



Date : 08/06/2006

Theme: Forging partnerships between libraries and extension services for improved access to agricultural information

AGLINET, AGORA, et al: Enhancing Access to Information in Support of Research and Extension in the Developing World

Jane Wu
Chief Librarian
FAO, Rome, Italy
jane.wu@fao.org

and

Mary Anderson Ochs
Cornell University Library
Ithaca, New York 14853
United States
mao4@cornell.edu

| | |
|-----------------|-----------------------------------|
| Meeting: | 103 Agricultural Libraries |
|-----------------|-----------------------------------|

| | |
|-------------------------------------|-----------|
| Simultaneous Interpretation: | No |
|-------------------------------------|-----------|

WORLD LIBRARY AND INFORMATION CONGRESS: 72ND IFLA GENERAL CONFERENCE AND COUNCIL
20-24 August 2006, Seoul, Korea
<http://www.ifla.org/IV/ifla72/index.htm>

ABSTRACT: *A number of information programs have been developed over the years to support world-wide agricultural research and extension. This paper discusses two of these programs, AGLINET and AGORA in the context of recent global library, information and communications technologies, best practices and future trends. Specifically, the programs are discussed in the context of the Millennium Development Goals, the Alexandria High Level Colloquium on Information Literacy and Lifelong Learning, the Alexandria Manifesto and the outcome of the World Summit on the Information Society. The advantages and disadvantages and future potential of these and similar programs and the need for complementary programs in development are discussed in the context of the present and future challenges for agricultural libraries and some future directions are proposed.*

Introduction

This is perhaps the finest moment in all of history for libraries. Information and communications technologies (ICT's) are converging and evolving, becoming more affordable and practical. We, as librarians have the privilege of working at time when technology can make our information access and dissemination dreams a reality. We are indeed on a threshold of opportunity. On the world stage, we have, through the International Federation of Library Associations (IFLA), fully participated in the World Summit on the Information Society (WSIS)ⁱ. Together we can claim the successes and move forward, following best practices and the advice from today's leading thinkers for enhancing access to information in support of research and extension in the developing world. We have the guidance of the deliberations of the high level library and information society colloquia in Prague and Alexandria which recognized and documented the economic advantages of libraries and their contributions to the Millennium Development Goals (MDG's)ⁱⁱ. The Alexandria pre-Summit Conference "Libraries - the Information Society in Action"ⁱⁱⁱ highlighted the concrete role libraries already have in building the Information Society. It showcased and documented some of the best practices from libraries around the world in the areas of health, education and training, media literacy, preserving of cultural heritage and disaster preparedness.

The Tunis Agenda for the Information Society, approved March 27, 2006 by the United Nations General Assembly Summit^{iv} recognized the existence and magnitude of the digital divide and the challenges that it poses for many countries, which, with very limited resources, are forced to choose between many competing objectives in their development planning and funds. It concluded that adequate and sustainable investments in ICT infrastructure and services, and capacity building, and transfer of technology will be needed for many years to come. *The Tunis Agenda furthermore called upon the international community* to promote the transfer of technology on mutually agreed terms, including ICTs, to adopt policies and programmes with a view to assisting developing countries to take advantage of technology in their pursuit of development through, *inter alia*, technical cooperation and the building of scientific and technological capacity in our efforts to bridge the digital and development divides. This demonstrated increased awareness of the economic and development importance of knowledge and information indicates that the time is ripe for intensified cooperation, collaboration and interaction at the international level.

ⁱ The IFLA website at <http://www.ifla.org/III/ws/BeaconInfSoc.html>. has full documentation on the WSIS meetings. Further specific sites are included in References.

ⁱⁱ A full discussion of the Millennium Development Goals role of libraries in relation to fulfillment of them may be found at <http://www.uneca.org/> (Workshop on Building of African Capacity to implement the Outcomes of the World Summit on the Information Society in the sphere of Libraries and Access to Information and Knowledge, March 27-28, 2006)

ⁱⁱⁱ See also www.infolit.org/International_Colloquium/index.htm and www.bibalex.org/infolit2005.

^{iv} See also <http://www.ifla.org/III/ws/Info-Lit-For-All.htm>

The AGORA and AGLINET Programs

Within the context and priorities established by the MDGs^v and the World Summit on the Information Society, the following paragraphs discuss international programs which rely upon collaboration for information dissemination in agriculture and related fields. The two programs discussed in greater depth are AGLINET^{vi} and AGORA^{vii}, both of which have similar objectives and content but are radically different in almost every other aspect. Access to Global Online research in Agriculture, or AGORA was born digital; is completely web-based and, apart from any print-outs the end-user may make, has no paper information dissemination component at all. The AGORA program, set up by the Food and Agriculture Organization of the United Nations (FAO) together with major publishers, enables the poorest developing countries to gain free access to an outstanding digital library collection in the fields of food, agriculture, environmental science and related social sciences. AGORA now provides a collection of 849 journals to more than 700 institutions in 63 of the 69 eligible countries and is designed to enhance the scholarship of the many thousands of students, faculty and researchers in agriculture and life sciences in the developing world. A Second Phase is also being planned which will allow access to a greater number of countries by extending access to countries in the \$1000 to \$3000 GDP per capita range. FAO serves as the central coordinating agency of AGORA, following the pattern developed by the publishers and the World Health Organization (WHO), for a similar program in the health sciences.^{viii} AGORA has a main portal maintained by FAO for its many users or participants and was launched just over two years ago. In comparison to the Agricultural Libraries Information Network, AGLINET, it is a child.

AGLINET is a world-wide network of fifty-eight large international and specialized agricultural libraries working together in a voluntary co-operative. This network was built upon the principles of mutual and rational use of library resources, not only for the benefit of members' own constituencies but also in support of other libraries within the country/region. It was founded in 1971 within the framework of the International Association of Agriculture Librarians and Documentalists (IAALD)^{ix} which wisely ensured AGLINET would have its own statutes and governance, developed and which have evolved through consensus with the members of the network. The structure, tasks, principles, procedures and changes in membership are guided by the AGLINET Statutes which were formulated and are periodically reviewed by members. All major changes must be approved by all members. Members also vote on whether to accept new members and a simple majority of votes is needed for approval or rejection.

^v For more information see <http://www.un.org/millenniumgoals/> It is evident that information literacy is key to the achievement of these goals.

^{vi} For more information see <http://www.fao.org/library/> under Partnerships/Networks.

^{vii} See <http://www.aginternetwork.org> for more information, including feedback from users.

^{viii} The sister program to AGORA which is agriculture-based, is HINARI which is described at <http://www.who.int/hinari/en/>

^{ix} More information may be found at <http://www.iaald.org/>

AGLINET was established in the paper and microform era, just over thirty five years ago and its focus was efficient delivery of primary documents, especially unique material. All member libraries agree to provide, upon request, low-cost inter-library loan and photocopy service to other member libraries, bibliographic information, reproductions (fiche or photocopy) and other cooperative activities as appropriate. AGLINET Centres provide partner libraries with access to the literature originating in the country or region and/or scientific literature for a given specialization. AGLINET libraries thus achieve comprehensive resource coverage and mutual and rational use of library resources. The FAO David Lubin Memorial Library is the Coordinating Centre for AGLINET. In contrast to the rather substantial administration for the AGORA program, AGLINET is in fact supported and managed by each individual member, each of which provides the information and documentation in a many to many relationship. Coordination at present consists mainly of keeping the membership information, voting and website up to date.

AGLINET, AGORA and the World Summit on the Information Society

Considering AGORA in the context of the MDG's and WSIS is a truly inspiring experience perhaps best summarized through identification with the IFLA Commentary on the WSIS Declaration of Principles. "IFLA and its members share a common vision of an inclusive Information Society in which everyone can create, access utilize and share information and knowledge ..." It is perhaps sufficient for the purposes of this current discussion to state that AGORA, born digital, existing digitally, provides the digital content needed to stimulate the bridging of the digital divide in accordance with all of the ideals and objectives of WSIS, particularly manifest in Geneva Declarations, 8, 9 and 10:

8. "We recognize that education, knowledge, information and communication are at the core of human progress. Further Information and Communication Technologies (ICTs) have an immense impact on virtually all aspects of our lives..."

9. "We are aware that ICTs should be regarded as tools and not as ends in themselves..."

10. "... We are fully committed to turning this digital divide into a digital opportunity for all, particularly for those who risk being left behind and being further marginalized." ^x

To fully utilize the content available through AGORA, much remains to be done to

^x More information is available at (www.ifla.org/III/wsis070604.html and www.itu.int/wsis/docs2/tunis/off/6rev1.html, article 90k.

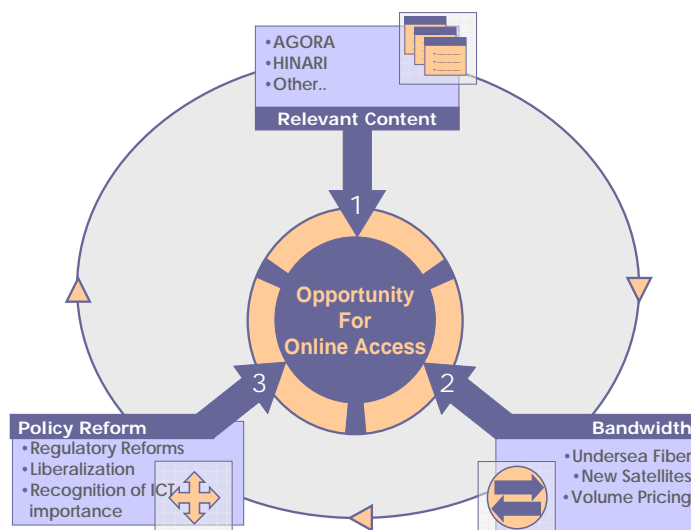
^{xi} Steiner, Roy. *Promoting African Research Education Networking –Internet Bandwidth Challenges and Opportunities* Presentation at the Cornell Conference on Building the ICT Capacity of African Universities to Promote Development. November 2004.

^{xii} More information at www.itoca.org.

^{xiii} Need for International Cooperation to meet Information Requirements of Scientists in a Developing Country, by Alladi Vagiswari, S. Amba, Christina Louis (INSPEL 35(2001)1, pp. 27-36)

advance ICTs in the developing world. However, the content available through AGORA and its sister program, HINARI, offers a powerful rationale for campuses seeking to improve their technical infrastructure. While offering AGORA and HINARI content to libraries who do not yet have good Internet connectivity presents a bit of a "chicken and egg" problem, the illustration below shows how the content is just one part in a three part solution that must come together in order for libraries in the developing world to have adequate access to information.^{xi}

Potential for Increase Access



In Africa, leadership for a collaborative training program in the use of AGORA and HINARI has come from ITOCA (Information Training and Outreach Center for Africa)^{xiii} in cooperation with FAO, WHO and Cornell University. Other partners, such as Michigan State, CABI, and some of the CGIAR centers in Africa, have helped host or facilitate the workshops. Since the AGORA launch in October 2003, national training workshops have been held in Nigeria, Tanzania, Uganda, Kenya, Malawi, Ghana, Ethiopia, Rwanda, Mozambique, Senegal, and Mali. The workshops focus on skill-building for use of the AGORA and HINARI resources, but also focus on learning to teach workshops in attendees' home institutions. Clearly this is an example of ICTs serving as a tool, not as an end unto itself, as specified in the WSIS Geneva Declaration 9.

In the post-WSIS era, however, a number of questions should be asked about a thirty-five year old network such as AGLINET. What are the trends for thematic networks today? Is AGLINET still relevant or has its relevance been superseded by other, more general regional networks and/or other content providers for development like

AGORA? Has AGLINET evolved with technology and has it optimized use of all the information and communications technological possibilities? Is it structurally sound or should it be opened up to new configurations? Should the membership restrictions be relaxed and membership extended to any number of agricultural libraries within a specific country? Do the programs fall within the framework of the Millennium Development Goals? Do they follow the guidance and principles established by the Alexandria Colloquium on Information Literacy and Lifelong Learning? Are they in harmony and on a par with the best practices identified at the Alexandria pre-Summit Conference “Libraries – the Information Society in Action”? Do they further the aims of the WSIS Declaration of Principles and Action Plan issued at the first Summit in Geneva in 2003? Do AGLINET and AGORA echo the aims and principles of the Tunis Agenda for the Information Society, the key concluding document of the Tunis Summit? If so, in the post- WSIS climate, are there opportunities now available which hitherto have not presented themselves?

Investigating the trends for thematic networks, particularly in developing countries, it is noted that in the year 2000 Vagiswari, Amba, and Louis^{xiii} predicted that “Cooperation and coordination will be the bedrock for library activities of the millennium. These two C's confined hitherto to certain traditional activities in the library has now extended to most areas in the library and to other players in the Information Arena as well as such as the Publishers and Vendors... Thus networking and consortia formation, a result of the 2C's, will play a prominent role in library and information activities.”

They also noted that, “International cooperation & coordination can also be a solution which will mitigate the problem of large investment in materials by libraries in India.” It is also worthwhile to note that they also cited a number of regional, national and international networks but AGLINET is not mentioned (although it has two members in India).

The previously cited best practices in library literature indicate cooperation and coordination will be solid foundation for library activities for the new millennium. AGLINET, representing as it does a voluntary co-operative for mutual and rational use of library resources, is certainly based on both of these principles. Surveys and data gathered over time indicate that there is a steady use of AGLINET, particularly to supplement existing or reduced periodical collections. However, the literature also indicates that this cooperation will move beyond the areas of collaboration which have stood the test of time and will extend to most other areas of the library. This could mean that there is much untapped potential for AGLINET which is not evident at present and which could perhaps only emerge in a forum permitting a full discussion amongst all members.

In a similar vein, Banionyte^{xiv} discussed the value of a thematic education network for libraries in countries in transition. Problems identified were those common to many libraries in countries in transition or in the developing world. These were lack of legal documents, lack of understanding of library information services in research and studies, lack of information, lack of money, poor or no knowledge of English and

other foreign languages, (especially in Baltic libraries), poor or no knowledge of computers, lack of qualified staff, lack of time.” The Baltic libraries then successfully formed a thematic network modelled on that of the Nordic national resource libraries in education.^{xv}

The network visionaries immediately recognized the need for face-to-face meetings to make concrete plans for the network which was to span the three countries of Latvia, Lithuania and Estonia. The concrete plans for the network which emerged from the first meeting included “library promotion, in-service training for librarians, library and information education, keep up possibility to communicate, hold annual meeting together with Baltic colleagues combined with Thesaurus Meeting in Lithuania.” Recognizing the need for management buy-in they also decided to invite Rectors and Library Directors to join a study tour to Nordic Educational Libraries. They also decided to establish a Nordic-Baltic virtual library. According to Banionyte, these activities were well under way indicating another path to success.

The Baltic library thematic network thus evolved through a meeting of all partners, brainstorming, a commitment to enhanced collaboration and investment in shared ICT developments for the virtual library. Although the formation of the network predated WSIS, it certainly fulfils the objectives and principles enunciated in the various WSIS documents and principles. With regards to AGORA, which has already proven to be a success in WSIS terms, a number of preparatory meetings among participants set the stage. This was followed by a substantial and sustained investment in ICTs by all partners.

In contrast, for AGLINET, aside from the website maintained by FAO, there has been no investment whatsoever in ICTs. Moreover at the present time there are no plans for seeking such support and for implementing it. While AGLINET could go on as it is for many years, fulfilling its unique role of fostering synergies of mutual support amongst and between Libraries in the field of food and agriculture, it is evidently not going to change and grow without new energies. In the success stories just visited, we note that productive and focused meetings resulted in ambitious work plans and concrete action. It should be noted that AGLINET used to hold regular meetings but that none have been held for the past seven years.

Confirming the need for face to face meetings and concrete work plans, in 2004 Barberena, Block and Guerrero^{xvi} reported on the success of the National Network of Art Libraries in Mexico, *Investig@rte*. This network is also well on its way to achieving its work plans which include “Maintaining updated information in IFLA’s *International Directory of Art Libraries*, organising courses on information resources in master’s and doctoral degrees in the Faculty of Philosophy and Letters at UNAM, working on the MEXICOARTE database, which is currently available with around 4,500 records on the web-page of UNAM’s Libraries Department, indexing the new series of “Artes de México” magazine (nos. 1-34, 1988-1997) and including it in the MEXICOARTE database, compiling biographical information on approximately 2,000 Mexican artists and sending it to the Union List of Artist Names at the Getty

Trust; creating a collective catalogue of Latin American periodicals (approximately 400 titles) on art and architecture that are available in Mexican libraries, called PEPENAR (Periodicals on Latin American art and architecture), running a course on art libraries as part of the post-graduate programme in librarianship at the Faculty of Philosophy and Letters, UNAM, operating the Mex@rte web-page, which is of interest to people searching for bibliographical information on Mexican plastic arts and architecture from the pre-Hispanic, colonial, modern and contemporary periods [and] creating a restricted glossary of terms used in the plastic arts and architecture.”

This rather ambitious work plan cannot be achieved without dedication, resources and technology. It does however extend much beyond the usual bounds of interlibrary cooperation and collaboration and was thus able to attract funding. In a similar manner, Kaul^{xvii} explored a number of collaborative models, reporting on their successes. “It can be concluded that in a developing country like India, steps are being taken to disseminate knowledge about environment. The capacity is being built up with the help of international funding agencies for this purpose. With the explosion of knowledge and constraints on the financial resources, the resource sharing networking has emerged as an important alternative. The information technology has facilitated the resource sharing among the institutions located in different geographical areas. It enables the participating libraries to obtain material from each others may be the list of books, indexes and abstracts of required articles, facsimile copies of required pages or documents, charts, figures, graphs, drawings by using computer terminals attached to a large or very large network system and data bases coupled with visual display units (VDUs) and attached with printing facility. Information can be scanned first on the screen, and if required, relevant information can be obtained in the print form.”

AGLINET members range from being very large and relatively well resourced to being very poor. Some have thousands of subscriptions while others receive only what can be obtained free of charge, including AGORA journals. Networking is important for the poor libraries as well as the better endowed. The African perspective on networking is provided by Alemna,^{xviii} among others. He states that the need for networking includes cost-effectiveness in service provision prompted by such factors as “shrinking resources, skyrocketing price of journals and other resources, the information explosion, avoiding duplication of efforts, dynamic and comprehensive user needs, developments in information technology and the need to promote optimum utilization of resource ... Developments in information technology, the availability of infrastructure that facilitates resource sharing, institutional goals and the need to use each other’s resources effectively.” As well as the “need to enhance quality, reduce costs and to minimize duplication of efforts among libraries”.

Alemna further notes that “resource sharing plays a significant role in improving access, developing a comprehensive shared stock, sharing staff and expertise, technology and promoting optimum use of space.” He further describes a project to build capacity at institutional, national and regional levels on the development of integrated virtual library services and notes that close consultation is already in place

with the libraries of the African Union, the Economic Commission for Africa and the African Development Bank for collaboration is the establishment of electronic libraries using as far as possible compatible standards, systems, networks and knowledge exchanges.^{xix} These four elements are important building blocks for a successful network and it has already been demonstrated that the success of AGORA is built upon them. They should be considered as essential to transform AGLINET from a solid stand-by to a dynamic force.

One more example of best practice can be drawn from the World Health Organization which is just developing The Global Health Library (GHL).^{xx} GHL has as its first step the goal of global access to reliable health information in paper form, electronic form, and any other media to those who need it. The objective is to point to reliable information collections and systems formation collections and systems, in which different users and user groups (ministries of health, policy makers, health workers, information providers, patients and their families, general public) can focus on the knowledge that best meets their health information needs. GHL will also act as a facilitator, enabling access to information contents produced by numerous key providers - be they commercial companies, government institutions, civil society, not-for-profit organizations, and regional or international bodies. It will also strive for universality with focus on developing countries, and will act as a resource locator for print materials essential to areas that do not have access to electronic content. GHL has just been launched but it seems to be developing as another success story and a provider of best practices to emulate.

Discussion and Conclusions

It has been amply demonstrated that AGORA is very much a modern outcome of the information society, one which provides substantive and meaningful content to developing countries and which fosters capacity building through ICTs to bridge the digital divide. It helps to fulfil all of the MDGs and is in complete harmony with the Geneva, Alexandria and Tunis WSIS aims, objectives and declarations.

AGLINET, however, while achieving the noble aims of networking, collaboration, cooperation and resource rationalization and sharing, appears to be missing some ICT-related opportunities now presented by the post-WSIS climate. It is important to note that the successful and dynamic networks have held regular meetings and it is recommended that annual AGLINET meetings be held in a location convenient to most members. Major agricultural library representatives attend IFLA and the fact that it is hosted in various continents make it appear an appropriate forum. The wide disparity of ICTs between the rich and poor AGLINET partners points to possibilities for extending the network to encompass collaboration in all other areas of library work. Philanthropic organizations and foundations are more aware of the challenges enunciated by WSIS and time may be right to mobilize funds to level the ICT playing field between the richer and poorer AGLINET partners. Most AGLINET libraries now have electronic catalogues and electronic document repositories and these are listed in a linear manner on the AGLINET web pages. There is no over-arching ICT

infrastructure linking all of these agricultural resources together in a seamless manner such as would be possible through a standard search portal such as the commonly-used library interface, Z39.50. If the de facto global agricultural library, which in fact already exists through AGLINET members, could be optimized through the use of information and communications technologies, it would further the noble goals of the GHIL and provide access to the information the world is lacking to grow the food needed to save lives. The IFLA website states “The second and last Summit has taken place, but the process has not been completed and the work has not ended. For IFLA members and librarians everywhere, there is now the challenge to follow up and ensure that we capitalise on the formal recognition, general awareness, and advocacy experience that we have gained.” The time is ripe, now, for AGLINET members to begin such a bold venture.

References and Notes

1. **AGLINET. Agricultural Libraries Information Network.** Full information at: <http://www.fao.org/library/> under Partnerships/Networks.
2. **AGORA. Access to Global Online Information in Agriculture.** Full information at: <http://www.aginternetwork.org>.
3. Banionytė, Emilija. *A Network of Educational Libraries in the Nordic-Baltic countries INSPEL* 32(1998)3, pp. 176-181. Reports presented at the first Nordic-Baltic Meeting of the Directors of the National Resource Libraries in Education on 7-10 December, 1995 in Stockholm were published in NORDINFO-rapport 1996:1.
4. Barberena, Elsa; Block, Carmen; Guerrero, Elda Mónica. *National Network of Art Libraries in Mexico: Investig@rte* World Library and Information Congress: 70th IFLA General Conference and Council 2004: <http://www.ifla.org/IV/ifla70/prog04.htm>
5. **HINARI. Health InterNetwork Access to Research Initiative.** Full information at: <http://www.who.int/hinari/en/>
6. **IAALD.**ⁱ International Association of Agricultural Information Specialists. Full information at: <http://www.iaald.org/>
7. IFLA documents include: Glasgow Declaration on Libraries, Information Services and Intellectual Freedom, and other documents (IFLA/UNESCO Public Library Manifesto; IFLA/UNESCO School Library Manifesto: The school library in teaching and learning for all; IFLA Internet Manifesto; Maintaining our digital memory: a declaration of support for the World Summit on the Information Society. Communiqué from the Conference of Directors of National Libraries (CDNL), Oslo, August 2005; Beacons of the Information Society - Alexandria Statement on Information Literacy and Lifelong Learning. High level Colloquium on Information Literacy and Lifelong Learning, Bibliotheca Alexandrina, 6-9 November 2005; IFLA

Statement on Open Access to Scholarly Literature and Research Documentation) at <http://www.ifla.org/III/wsis/BeaconInfSoc.html>, <http://www.ifla.org/III/wsis/info-lit-for-all.htm>, The Alexandria Proclamation on Information Literacy and Lifelong Learning: Beacons of the Information Society, is at <http://www.ifla.org/III/wsis/BeaconInfSoc.html>. More information is at www.infolit.org/International_Colloquium/index.htm and www.bibalex.org/infolit2005. and the Alexandria Manifesto on Libraries, the Information Society in Action can be found at <http://www.ifla.org/III/wsis/AlexandriaManifesto.html>. The IFLA statement on Internet governance (www.ifla.org/III/wsis/InternetGovernance.html <http://www.edri.org/edriagram/number3.23/> Also (www.ifla.org/III/wsis/declaration-CDNLI2005.html) (www.ifla.org/III/wsis/Byrne-Plenary-Address.html) and <http://fmp-web.unil.ch/IFLA/> <http://www.ifla.org/V/cdoc/policies.htm#Manifestos>

8. ITOCA (Information Training and Outreach Center for Africa), at www.itoca.org.

9. Kaul, Surekha. *Information Resource Sharing Models in Developing Countries: a network emerging from the world bank supported Environmental management capacity building*. Project Paper presented for the GLOBAL 2000 Worldwide Conference on Special Librarianship, 16-19, October 2000 in Brighton, UK INSPEL 35 (2001)1, pp 9-26

10. Millennium Development Goals may be found at <http://www.un.org/millenniumgoals/> See also <http://www.uneca.org/> for more discussion regarding information literacy and libraries as key to the achievement of these goals. (Workshop on Building of African Capacity to implement the Outcomes of the World Summit on the Information Society in the sphere of Libraries and Access to Information and Knowledge, March 27-28, 2006)

11. Steiner, Roy. *Promoting African Research Education Networking –Internet Bandwidth Challenges and Opportunities*. Presentation at the Cornell Conference on Building the ICT Capacity of African Universities to Promote Development. November 2004.

12. Vagiswari, Alladi, Amba, S., Louis, Christina. *Need for International Cooperation to meet Information Requirements of Scientists in a Developing Country*. Paper presented for the GLOBAL 2000 Worldwide Conference on Special Librarianship, 16-19 October 2000 in Brighton, UK INSPEL 35(2001)1, pp. 27-36.

13. World Summit on the Information Society, Tunis, 16-18 November and the first Summit in Geneva in 2003, (www.ifla.org/III/wsis070604.html and www.itu.int/wsis/docs2/tunis/off/6rev1.html, specifically see article 90k, the text of which (§90, sub-para k of the document *Tunis Agenda for the Information Society* WSIS-05/TUNIS/DOC/6 (rev. 1)) is as follows:

90. We reaffirm our commitment to providing equitable access to information and knowledge for all, recognizing the role of ICTs for economic growth and development. **We are committed** ... towards achieving the indicative targets, set out in the Geneva Plan of Action, that serve as global references for improving connectivity and universal, ubiquitous, equitable, non-discriminatory and affordable access to, and use of ICTs, considering different national circumstances, to be achieved by 2015, and to using ICTs, as a tool to achieve the internationally-agreed development goals and objectives, including the Millennium Development Goals, [...] k. *supporting educational, scientific, and cultural institutions*, including libraries, archives and museums, in their role of developing, providing equitable, open and affordable access to, and preserving diverse and varied content, including in digital form, to support informal and formal education, research and innovation; and in particular supporting libraries in their public service role of providing free and equitable access to information and of improving ICT literacy and community connectivity, particularly in underserved communities;