Who Should Pay for Open Access?

A case study of Bioline International and a Global Distributed Support Model

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Director, Bioline International
University of Toronto
Scarborough
Premise

- Publicly funded scientific research as “Global Public Goods”
- Improving access to knowledge is central to human development
- Open Access as a global issue requiring global coordination and solutions
- Correcting the imbalance in modes of knowledge production and dissemination
- Need to answer the “who pays” question in a global context
Human Development and Access to Knowledge-embedded goods

Access to learning resources
Access to journals
Access to research and outcome data
Access to health care
Access to Medicine

PUBLIC GOODS

Education/literacy

Economic Opportunities

Health/life expectancy
The World of Scientific Output According to Thomson’s ISI Science Citation Index

Data from 2002
http://www.worldmapper.org/display.php?selected=205
Prof. Mary Abukutsa-Onyango
Jomo Kenyatta University of Agriculture and Technology

http://vimeo.com/10169351
- Physiological studies (IPGRI)
- Crop collection and standardization (IPGRI).
- INCO studies on urban and peri-urban cultivation of AIVs (EU).
- Developed high iron recipes for vegetables and vegetable products, possible commercial ventures (Vicres and ProNIVA II).

**BSC HORTICULTURE RESEARCH PROJECTS AT MASENO UNIVERSITY**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Number of Students</th>
<th>% Vegetable research projects</th>
<th>% AIVs Research projects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>2001</td>
<td>10</td>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>2002</td>
<td>29</td>
<td>59</td>
<td>34</td>
</tr>
<tr>
<td>2003</td>
<td>14</td>
<td>79</td>
<td>28</td>
</tr>
<tr>
<td>2004</td>
<td>14</td>
<td>79</td>
<td>71</td>
</tr>
<tr>
<td>2005</td>
<td>25</td>
<td>80</td>
<td>70</td>
</tr>
</tbody>
</table>

**MSC AND PHD RESEARCH PROJECTS ON AIVS ARE OVER 10**

- IFS Intercropping study at Maseno
- Seed packages of AIVs
- Seed bulking at JU</n

**CONCLUSIONS**

- AIVs have several advantages that need to be exploited.
- Research on AIVs need to be reinforced at all levels to reap the benefits.
- Universities and other teaching institutions need to include AIVs in the curricula.
- To address millennium development goals on food and nutrition security AIVs must be included.
- For Health and wealth go for AIVs.

**Acknowledgement**

IPGRI (BI)
PROTA
IFS
VICRES
EU
MASENO UNIVERSITY
JU.

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**AFRICAN INDIGENOUS VEGETABLES (AIVs)**

RESEARCH ACTIVITIES IN KENYA
“Weeds” or Vegetables?
The World of Scientific Output According to Thomson’s ISI Science Citation Index

Data from 2002
http://www.worldmapper.org/display.php?selected=205
The Elephant of Scholarly Communication
(Eleanor Ostram and Charlotte Hess)
Private Interests

Public Goods
Big Deals

Small Deals
Case Study of a small deal: Bioline International

http://www.bioline.org.br
Bioline International is a not-for-profit scholarly publishing cooperative committed to providing open access to quality research journals published in developing countries. BI's goal of reducing the South to North knowledge gap is crucial to a global understanding of health (tropical medicine, infectious diseases, epidemiology, emerging new diseases), biodiversity, the environment, conservation and international development. By providing a platform for the distribution of peer-reviewed journals (currently from Bangladesh, Brazil, Chile, China, Colombia, Egypt, Ghana, India, Iran, Kenya, Malaysia, Nigeria, Tanzania, Turkey, Uganda and Venezuela), BI helps to reduce the global knowledge divide by making bioscience information generated in these countries available to the international research community world-wide.

Find out more about:
- Journals in the Bioline International system
- How to Support Bioline
- How to apply to join Bioline International
- What’s new at Bioline International

• Key Partner in Brazil : CRIA
• Over 30 other partners: scholarly societies, academy of sciences, university research units
Bioline International - Mission

• In operation since 1993

• Improve the visibility of developing world publications

• Reduce the South-North knowledge gap

• Provide a sustainable platform for the dissemination of journal materials
Active Bioline Journals graphed with Google Maps.

Retrieved April 26, 2010 from:
http://maps.google.com/maps?ie=UTF8&hl=en&msa=0&msid=117328677437228595850.00044ec490b69019e64a3&z=2
1,591,735 visits came from 24,335 cities
<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Downloads</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>United States</td>
<td>33,660</td>
<td>2.11%</td>
</tr>
<tr>
<td>2</td>
<td>India</td>
<td>30,775</td>
<td>1.93%</td>
</tr>
<tr>
<td>3</td>
<td>Brazil</td>
<td>29,290</td>
<td>1.84%</td>
</tr>
<tr>
<td>4</td>
<td>United Kingdom</td>
<td>28,681</td>
<td>1.80%</td>
</tr>
<tr>
<td>5</td>
<td>Mexico</td>
<td>25,050</td>
<td>1.57%</td>
</tr>
<tr>
<td>6</td>
<td>Canada</td>
<td>21,322</td>
<td>1.34%</td>
</tr>
<tr>
<td>7</td>
<td>Nigeria</td>
<td>20,574</td>
<td>1.29%</td>
</tr>
<tr>
<td>8</td>
<td>Colombia</td>
<td>20,083</td>
<td>1.26%</td>
</tr>
<tr>
<td>9</td>
<td>China</td>
<td>19,898</td>
<td>1.25%</td>
</tr>
<tr>
<td>10</td>
<td>Spain</td>
<td>18,505</td>
<td>1.16%</td>
</tr>
<tr>
<td>11</td>
<td>Iran</td>
<td>18,160</td>
<td>1.14%</td>
</tr>
<tr>
<td>12</td>
<td>Kenya</td>
<td>18,074</td>
<td>1.14%</td>
</tr>
<tr>
<td>13</td>
<td>Egypt</td>
<td>17,993</td>
<td>1.13%</td>
</tr>
<tr>
<td>14</td>
<td>Pakistan</td>
<td>17,877</td>
<td>1.12%</td>
</tr>
</tbody>
</table>
• Premise of new funding model:
  – Building a distributed support model
  – Evaluation of different sustainability models
  – Demonstrating “added values” with new accounting framework
  – Creating new partnerships through sponsorship and membership support
Well-known OA publishing models

• Author Pay models – BioMedCentral, PLoS, Hindawi etc.
  – Article Processing Fee from 1,500 US to 3,000US
• Increasing number of publishers providing “hybrid” option

• SCOAP3 (Sponsoring Consortium for Open Access Publishing in Particle Physics)
  – annual funding goal of €10,000,000 ($14,120,000)
• 83.3% of OA journals published by scholarly societies charge no publication fees.

Suber and Sutton, 2007

http://www.earlham.edu/~peters/fos/newsletter/11-02-07.htm#list
Membership Model

- DOAJ (Directory of Open Access Journals)
- arXiv
• Founding sponsors
  – Open Society Institute (Information Program)
  – Science Commons
  – Simon Fraser University Library
  – University of Ottawa Library
  – University of Guelph Library
  – York University Library
• **Supporting Members**
  
  - National Science Library, CAS
  - Max Planck Digital Library
  - Wellcome Library
  - IDRC Library
  - Libraries & Cultural Resources, U of Calgary
  - York University Libraries
  - U of Guelph Library
  - U of Manitoba Libraries
  - U of Ottawa Library
  - U of Victoria Libraries
  - Harold B. Lee Library, Brigham Young U
  - Albert B. Alkek Library, Texas State U
  - U of Iowa Libraries
  - U of Wisconsin-Madison Libraries
  - Penn State U Libraries
  - Ghent U Library
  - Lund U Libraries, Sweden
  - Wellcome Library
  - Main Library, U of the West Indies
  - U of Hong Kong Libraries
  - Sterling Memorial Library, Yale U
  - Syracuse U Library
• Consortial Members
  – JISC Collections (Europe)
  – OCUL
“Too often we think of scientific knowledge and the developing countries in terms of what “we” can do for “them”. We need to nurture the organizations and initiatives that challenge this limiting point of view, enriching the international scholarly community with important research and neglected perspectives from the developing world.”

Lynne Copeland, Dean of Library Services & University Librarian, Simon Fraser University Library, Canada
Membership = Support of a value proposition

Towards fair and equitable use of knowledge for human development, worldwide
Who Pays?

• Need to shift from an Institution-Centric to a Commons-Centric approach
• Need to rethink what counts or what to value
• Shifting from Business planning to Sustainability planning
• Institutional redesign
Social and Sustainability Accounting
## Broadening the definition of “success”, “impact”, “value” and “capital”

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business value</td>
<td>monetary return, financial capital, efficiency, competiveness</td>
</tr>
<tr>
<td>Scholarly value</td>
<td>Reputation and citation; trust; symbolic capital</td>
</tr>
<tr>
<td>Institutional value</td>
<td>Public mission, community outreach, intellectual capital</td>
</tr>
<tr>
<td>Social value</td>
<td>Equity, participation, diversity, social capital</td>
</tr>
<tr>
<td>Political value</td>
<td>Evidence based policy, transparency, accountability, civic capital</td>
</tr>
</tbody>
</table>
Institutional redesign

Sustainability as a set of institutional structures and processes that build and protect the knowledge commons (after Sumner 2005, Mook and Sumner 2010)
Collective Action and the Evolution of Social Norms

Collective Action and the Evolution of Social Norms

- Elinor Ostrom
- Published by: American Economic Association
“The more successful open access becomes, the more irrelevant our traditional view of library budgets will be… It would be truly unfortunate if the open access movement passed librarians by because we were too busy worrying about the library's bottom line.”

Plutschak, T. Scott, Editor Embracing open access
J Med Libr Assoc. 2004 January; 92
A Challenge

The 1% Solution
Thank You!

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