

# **The Database of African Theses and Dissertations (DATAD)**

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## **Background**

The project for the development, management and dissemination of a Database of African Theses and Dissertations (DATAD) is an initiative aimed at enhancing higher education through exposing the research output of higher institutions in Africa to the wider research community and providing opportunities for networking of researchers. Owing to relatively low investment in Research and Development (R&D) by African governments (with the exception of the Arab states and South Africa), higher institutions undertake most of the research activities. Through Masters and PhD programmes, staff and students undertake serious research that generates a wealth of empirical data and important insights of great value to local and international development. These theses and dissertations are sparingly indexed in major databases, and do not feature much in the international literature. This body of research has received little recognition at home and abroad. In other parts of the world, by contrast, graduate theses and dissertations are well preserved and indexed, and scholars and researchers worldwide have relatively easy access to them either in print or in digital form. Efforts made to provide a globally accessible, well-documented source of information on African theses and dissertations have been uncoordinated so far, resulting in duplication of effort and lost opportunities for sharing experiences and skills. But, thanks to the digital and information/communication revolution, the Association of African Universities, Accra, Ghana (AAU) has, through the DATAD project, begun to come to terms with this problem.

The DATAD project was initiated at a planning meeting organised by Project for Information Access and Connectivity (PIAC) and held in Nairobi, Kenya, in January 1998. This meeting considered measures for contributing to the creation of capacity in African universities for the collection, management and electronic dissemination of theses and dissertations. This meeting proposed a study to test the feasibility of the idea, and acknowledged the centrality of the AAU in coordinating and providing leadership to the proposed project.

The AAU Conference of Rectors, Vice-Chancellors and Presidents (COREVIP) approved the Report of the [Feasibility Study](http://www.piac.org/datad) (http://www.piac.org/datad) in 1999, and thereafter, a three-year pilot phase, involving 11 institutions, began in February 2000. This phase was concluded in August 2003.

The main database was launched on 30 April 2003. Known as DATAD OnLine, with the URL reference <http://www.aau.org/datad/database> the database had 14,723 records and likely to reach 20,000 by the end of 2004. There were more than 700 registered<sup>1</sup> users of the database. Of these, more than 60 were institutions from 25 different countries and about 600 individuals from 65

different countries. A user has to register to access the DATAD resources. Registration offers a brief access to the records. Full access is by subscription and the rates depend on AAU membership, or regional affiliation. Subscription information is provided in Appendix 1.

## **Objectives**

Apart from its specific objective, namely, to provide information on African theses and dissertations, DATAD aims broadly at:

- contributing to the creation of a conducive environment for research and publication in Africa;
- creating capacity in African universities for the collection, management and dissemination of theses and dissertations electronically;
- providing visibility and improved access to the work of African scholars, both within and outside of the continent; and
- facilitating the development of copyright procedures and regulations for the protection of the intellectual property rights of African university graduates and researchers; and

As a capacity building initiative, DATAD supports participating institutions through skills development, enhancement of facilities and orientation towards retrospective indexing of existing collections. Participating institutions, for their part, are expected to maintain annual updates as part of their institutional contribution.

## **Implementation**

The pioneer institutions were strategically identified among 18 institutions visited during the DATAD Feasibility Study. The main criteria for eligibility were:

- Regional and linguistic balance;
- Existence of basic ICT infrastructure, particularly Internet connectivity;
- Leadership commitment; and
- A graduate programme with a considerable number of theses and dissertations.

The institutions chosen were Addis Ababa University (Ethiopia), Eduardo Mondlane University (Mozambique), Makerere University (Uganda), University of Zimbabwe (Zimbabwe), University of Dar es Salaam (Tanzania), Cheikh Anta Diop (Senegal), CODESRIA<sup>2</sup> (Dakar), Yaounde I University (Cameroon), Kenyatta University (Kenya), Ain Shams University (Egypt), and University of Ghana (Ghana). After the pilot phase, two other institutions have been added, namely, Obafemi Awolowo University (Nigeria) and the University of Jos (Nigeria).

The DATAD model was informed by experiences from existing models that were explored and evaluated with due consideration for the environment within which DATAD was to operate. Options for centralised, decentralised, and mixed models were explored. Bandwidth, IT skills level for staff, copyright and intellectual property issues, capacity building, and sustainability were key considerations in specifying requirements for hardware and software and setting up regional and institutional management structures. DATAD has adopted a distributed model, with a combination of centralised and decentralised activities and processes.

Centralised aspects and activities include:

- Standards for record and data formats
- Quality control and monitoring
- Hardware and software minimum specifications
- Management and maintenance of the central server
- Coordination

Decentralised aspects and activities are:

- Data entry and editing
- Institutional quality control
- Storage and archiving
- Provision of full text
- Copyright and IPR management

### **Management and Administration (during the pilot phase)**

A DATAD Advisory Committee was established to oversee the implementation process. The committee met once every year and invited institutions to discuss a memorandum of understanding stating the terms of cooperation and obligations of parties. The institutional management teams were made up of a representative of each of the stakeholders, i.e., postgraduate studies division, faculty, IT, library and graduate students. Others were heads of institutions, appointed institutional coordinators and identified implementing units. In most institutions, the library was identified for the purpose. Institutional coordinators were the main link to the AAU.

### **Hardware and software considerations**

The key requirements of any software to be adopted for the integrated database were affordability, ability to handle non-roman scripts, security for the internet server, and good report generation features. The integrated database has been developed in-house and runs MySQL. Each institution was provided with bibliographic software, scanning /optical character recognition (OCR) software, and an intranet posting software. Other points considered included economies of scale in bulk purchases, ease and efficiency in delivery, accounting, and the budget line.

### **Training and IT support**

The DATAD implementation process aims at capacity building for sustainability of the initiative. The strategy has been to train on site and involve as many people as possible. The training missions involved sessions for raising the awareness to all staff in the implementing unit, the management team and university leadership, and training such as specific skills for scanning, data entry, and quality control. Supplementary training was done during annual workshops.

### **Database Content**

Determination of the record fields did consider the different user communities and their research needs: students, researchers, administrators, decisions and policy makers, development agencies, civil society groups, etc. The main aim is to develop DATAD as a research resource (as opposed to a simple bibliographic database) that will facilitate dissemination of research findings,

networking of researchers, bibliometric<sup>5</sup> studies, and a tool to enhance higher education policy and decision-making.

A DATAD record has fields for Author, Gender, Title, Degree, Year, Supervisor(s), University (faculty/dept, town, country), Availability statement, Location (of e-copy if available), Copyright statement, Abstract, Keywords, and Call numbers. Not all fields are displayed when searching the database, e.g., gender (see Appendix 2 for a sample record).

### **Workshops and meetings**

Workshops and Advisory Committee meetings were held for the duration of the pilot. The workshops involved at least two people from each participating institution and lasted two days. The objectives of these workshops were to receive and discuss progress reports from each participating institution. Particular attention was paid to:

**a. Work progress:** Data entry progress and problems, additional contributions from institutions, proposals/suggestions to enhance implementation, and technical, administrative, policy related challenges.

**b. Quality control:** The workshops were used to re-visit quality control for data. Actual data was reviewed for quality while common mistakes were identified and corrected. .

**c. Copyright:** Participants discussed the different copyright statements provided by each institution and reviewed them for adequacy, relevance and flexibility.

**d. Skills enhancement sessions: These** provided for hands-on enhancement of skills for scanning, data entry, editing, file transfers and general trouble shooting for the different software.

Each workshop made recommendations that have provided useful input for improvement of coordination and implementation. Full reports of these workshops can be accessed at <http://www.aau.org/datad/reports>. The recommendations of the concluding workshop were communicated to the heads of institutions for their attention and action.

### **Lessons**

#### **The DATAD model**

The combination of centralised and decentralised architecture at management and technical levels was most acceptable to institutions and technically feasible. In particular, the relatively poor and unreliable communication infrastructure in most parts of Africa makes offline data entry and editing the most suited option for data entry and editing. Copyright and intellectual property concerns were real and featured in all discussions, but strangely, seemed to be 'library concerns' rather than institutional issues. This subject did not feature in the agenda of national higher institutions' bodies or committees.

Support for infrastructure enhancement and training was essential for all sites. Basic facilities are vital for timely implementation of activities. During the pilot phase, each institution was provided with bibliographic management software, OCR, a scanner and two desktop computers.

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<sup>5</sup> Study of life cycle, utility, trend, or pattern as applied to a specific collection or group of documents

Quality control is an absolute necessity at institutional level and for the central database.

**a. Standardisation:** The benefits of standardisation in information systems development are appreciated. DATAD has tried to standardise record structure, software, and provided minimum hardware requirements. This is further detailed in the DATAD methodology manual (<http://www.aau.org/datad/reports/datadmanual.pdf>). Vocabulary control and the use of a thesaurus for the purpose were raised on several occasions but have not been adequately addressed. Currently, the database uses keywords as provided by institutions. Most of these are derived from the Library of Congress Classification Schemes and Sears Subject Headings. This area needs further attention.

**b. Full text access:** Most institutions are wary of responding to requests for full text, partly due to absence of clear policies on copyright and access provisions. The whole area of copyright and intellectual property rights as pertains to theses and dissertations is not well understood. There is need to provide more opportunities and avenues for creating awareness, developing guides, and disseminating best practices. Measures to address this are further explained in the presentation.

**c. Preservation:** Long-term preservation of theses and dissertations is important to ensure long-term availability of these works. Institutions are urged to ensure completeness of their theses and dissertation collections, continue maintenance of a print archival copy of the same, and implement sound preservation policies for print and electronic copies of all theses and dissertations and other research output and vital documents from them.

**d. Local content digitisation:** The facilities provided and skills developed while implementing DATAD are useful for the digitisation of other local content. DATAD encourages this as well as cooperation with similar initiatives within and outside the institution

**e. Sustainability:** The DATAD process emphasises institutional ownership to ensure support and maintenance after the initial support from AAU.

### **Ongoing activities**

The current focus of DATAD is on copyright and intellectual property management as well as a business model that will provide for a sustainable database. The two are critical to the integrity, expansion and well-being of the DATAD undertaking. The guide for the management of copyright and intellectual property is generally applicable to theses and dissertations and other intellectual assets (i.e., data, electronic documents, and associated metadata) developed under DATAD and the administration of the rights for usage of those assets. It will have templates and examples that can be customised for institutional use.

**The business-plan for DATAD** focuses on the organisational infrastructure and management that would support its policies and activities, i.e., an optimal organisational structure to address governance and a funding model and fiscal management strategy that would ensure accountability and benefits to the contributing universities, and the long-term availability of the DATAD resources to the larger community.

### **Production of the DATAD database on CD-ROM**

In Africa, CD-ROM databases are still an effective way of fulfilling the information needs of scholars, as they are convenient to use in institutions that do not have full Internet connectivity or have erratic and low bandwidth connections.

The plan is to maintain the online database as well as develop capacity to provide the database on CD-ROM.

### **A note on DATAD and ETD**

The DATAD initiative has gained acceptance and momentum within institutions. It has laid a sound basis for institutions to embark on Electronic Theses and Dissertations (ETD) and e-publishing in general. DATAD is involved in ETD initiatives in Africa, and keen to work with institutions who wish to move on to ETD. The AAU is committed to expanding and sustaining DATAD.

### **About the Association of African Universities (AAU)**

The Association of African Universities (AAU), with headquarters in Accra, Ghana, is an international non-governmental membership organisation set up by the universities of Africa to promote cooperation among themselves and between them and the international academic community, in the service of African development. It was established in November 1967 at a founding conference in Rabat, Morocco, attended by representatives of 34 universities.

Today, membership stands at 171 institutions (including private universities and non-university tertiary institutions) drawn from 43 African countries that spread throughout all the sub-regions of the continent, embracing the entire major linguistic groupings as well as educational traditions. The official languages are Arabic, English and French.

As the apex continental body promoting cooperation and coordination among African universities, the AAU serves its members and African higher education generally by providing resources and running programmes that build on the synergy of collective action by its members. Its programmes involve research and training; the collection, and dissemination of information on higher education and research in Africa; and advocacy and support for the programmes of member institutions. These are spelt out more fully on the Association's website: <http://www.aau.org>.

## Appendix 1

Access to the DATAD database

### ■By Registration (free)

- Individual
- Institution

*Offers: Brief access to about 20 records*

### ■By Annual Subscription (after registration)

- Rates depend on user status, i.e., whether AAU member, African institutions, individual or otherwise, as detailed below:

#### Annual access rates in US\$

##### Inside Africa

DATAD Pioneers Free

AAU Members US\$ 100

Non-AAU Members US\$ 250

Individuals US\$ 100

##### Outside Africa

Institutions US\$ 400

Individuals US\$ 250

Consortia: *negotiable*

## Appendix 2: Sample DATAD Record

<b>Record ID</b>	DATAD/02413/UG
<b>Title</b>	Akyem Abuakwa C. 1874-1943: A Study of the Impact of Missionary Activities and Colonial Rule on a Traditional State
<b>Author</b>	Addo-Fening, Robert
<b>Degree</b>	PhD, 1980
<b>Supervisor(s)</b>	A. Adu Boahen
<b>University</b>	University of Ghana, Department of History, Accra, Ghana
<b>Physical description</b>	537p., Tables
<b>Language</b>	English
<b>Abstract</b>	<p>This thesis is a study of the nature and extent of the pressures -- social, economic and political -- that the Basel Missionaries and British colonial Administrators brought to bear on Akyem Abuakwa society during the period 1874-1943. The study also examines the State-responses to these pressures and the extent to which they were conditioned by her pre-European historical experience, her ethos, the strengths weaknesses of her institutional arrangements, the quality of her political leadership and her resources. The general conclusions that emerge from the study are that missionary activities and colonial policies brought a great deal of material progress to Akyem Abuakwa society: the quality of life was improved by the spread of Western education, by the adoption new skills, by improved medical care and by infrastructural developments; changes in the customary penal system made the administration of justice more humane; while the evolution of a modern-style bureaucracy at the courts of the chiefs and the adoption of certain administrative routines enabled the complicated and diverse functions of modern government to be effectively discharged. These positive results-were, however, off-set by negative and harmful results: the spiritual foundations of Akyem Abuakwa were seriously undermined by widespread and wilful violation of time-honoured customary taboos by missionary converts in the name of religious freedom as well as by the introduction of a dichotomy between religion and politics; the cohesion and solidarity of Abuakwa society suffered great damage by the creation of salems whose Christian inhabitants held aloof from the life of the wider community; existing social conflicts were sharpened while new, more serious and harmful ones were introduced by the concept of territorial jurisdiction as embodied in the N.J.O., by the distortion of the character and role of chieftaincy, and by the destruction of the religious conformity of the state; the weakening of extended family ties, the growing emphasis on individualism and the failure of Christianity to deal adequately with the trauma of rapid social and economic change created problems of security which express themselves in alcoholism and neurosis; above all the exploitation of Abuakwa immense resources - human and natural - for the greater benefit of her alien rulers resulted in the under-development of the State.</p>
<b>Keywords</b>	African history/Missionary activities/Politics and government/Ghana/Akyem Abuakwa
<b>Call Number</b>	DT511.Ad2
<b>Availability</b>	University of Ghana, Balme Library, P. O. Box LG24, Legon, Accra, Ghana. E-mail: rihall@libr.ug.edu.gh
<b>Copyright</b>	<ol style="list-style-type: none"><li>Balme Library theses are available for consultation in the library. They are not normally available for loan, and they are never lent to individuals</li><li>All who consult a thesis must not copy or quote from it without the consent of the author and of this University</li><li>Any copying or quotation permitted should be duly acknowledged</li></ol>