

Feasibility Study Project Proposal

Nigerian Virtual Library for Universities and other Institutions of Higher Education

Country:	Nigeria
Project Title:	Feasibility Study: Nigerian Virtual Library for Universities and other Institutions of Higher Education
Executing agency:	UNESCO jointly with Nigerian Presidency and Nigerian Ministry of Education
Donor:	Japanese Funds-in-Trust for Capacity-Building of Human Resources
Estimated Duration:	4 – 6 months
Requested Contribution:	\$ US 133 679

Context

1. Information and communication technologies (ICT) play a significant role in development efforts and poverty alleviation. ICTs open up new horizons for the creation and exchange of knowledge, for education and training and for the promotion of creativity, cultural development and intercultural dialogue.
2. Many African governments are facing the challenge to seize the opportunities of ICTs and to apply and integrate them into a wide range of activities. Particular challenges include the improvement of information literacy, an improvement of ICT infrastructures, the enhancement of access to ICTs, the practical use of ICT, in particular in education at all levels.
3. This is particularly true in Nigeria whose current (July 2000) population is estimated at 123.34 million. The country has 405,000 (1995) main line telephones and 10,000 (1999) mobile cellular telephones, representing respectively 0.003 % and 0.0001 % of the population. Equally, there are five Internet Service Providers (ISPs) (1999) in the country. Clearly, this denotes that Nigeria is suffering from a considerable *digital divide*.¹ As a first step to redress this situation, the Government recently adopted a National Policy for Information Technology (IT), setting out a vision, a mission statement, general objectives and strategies.

¹ The existing telephone system is inadequate and is further limited by poor maintenance. Major expansion of the network is required and a start has been made, especially by privatising the fixed and mobile telephone systems through auctions. At the domestic level, the telephony infrastructure includes: intercity traffic carried via coaxial cable; microwave radio relay; a domestic communications satellite system with 19 earth stations; and, a coastal submarine cable; mobile cellular facilities and the Internet are available. At the international level, the telephony infrastructure includes: satellite earth stations - 3 Intelsat (2 Atlantic Ocean and 1 Indian Ocean); and, coaxial submarine cable SAFE (South African Far East).

Statistics pertaining to more traditional means of electronic communication are as follows:

- Radio broadcast stations: AM 82, FM 35, short-wave 11 (1998)
- Radios: 23.5 million (1997)
- Television broadcast stations: 2 government-controlled; note - in addition, in 1993, 14 licenses to operate private television stations were granted (1999)
- Televisions: 6.9 million (1997)

4. As regards education, the country is in a state of crisis at all levels of education. Institutions of higher education and learning which are the stepping stones of the country towards partaking in the emerging global knowledge society suffer from a debilitating lack of financial resources and insufficient learning tools as well as, in particular, libraries.

5. Libraries in Nigerian universities and other institutions of higher learning are virtually non-existent in the rural and urban marginal areas. Even in the few urban centres where they do exist, their orientation is narrow and book-centred (with seriously outdated material) and their services are undermined by poor funding and obsolete and inadequate collections. The purchase of publications from outside Nigeria has become unaffordable and is essentially no longer available, seriously impeding the intellectual basis for the development of the country and preventing the country's learning institutions from engaging in and benefiting from global exchanges. In sum, the potential role of university libraries as sources of learning, education, innovation and research, as tools for social development and as means of communications have become seriously eroded.

6. Structural rather than political constraints are thus the major impediments facing university libraries in the discharge of their responsibilities as a vital component renovating and innovating education and in providing access to knowledge and information for the public at large. Resources and services need to be designed to enable them to cater effectively to the social, cultural and developmental needs of library users in Nigeria and more specifically, as a priority, for higher and tertiary-level education.

Justification

7. To help improve the above situation, the creation of a virtual library for universities and other institutions of higher education in Nigeria is proposed, preceded by a feasibility study.

8. In general, the purpose of a virtual library (VL) is to underpin learning and acquisition of knowledge, to provide a more solid basis for education and to enhance quality of life by drawing on digitally available (preferably on-line) books, materials and journals via ICT-based tools. A VL provides remote (on-line or CD-ROM-based) access to a variety of national and international content (e.g. curricula, learning materials, books, journals, magazines, newspapers), services traditionally offered by libraries and other information sources. VLs thus combine on-site collections of materials in electronic format with an electronic network which ensures access to and delivery of those materials. To become an effective educational tool in the public service, it must respond to the needs of and provide affordable access for prospective users - students, teachers, researchers and academics. Emphasis should be given to building up collections that are in the public domain and that are accessible through, e.g., applications of free software on the basis of affordable Internet tariffs.

9. The function of a VL is to ensure the systematic development of the means to collect, store, and organize information and knowledge in digital form and to provide easy and affordable access to it around the clock from various locations. In general, a VL should:

- provide ICT-based access to a range of digitally available publications for educational purposes available in the public domain and from other sources;
- provide access to distance education materials;
- contribute to the efficient delivery of information to students, researchers and teachers of all universities and educational institutions of higher learning in Nigeria;
- strengthen communication and collaboration between and among the research, library and educational communities, nationally, regionally and internationally;
- offer lifelong learning opportunities.

10. In order to design a comprehensive VL design and implementation plan, the feasibility of how

best to create, operate and expand a VL in Nigeria must be examined, taking into account the present telephony infrastructure. In that connexion, a series of issues must be addressed and clarified:

- Institutions to be included (Universities, other training institutions, libraries² etc);
- Access modalities (institutional and/or individual);
- Content themes (faculties and subjects to be covered in connection with higher and tertiary level curricula);
- Content form (access to existing materials and the need to create new content in English, Yoruba and/or other national languages; content in the public domain; inclusion of commercially available content);
- Content delivery (combination of online and offline ICT approaches and products);
- Content access (cataloguing and indexing), including relationship with the Nigerian National Union Catalogue (NUC)³;
- ICT infrastructure and equipment needs/availability at institutions concerned (including connectivity and networking capacities, use of freeware, tariff negotiations; suitability of equipment to climate and local conditions);
- Architecture of the virtual library (access and centralised vs. decentralised services);
- Training needs (to set up, manage and use the VL);
- Links to already existing national virtual library and virtual laboratory projects⁴;
- Partnerships with other regional and international virtual library initiatives⁵.

Development Objectives

11. The project shall contribute to the attainment of the following development objectives:

- The relevant goals to be attained for bridging the digital divide, as formulated in the Action Plan of the UN ICT Task Force (“Promoting national and international efforts to support local content and application creation” and “Enhancing human capacity development, knowledge creation and sharing”) and of the DOT Force of the G8 (to foster “National and international efforts to support local content and application creation”)⁶;
- the relevant objectives, strategies and provisions of the Nigerian National Policy for Information Technology (IT);
- the goals of the “Dakar Framework for Action” for Education for All (EFA), pertinent to higher education (“to enhance the quality of education and reforming educational systems” and to “harness new information and communication technologies to help achieve EFA goals”);⁷
- the objective of “Dissemination of information at all levels” of the Common Country Assessment/United Nations Development Assistance Framework (CCA/UNDAF) for Nigeria 2002-2007, (under Theme 2 “Promoting good governance and human rights”);
- the objectives of UNESCO’s Information for All Programme (“Promote and widen access to information in the public domain through the organization, digitisation and preservation of information”, “Support the production of local content” and “Strengthening institutions as gateways

² List of University libraries in Nigeria at <http://www.ru.ac.za/library/contacts/africa/Africlib.html>

³ <http://www.nlbn.org/nuc.htm>

⁴ Cf. Pilot “Virtual University and Virtual Laboratory” project involving six universities and the “Virtual Library Testbed” conducted by CI/INF/Addis Ababa

⁵ Cf.. [African Digital Library](#) of the Michigan State University, *Institut Fondemental d’Afrique Noire* (IFAN) and the West African Research Center (WARC).; [African Digital Library](#) of the [Technikon SA’s Center for Lifelong Learning](#) and the Association of African Universities ; [African Virtual Library Initiative](#) ; [African Virtual University](#) of the Univ. of Massachusetts, the New Jersey Institute of Technology, Indiana University, and others ; [American University in Cairo. Library](#) , etc.

⁶ http://www.dotforce.org/reports/DOT_Force_Report_V_5.0h.html

⁷ http://www.unesco.org/education/efa/ed_for_all/dakfram_eng.shtml

for information access”)⁸.

Co-operation Arrangements

12. The situation will be assessed in close relation with the Ministries of Education and Science and Technology as well as other stakeholders, in particular, the National Librarian, Vice-Chancellors of the Universities, librarians of universities, the UNESCO CI Chair at the Federal University Yola, the Nigerian University Commission, the National ICT Institute and the Nigerian National Commission for UNESCO. On the international level, experts of the International Federation of Library Associations and Institutions (IFLA) may be involved in the preparation of the feasibility study.

13. UNESCO, for its part, will draw on its extensive experience in preliminary studies of VL and library services.

14. The various issues shall be addressed through a Feasibility Study, to be carried out under the auspices of the UNESCO Task Force on UNESCO-Nigeria Co-operation and led by the Bureau of Strategic Planning (BSP), as decided by the Director-General of UNESCO, with a view to developing a nation-wide action plan for the implementation of which the President of Nigeria has already committed federal funding.

Immediate Objectives

15. The immediate objective of the project is to conduct a detailed Feasibility Study for the creation of a Virtual Library for universities and other institutions of higher education in Nigeria with an action plan for its implementation.

16. The Feasibility Study will assess what elements are needed and what steps will have to be deployed in order to develop a Virtual Library for universities and other institutions of higher education in Nigeria. It shall serve as an action-oriented policy and project development tool for the implementation of such a project in Nigeria.

17. Aspects to be addressed include issues relative to user needs analysis; options for affordable connectivity and access; content provision, creation and management; workflow models for acquisition, cataloguing and dissemination; standardisation for digitization and cataloguing; training for staff and users; maintenance; project funding; project management; and project evaluation.

18. In particular, the Feasibility Study will address the following issues:

- **Content**

What are the needs of the users? What type of information should be made available? How should this information be made available – free or via subscription? Which are the legal issues (copyright, fair use, legal deposit for digital born contents)? Should only Nigerian publications be made available? What languages will be used (English [official], Hausa, Yoruba, Igbo [Ibo], Fulani)? What about foreign monographs, serial publications, on-line materials (including courseware)? What about digitising already available material, both nationally and internationally? What standards to be used for digitization and cataloguing of electronic contents?

- **Capacity-building and training**

Once the system is devised, what sorts of skills will be necessary? Who needs to be trained? For what functions do these people need to be trained (to input data, to up-keep the Library, to consult

⁸ <http://www.unesco.org/webworld/ifap/programme.shtml#objectives>

information on-line, to create alternative methods of delivery (i.e. CD-ROM), to ensure technical maintenance of the equipment...)? What are the current capacity and skills? What are the possibilities of training trainers? What are the possibilities of training users?

Inputs

19. The team entrusted with the preparation of the Feasibility Study shall ideally be composed of:
 - One libraries and information management specialist
 - One higher education specialist
 - One ICT specialist (system development, hardware and software)
 - One telecommunication specialist (to assess national telecommunication and networking infrastructure and to identify lacunae)
 - One national Professional Officer (NPO) (Abuja) for local administration, organisation, liaison with national counterparts and preparatory activities.
20. UNESCO/BSP will ensure the direction and administrative oversight in co-operation with the CI Sector.

Activities

21. Each specialist shall be required to produce a detailed report on their findings pertaining to the possibilities, problems and obstacles related to the creation of a virtual library. A draft version of each report shall be submitted at least one month prior to termination of contract, for eventual revisions.
22. It is assumed, that each specialist may have to
 - undertake two missions to Nigeria with the objective of meeting various stakeholders and to have first-hand on-site assessments by appropriately placed officials;
 - undertake one mission to UNESCO Headquarters for briefing/debriefing and strategic formulation.
1. The NPO will provide local logistical and administrative support and backstopping and will assist also in the formulation of a national generated strategy for a Virtual Library for universities and institutions of higher learning in Nigeria.
2. UNESCO/BSP will co-ordinate the various reports, prepare a consolidated version and be responsible for the production of the Final Report of the Feasibility Study. The Report will be professionally edited and produced/printed

Budget

Nigerian Virtual Library for Higher and Tertiary-Level Education

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Description	Cost \$ US	
Six month contract for the recruitment of the NPO \$US 17 300 = NGN# 1 957 668	\$ US	17 300
Four Consultant Contracts (PRN*) @ \$US 18 000 each (1 System, Hard- and Software specialist; 1 libraries and information management specialist; 1 telecommunications specialist; 1 higher education specialist) <i>(each \$US 18K includes, inter alia, two missions to Nigeria with the objective of meeting various stakeholders and one mission to UNESCO Headquarters for briefing/debriefing and strategic formulation and production of detailed report on their findings as well as related expenses)</i>	\$ US	72 000
Missions by UNESCO HQ staff (PRN*)	\$ US	17 000
Editing of the Final Report	\$ US	5 000
Production and Publication of the Feasibility Study	\$ US	3 000
Miscellaneous	\$ US	4 000
Total Direct Costs	\$ US	118 300
<i>Support Costs(13 %)</i>	<i>\$ US</i>	<i>15 379</i>
Total	\$ US	133 679