

The International Network for the Availability of Scientific Publications (INASP), African scientific journals, and online access

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Abstract

The following paper provides a brief introduction to the International Network for the Availability of Scientific Publications (INASP), followed by a summary of the current state of scientific journal publishing in Africa. It then focuses particularly on INASP's African Journals Online (AJOL) programme, why it was established, the results of a recent evaluation, and the aims and content of AJOL 2000.

Speaker

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Outline of talk

- International Network for the Availability of Scientific Publications (INASP)
- African scientific journals publishing
- African Journals Online (AJOL)

The International Network for the Availability of Scientific Publications (INASP): *improving worldwide access to information and knowledge*

INASP is a co-operative network of partners. Its mission is to enhance the flow of information within and between countries, especially those with less developed systems of publication and dissemination.

It was established in 1992 by the International Council for Science (ICSU), as a programme of the Committee for the Dissemination of Scientific Information (CDSI) (*see box*).

About ICSU and CDSI

ICSU is a non-governmental organization that originated in 1931 to promote and co-ordinate international scientific activity. Members of ICSU consist of 95 national scientific academies or research councils, 25 discipline-specific scientific unions and 28 scientific associates. Through its membership, ICSU is in contact with hundreds of thousands of scientists worldwide. Its headquarters are in Paris.

The Committee on the Dissemination of Scientific Information (CDSI) is one of ICSU's eight special policy and advisory committees. It is charged with providing advice to the ICSU family about scientific publications, new developments in information technology, access to data and information, and pertinent legal issues.

The **objectives** of INASP are:

1. to map, support and strengthen existing activities promoting access to and dissemination of scientific and scholarly information and knowledge
2. to identify, encourage and support new initiatives that will increase local publication and general access to quality scientific and scholarly literature
3. to promote in-country capacity building in information production, organization, access and dissemination.

INASP is advised by an international Council and has a small secretariat in Oxford, UK. It has two full-time and four part-time staff. Membership of the Network is open to all interested organizations and individuals.

INASP activities and services

• *Advisory and liaison services*

— advice and support on all aspects of literature publication and dissemination, especially in response to and in partnership with institutions in developing and emerging countries;
— assist funding agencies and others in the establishment and implementation of information-related programmes.

• *Database*

Contains descriptive profiles of institutions and organisations active in promoting and supporting information production and/or access, including those seeking partnership.

• *INASP-Health*

Strengthens and supports the activities of organizations worldwide in providing access to reliable information for healthcare workers. Services include:

— international advisory and referral network;
— Health Information Forum: promotes international co-operation through workshops and electronic discussion;
— mapping and information service on health information activities, needs and priorities worldwide.

• *African Journals Online (AJOL)* – see below

• *Publishing*

Activities include the facilitation of workshops and the publication of practical handbooks and guides.

• *Support for libraries in Africa*

Activities include workshops on 'Using the Internet' for university librarians, support for professional associations and assistance in the revitalization of information services to the public.

Publications

INASP Directory 1997/8

INASP Directory of Organisations and Networks in Rural Development: Africa

INASP-Health Directory 1999

Public Libraries in Africa: A Report and Annotated Bibliography

INASP Newsletter

To be published in late 2000:

INASP Directory 2001

A Guidebook on Journal Publishing for Agricultural and Rural Development

A Practical Guide to Marketing and Promotion for Agricultural and Rural Development Publications

Book Marketing & Promotion: A Handbook of Good Practice by Hans M Zell

Electronic Journal Publishing: A Reader (2nd edition)

African scientific journals

Overview

There are about 50 regular peer-reviewed scientific journals - including medicine and the social sciences - in sub-Saharan Africa (excluding South Africa, which has approximately 50 journals). This compares with some 20,000 worldwide. Sub-Saharan Africa (*including* South Africa) contributes less than 1% of the global total of scientific papers (Barre et al 1993). Most of these are in the 'high-priority areas' of agriculture and health. Apart from North Africa and South Africa, the main publishing countries are Nigeria, Kenya, and Zimbabwe.

Why does Africa have so few journals as compared with the rest of the world? This is partly because scientific research in Africa is underfunded and is has a low priority with African governments as compared with industrialized countries. African countries do of course have a much smaller gross national product than many industrialized countries, yet spend less than 1% of GNP on scientific research as compared with 3% in N America (Odhiambo & Thomas 1993).

In addition, for African journals as compared with other journals:

1. The **market** is more limited
2. The **financial basis** is weak
3. The **author input** tends to be of poorer quality and quantity
4. The **editorial and production resources** are fewer

1. Market

The potential market for African journals is considered by investors to be too small to be commercially viable:

- Individual academics in Africa have low salaries and are unable to afford personal subscriptions to journals. If they do subscribe to a journal, they tend to prefer international journals because the latter tend to have a higher quality of content and regularity of production.
- Libraries worldwide have increasingly limited budgets for journal acquisition. The increasing availability of electronic publications (many of which are free, especially among medical

publications) has accelerated a shift from 'ownership' to 'access'. Libraries are cancelling their subscriptions to print journals in favour of access to shared online resources. The first print subscriptions to be cancelled are the 'non-core journals' - those which have a relatively small, specialist readership. In most libraries, African-published journals are considered 'non-core journals' and are therefore vulnerable to cancellation. As with individual subscribers, the trend is accelerated by lack of confidence that the journal will be delivered on a reliable basis, or indeed will survive beyond the current issue.

- African libraries have the same pressures as libraries worldwide, but even fewer resources. Many have no budget for acquisitions at all, and rely on donated books and (international) journals through schemes offered by agencies like Book Aid International (UK), American Association for the Advancement of Science (US), Nuffic (Netherlands) and Sida:SAREC (Sweden). In 1994 the International African Institute initiated a scheme called the 'African Journals Distribution Programme', which involved purchase of African scholarly journals on behalf of African university libraries. This scheme was successful but has foundered recently after hand-over to a Kenyan non-governmental organization, mainly because of early withdrawal of support by the funding agency, Danida.

Given the relatively small, specialized market for African scientific journals, it is perhaps not surprising that none are managed on a commercial basis. Understandably, commercial publishers in Africa prefer to focus on the much larger, secondary-level textbook market.

That said, recent research (Alemna et al 1999) has shown that the great majority of academic staff in African universities consider African-published journals equally or more important than journals published elsewhere. They like to use them because articles are contextual and the results presented and discussed are relevant to the African environment and conditions. They contribute both to research and teaching. Their importance, however, is limited because academics do not know what is available, lack access and are sometimes discouraged by the lack of regularity and quality. So there is a potential market.

2. Financial base

The income of scientific journals generally comes from three sources:

1. Subscriptions
2. Advertising
3. External finance

1. Subscriptions. For most journals worldwide, the income from subscriptions is the mainstay of the financial health of the journal. Yet most African scientific journals have a paid subscription base of less than 100, and often less than 50.

2. Advertising. Medical journals in the North can attract substantial income from pharmaceutical advertising. But advertisers are unwilling to pay high prices, if at all, for advertisements in journals that have a small subscription base, particularly where individual readers are seen to have limited purchasing power. The latter is related to regional and national factors such as economic instability and reduced public sector spending capacity. For example, reduced healthcare budgets have led to decreased spending on pharmaceuticals with a consequent loss of interest among pharmaceutical companies for the drug market in Africa. One example of this trend was experienced by the current author, who in the early 1990s was deputy editor of *Medicine Digest*, a free educational journal for doctors in Africa, run commercially on income from pharmaceutical advertising. During the 1990s the journal was forced to discontinue distribution in Africa because it was no longer able to attract

advertisers. It has now shifted its entire focus to other parts of the world, notably China and South-East Asia.

3. *External finance.* As a result of the factors above, most African scientific journals rely on financial support. In some cases this is through their 'parent institution', with subsidies from the professional society, association, or university. Most copies of these journals are distributed free to society members and academics. Over the past 10 years, African universities have had increasingly limited resources – journals are often seen as non-critical as compared with 'core' university costs such as teaching activities, and journal production tends to be an early casualty of budget cuts. About one-third of scientific journals in Africa are now dependent on support from donor agencies such as Sida (which gives direct support to 13 journals in Ethiopia, 2 in Tanzania, and 2 in Zimbabwe) and CTA (Technical Centre for Agricultural and Rural Cooperation, Netherlands, which supports several journals including *African Crop Science Journal*, *African Journal of Food Technology*, *African Journal of Food and Nutritional Security*, *Journal of Food Technology in Africa*, *African Plant Protection Journal*, and *Social Science*).

3. Author input

The quality of a journal's content is critically dependent on the quality and quantity of the submissions to the journal. And the quality and quantity of submissions tends to be low because of (1) an unfavourable environment for African science authorship, and (2) lack of competition among authors to publish in African journals.

The unfavourable environment for African science authorship is characterized by:

- Lack of spending on scientific research in Africa (see above).
- African scientists have a relatively low income, and are forced to do private consultancy work in preference to academic research and writing.
- The low income of African academics, together with the impoverished state of university libraries, means that academics lack access to the up-to-date information they need to keep up to date with current developments in their field - a prerequisite to the planning, undertaking and reporting of new original research projects.

In response to the above, international organizations such as COHRED (Council on Health research for Development) are trying to redress the imbalance in global research spending whereby minimal medical research funding is allocated to the major health problems of the developing world. And the Rockefeller Foundation supports the production of quality author input includes scholarly writing workshops run by Rockefeller in E Africa, W Africa, and S Africa. Such schemes cannot, however, be expected to address the core problems described above.

Meanwhile, African journal publishers themselves can contribute by encouraging advocacy among scientists to national and international leaders and decision makers.

African publishers have a more direct role to play in encouraging scientific authors to publish in African journals. African academics generally prefer to publish in the leading international journals. These journals afford greater recognition in the scientific community, and are much more widely read internationally than the African scientific journals. Further, most African journals are not cited in the major international indexes (for a range of reasons that are controversial and outside the scope of this paper), which again makes them less attractive to authors.

Much of the cream of African research is therefore skimmed by the international journals, and this is bound to continue. African journal editors are often forced to accept papers that are poorly

written or are methodologically flawed - papers that may well have been rejected, or would be rejected, by the leading international journals.

4. Editorial and production resources

'The role of the editor is significantly more difficult and complicated in the Third World than in the industrialized nations' (Altbach 1998). Problems include:

- High costs of paper, ink, and other materials. Many materials have to be imported, often with national government imposition of import taxes.
- Lack of skilled production personnel. This extends to all areas: editing, proofing, design, marketing, secretarial, and peer review. Peer reviewers are difficult to find, or to motivate, because most academics are not interested, or able, to carry out work free of charge.
- Lack of resources for staff training and remuneration, leading to demotivation of existing staff and inability to attract new staff.
- Continued drain of skilled workers to industrialized countries, foreign NGOs, and multinationals - leading in turn to a lack of personnel for skilled tasks.
- Unlike in industrialized countries, the 'full-time journal editor' does not exist in Africa - most have to do the editorial work (not to mention the work of proofreader, secretary, and marketer) in their spare time.

What are the consequences?

Given the problems, it is a credit to existing African journals that they continue to survive at all. And it is not surprising that one of the commonest features of African science publishing is the syndrome of 'Volume 1, Number 1' – the journal dies after its first issue. All journals launch on a wave of enthusiasm and a small package of external finance for the first few months. The enthusiasm is quickly tempered by the realities and problems described above, while the external finance (whether individual, institutional, or from an external donor) tends to be short-term. As funding support is withdrawn, the journal folds, either immediately or after a period of chronic illness with falling quality of content and irregular publication.

What can the publisher do to survive?

In the face of all the barriers mentioned above, it has been argued that the African journal publisher has – even more than any other journal publisher – to maintain a focus on **quality** and **visibility**:

1. **QUALITY**: In order to restore confidence among authors and subscribers, the African journal publisher has to demonstrate a commitment to excellence – in the long run, it is only through demonstrating quality of editorial and reliability of production, that the journal can survive.

2. **VISIBILITY**: Marketing is a vital part of the African journal publishers' role. If journal publishers are to attract greater numbers of authors and subscribers, they must do more to increase awareness of what the journal has to offer.

And yet marketing of African journals is a neglected area: 'Only very few African editors go the extra mile of advertising and marketing their journals and as a result lack visibility' (Teferra 1998a).

Lack of visibility inevitably leads to low sales and low interest from academic contributors.

The Web offers a new potential for the marketing of African scientific journals. 'The WWW is now an important outlet for promoting journals and no publisher can afford to ignore it as a vehicle for publicity and marketing' (Zell 1998)

To take advantage of the Web for marketing, the African journals publisher might set up their own Web site, or publicise their journals on a secondary site. The latter might include university Web sites or nonprofit secondary sites. The content might be provided as Tables of Contents, abstracts, or full text.

It should be emphasized that the potential for direct income generation from document delivery via the Web is currently very limited – even among the major international journals. The main potential benefit to African scientific journals is increased visibility. And this is the expected benefit of INASP's African Journals On Line (AJOL) programme.

‘African Journals Online’ (AJOL)

The African Journals Online programme was initially set up in 1997 with funding from UNESCO, ICSU, and NAS. The costs of the pilot project totalled only £23,000 (US\$36,000) during the whole 3 years, including staff salaries, journal subscriptions, and all overheads.

Its aims include:

- increased access to African research
- increased income for African journal publishers
- assess the impact of the internet on African journal publishing.

In the long term it is hoped that AJOL will be transferred to an African host.

Up until this month, AJOL has featured 17 journals in science and technology. The service has provided free access to the Tables of Contents of participating journals. Users are invited to order the full text of documents at a cost of around £5 (US\$8) per copy.

Two of the journals had hyperlinks to the Bioline site, which provides free abstracts and full text of documents on request, at a similar cost.

Evaluation

At the end of 2 years the AJOL programme was evaluated (Rosenberg 2000) to answer two questions:

1. Did the AJOL programme increase the **use** of African journals?
2. Did the AJOL programme show evidence of benefit to the **publishers**?

Indicators and results were as follows:

- site hit monitoring – increased over time
- user questionnaire (online/listserv) – poor return (10 and 16 returns, respectively)
- librarian survey – 16 returns, 10 unaware, 1 regular user
- number of photocopies purchased – nil
- survey of new/ex-subscribers – poor return (4/21)

Overall the evidence suggested that AJOL had succeeded in raising interest in African journals. Whether it had succeeded in getting them read and used was not proven. It was recognized that the evaluation had taken place too soon after the start of AJOL for any valid data to be forthcoming. However, it was clear there was a potential significant benefit and that more time was needed to test

the impact of the service. As has been shown with other electronic publishing initiatives, success depends to a large extent on wide and continuous publicity to attract people to the site. Further, the available data suggested ways in which AJOL might be improved.

Extension of the programme: AJOL 2000

Over 2000-2001, the programme will be extended with assistance from NORAD and other donor agencies. Up to 50 journals will now be included, representing the full spectrum of the sub-Saharan peer-reviewed scientific journal output (excluding South Africa) and covering agricultural sciences, health and social sciences as well as science and technology.

Apart from the expanded range of journals, the new AJOL service will include abstracts of all articles, a free photocopy service (up to 2 per user) for a trial period of 6 months, and the facility to search journals by key word. Links are provided to sites where the full text of a journal may be accessed (at the moment only a minority of journals – around 10 – are available as full text.) The paid document delivery service will continue and procedures have been simplified. As before, all proceeds will be returned to the journal concerned.

To cut down costs, journals are being asked to provide TOCs and abstracts in electronic format.

The AJOL programme is inexpensive and low-tech, and is in tune with the present state of African technology and resources. The programme is providing visibility to African scientific journals.

However, AJOL cannot improve the quality of journal content, production, or regularity of journal scheduling. Communication with journal editors and publishers is often difficult, and there are severe delays in receipt of some journals. From a user point of view, another limitation is the inability to access the full text of all articles online.

As with all African journals, the main long-term threat to the programme is financial withdrawal (in AJOL's case, withdrawal of donor support) and collapse. The handover to an African institution is also a critical phase and experience from other organizations has shown this can be a highly problematic area – it will be particularly important to identify early which African institution might be able to take over the programme, and to involve them as early as possible before handover to maximize the chance of success. A programme like AJOL will never become self-sustainable until journals reap some financial benefit from their presence on the Web and are then able themselves to provide funds collectively to support the service.

Conclusion

In order to survive and thrive in the harsh environment of African science publishing, African journal publishers and editors need to focus on quality and marketing. They need to be aware, and to take advantage, of the various support initiatives available - indeed they need to play an active role in developing such initiatives. Meanwhile, there needs to be greater international awareness of the wider environmental difficulties for African science publishers. International organizations need to work more closely with one another and with African publishers to develop coherent demand-led programmes to address, or at least ameliorate, these problems. Publishers, editors, and international players need to drive the development of current and new initiatives and to learn from one another. 'The various efforts by NGOs – local and regional – to promote African scholarly journals should be networked and streamlined.' (Teferra 1998b)

Monitoring and evaluation of all projects is essential - it is more valuable to learn and share where things have not worked and where there are difficulties, than it is to share success stories. During the next 3 years, we expect there will be many lessons to be learned and shared from AJOL. In particular, we look forward to measuring the impact of such an inexpensive and simple programme on the health of African scientific journals. It is hoped that in combination with other initiatives run by INASP and other organizations, the tide will turn for African science and African scientific journals.

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