School Diary: February 14, 2003

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The first lecture slated for 9.00 am started effectively at 9.15. Prof. Radicella introduced for 5 min Prof. G.O. Ajayi, Director General of the National Information Technology Development (NITDA), Abuja, Nigeria. He was described as scientist of with valuable contribution in the field of Radio Propagation with emphasis in the area of microwave studies for Africa. He has been actively involved in ICTP activities for a long period. He also originated the ICTP VSAT pilot project for the Obafemi Awolowo University, Ile-Ife Nigeria. This pilot project had tremendous impact in the University.

Prof. G.O. Ajayi responded by pointing out that the ICTP has indeed played a key rule in the ICT in Nigeria, and its impact was being felt in all sectors.

The actual lecture – "State of Information and Technology in Africa: Nigeria Case Study" started effectively at 9. 25. The lecturer explained the following issues related to the ICT sector in Africa

Lowest growth in teledensity with about 1 million Internet users for the whole Africa e-Africa commission setup by NEPA for ICT development in Africa inspired by the e-ASEAN Task Force and the e-European initiative

Projects:

- Human resource Development
- Infrastructure Development
- e-Policies and strategies
- Local Content Development
- Special Programmes
- Public e-Awareness

He equally pointed out the SAT-3 /WASC/SAFE for Africa which will provide 120 Gbps fiber optic cable system for Africa (East)

Prof. G.O Ajayi took the case study of Nigeria. It was recorded that the country has about 2 million GSM subscribers and the access to Internet was still limited to major cities. However the Nigerian government was beginning to give priority in the ICT sector. This was expressed by the recent launching of National Telecommunication Policy recently. It was also recorded that the National Space Research and Development Agency (NARSDA) launched a program for the Nigerian Satellite System which is Satellite expected to be functional by July 2003.

The lecturer proposed an Implementation Strategy consisting of Human resource capacity building, Institutional capacity building, and Infrastructure capacity building.

Prof. G.O. Ajayi introduced briefly his agency -NITDA to the audience; he pointed out its partnership with CISCO, the launching of Mobile Internet Units (MIUs) by the agency

and the establishment of the PSNet which is the Public Service Network providing VSAT connectivity to government institutions and ministries.

NITDA was also in charge of promoting the e-Government in Nigeria.

The lecturer made some recommendation and concluded at 9.00 am. This was followed by a 5-min discussion.

A 30-min coffee break was given at 10.10 am.

At 10.45 the second theme – *Wireless LAN Overview* was handled by Prof. E. Pietrosemoli.

The lecturer clearly explained the following topics:

Direct Sequence Spread Spectrum (DSSS

Frequency Hoping Spread Spectrum (FHSS)

802.11 standards and terminology

Comparison of the DSSS) and the FHSS was equally made. DSSS was observed to be popular, however more vulnerable to interferences than FHSS.

The lecturer noted that nowadays, applications are usually bandwidth hungry. He Channel overlapping leading to 3 effective non-overlapping channels in practice.

The Bluetooth technology was briefly described. This was noted to be an attractive field in wireless technology, however its range of coverage will still have to be improved on.

Prof. E. Pietrosomoli took the audience through the various components of a wireless network such as AccessPoints, Connectors, Configuration & management, and Security (WEP, RADIUS).

12.15 to 2.00 pm: Launch break.

At 2.15 Prof G.O. Ajayi handled the afternoon session with the theme: *Building Capacity*. The lecturer talked about Capacity Building, Human resources and other Infrastructures. He equally pointed out the functions of High Education Institution (HEI) and some global trends in the ICT sector.

Prof. G.O. Ajayi recommended an adequate budget provision for ICT for each government, ICT to be considered as priority project and an adequate infrastructure to be established.

Conclusion: HEIs to be vanguard for ICT use and development in Africa.

The lecture ended at 3.15 followed by 10-min discussion.

The laboratory session was directed by Dr. C. Fonda who introduced briefly the basic commands of VI (VIM) editor. This was followed by the installation of Linux Operating System, slakware 8.1 distribution.

The laboratory session ended at 6.30 pm.

A party was slated for 8.30 pm to mark the Valentine's day. The Party started at 9.00 pm, the multimedia projector (for presentations) was used special effects and the notebook as CD-players, what a Hi-Tech party!

It has indeed been a busy day.