

A Report of Capacity Building programme on Applications of Remote Sensing/GIS for Forestry Management in Nigeria held from 4th – 15th October, 2010 at Space Applications and Environmental Science Laboratory, Institute of Ecology and Environmental Studies, Obafemi Awolowo University, Ile-Ife, Nigeria

1.0 Introduction

The Space Applications and Environmental Science Laboratory (SPAEL), in the Institute Of Ecology and Environmental Studies, Obafemi Awolowo University (OAU), Ile-Ife, in collaboration with Ecology Fund Office (EFO), Office of Secretary to the Government of the Federation, the Presidency, Abuja, organised a capacity building programme from 4th-15th October, 2010. The workshop was designed to run in two batches, the first was from 4th-8th October, 2010 (for participants from the northern part of the country) and the second batch from 11th-15th October, 2010 (for participants from the southern part of Nigeria). The theme of the workshop was '**Applications of Remote Sensing/GIS for Forestry Management in Nigeria**'. The goal was to train and develop human capacity on the applications of space technology in forestry management.

2.0 Attendance

The workshop had participants in attendance drawn from Federal and State Ministries and Departments of Forestry. Participants for the first batch came from the following States: i. Sokoto, ii Kebbi, iii. Zamfara, iv. Katsina, v. Jigawa, vi Kano, vii. Yobe, viii. Borno, ix. Gombe, x. Bauchi, xi. Kaduna, xii. Niger, xiii. Adamawa, xiv. Taraba, xv. Kwara, xvi. Kogi, xvii. Benue, xviii.

Nassarawa, xix. Plateau and xx. Federal Capital Territory (FCT). The participants for the second batch were drawn from i. Oyo, ii. Ogun, iii. Osun, iv. Ondo, v. Edo, vi. Ekiti, vii. Lagos, viii. Delta, ix. Bayelsa, x. Imo, xi. Rivers, xii. Abia, xiii. Akwa Ibom, xiv. Ebonyi, xv. Enugu, xvi. Anambra, xvii. Cross Rivers and 3 nominees from Federal Department of Forestry.

The participants included directors, deputy directors, forest conservators as well as researchers from Universities/Research Institutes with diverse academic background, e.g. Botany, Forestry Conservation and Management, Tourism, Geography, and Agriculture (see Table 1 for list of participants).

3.0 Lectures and Practical

The workshop included hand-on-tool training sessions (Table 2). The first day focused on Introduction to Remote Sensing and Geographic Information System (GIS), Forestry Applications of Remote Sensing and GIS; second day was devoted to hands-on-tools practical session on basic image processing techniques, Identification of forest margins and human settlements from satellite images, Practical session on Land use/cover Mapping. The third day was centred on NDVI creation, Change detection techniques in forestry management, Derived deforestation map of forest margins; while the fourth day was for fieldwork (Figure 1) and dropping GPS points taken from the field on the image. The fifth day was utilized for the presentation of the group projects by the participants and workshop evaluation (Figure 2). The participants contributed well in the discussions and asked questions that demonstrated their understanding of the

lectures. Each participant produced a Land use/cover map. The workshop was a big success, being the first of its kind in the country. The participants commended the organisers for the quality of the facilities and facilitation, the relevance of the materials, as well as the experience and skills of the lecturers. Most participants hoped that the workshop would be the beginning of a new era in Forest Management in Nigeria, because they benefited immensely. Participants were given certificate of participation (Figure 3).

Table 1: List of Registered Participants at the Workshop

S/N	Name	Institution/Organization	E-mail Address	Phone Number
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CAPACITY BUILDING PROGRAMME



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Table 2: APPLICATIONS OF REMOTE SENSING/GIS FOR FORESTRY MANAGEMENT IN NIGERIA

DATE	TIME	TOPIC/ACTIVITIES
DAY 1 Monday	9.00 – 10.00	Registration and Opening Ceremony
	9.30-12.30	Registration and Opening Ceremony
	12.30- 14.00	Lunch
	14.00-17.00	Introduction to Remote Sensing and Geographic Information System (GIS) Forestry Applications of Remote Sensing and GIS
DAY 2 Tuesday	9.00– 12.30	Hands-on-tools practical session on basic image processing techniques
		Identification of forest margins and human settlements from satellite images
	12.30- 14.00	Lunch
	14.00-17.00	Practical session on Land use/cover Mapping
DAY 3 Wednesday	9.00 – 12.30	NDVI creation
	12.30- 14.00	Lunch
	14.00-17.00	Change detection techniques in forestry management
		Derived deforestation map of forest margins
DAY 4 Thursday	9.00 – 17.00	FIELD WORK
DAY 5 Friday	9.00– 12.30	Visualisation techniques
	12.30- 14.00	Lunch
	14.00pm-17.00	Presentation of Pilot Project & Workshop Evaluation
DAY 6 Saturday	DEPARTURE	

Gallery



Figure 1: Field work

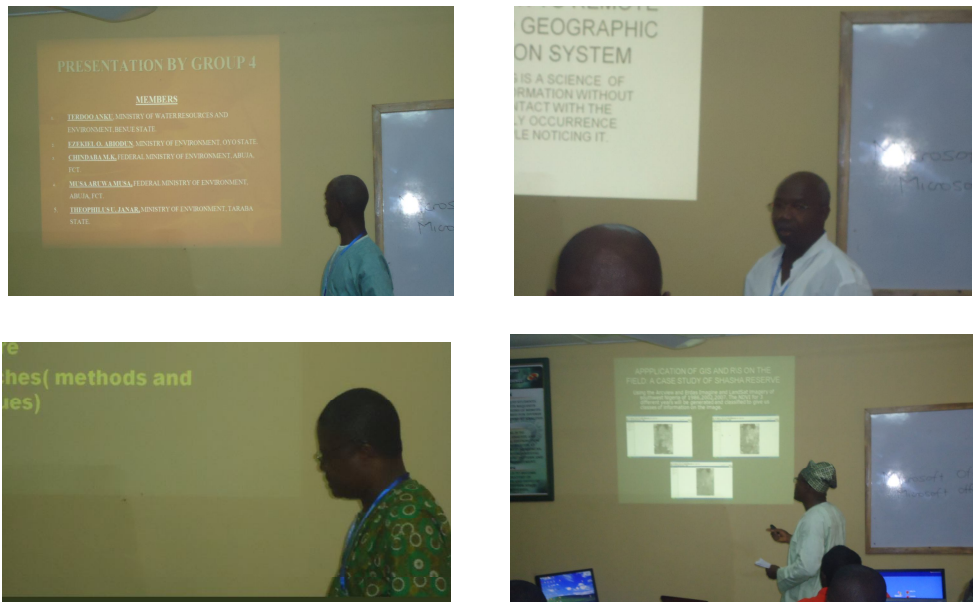


Figure 2: Group projects and presentations in the workshop



Figure 3: certificate presentation