ETD Policies, Strategies and Initiatives in India: A Critical Appraisal

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Public Funded Research in India

- Doctoral Research is supported through:
  - Junior Research Fellowship (JRF)
  - Senior Research Fellowship (SRF)
  - State Scholarship
  - Study Grants
- Pre-Doctoral Research (such as, M.Phil., M.Tech., M.D., MS Research) is supported through monthly scholarship, study grants, etc.
- Public funded doctoral and pre-doctoral research produce a considerable amount of scholarly literature, such as dissertations and theses
- National Knowledge Commission and other advisory bodies recommend to disseminate these literature through open access channels
### Research Fellowship Schemes available during 11\textsuperscript{th} Five Year Plan (2007-2012) - Examples

<table>
<thead>
<tr>
<th>Name of the Scheme</th>
<th>Responsible Agency</th>
<th>Amount in INR (Crore)</th>
<th>USD (Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Fellowships in Basic Sciences &amp; Interdisciplinary areas</td>
<td>CSIR</td>
<td>870.00</td>
<td>213.14</td>
</tr>
<tr>
<td>GATE qualified Junior Research Fellowship (JRF-GATE) Scheme</td>
<td>CSIR</td>
<td>50.00</td>
<td>12.25</td>
</tr>
<tr>
<td>Trans-disciplinary Fellowship Scheme</td>
<td>CSIR</td>
<td>14.00</td>
<td>3.43</td>
</tr>
<tr>
<td>Shyama Prasad Mukherjee Fellowship Scheme (SPMF)</td>
<td>CSIR</td>
<td>16.00</td>
<td>3.92</td>
</tr>
<tr>
<td>Research Fellowships in all Major Subjects &amp; Interdisciplinary Areas</td>
<td>UGC</td>
<td>1500.00</td>
<td>367.49</td>
</tr>
<tr>
<td>Teaching Assistantship for Doctoral Students (Non Fellowship)</td>
<td>UGC</td>
<td>150.00</td>
<td>36.75</td>
</tr>
</tbody>
</table>
Policy Framework in India

- UGC (Submission of Metadata and Full-text of Doctoral Theses in Electronic Format) Regulations, 2005
  - Recommends
    - Creation of Indian National Theses Database (INTED)
    - Submission of PhD Theses in Electronic Form
Implications of UGC Regulations

- A roadmap in achieving wide dissemination of results of doctoral research conducted in Indian universities
- Bibliographic control of theses and dissertations of research degrees
- Quality control in public funded research
  - Avoiding duplication of research efforts
  - Avoiding malpractices, such as plagiarism
- Proper utilization of infostructure in Indian universities, particularly subscribed electronic resources
INDEST Consortium

- A strategic alliance of elite institutions, maintaining S&T education grid, improving access to subscription-based electronic resources, partnered with Ministry of Human Resource Development (MHRD) and All India Council for Technical Education (AICTE)
- An advocacy group for open access movement in India
- Consortium Consists of:
  - Core Members (supported by MHRD) (37)
    - Such as, IISc, IITs, IIMs, IIITs, etc.
  - AICTE-supported Members (government institutions) (60)
  - Self-supported Institutions (private institutions recognized by AICTE) (517)
Advocacy Roles of INDEST

- Recommended establishment of ETD Repository in each core member institution
- Retrospective digitization of back volumes of thesis and dissertation collections on project basis and make them available through open access or campus-wide institutional/ETD repositories.
- Prepared a number of guidelines on the ETD and organized training workshops for implementations of open access repositories across member institutions
- Now, member institutions accept electronic submission of theses and dissertations for archiving in respective IR and ETD repository
- Consortia provides consultative supports to other Indian consortiums, research agencies and individual institutions in formulation of open access policies and implementation of ETD/institutional repositories
# Open Access to ETDs in India

<table>
<thead>
<tr>
<th>Name of Initiative</th>
<th>Name of Institution</th>
<th>No. of Full-text Theses</th>
<th>No. of Other Items</th>
<th>URL</th>
<th>Software Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vidyanidhi</td>
<td>Univ. of Mysore</td>
<td>4151</td>
<td>0</td>
<td><a href="http://dspace.vidyanidhi.org.in:8080/dspace/">http://dspace.vidyanidhi.org.in:8080/dspace/</a></td>
<td>DSpace</td>
</tr>
<tr>
<td>Dspace@TIET</td>
<td>Thapar University</td>
<td>259</td>
<td>33</td>
<td><a href="http://dspace.tiet.ac.in/dspace/">http://dspace.tiet.ac.in/dspace/</a></td>
<td>DSpace</td>
</tr>
<tr>
<td>ETD@IISc</td>
<td>Indian Institute of Science</td>
<td>229</td>
<td>0</td>
<td><a href="http://etd.ncsi.iisc.ernet.in/">http://etd.ncsi.iisc.ernet.in/</a></td>
<td>DSpace</td>
</tr>
<tr>
<td>DSpace@NCL</td>
<td>National Chemical Laboratory</td>
<td>208</td>
<td>149</td>
<td><a href="http://dspace.ncl.res.in/dspace/">http://dspace.ncl.res.in/dspace/</a></td>
<td>DSpace</td>
</tr>
<tr>
<td>Open Access Repository of IIAP</td>
<td>Indian Institute of Astrophysics</td>
<td>83</td>
<td>1389</td>
<td><a href="http://prints.iiap.res.in/">http://prints.iiap.res.in/</a></td>
<td>DSpace</td>
</tr>
<tr>
<td>Eprints &amp; ETD@IIT Delhi</td>
<td>Indian Institute of Technology Delhi</td>
<td>30</td>
<td>2106</td>
<td><a href="http://eprint.iitd.ac.in/dspace/">http://eprint.iitd.ac.in/dspace/</a></td>
<td>DSpace</td>
</tr>
<tr>
<td>DSpace@NITR</td>
<td>National Institute of Technology Rourkela</td>
<td>13</td>
<td>388</td>
<td><a href="http://dspace.nitrkl.ac.in/dspace/">http://dspace.nitrkl.ac.in/dspace/</a></td>
<td>DSpace</td>
</tr>
<tr>
<td>OpenMED@NIC</td>
<td>National Informatics Centre</td>
<td>8</td>
<td>1491</td>
<td><a href="http://openmed.nic.in">http://openmed.nic.in</a></td>
<td>EPrints</td>
</tr>
</tbody>
</table>
An initiative of University of Mysore, supported by Department of Scientific & Industrial Research of India (DSIR) and Ford Foundation

National Repository of full-text ETDs

Also maintains a bibliographic database of Indian theses

Has partnership with NASSDOC, University of Hyderabad, Jamia Millia Islamia, for sourcing ETDs

A wide range of subject coverage
ETDs @ Thapar University

- An initiative of Thapar University, Patiala
- Institutional Repository of full-text ETDs; also contains other types of documents
- Subject coverage limited to engineering and technology
ETD@IISc

- An initiative of Indian Institute of Science, Bangalore (IISc), maintained by National Centre for Science Information (NCSI)
- Institutional Repository of full-text ETDs; also contains digitized collections
- Subject coverage limited to applied science, engineering and technology
- An showcase initiative from a core member INDEST Consortium for accelerating open access movement amongst INDEST members
ETDs @ National Chemical Laboratory

- An initiative of National Chemical Laboratory, Pune (NCL), a prominent laboratory of Council of Scientific and Industrial Research (CSIR)
- Institutional Repository of full-text ETDs; also contains other types of documents
- NCL has a large pool of CSIR research fellows, largest amongst 42 CSIR laboratories
- An showcase initiative from a CSIR lab for accelerating open access movement amongst CSIR research fellows
Cross Archive Search Service for Indian Repositories (CASSIR)

- An initiative of National Centre for Science Information (NCSI) of Indian Institute of Science (IISc) and supported by Department of Scientific & Industrial Research of India (DSIR)
- Has cross-searching functionality
- At present, CASSIR covers 18 open access repositories in India
- Can be searched by document type, such as, Thesis or Dissertation
Bibliographic Control of Information on Theses and Dissertations in India

- **CSIR e-Thesis**
  - CSIR Unit for Research and Development of Information Products (URDIP), Pune

- **National Online Union Catalogue of Doctoral Theses**
  - Information and Library Network Centre (INFLIBNET) of University Grants Commission (UGC)

- **Vidyanidhi Indian Theses database**
  - University of Mysore

- **DELNET Theses and Dissertations Database (Union Catalogue)**
  - Developing Library Network (DELNET)

- **Bibliographies of Doctoral Dissertations**
  - Published in University News (weekly journal of Association of Indian Universities)

- **Doctoral Theses Repository in NASSDOC (In-house Catalogue)**
  - National Social Science Documentation Centre (NASSDOC) of Indian Council of Social Science Research (ICSSR)
e-Thesis is a database of doctoral theses submitted by CSIR fellows. It is the only one central authoritative source for information about CSIR doctoral dissertations. The potential users of this database include doctoral candidates who would like to make sure that their proposed thesis topics have not already been written about. Students, faculty and other researchers may search it for titles related to their scholarly interests.

The database represents the work of authors from over 250 national laboratories, universities and research institutes in India.
### Subject Coverage in CSIR e-Thesis Database

<table>
<thead>
<tr>
<th>Research Area</th>
<th>Number of Records</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td>541</td>
<td>82.22</td>
</tr>
<tr>
<td>Biology</td>
<td>54</td>
<td>8.21</td>
</tr>
<tr>
<td>Physics</td>
<td>40</td>
<td>6.08</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>11</td>
<td>1.67</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>2</td>
<td>0.30</td>
</tr>
<tr>
<td>Engineering</td>
<td>2</td>
<td>0.30</td>
</tr>
<tr>
<td>Leather Processing</td>
<td>2</td>
<td>0.30</td>
</tr>
<tr>
<td>Botany</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>Earth Sciences</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>Environment</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>Medicine</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>0.30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>658</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>
Search and Display Interfaces of CSIR e-Thesis

Also gives links to Papers and Patents published by the researcher based on the thesis work
An online union catalogue and bibliographic database of doctoral theses submitted in Indian universities and available in university libraries across India

An initiative of UGC’s Information and Library Network Centre (INFLIBNET), India

An authoritative source for information on doctoral research undertaken by UGC research fellows and other doctoral students

Would be scaled up as a full-text digital library
DELNET Theses and Dissertations Database

- An online union catalogue and bibliographic database of theses and dissertations available in member libraries
- An initiative of Developing Library Network (DELNET) – a major Library Network in India and South Asia
- Also covers Masters’ dissertations and project reports
Conclusion

- The elite Indian institutions are forerunners in implementing ETD repositories, followed by national laboratories and central universities.
- Not all universities and institutions are encouraging submission of electronic copies of theses and dissertations.
- Those accepting electronic copies of theses and dissertations, are not fully prepared to implement ETD repositories or bibliographic databases at institutional level.
- As number of universities and higher educational institutions is growing, a rush for research degrees observed. Thus, need for proper mechanism of quality assurance arises through implementation of ETD repositories and online bibliographic databases.
- Centralized ETD repositories at the fellowship granting agency level.
- Decentralized ETD repositories at the degree awarding university level.
- Current (11th) Five Year Plan will provide necessary frameworks and infrastructure in achieving open access to scholarly literature of public funded research.
Thank You

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