

DIGITAL COLLECTIONS AND SERVICES FOR DEVELOPING COUNTRIES

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Abstract

IAALD¹ is an association of people working in the field of agricultural information. The term of the IAALD congress, held regularly every five years, and the term of the USAIN² biennial conference met in 2005 and organising committees decided to hold them jointly. The theme of the XIth World Congress IAALD and the Biennial USAIN Conference was "Globalisation of Information: Agriculture at the Crossroads". Two hundred participants came from 29 countries. The contributors were librarians of agricultural universities and research institutes as well as information specialists of international organisations, for instance FAO³, WAICENT⁴, CGIAR⁵, INFITA⁶, INASP⁷, and others that are providers and/or coordinators of information sources and services. The IAALD associates members from both developed and developing countries. The aims of developed countries are to improve technologies, to provide and exchange information faster and at the required quality. For developing countries, the most important is that information can fight against hunger. One of the possibilities of help is providing of free or very cheap access to agricultural full texts in databases such as AGORA, TEEAL, DOAJ, and others. The example of propagating research results of developing countries is AJOL database that was created by INASP to propagate articles published in African scientific journals.

Key words: agricultural information, agricultural full texts, AGORA, TEEAL, DOAJ, AJOL, developing countries

INTRODUCTION

Lexington, not very large town in the heart of Kentucky, USA, was the venue of the IAALD/USAIN congress. There were nearly 200 participants from 29 countries there (Carey et al., 2005). My participation was dependent on awarding a scholarship that I asked for several months before. Since I was chosen, I met many colleagues at the congress – agricultural librarians and other information specialists from various parts of the world. Besides participants from the USA, Canada, Japan, Belgium, the United Kingdom, the Netherlands and other developed countries, also specialists from developing countries such as Kenya, Uganda, Zimbabwe, Cameroon, Indonesia, Jamaica and others took part there as well.

The whole program of the congress was very interesting but I want to mention only a topic oriented to information management in agriculture: services for developing countries. During the last 20 years, the ration of starving people decreased by one fifth, but the absolute number of them decreased only minimally and today still about 852 million people are malnourished (Sanchez et al., 2005). Long-term import of food to poorest countries is not a solution. It is necessary to educate not only new generations, but also concurrent farmers, owners of food firms and others who are responsible for human nutrition, to teach them how to grow crops in more effective way, how to fight against plant pests and diseases, how to store food without risk of degradation, etc. Since there is a lack of food in developing countries, it is not health safe in many cases for human nutrition, particularly for children.

To transfer information from literature to practice, advisory centres are built at the agricultural university libraries in developing countries. The main aim of them is to provide services for farmers – to choose information, translate it into local languages and deliver it in exoteric form to them.

The first pre-conference activity was a workshop on the topic: Building Digital Library Collections and Services for Libraries in the Developing World. Many other oral as well as poster contributions were also dealing with the services for developing countries. They provided me with information about several projects/databases some of which I want to describe here.

Digital Collections, Databases and Services

The contribution about the Consultative Group on International Agricultural Research (CGIAR) Virtual Library <http://www.cgiar.org/vic/> presented by Luz Marina Alvaré started with the excerpt by H. E. Adam Samassekou, president of the African Academy of Languages: "Open access for all constitutes, at the same time, an intellectual requirements, an economical necessity, and a duty of human solidarity", which hits the mission of CGIAR very well. CGIAR associates agricultural scientists from more than a hundred countries. The research covers all main agricultural crops including food use and economical aspects. The consortium of libraries has 29 members, their differences are a guarantee of a power and stability. It consists of libraries of American and European universities (Cornell University, Minnesota University, Wageningen University,...) but also libraries of CIMMYT⁸ and ICARDA⁹ as well as many others. The Virtual Library contains a union catalogue of journals subscribed to all of participating libraries. Wide

diversity is an advantage because it multiplies possibilities of transferring and using information and knowledge from various fields (Alvaré, unpublished).

AGORA – Access to **G**lobal **O**nline **R**esearch in **A**griculture - <http://www.aginternetwork.org> is the activity that enables a free access of public institutions in developing countries to main scientific journals in agriculture and relating fields (biology, environment, social sciences,...). It was launched in October 2003 by Cornell University, Ithaca, USA. The main world publishers - Blackwell Publishing, CABI Publishing, Elsevier, Kluwer Academic Publishers, Lippincott, Williams & Wilkins, Nature Publishing Group, Oxford University Press, Springer-Verlag, and John Wiley & Sons collaborated during the establishment of AGORA by providing access to more than 400 titles of their journals, some others were invited later. Every publisher can add to the list or can delete itself from it (Ochs, unpublished).

Today, it provides an access to 835 journals. Under the leadership of FAO the main goal of the database and the same project named AGORA as well is to increase a quality and effectiveness of agricultural research, education and practice in the countries with low per capita income and also to improve the quality of food. The researchers, politicians, pedagogues, students, technical and advisory specialists can access up-to-date agricultural information through the Internet.

Who can use the database without any charge? Potential users must be registered at the FAO and the access is controlled by passwords. Only the eligible countries can participate whose GDP per capita/year was only 1,000 USD or less to the certain date (Sanchez et al., 2005). Today, more than a hundred poorest countries meet that requirement. They are listed in the World Bank's 1998-99 World Development Report. Ninety-nine countries from the list have already been using the AGORA database.

TEEAL - The **E**ssential **E**lectronic **A**gricultural **L**ibrary - <http://www.teeal.org> was developed by Cornell University's Mann Library with financial support from the Rockefeller Foundation. This database is called "library in a box" because it is provided on 426 CDs. This system contains 145 core journals from agriculture and related fields (CD TEEAL). Since 1999, it has been provided to libraries in developing countries for a limited price. This information product is not completely free of charge, but for eligible countries the price is very low. Besides a set of 145 CDs, also a local area network version is provided with 115 journals (LanTEEAL). Gracian Chimwaza, who is responsible for TEEAL and AGORA in Africa, spoke in his presentation about the work of these projects/databases in disseminating journal literature, outreach, and training. He also mentioned future issues improving information technologies such as bandwidth availability and networked computers (Chimwaza, unpublished).

In 2004, Mary Ochs (Cornell University, USA) was asked to do an analysis about effectiveness of the TEEAL database. It was tested if it met its goal – the improving of education and research in institutions all over the world. The results were compiled to several graphs and it is clear that most of people using TEEAL are not able to imagine their study or work without the possibility to use this information source (Ochs, 2005).

DOAJ - **D**irectory of **O**pen **A**ccess **J**ournals - <http://www.doaj.org> is the database provided by Lund University Libraries in Sweden. It covers free, full text, quality controlled scientific and scholarly journals. Its aim is to cover all subjects and languages. There are now 1,991 journals in the directory. Currently **492** journals are searchable at an article level. As of today 83,313 articles are included in the DOAJ service. Available technologies make it possible to collect and organise chosen resources in a way that allow libraries worldwide to integrate these resources in existing services thus offering added value for both the service providers of these resources and the global research and education community. DOAJ is freely open for all countries, not only for eligible ones.

AJOL - **A**frican **J**ournals **O**n **L**ine - <http://www.ajol.info/> is a gateway to what was published in African research. Launched in 1998, the online aggregation of published African academic research has previously been run by the INASP in the United Kingdom. The primary aim of AJOL is to increase the visibility of African journals among the global research and librarian community by providing an online catalogue and current awareness service for members. Funded by UNESCO, the USA National Academy of Sciences, the Norwegian Agency for Development Cooperation (NORAD), the Swedish International Cooperation Agency (SIDA) and the United Kingdom Department for International Development (DFID), AJOL has grown to over 195 journals from 21 countries. There are currently more than 13,000 article abstracts available on the AJOL website. There is no charge to the journals for their participation, and AJOL only charges for document delivery requests from developed-country librarians and researchers. The online service is dedicated to supporting African scholarly publications. An opportunity now exists for African journals and academics to enjoy unprecedented international exposure, with the success of the operation resting in a strong member base and spirit of collaboration within the African research community. Other local databases of online journals (JOLs) are built also in Pakistan, Nepal, Sri Lanka, and other countries or regions are interested in it for instance Vietnam, Latin America (Smart, unpublished).

CONCLUSION

In the world where 75 percent of poor people depend on agriculture to survive, poverty cannot be reduced without financial investment in agriculture. However, we can help also by providing information. Several scientific agricultural journals are published in the Czech Republic now, the full texts of which are available in a digital form. That is why, I use Kofi Annan's words said at the seminar on Innovative Approaches to Meeting Hunger in Africa, held in Addis Ababa in 2004: "...let us show the meaning of global solidarity. Let us all do our part to help Africa's farmers and their families take their first step out of chronic poverty, and to help societies make a decisive move towards balanced and sustainable development..."

Explanations

¹IAALD, <http://www.iaald.org/>

The main vision of International Association of Agricultural Information Specialists is to be the leading global community of practice for information specialists serving agriculture. The main mission is to enable members to create, capture, access and to disseminate information to achieve a more productive and sustainable use of the world's land, water, and renewable natural resources.

²USAIN, <http://ag.arizona.edu/oals/usain/>

The United States Agricultural Information Network is an organisation for information professionals that provides a forum for discussion of agricultural issues, takes a leadership role in the formation of a national information policy as related to agriculture, makes recommendations to the National Agricultural Library on agricultural information matters. It promotes cooperation and communication among its members.

³FAO, <http://www.fao.org/>

The Food and Agriculture Organisation of the United Nations leads international efforts to defeat hunger. Serving both developed and developing countries, FAO acts as a neutral forum where all nations meet as equals to negotiate agreements and debate policy. FAO is also a source of knowledge and information. It helps developing countries and countries in transition, modernises and improves agriculture, forestry and fisheries practices and ensures good nutrition for all. Since founding in 1945, it has focused special attention on developing rural areas, home to 70 percent of the world's poor and starving people.

⁴WAICENT (FAO/WAICENT),

<http://www.fao.org/waicent/>

The World Agricultural Information Centre of FAO is contributing to FAO's mandate to collect, analyse, interpret and disseminate information relating to nutrition, food and agriculture. The WAICENT framework integrates and harmonises standards, tools and procedures for the efficient and effective management and dissemination of high-quality technical information, including relevant and reliable statistics, texts, maps, and multimedia resources.

⁵CGIAR, <http://www.cgiar.org/>

The Consultative Group on International Agricultural Research is a strategic alliance of countries, international and regional organisations, and private foundations supporting 15 international agricultural research centres that work with national agricultural research systems and civil society organisations including the private sector. The alliance mobilises agricultural science to reduce poverty, fosters human wellbeing, promotes agricultural growth and protects the environment. The CGIAR generates global public goods that are available to all.

⁶INFITA, <http://www.infita.org/>

International Network for Information Technology in Agriculture provides the basis for cooperation among national and international organisations and associations with interest in research and the utilisation of information technology in agriculture, food, and the environment.

⁷INASP, <http://www.inasp.info/>

International Network for the Availability of Scientific Publications is an organisation, whose main vision is that all people are able to access and contribute information, ideas and knowledge necessary to drive sustainable and equitable development. INASP wants to enable worldwide access to information and knowledge with particular emphasis on the needs of developing and transitional countries. We work with partners and networks around the world to encourage the creation and production of information, to promote sustainable and equitable access to information, to foster collaboration and networking, and to strengthen local capacities to manage and use information and knowledge.

⁸CIMMYT, <http://www.cimmyt.org/>

International Maize and Wheat Improvement Centre (Centro Internacional de Mejoramiento de Maíz y Trigo) is committed to improving livelihoods in developing countries. Through strong science and effective partnerships, CIMMYT creates, shares, and

uses knowledge and technology to increase food security, improve the productivity and profitability of farming systems, and sustain natural resources. CIMMYT is a non-profit research and training centre with direct links to about 100 developing countries through offices in Asia, Africa, and Latin America. It participates in an extensive global network of people and organisations that share similar development goals, including the public and private sector, non-governmental and civil society organisations, relief and health agencies, farmers, and the development assistance community.

⁹ICARDA <http://www.icarda.org/>

International Centre for Agricultural Research in the Dry Areas was established in 1977. This centre is one of the 15 centres strategically located all over the world. It is supported by the CGIAR. With its main research station and offices based in Aleppo, Syria ICARDA works through a network of partnerships with national, regional and international institutions, universities, non-governmental organisations and ministries in the developing world; and with advanced research institutes in industrialised countries.

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