



Space Applications and Environmental Science Laboratory (SPAEL)



A Report of the African for Monitoring of the Environment for Sustainable Development (AMESD) Workshop on Water management for Cropland and Rangeland Management held from August 16-20, (Abuja) and August 23-27, 2010, OAU, ILE-IFE.

Introduction

African Monitoring of the Environment for Sustainable Development (AMESD) is a program by the European Union Commission and African Union Commission aimed at deploying 50 E-Stations to Africa. It is a continental wide, pan-african project for the development of Geoinformation service, of which Economic Community of West African States (ECOWAS) is the regional economic community for that of West Africa countries. It is in line with this that a workshop in Abuja was held at the Nigeria Hydrological Service Agency (NIHSA) and at the Space Applications & Environmental Science Laboratory (SPAEL), in the Institute of Ecology and Environmental Studies (IEES) in Obafemi Awolowo University (OAU) Nigeria. The theme of the workshop was "**Water management for Cropland and Rangeland Management**".

The goal of the workshop was to give information about what AMESD entails and products that will be expected which is to improve decision making-processes in the field of environmental resource and environmental risk management in Africa; by increasing the information capacity of African regional and national institutions mandated for environment-related sectors, and facilitates access to Africa-wide environmental information derived from Earth Observation technologies.

Attendance

The same workshop was held in Abuja and SPAEL in order to make provision for participants that cut across the country to attend. Twenty five (25) attended that of Abuja and another 25 attended the one that was held at SPAEL, OAU, Ile-Ife. The lists of the institution invited are stated below.

NIHSA, Abuja

1. Nigerian Meteorological Agency (NIMET), Abuja
2. ECOWAS, Abuja



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3. National Emergency Management Agency (NEMA), Abuja
4. Nigeria Hydrological Services Agency, Abuja.
5. Ecological Fund Office, Office of Secretary to the Government of the Federation, Bullet Building, Eagle Square, Abuja.
6. Climate Change Unit, Federal Ministry of Environment, Abuja.
7. Drought and Desertification Control Unit, Federal Ministry of Environment, Abuja.
8. Federal Ministry of Agriculture and Water Resources, Abuja.
9. Federal Department of Forestry, Abuja.
10. Department of Forestry and Wildlife Management, Federal University of Technology, Yola.
11. One participants each from the Ministries of Environment in the 13 frontline states in Northern Nigeria viz: Adamawa, Jigawa, Katsina, Kebbi, Sokoto, Bauchi, Gombe, Kano, Borno, Nassarawa, Niger, Yobe and Zamfara.

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12. Nigerian Maritime Administration and Safety Agency (NIMASA), Apapa, Lagos.
13. Nigerian Institute of Marine and Oceanographic Research (NIOMR), Lagos.
14. Niger Delta Development Commission (NDDC), Port-Harcourt.
15. Institute of Pollution Studies, Rivers State University of Technology, Port-Harcourt.
16. Department of Environmental Technology, Federal University of Technology, Owerri.
17. Institute of Oceanographic and Marine Research, Oron.
18. Imo State Ministry of Environment.
19. Bayelsa State Ministry of Environment.
20. Rivers State Ministry of Environment.
21. Delta State Ministry of Environment.
22. Lagos State Ministry of Environment.
23. Department of Water Resources Management & Agro meteorology, University of Agriculture, Abeokuta.
24. Cross Rivers State Ministry of Environment.



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25. Ogun State Ministry of Environment.
26. Edo State Ministry of Environment.
27. Ondo State Ministry of Environment.
28. Osun State Ministry of Environment.
29. Oyo State Ministry of Environment.
30. Forestry Research Institute of Nigeria (FRIN), Jericho, Ibadan.
31. Nigeria Conservation Foundation (NCF), Lagos.
32. Nigerian Meteorological Agency (NIMET), PUMA Station, Oshodi, Lagos.
33. Abia State Ministry of Environment.
34. Ekiti State Ministry of Environment.
35. Enugu State Ministry of Environment.
36. Regional Centre for Training in Aerospace Surveys (RECTAS), Ife.
37. Institute of Ecology and Environmental Studies, Obafemi Awolowo University, Ile-Ife.

Lectures and Practicals

There were 14 lectures and 3 practical sessions in the 5-day workshop for each location (Abuja and Ile-Ife). The training coordinator was Prof. Ayobami T. Salami and he was assisted by Omodanisi Esther O. The staff of Nigeria Hydrological Service Agency (Abuja) and the Institute of Ecology and Environmental Studies (OAU, Ife) also supported the programme.

The schedules and information about the lectures and practical sessions are shown by Table 2. The Honourable Minister of Water Resources, **Chief Obadiah Ando** gave the keynote address at the opening ceremony on *African Monitoring of the Environment for Sustainable Development (AMESD) using AMESD network reception and Environmental Indicator and its products*. Thereafter, Mr. Alfari from AGRHYMET, Niamey, Niger gave an overview of what AMESD is all about and what we expect from it.

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The training started fully on the second day with the Introduction to Remote Sensing/Geographic Information System and general overview of the previous products and what Nigeria is expected to have. The third day was centered on Vegetation Monitoring and its indicators with a practical session; while the fourth day was devoted to Climate and Meteorological indicators and a practical session. The fifth day was utilized to explain the E-Station that will be installed in Abuja and the upgrade in Lagos that was scheduled for October 2010. The participants contributed well in the practical/discussions and asked questions that demonstrated their understanding of the lectures. The participants expressed their views through the evaluation form (Figures 1 and 2). The workshop was a big success, being the first of its kind in the country.

Table 1: Lectures and Practicals Schedules

Period	day 1	day 2	day 3	day 4	day 5
1	Opening Ceremony	Introduction to Remote Sensing	Vegetation Monitoring: methodological concept	Climate and meteorological indicator	E-Station E-Station installation calendar
2	Word from ECOWAS Word from the Director, Hydrological Services Agency	Introduction to Photo Interpretation	Derived indicators and observation from vegetation reflectance	Monitoring surface water: principles, methods and applications	Feedback and Evaluation
3	Overview of the projet AMESD	General Overview of the Products	Seasonal monitoring: the phenology	Monitoring surface temperature, rainfall estimation: principles, methods and applications	Closing Ceremony
4	Background of Participants Discussion	Discussion	Practical/Discussion	Practical/Discussion	

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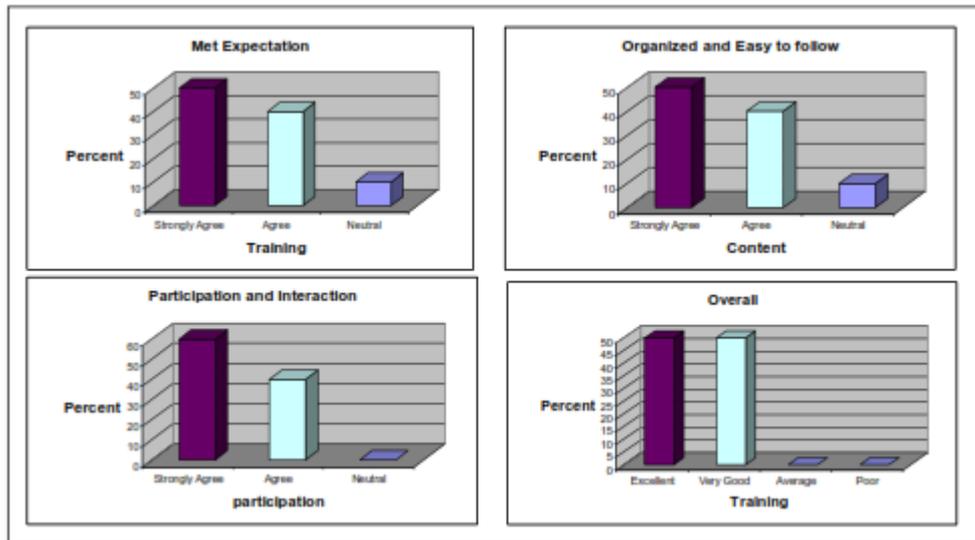


Figure 1: Evaluation of the Workshop at NIHSA, Abuja.

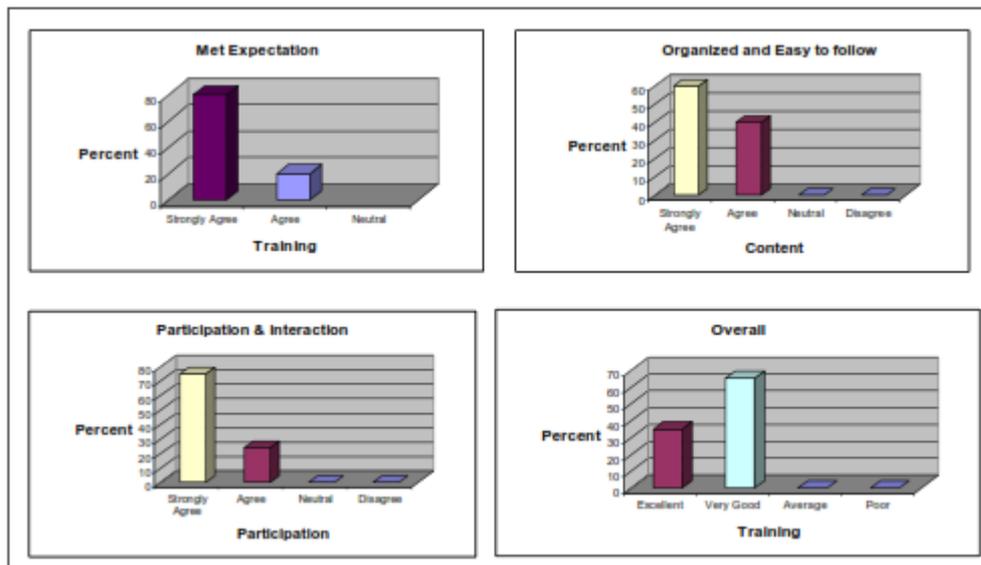


Figure 2: Evaluation of the Workshop at SPAEL OAU, Ile-Ife.