# Open Access Journal Publishing in India: A study with OJS Software

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## Abstract

*India, the second most populous country, and the most populous democracy in the world. Economic reforms have transformed it into the second fastest growing large economy. It has one of the largest English speaking populations in the world. India offers one of the largest higher education systems in the world. It has around 300 universities with 15000 Colleges of Engineering, Medical, Arts, Humanities, Social Sciences, Commerce, Science and Management Education out of which nearly 10000 Ph.Ds are being awarded every year. Scholarly journals are considered to be the main carrier of quality scholarly knowledge. In majority of the cases public money is utilized in research projects. Scientists and scholars working on these projects produce articles containing research results. These are sent to scholarly journals for publication. These articles carrying nascent information are expected to generate new cycles of knowledge. However the traditional process of publishing system of print-only journals prevent easy and quick access to these articles. Providing open access to the research work will help the researchers, especially in the developing world, to have access to the research literature from across the world. The paper outlines the features of one of most popular open source software Open Journal Systems (OJS) for Open access journal publishing. More and more number of open access journals in India will bring a significant increase in the productivity and visibility of Indian scientific research.*

**Keywords:**          Open Access, OJS

## 1. Introduction

Open-access (OA) literature is digital, online, free of charge, and free of most copyright and licensing restrictions. Providing open access to the research work will help the researchers, especially in the developing world, to have access to the research literature from across the world. Also, studies have shown that the citations for the open access scholarly literature is higher than the subscription based scholarly literature.

Open Access to scholarly information can be achieved by two methods:

- Open Access Journals
- Open Archives

Open Access Journals publish articles like conventional journal but are accessible in full without any fee or subscription charges.

Open Archives are publicly accessible online repositories where the authors or their representatives or other right holders upload their pre-print or post-print articles.

## 2. Open Access Publishing

Open access publishing is the publication of material in such a way that it is available to all potential users without financial or other barriers. An open access

publisher is a publisher producing such material. Many types of material can be published in this manner scholarly journals, known specifically as open access journals.

Open access journals are scholarly journals that are available to the reader "without financial or other barrier other than access to the Internet itself." Some are subsidized, and some require payment on behalf of the author. Subsidized journals are financed by an academic institution or a government information center; those requiring payment are typically financed by money made available to researchers for the purpose from a public or private funding agency, as part of a research grant.

In 2002, the Budapest Open Access Initiative (BOAI) was launched to encourage science to be freely available on the Internet. To support this nowadays a scientific community can use different open source electronic publishing systems for the e-journals. Some of the popular ones are Digital Publishing System (DPubs), ePublishing toolkit (ePubTk), Open Journal System (OJS).

With its features, functionalities such as easy to use, modest system requirements, extensive documentation, user manuals, support, customization and biggest user community Open Journal System (OJS) has become popular journal management system.

## 3.    Open Journal System (OJS)

Open Journal Systems (OJS) is a journal management and publishing system that has been developed by the Public Knowledge Project (PKP) through its federally funded efforts to expand and improve access to research.

## 4.    Why OJS:

OJS is open source software made freely available to journals worldwide for the purpose of making open access publishing a viable option for more journals, as open access can increase a journal's readership as well as its contribution to the public good on a global scale.

OJS has been designed to reduce the time and energy devoted to the clerical and managerial tasks associated with editing a journal, while improving the record keeping and efficiency of editorial processes. It seeks to improve the scholarly and public quality of journal publishing through a number of innovations, from making journal policies more transparent to improving indexing.

OJS was designed to facilitate the development of open access, peer-reviewed publishing, providing the technical infrastructure not only for the online presentation of journal articles, but also an entire editorial management workflow, including article submission, multiple rounds of peer-review, and indexing. OJS relies upon individuals fulfilling different roles, such as the Journal manager, editor, reviewer, author, reader, etc. (wikipedia)

As of January 2009, OJS is being used by at least 2000 journals worldwide. A selected list of OJS journals is available on the PKP web site.

## 5.    OJS Features

1. OJS is installed locally and locally controlled
   ♦  Easy to install with moderate system requirements
2. Editors configure requirements, sections, review process, etc.
3. Online submission and management of all

content.

♦ OJS moves submissions to the journal through easy steps in the editorial process, which will be managed by one or more of the editors.

4. Subscription module with delayed open access options.

5. Comprehensive indexing of content part of global system.

6. Reading Tools for content, based on field and editors' choice.

♦ The Reading Tools are designed to assist experienced and novice readers by providing a rich context of related materials from a wide variety of largely open access sources.

7. Email notification and commenting ability for readers.

8. Complete context-sensitive online Help support.

♦ Help document is contextually embedded within OJS, with the relevant pages coming up depending on where the user is when requesting Journal Help.
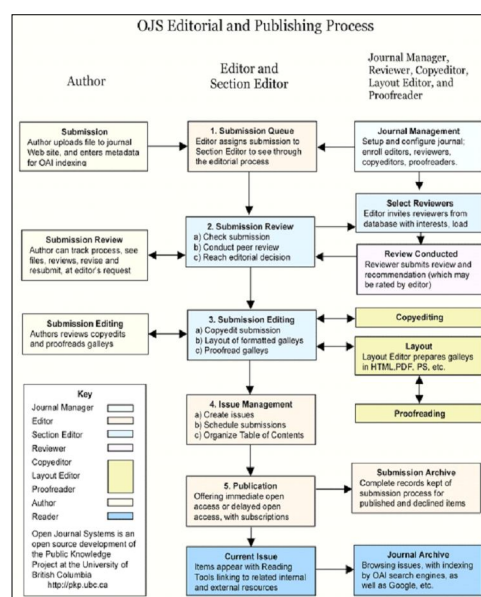
## 6.   OJS Workflow:

OJS management systems are structured around the traditional journal workflow (Diagram-1) required to move a submission through reviewing, and if accepted, editing and publishing, with records maintained of who is doing what and when. It uses roles to organize activities and spaces within the journal's management and publishing website.

### 6.1 Roles in the Publishing Workflow Are:

♦ **Journal manager**, who sets up journal by filling in templates and checking options; manages users, assigns roles; manages reading tools, indexing, prepared emails templates.

♦ **Editors** can assign one or more editors or a section editors to submissions; oversee editorial process and decisions; assemble and publishe issues.

♦ **Section editor:** he manages peer review process and makes editorial decision for submissions, in consultation with Editor.

♦ **Subscription manager**, who sets up different types of subscriptions and manages subscription processes.



**(Diagram-1)**

OJS has a 'plugin' architecture, similar to other community-based projects such as WordPress, allowing new features to be easily integrated into the system without the need to change the entire core code base. Some of the plugins contributed to OJS include tools to facilitate indexing in Google Scholar and PubMed Central, a feed plugin providing RSS/Atom web syndication feeds, a COUNTER plugin, allowing COUNTER-compliant statistics and reporting, and more.

OJS is also LOCKSS-compliant, helping to ensure permanent archiving for ongoing access to the content of the journal. OJS has been translated into eight languages (English, French, German, Italian, Portuguese, Russian, Spanish, Turkish), with an additional languages (Arabic, Catalan, Chinese, Croatian, Persian, Hindi, Japanese, Norwegian, Thai, Vietnamese) in development. All translations are created and maintained by the OJS user community

## 7.  OA in India:

A small but the number of Indian journals moving towards open access is significantly increasing. There is a need to create a great deal of awareness of OA concepts and its impact on the visibility of scholarly information.

### 7.1  Present scenario of Open access in India:

**1.** 107 Journals found at DOAJ - Directory of Open Access Journals when searched with India.

**2.** Browse India ROAR Registry of Open Access Repositories resulted in 39 repositories.

The Indian Academy of Sciences converted all its journals into OA. The Indian Medlars Centre at the National Informatics Centre brings out the OA version of 40 biomedical journals under its medIND programme. Four OA journals are from Indian National Science Academy. MedKnow brings out more than 70 OA journals on behalf of their publishers (although not all  of them are Indian journals), Calicut Medical College brings out 3 OA medical journals. It is also noted that inspite of their online presence the articles in some of these journals are less used because some of these journals do not comply with indexing standard of OA, i.e OAI-PMH (Open Access Initiative – Protocol for Metadata Harvesting) protocol. Hence the articles in these

journals are not easily 'discoverable' due to poor metadata and poor indexing.

As OJS is OAI-PMH compliant, it makes the content of the journal's metadata OAI–PMH compliant which will significantly increase the accessibility of content.

## 8.  Present issues facing scholarly publishing in India:

**1.** Fear that revenue loss from print subscriptions if journal becomes OA, even as it increases readership and circulation of knowledge

**2.** Lack of IT infrastructure or the funds to develop it for using far more efficient online means of managing and publishing journals.

**3.** Other obstacles include uncertainty around copyright issues and a lack of management support and clerical support.

## 9.  OJS initiatives in India:

**9.1 SJPI:** Project in partnership with PKP demonstrated electronic publishing through a prototype and disseminated the knowledge by conducting two workshops in which participants from different parts of India who are involved in publishing attended.

**9.2 Open Knowledge Society (OKS):** OKS a non profit organization working for the dissemination of all forms of Open Access to the Knowledge. OKS as PKP partner in India supports publication of Open Access Journals through OJS and conversion of print journals into online versions.

With the support of OKS Medicinal and Aromatic Plant Association of India the newly formed scientific society at National Research Centre for Medicinal and Aromatic Plants (NRCMAP) a constituent

establishment of ICAR has launched an Open Access Journal on Medicinal and Aromatic Plants (OJAMP).

Open Knowledge Society aims to facilitate all forms of Open Access to Knowledge. It includes:

- Supporting publication of Open Access Journals
- Supporting conversion of print journals into online versions
- Supporting making online journals OAI-PMH complaint
- Supporting creation of Institutional Repositories
- Supporting automation of libraries
- Supporting Digital Libraries
- Other activities that promotes open access to knowledge.

A demo system has been enabled at http://ojsdemo.oksociety.in where interested people can test setting up journals online.

Following are some of the test journals setup.

- Mysore Journal of Agricultural Sciences.
- Journal of Spices and Plantation crop
- Journal of soil Science and management'
- Journal of Pest Management. Etc…

## 10. Conclusion:

With its well defined workflow for the management of peer-review journals, support Open Access peer-reviewed journals can be setup easily thereby increasing the productivity and visibility of Indian research. Also OJS is a multilingual system, allowing journals to publish in a variety of languages. This will be of great help to countries like India where substantial amount of literature, scholarly information is being published in other languages. This will draw non-English speaking people to computers and Internet.

## References

1. **PeterSuber, Open Access Overview (definition, introduction)** Available at http://www.earlham.edu/~peters/fos/overview.htm (Accessed on 22/12/2008).

2. **Steve Lawrence:** "Online or invisible?" Nature 2001, 411**:**521

3. **Open access publishing** Available at http://en.wikipedia.org/wiki/Open_access_publishing (Accessed on 02/01/2009)

4. **Loubani, Tarek** [et. al.] No budget, no worries: Free and open source publishing software in biomedical publishing. In Proceedings of the 12th International Conference on Electronic Publishing held in Toronto, Canada 25-27 June 2008.

5. **Open Journal Systems,** Public Knowledge Project Available at http://pkp.sfu.ca/?q=ojs (Accessed on 02/01/2009)

6. **Open Journal Systems** Available at http://en.wikipedia.org/wiki/Open_Journal_Systems (Accessed on 02/01/2009)

7. **Chýla, Roman What open source webpublishing software has the scientific community for e-journals?**, 2007 . In CASLIN 2007, Stupava (Slovak Republic), 3-7 June 2007. (In Press) Available at http://eprints.rclis.org/10870/ (Accessed on 03/01/2009)

8. **Arunachalam, Subbiah Open Access in India: Hopes and Frustrations** In Proceedings ELPUB 2008 Conference on Electronic Publishing - Toronto, Canada - June 2008

9. **Thomas Abraham and Suvarsha Minj Scientific journal publishing in India: Promoting electronic publishing of scholarly journals in India** First Monday, Volume 12 Number 10 - 1 October 2007 Available at http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/1954/1831 (Accessed on 03/01/2009)

10. **Open Knowledge Society.** Available at http://www.oksociety.in

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