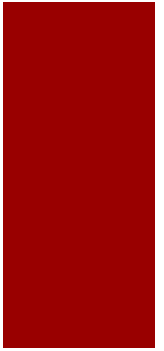# Repositories and Research Communication Challenges in Africa
Leipzig, 4 June 2009

MARCO GUADAGNINO – UNIVERSITY OF NAPLES
"L'ORIENTALE"
ANSIE VAN DER WESTHUIZEN – UNIVERSITY OF SOUTH AFRICA

The contribute of Open access institutional repositories to the dissemination of scholarly information

Leap-frog over digital divide

Preserve and give more accessibility and visibility to research output from SSA

Open access initiatives in Africa

- the African Journals Online (1998)

- the African Digital Library (1999)

- the Database of African Theses and Dissertations (2003)

- the Africa's Open Knowledge Network (2003)

- the African Online Digital Library (2003)

- African Network for Localisation (ANLoc) (2008)
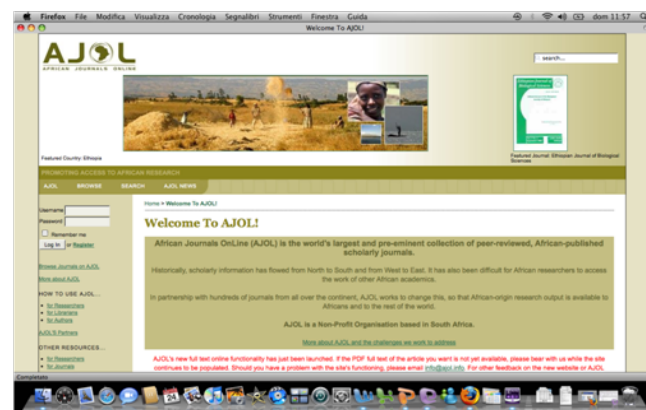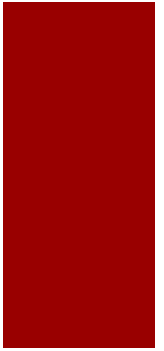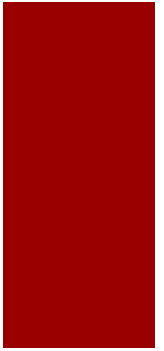
Obstacles

Mistrust and lack of awareness

Budget allocation

Inadequate technology infrastructure

Mistrust and lack of awareness

Budget allocation and inadequate technology infrastructure
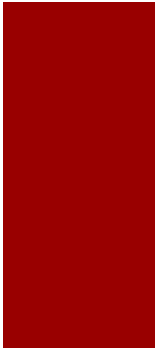
Fast, reliable, affordable internet connection

Adequate ICT infrastructure with limited funds

Staff constraints

Institutional repositories in Africa

Proportion of Repositories by Country
Africa

South Africa (16 = 67%)
Egypt (2 = 8%)
Cape Verde (1 = 4%)
Ethiopia (1 = 4%)
Kenya (1 = 4%)
Namibia (1 = 4%)
Uganda (1 = 4%)
Zimbabwe (1 = 4%)

OpenDOAR 18-May-2009

Total = 24 repositories

IR growth in Africa

Growth of the OpenDOAR Database
Africa

OpenDOAR 18-May-2009
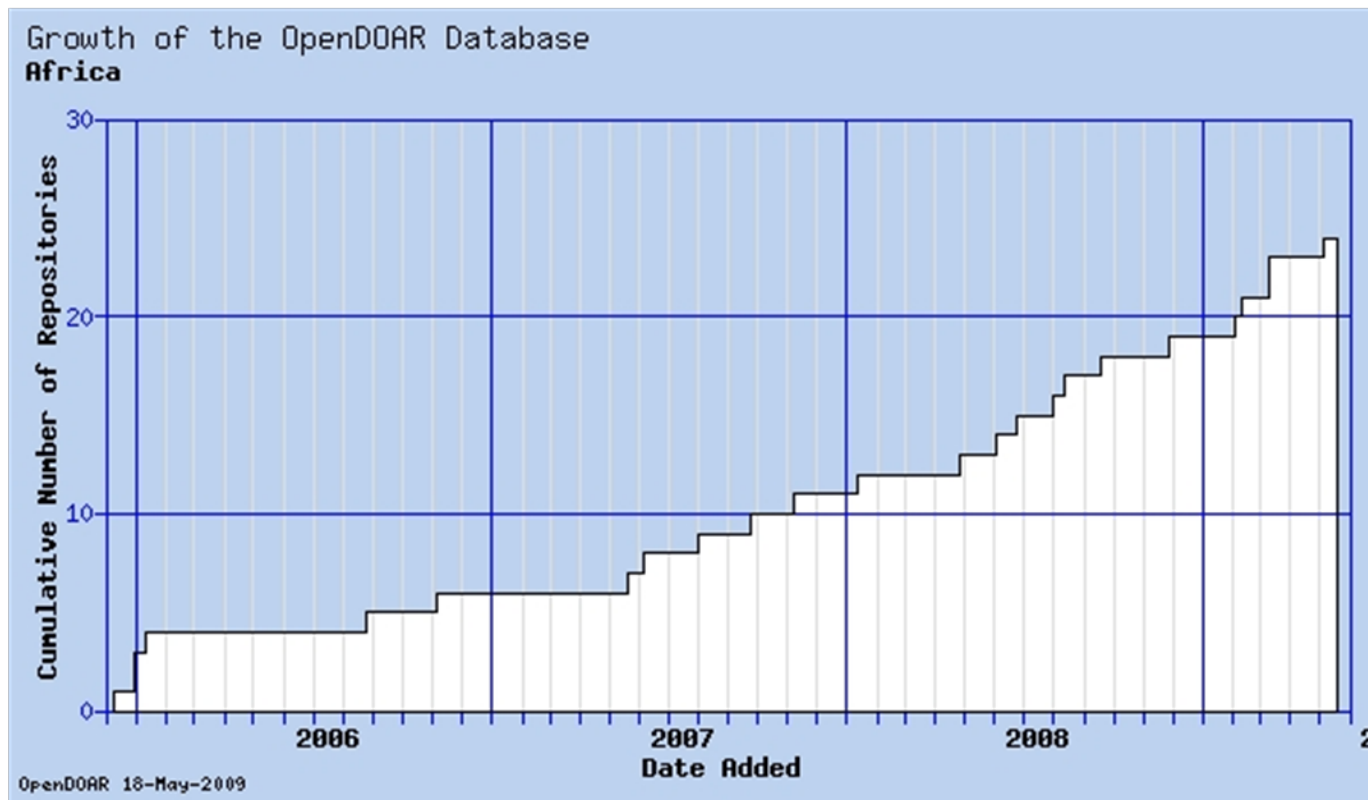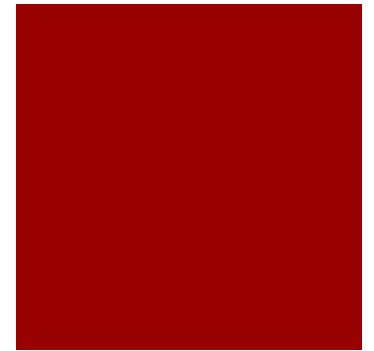
Content

Content Types in OpenDOAR Repositories
Africa

Percentage of Repositories

Content Type	Value
Theses and dissertations	17 = 70%
Journal articles	16 = 66%
Conference and workshop papers	11 = 45%
Unpublished reports and working papers	7 = 29%
Multimedia and audio-visual materials	5 = 20%
Other special item types	5 = 20%
Books, chapters and sections	4 = 16%
Learning Objects	4 = 16%
Bibliographic references	1 = 4%
Datasets	1 = 4%

OpenDOAR 18-May-2009

Total = 24 repositories

Subjects

Subjects in OpenDOAR
Africa

Percentage of Repositories

Subject	Percentage
Multidisciplinary	19 = 79%
Agriculture, Food and Veterinary	1 = 4%
Ecology and Environment	2 = 8%
Health and Medicine	1 = 4%
Civil Engineering	1 = 4%
Computers and IT	1 = 4%
Arts and Humanities General	1 = 4%
Business and Economics	1 = 4%
Education	2 = 8%
Law and Politics	2 = 8%
Library and Information Science	1 = 4%
Management and Planning	1 = 4%

OpenDOAR 18-May-2009

Total = 24 repositories
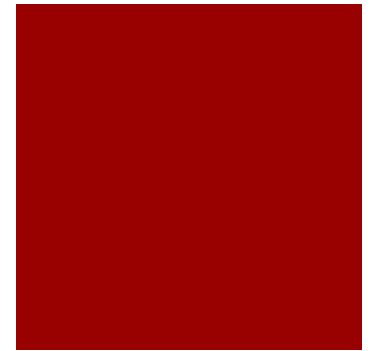
Languages

Most Frequent Languages in OpenDOAR
Africa

Percentage of Repositories

Language	
English	23 = 95%
Afrikaans	3 = 12%
Amharic	1 = 4%
Arabic	1 = 4%
Portuguese	1 = 4%
Sesotho	1 = 4%

OpenDOAR 18-May-2009

Total = 24 repositories

Software
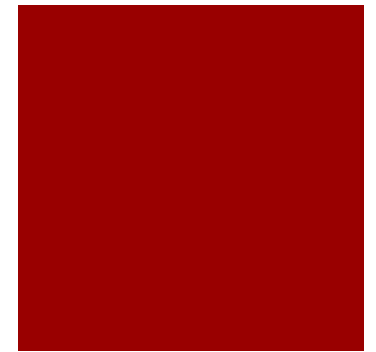
Usage of Open Access Repository Software
Africa

DSpace (13 = 54%)
[Unknown] (3 = 13%)
EPrints (3 = 13%)
ETD-db (3 = 13%)
Greenstone (2 = 8%)

OpenDOAR 18-May-2009

Total = 24 repositories
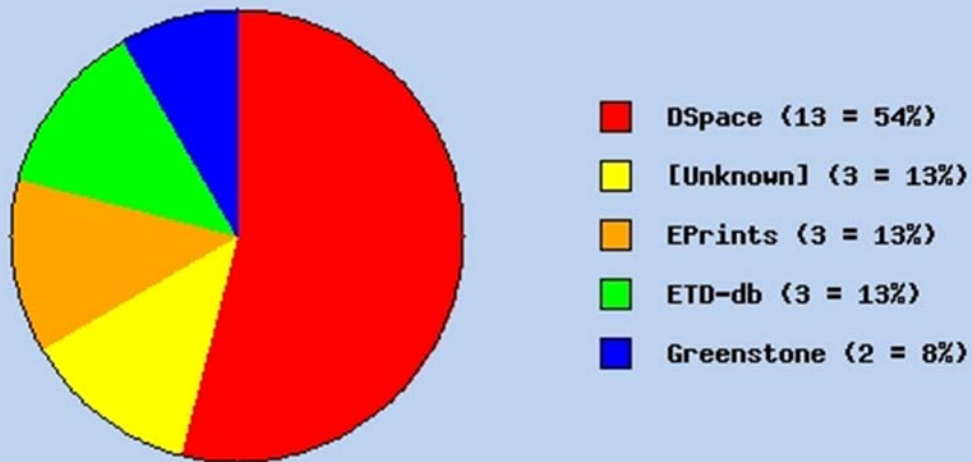
SSA data collections

Name	Country	Items	Content	Languages	Subjects
Biblioteca Digital da Universidade Jean Piaget	Cape Verde	182	Articles; Conferences; Theses; Unpublished; Books; Learning Objects	Portuguese	Multidisciplinary
Addis Ababa University Libraries Electronic Thesis and Dissertations Database	Ethiopia	1669	Theses	English; Amharic	Multidisciplinary
Sudan Open Archive	Kenya	807	Unpublished	English	Ecology and Environment; Economics; Law and Politics; Management
Digital Collections of the University of Namibia Library	Namibia	17	Articles; Learning Objects; Multimedia	English	Multidisciplinary Health and Medicine
Uganda Scholarly Digital Library at Makerere	Uganda	55	Articles; Conferences	English	Multidisciplinary
University of Zimbabwe Institutional Repository	Zimbabwe	212	Articles; Conferences; Learning Objects	English	Multidisciplinary

Addis Ababa University, Ethiopia
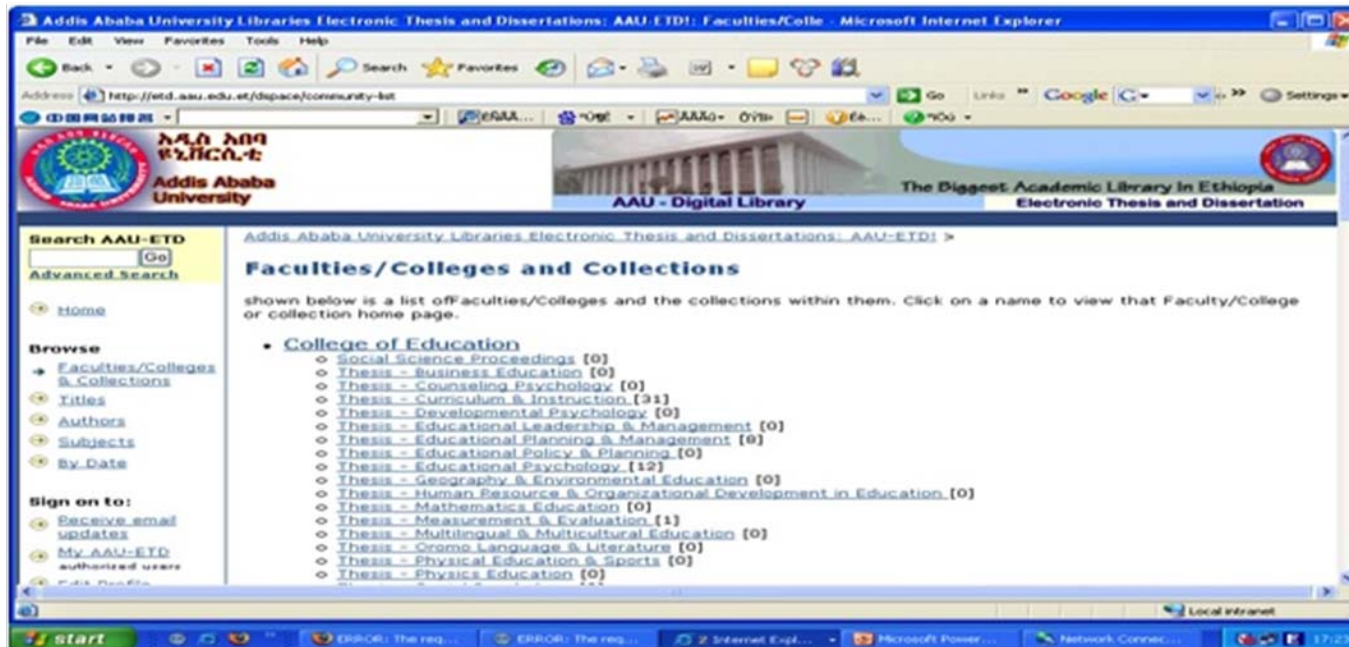
South African Institutional Research Repositories

- **North-West University (Mafikeng, Potchefstroom, Vanderbijlpark)**

- **University of Pretoria (Pretoria) 2 repositories**

- **Rhodes University (Grahamstown)**

- **Stellenbosch University (Stellenbosch)**

- **University of the Western Cape (Cape Town) 2 repositories**

- **University of the Witwatersrand (Johannesburg)**

- **University of Johannesburg (Johannesburg) 2 repositories**

- **Durban University of Technology (Durban, Pietermaritzburg)**

- **University of South Africa (Pretoria, Open Distance Learning) 2 repositories**

- **University of Cape Town (Cape Town)**

- **CSIR (Pretoria)**

Institution	Repository	Subjects	Types	System	Items
CSIR	CSIR Research Space	Science and Technology	Articles, Conferences	Dspace	821
Durban University of Technology	DUT IR	Multi disciplinary	Articles, Theses	Dspace	248
North West University	Boloka	Multi disciplinary	Articles, Theses	Dspace	1319
Rhodes University	ReRR	Multi disciplinary	Articles, Theses	Eprints	1065
Stellenbosch University	Sun ETD	Multi disciplinary	Articles, Multimedia	Dspace	1679
University of Cape Town	UCT CS	Computer Science	Miscellaneous	Eprints	290
	UCT LawSpace	Law and Politics	Miscellaneous	Dspace	197
University of Johannesburg	UJ DigiSpace	Multi disciplinary	Miscellaneous	Dspace	405
	RAU ETD	Multi disciplinary	Theses	ETD-db	846
University of Pretoria	UPSpace	Multi disciplinary	Miscellaneous	Dspace	5562
	UP ETD	Multi disciplinary	Theses	ETD-db	4224
University of South Africa	UnisaIR	Multi disciplinary	Miscellaneous	Dspace	120
	UnisaETD	Multi disciplinary	Theses	ETD-db	2002
University of the Western Cape	UWC Theses and Dissertations	Multi disciplinary	Theses	Unspecified	479
	AHERO	Multi disciplinary	Miscellaneous	Unspecified	165
University of the Witwatersrand	Wits ETD	Multi disciplinary	Miscellaneous	Dspace	5405
Total items in South African Research Repositories					**24827**

Contents of South African IRRs

Challenges

- **Invisibility of the African scholar**

- **Getting a mandate from the institution**

- **Selling the concept**

- **Recruiting content**

- **Need for IT support**

- **Description, indexing and metadata harvesting**

- **Digitization of resources and digital preservation**

- **Need for skilled human resources**

- **User expectations and increasing use**

- **Merger of institutions**

Benefits

- Enhanced global visibility of African scholarship

- Interoperability with other repositories

- Agreements with publishers

- Peer reviewing

- Self archiving of research not published in accredited journals

- One stop collection of an institution's research and intellectual outputs.

- Tool for assessment of researchers and academics.
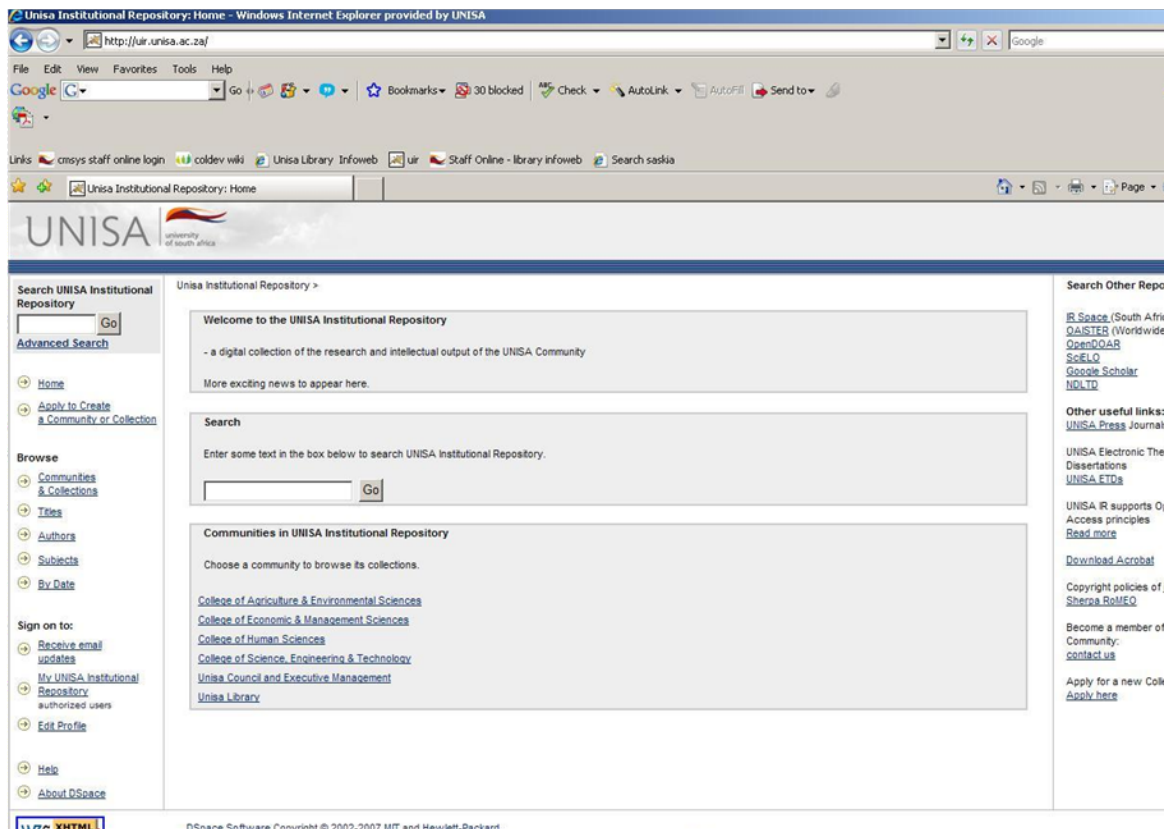
- Sharing of knowledge internationally.

Case Study:
Unisa Institutional Repository

- **Background of Unisa**

- **Planning and development**

- **Policy**

- **Pilot project**

- **Software evaluation**

- **Training of staff**

- **Evaluation**

- **Test report and recommendation**

- **Implementation on production**

- **Launch of the system**

Unisa institutional repository

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Gideon Emcee, Christian (2008) Issues and challenges to the development of open access institutional repositories in academic and research institutions in Nigeria, a Research Paper prepared for the International Development Research Centre (IDRC) Ottawa, Canada - http://idl-bnc.idrc.ca/dspace/bitstream/123456789/36986/1/127792.pdf

Report of the AAU /KIT/CARLIGH International Seminar on DATAD & Advocacy for Institutional Repository, March 2009, Accra, Ghana - http://irs.aau.org/workshop_report.pdf

Vermaak, Irene (2005) Implementing an EPrints repository system at a small South African university. In: ETD2005: Evolution through discovery, 28-30 September 2005, Sydney, Australia - http://eprints.ru.ac.za/283/

Opendoar: the Directory for open access repositories www.opendoar.org. Accessed on 24 May 2009