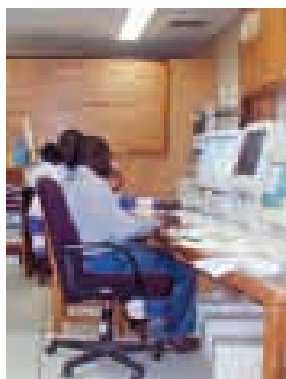


12. Information and Communications Technology

Installation of an autonomous Information and Communications Technology (ICT) Unit in 1997 brought formal electronic workspace into WARDA, by introducing the CGIAR IVDN (Integrated Voice and Data Network). The main goal was to transform staff attitude with the introduction of a local area network (LAN), Internet web-browsing, e-mail and voice over Internet.



With assistance from IDRC, an IRS position was created under the Director General's Office, with the challenge of linking all the institution's computers and electronic activities. The current ICT Manager started merging all data in one CG-wide standard (in our case SQL).

Other achievements to date include:

- Security and backup systems—keeping our site and research information safe;
- Fluid telecommunication via secure digital link established with the national telephone company;
- New global agreement with CGNet, in collaboration with other CG IT managers—reducing costs and improving quality of services;
- New high-speed Internet link to a new provider with very-low-cost international telephone connections.

The main goal of WARDA's ICT Unit in the coming decade is to assist researchers in gaining the maximum benefits from new software and IT tools in order to increase staff productivity. Specifically, this implies:

- The replacement of the present suite of personal computers with Net PCs, which include in their physical structure the software tools to facilitate communication and information exchange in mixed text format, charts, audio and video.
- Continuous re-engineering of existing databases in a standard format in line with ISO and Institute of Electrical and Electronics Engineers (IEEE) norms.
- Establishing an integrated management information system for research and participating in on-line meetings in rarely accessible academic areas, such as biometrics and GIS.
- In the immediate future, the use of dedicated high-speed Internet will be expanded and video-conferencing capability installed in order to facilitate interaction among researchers, technicians, NARS and others at reduced cost.

Communication within the CGIAR should be improved with the installation of a hyper-relational structure such as 'Active Directory.' Such a link will make the CGIAR a one-network entity where all employees can be linked to a virtual global institution.

The implementation of these objectives will be done in accordance with the standards and guidelines established by the CGIAR Information and Communications Technology Knowledge Management (ICT-KM) Working Group.