
Open Access and the Developing World

Sarah Durrant, INASP

International Symposium on Open Access and the Public Domain
in Digital Data and Information for Science
10th -11th March 2003
UNESCO Paris

This Presentation Covers:

- INASP – Brief Background
- Open Access in Developing Countries: Context, Issues and Challenges
 - the Knowledge Gap
 - a ‘SWOT Analysis’ of Open Access for DCs
- Overview of OA Initiatives in Developing Countries
- INASP’s Journals Online Programme
- Open Access in Developing Countries – What Needs To Be Done?

INASP: a brief background

- The International Network for the Availability of Scientific Publications (INASP)
- a programme of the International Council for Science (ICSU)
- INASP established in 1992 following ICSU/UNESCO conference
- programmes and activities in over 120 countries

MANDATE: to improve world-wide access to information and knowledge through a commitment to capacity building in developing and transitional countries

Open Access in Developing Countries:

Context, Issues, Challenges

“The invisibility to which mainstream publishing condemns most third world research thwarts the efforts of poor countries to strengthen their indigenous science journals, and with them the quality of research, in regions that most need them.”

Richard Horton, Editor The Lancet, 1996

The Knowledge Gap

- South to North
 - limited local resources
 - limited ICT skills & lack of access to technology
 - (in some quarters) perceived lack of credibility
- North to South
 - information has become a very expensive commodity
 - the digital divide – need for technology and training
 - exclusive/relevant? (ArXive?)
 - damaging indigenous initiatives?
- South to South
 - lack of funds/high costs hinder awareness, use, development
 - perception – the most relevant information arena is the North

Can Open Access Bridge These Gaps?

Open Access – Strengths

- visibility: strong potential to improve awareness of (and access to) resources - North & South
- affordability & sustainability
 - software (E-Prints, D-Space, CERN) is free
 - OA information is free
 - distributed server technology
- utility - OA software easy to obtain, straightforward to utilise
- interoperability – OAI compliance increases potential for access and retrieval & therefore visibility

Open Access – Weaknesses

- technology-based
 - poor ICT infrastructure
 - (relative) lack of OA-relevant skills
e.g. archive building, document structuring, resource discovery
- archives presently North-biased – perpetuates situation of ‘problems in the South, data in North’
- content of some OA sites is not peer-reviewed - potential danger e.g. in medical disciplines
- quality control - peer review/consistency/version management

Open Access - Opportunities

- enables researchers to communicate results widely, quickly and cheaply
- connects global research communities, decreases sense of isolation amongst scientists and researchers
- potential to foster partnerships, strengthen scientific cooperation
- OA improves communication – changing perception in the North; challenging ‘West is best’ attitudes in the South
- OA speeds up the ‘minutes of science’
quicker & wider availability = quicker & wider impact
= potential to speed up the rate of progress

Open Access – Threats

- threat of ‘too much’ information?
 - how do I know what’s available? is ‘worth’ having?
is all there is?
- threat of being left behind
 - potential for technology, know-how and innovation to progress in North to the exclusion of South?
- archiving and perpetual access
 - who hosts the data? and controls access?
 - who pays for this?
 - for how long?
- Copyright Transfer Agreements from elsewhere may limit rights of authors to post or publish articles openly

Overview of Open Access Initiatives within/for Developing Countries

Bioline International - Brazil, Toronto; 21 journals + 1 Symposium series; topics in health, biodiversity, environment

BMJ journals – free access to 29 journals to world's 100 poorest countries

ExtraMed – OA online full text (page images) from over 300 biomedical journals published in less developed countries 'outside of Medline'

Electronic Journal of Biotechnology – open access peer-reviewed journal based in Valparaíso, Chile (mirrored in US)

INDMED – bibliographic database of 75 leading Indian medical journals, based in New Delhi

JOL - Journals OnLine, a programme of INASP; AJOL – African Journals OnLine 150+ journals from Africa; free access to ToCs and Abstracts; funded access to full text

Journal of Postgraduate Medicine – OA to full text of one of India's oldest medical journals

Ptolemy Project - U. Toronto partnering with surgery associations from E Africa access to UT library collections to strengthen capacity

Public Knowledge Project (PKP) – from U. British Columbia; Open Journals System software for OA capacity building in developing countries

SciELO – large collections of online journals from Brazil, Chile & Cuba; initiatives planned in Costa Rica and Venezuela (& Spain); presently free

TerraLib - Open Source GIS Software, Brazil

UNESCO - catalog listing over 100,000 UNESCO documents, most available for free full text access

New from INASP...

- guide to OA projects, key organisations (groups involved with OA) and related sites
- (so far) 65 projects listed - short description plus web link:
 - ✓ individual journals
 - ✓ journal collections
 - ✓ subject repositories
 - ✓ online books
 - ✓ A&I databases
 - ✓ public domain data from government departments and international organisations
- printed copies available from me at this meeting
- suggestions welcome...



Search
go

Open Access

[Selected Sites of Interest](#)

[Links to Key Open Access Journals/Self-Archiving Sites](#)

Guide to Open Access Resources

This document provides a series of links to web-based Open Access resources which may be of particular interest to researchers, teachers, students, health and medical workers plus information professionals based in developing and transition countries. In compiling this list, sites have been selected which permit (at least some) free access to high quality research content; many are consciously doing so in the name of Open Access.

African Journals OnLine (AJOL)

A programme of INASP - the International Network for the Availability of Scientific Publications - AJOL promotes the awareness and use of African-published journals in the sciences, medicine, agriculture, humanities and social sciences by providing access to tables of contents (TOCs) and abstracts on the Internet, links to full text (if available) plus document delivery of paper articles subsidised (to less developed countries). AJOL already includes over 150 journals published in Africa. Journals are accepted on the basis of their quality of content and proven record of regular publication.

<http://www.inasp.info/ajol/index.html>

AGRIS

AGRIS is the international information system for the agricultural sciences and technology. It was created by the Food and Agriculture Organization of the United Nations (FAO) in 1974, to facilitate information exchange and to bring together world literature dealing with all aspects of agriculture.

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

AGRICOLA:

AGRICOLA (AGRICultural OnLine Access) is a bibliographic database of citations to the agricultural literature created by the National Agricultural Library and its co-operators. Production of these records in electronic form began in 1970, but the database covers materials in all formats, including printed works from the 15th century. Coverage: 1978-present.

<http://www.nal.usda.gov/ag98/>

Algebraic & Geometric Topology

AGT is a fully refereed journal covering all of topology, understood broadly. AGT is published in free electronic format by Geometry and Topology Publications, with papers appearing a few days after acceptance. AGT is freely available online to all users.

<http://www.maths.warwick.ac.uk/agt/>

Analytical Chemistry Web Resources

A compilation of resources (by Ghirma Moges) useful to support teaching and research in the field of analytical chemistry.

Related Sites of Interest

The following are sites which are not truly 'Open Access' but which actively encourage broader dissemination of research content over the Web.

African Journals OnLine Publishing Project (AJOPP)

If African journals are to compete successfully with journals published elsewhere, they need to offer access to full text online. There have been a number of requests from journal publishers in Africa for a pilot project to offer electronic delivery and to evaluate whether this method increases journal use and sustainability. Ten journals are being supported initially and preferential subscription rates are offered for African-based Institutes and individuals.

<http://www.inasp.info/psi/ajopp/index.html>

E-BioSci

E-BioSci is EMBO's initiative to set up a platform providing services relating to access and retrieval of digital information in the life sciences, ranging from bibliographic or factual data to published full text.

<http://www.e-biosci.org/>

BioOne

BioOne is the product of collaboration between scientific societies, libraries, academe and the private sector and brings to the Web an aggregation of the full-texts of high-impact bioscience research journals. Most of BioOne's titles are published by small societies and non-commercial publishers, and, until now, have been available only in printed form. BioOne provides integrated cost-effective access to a thoroughly linked information resource of interrelated journals focused on the biological, ecological and environmental sciences.

<http://www.bioone.org/>

Project Euclid

Joint project between Cornell University and SPARC, Project Euclid's mission is to advance scholarly communication in the field of theoretical and applied mathematics and statistics. Project Euclid hopes to address the unique needs of low-cost independent and society journals. Through a collaborative partnership arrangement, these publishers join forces and participate in an online presence with advanced functionality, without sacrificing their intellectual or economic independence or commitment to low subscription prices. Full-text searching, reference linking, interoperability through the Open Archives Initiative, and long-term retention of data are all important components of the project.

<http://projecteuclid.org/Dienst/UI/1.0/Home>

Links to Key Open Access Projects/Self-Archiving Sites

ARL Resources for Open Archiving

In early 2002, an ARL task force recommended that the Association promote "open access to quality information in support of learning and scholarship." A key component of this effort is educating members of the research and academic communities about open access and its potential. This site therefore is a resource guide to assist and inform these discussions. It highlights the key points to consider in discussing open access, gives examples of open access implementation and provides sources for more information.

http://www.arl.org/acomm/open_access/framing.html#initiatives

ARL Resources for Open Archiving

In early 2002, an ARL task force recommended that the Association promote "open access to quality information in support of learning and scholarship." A key component of this effort is educating members of the research and academic communities about open access and its potential. This site therefore is a resource guide to assist and inform these discussions. It highlights the key points to consider in discussing open access, gives examples of open access implementation and provides sources for more information.

http://www.arl.org/scomm/open_access/framing.html#initiatives

Budapest Open Access Initiative (OAI)

Pioneering Open Access and Self-Archiving initiative, originated by the Soros Foundation. From the OSI website: To secure these benefits for all, we call on all interested institutions and individuals to help open up access to the rest of this literature and remove the barriers, especially the price barriers, that stand in the way. The more who join the effort to advance this cause, the sooner we will all enjoy the benefits of open access.

<http://www.soros.org/openaccess/read.shtml>

DARE Project

DARE (Digital Academic Repositories) anticipates developments in the provision of academic information, in which information and communications technology has come to play a dominant role. DARE is modernising the management of Dutch academic information by putting an infrastructure system in place and providing advanced services for the digital recording, accessing, storage and distribution of the Dutch academic output. This will greatly improve the visibility of and access to the academic output.

<http://www.surf.nl/en/actueel/index2.php?oid=7>

D-Space

DSpace is an open source digital asset management software platform that enables institutions to capture and describe digital works using a submission workflow module; distribute an institution's digital works over the web through a search and retrieval system; and store and preserve digital works over the long term. Originally created to capture, distribute and preserve the intellectual output of MIT, D-Space technology is free to all institutions wishing do the same.

<http://www.dspace.org/>

Eprints

Site dedicated to opening access to the refereed research literature online through author/institutional self archiving. The Eprints site is full of useful information about Open Access issues with links to seminal papers, key sites, useful software and more.

<http://www.eprints.org/>

Open Archives Resource Page

The Open Archives Initiative develops and promotes interoperability standards that aim to facilitate the efficient dissemination of content. The Open Archives Initiative has its roots in an effort to enhance access to e-print archives as a means of increasing the availability of scholarly communication. Continued support of this work remains a cornerstone of the Open Archives program.

<http://www.openarchives.org/>

The Journals OnLine Programme (from INASP)

INASP: Journals Online Programme

- increase awareness of, and access to, research results nationally and internationally
- stimulate author submissions and support subscriptions
- support publications in local languages
- enhance capacity building in-country
 - ✓ enhance skills of local journal editors in preparation and e-submission of articles
 - ✓ move to local management

So far:

- AJOL – African Journals OnLine
- CARINDEX – pilot phase for Caribbean journals
- feasibility surveys: Nepal, Sri Lanka and Bangladesh

African Journals Online (AJOL)

- www.inasp.info/ajol/index.html
- a web site featuring the Tables of Contents and Abstracts of 150+ African journals
- links to electronic full text where this is available
- document delivery by fax/airmail with fair recompense to African publishers
- (basic) cross-title searching
- now includes over 150 journals in:
 - ✓ agricultural sciences
 - ✓ arts, culture and literature
 - ✓ health and medicine
 - ✓ science, technology and social sciences

AJOL - Visibility

Month	Pages Viewed per Month
Jan. 2001 (launch)	6,000
Jan 2002	44,064
Mar 2002	48,275
May 2002	53,567
Aug. 2002	63,348
Oct 2002	71,682
Dec. 2002	81,877

AJOL – Visibility (cont'd)

Country/Region	Number of Registered Users
USA	1171
South Africa	662
Africa (not S/A)	1338
Europe	1100
Canada	155
Asia	249
Australia	84
Central/South America	75
Total	4834

Open Access in Developing Countries - What Needs to be Done?

-
- raise awareness of OA
 - when sharing information (writing, talking, visits) be inclusive, emphasise shared opportunities
 - lobby for improved infrastructure
 - connectivity/cables, bandwidth, hardware, software
 - highlight information access to policy-makers as a priority on education/research agendas, within institutes, amongst researchers
 - training for capacity building
 - general ICT and web skills
 - skills for library and faculty – e-journals management, resource discovery, doc.del., downloading etc.
 - specific OA training – building institutional repositories, technical and other protocols, self-archiving etc.
 - focussed funding for OA projects in the South and/or partnerships with North
-

Thank you –
any questions?

sdurrant@inasp.info

Some Useful Sites @ INASP

<http://www.inasp.info/peri/resources.html>

list of international (paid-for) resources available to developing countries at low cost

www.inasp.info/peri/openaccess

open access resource listing

www.inasp.info/peri/free

listing of free www information resources with particular relevance to LDCs

www.inasp.info/ajol/

everything you need on AJOL

<http://www.inasp.info/peri/internet.html>

INASP training programmes, workshop schedules, materials, resources
(in English, Portuguese, Russian; coming soon in French and Spanish)