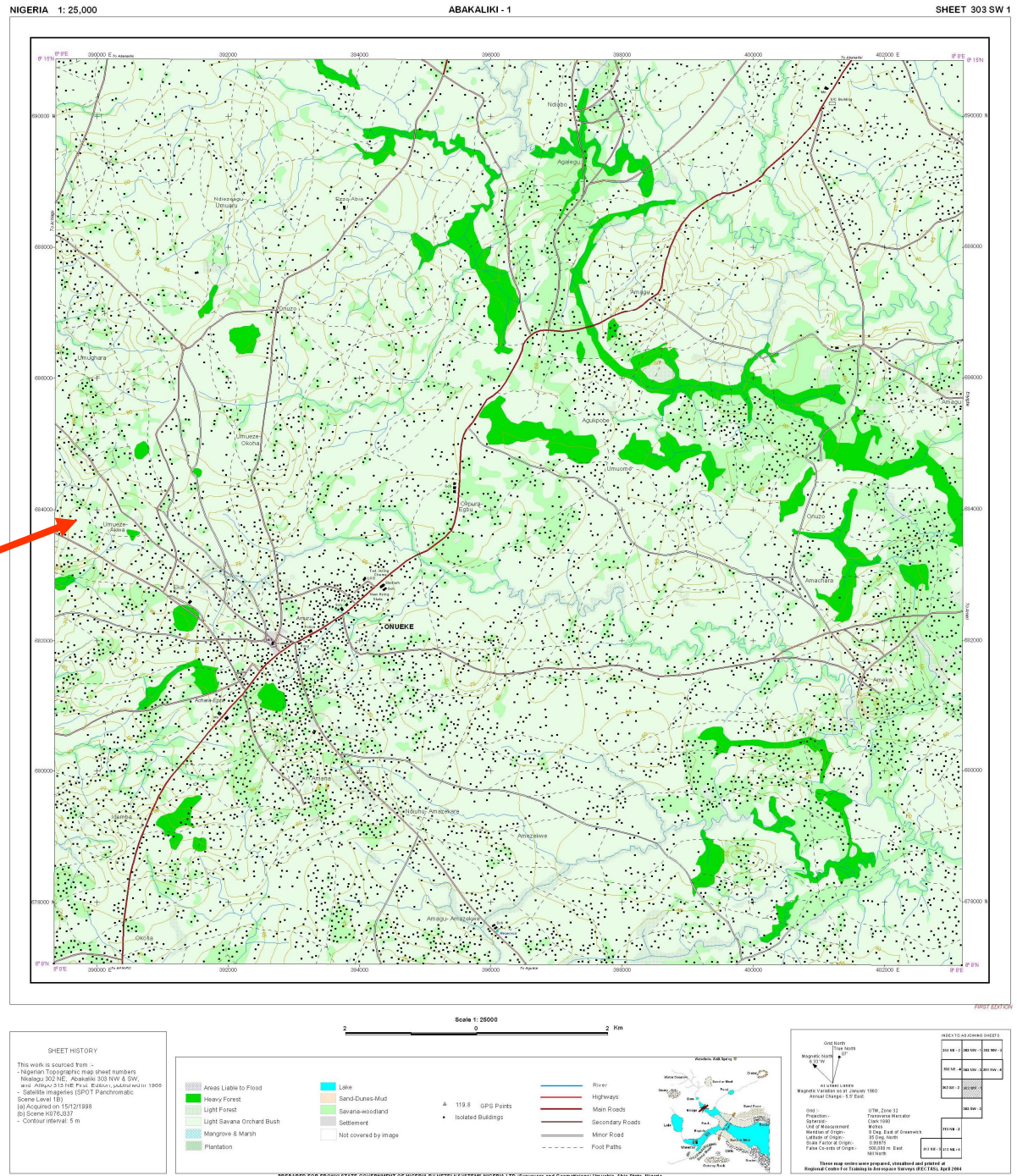
# Consultancy & Advisory Services:

## *Short Courses:*

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

# Mapping services

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

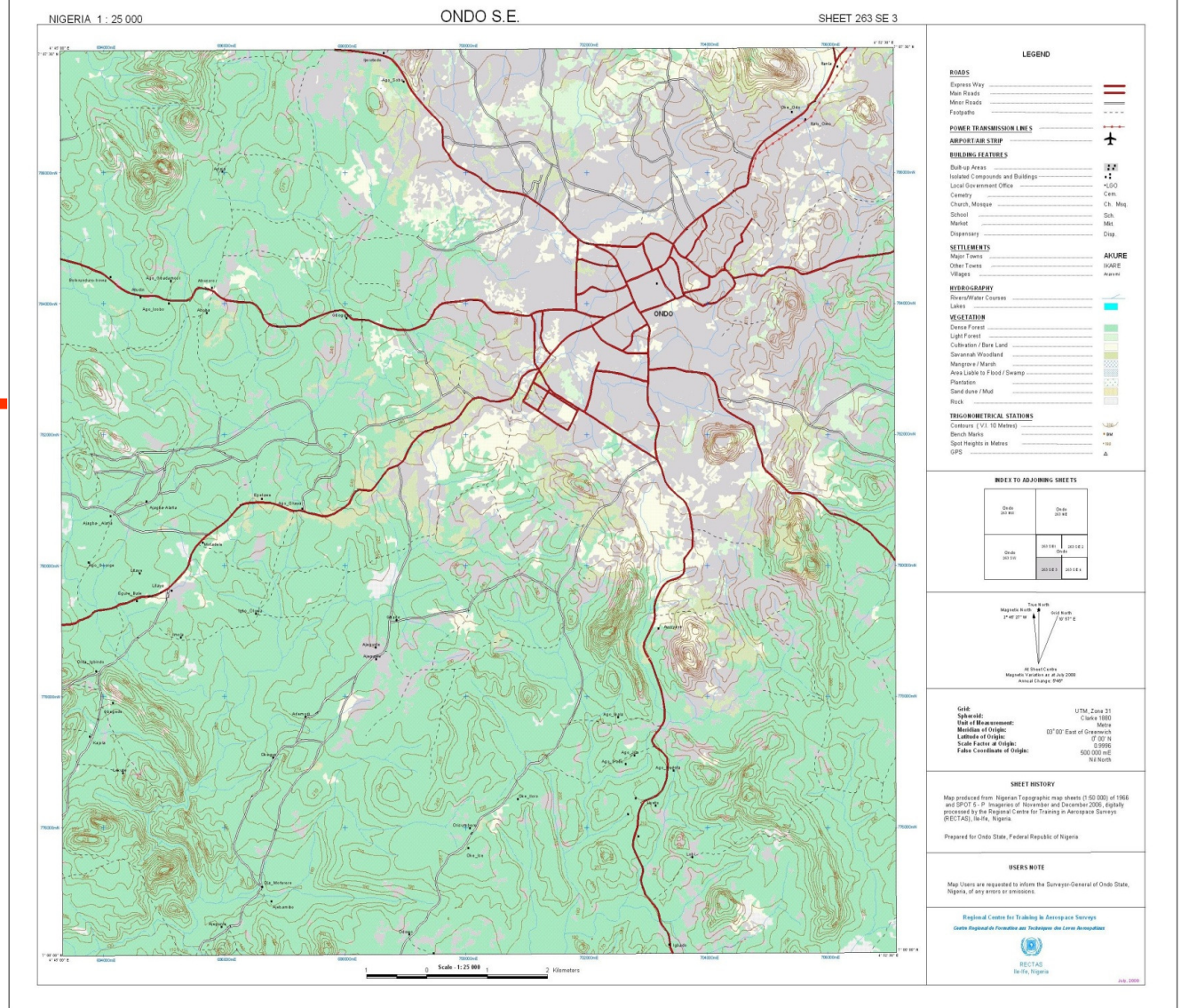




# Consultancy

## 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

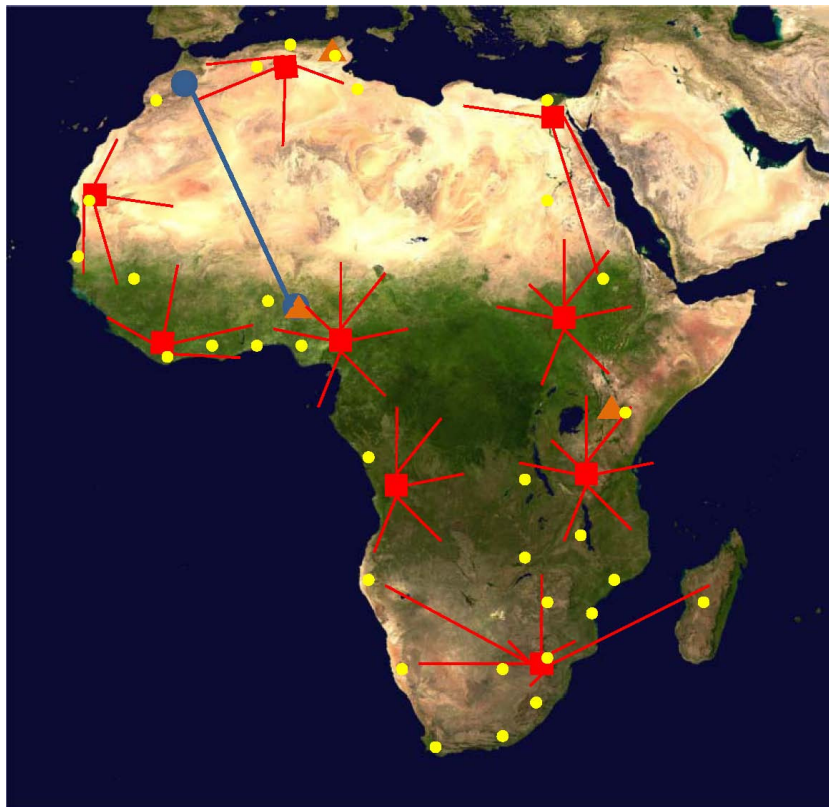
Tuition	\$552
Hostel	\$2,482
Stipend	\$828
Others	\$638

RECTAS Fellowship  
to Trainees of  
member countries

- Short Course:
  - *\$150 for 3 weeks*
- Customised Course:
  - *\$50 per day*

# 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**