Towards Open Access Institutional Repositories in Zambian HEIs

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Key Questions

- **What is 'Scholarly Communication'**
  - The Conventional Method
  - Open access method
- **What are 'institutional repositories (IRs)'?**
- **Why HEA must mandate academic institutions to establish IRs?**
  - Enforcing IR establishment in Zambia
- **Implementation and implications IRs?**

Scholarly Communication

- **The "process of sharing, disseminating and publishing research findings of academics and researchers so that the generated academic contents are made available to the global academic communities" (UNESCO, 2015b).**
- **Process involves:**
  - "registration,
  - certification,
  - awareness,
  - archiving and
  - rewarding" (Jones, 2007)

Scholarly Communication Methods (1)

- **Channels of Scholarly Communications**
  - Academic Journals
  - Conference Proceedings
  - Research Monographs
  - Research Reports
  - Working Papers
  - Theses and Dissertations
  - Patents/ Standard

  UNESCO (2015)

Scholarly Communication Methods (2)

- **Traditional/Conventional Method**
  - How academic and scientific research was disseminated prior to electronic publishing and online digital documents.
- **Open Access**
  - **Green**: (E-print archives, Open archives, Self archiving and **Institutional repositories**)
  - Gold: The business Model/Open Access journals

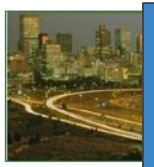
Situation Analysis

- **Structural problems with scholarly publishing**
  - Serials crisis
    - "a spiralling effect of constant increase in subscription cost of many scholarly journals and exponential hike of online access fees of e-journals..."
  - Impact barriers
    - Authors give away their content and want to achieve impact not income; want to disseminate research widely
    - but publishers want to restrict circulation based on subscriptions
  - Access barriers
    - Researchers want easy access to the literature
    - But most researchers do not have easy access to most of the literature

Online Visibility of Zambian Scholarly Output (1)

Use AJOL to:

- browse peer-reviewed journals from Africa,
- download full text articles from journal homepages,
- search for an article by title, author/s or keywords,
- and find other information sources and more resources for researchers and journals.



Featured Country: So

ge Systems

Zambian research output is not visible online [...]

Most recent issues on AJOL:

Vol 16, No 1 (2016)	Samaru Journal of Information Studies
Vol 8, No 3 (2018)	Open Veterinary Journal
Vol 10, No 2 (2018)	Journal of Research in Forestry, Wildlife and Environment
Vol 34, No 9 (1960)	South African Medical Journal
Vol 32, No 11 (1958)	South African Medical Journal
Vol 46 (2018)	Journal of Consumer Sciences
Vol 1, No 1 (2018)	Rwanda Journal of Medicine and Health Sciences
Vol 73, No 3-4 (2017)	Nigerian Medical Practitioner
Vol 6, No 2 (2018)	African Journal of Economic Review
Vol 14, No 2 (2018)	Journal of the Cameroon Academy of Sciences
Vol 45, No 1 (2018)	Medical Journal of Zambia
Vol 16, No 1 (2018)	Annals of Ibadan Postgraduate Medicine

- Free To Read Titles

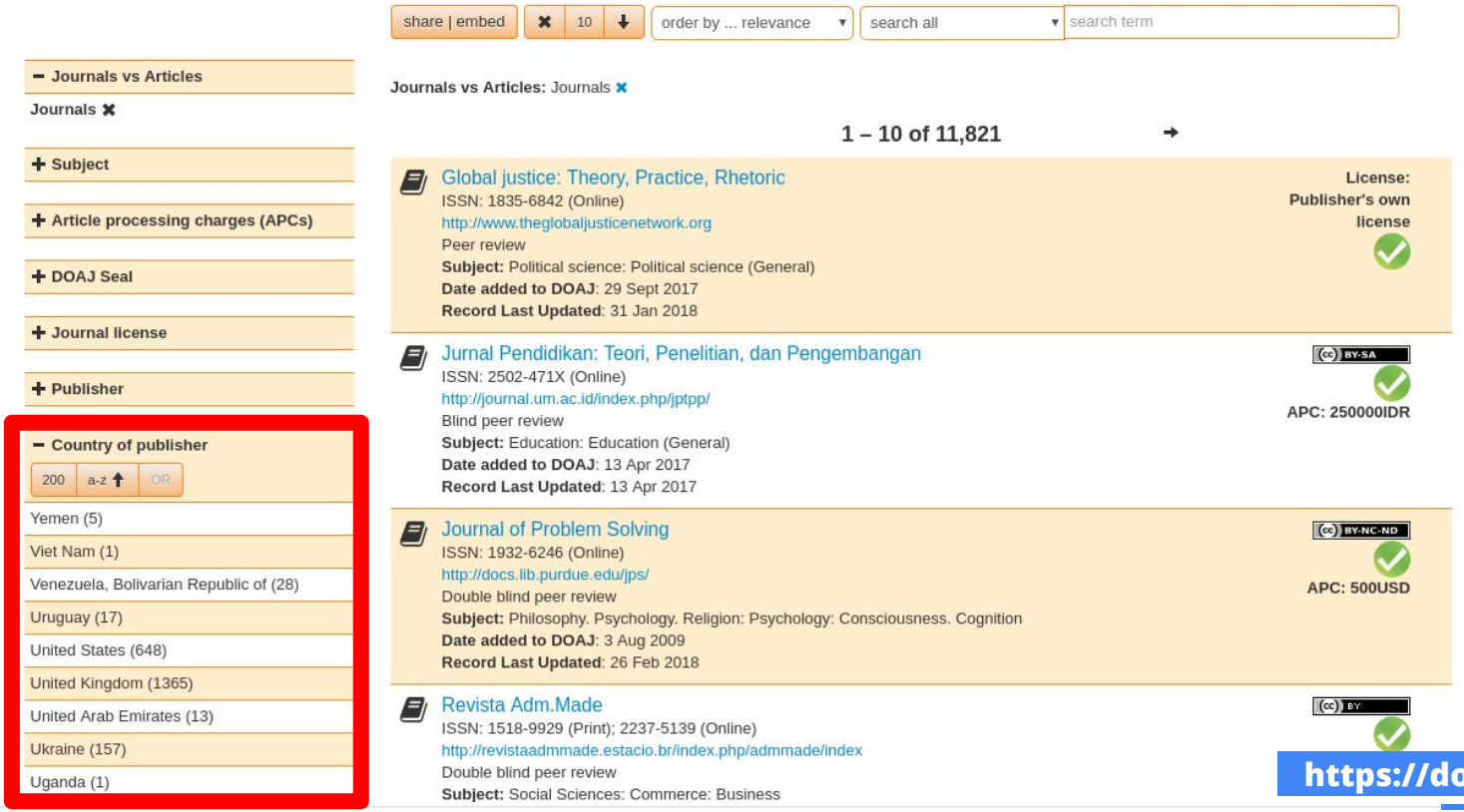
Featuring journals from 32 Countries:

- Algeria (5)
- Benin (1)
- Botswana (3)
- Burkina Faso (3)
- Cameroon (8)
- Congo, Republic (1)
- Côte d'Ivoire (4)
- Egypt, Arab Rep. (14)
- Eritrea (1)
- Ethiopia (30)
- Ghana (27)
- Kenya (29)
- Lesotho (1)
- Libya (2)
- Madagascar (1)
- Malawi (4)
- Mauritius (3)
- Mozambique (1)
- Nigeria (222)
- Rwanda (5)
- Senegal (6)
- Sierra Leone (1)
- South Africa (96)
- South Sudan (1)
- Sudan (3)
- Swaziland (3)
- Tanzania (19)
- Togo (1)
- Tunisia (2)
- Uganda (12)
- Zambia (2)
- Zimbabwe (12)

Like 7K Share

https://www.ajol.info

Online Visibility of Zambian Scholarly Output (2)



Online Visibility of Research Impacts Rankings

ranking	World Rank	University	Det.	Country	Presence Rank*	Impact Rank*	Openness Rank*	Excellence Rank*
57	2524	University of Mauritius	»		2358	5585	2106	2484
58	2566	Suez Canal University	»		7600	9238	5495	1249
59	2577	Université Abou Bekr Belkaid Tlemcen	»		491	6841	2602	2395
60	2598	University of Zambia	»		424	8780	3826	1884
61	2629	Jomo Kenyatta University of Agriculture and Technology	»		648	5217	2558	2805

Research output is also key topic for Webometrics, but including not only formal (e-journals, repositories) publications but also informal scholarly communication. Web publication is cheaper, maintaining the high standards of quality of peer review processes. It could also reach much larger potential audiences, offering access to scientific knowledge to researchers and institutions located in developing countries and also to third parties (economic, industrial, political or cultural stakeholders) in their local community.

We intend to motivate both institutions and scholars to have a web presence that reflect accurately their activities. I**f the web performance of an institution is below the expected position according to their academic excellence, university authorities should reconsider their web policy, promoting substantial increases of the volume and quality of their electronic publications**.

http://www.webometrics.info

Open Archives

- 'Open' = freely accessible and/or interoperable
  - Open Archives Initiative (OAI):
  - "develops and promotes interoperability standards that aim to facilitate the efficient dissemination of content."
  - OAI Metadata Harvesting Protocol
    - allows metadata from different archives to be harvested and collected together in searchable databases
- creates the potential for a global virtual research archive

Self Archiving

- **Author self-archiving**
  - "...an umbrella term often applied to the electronic posting, without publisher mediation, of author-supplied research."
- **Institution self-archiving**
  - Institutions may post articles on behalf of authors

Institutional Repositories

- **Institutional repositories (IRs): "digital collections that preserve and provide access to the intellectual output of an institution."**

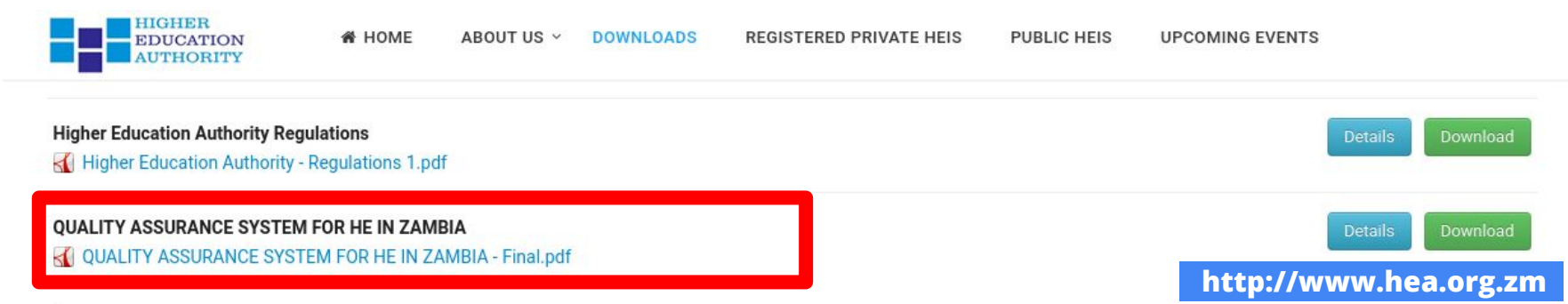
Why institutional repositories?

- **Situation analysis**
  - structural problems in scholarly publishing
    - Serials crisis, Impact barriers and Access barriers
  - e-print repositories a possible solution
- **Benefits**
  - for the researcher
  - for the institution
  - for the research community

Why Mandate IRs Adoption in Zambia (1)

- Quality assurance
- Facilitate the dissemination of research—applied research—output to a much wider audience.
- Raising profile and prestige of academics and institutions in Zambia
- Increases competitiveness
- Reduces institutional cost

Why Mandate IRs Adoption in Zambia (2)

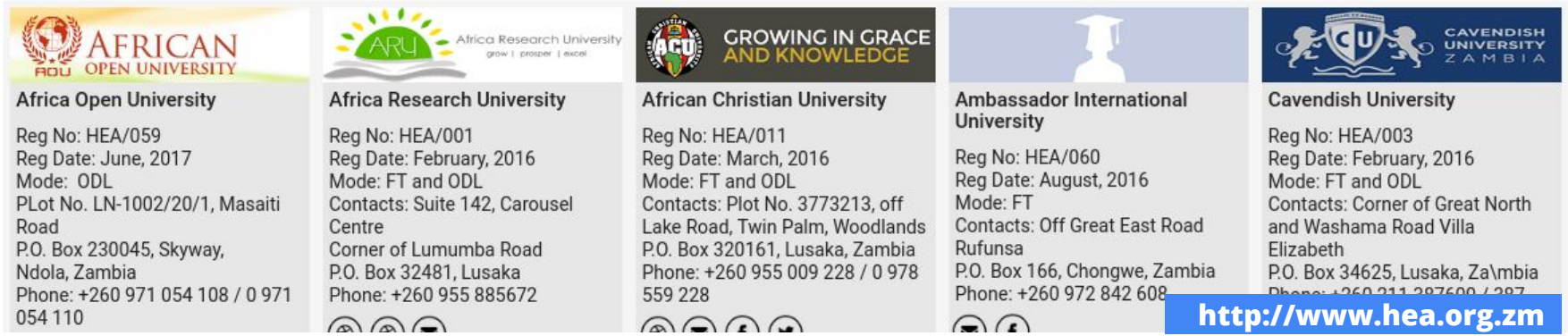


NON-CORE REQUIREMENTS	
Criteria	**Elements**
Vision, Mission and Strategy (40%)	• A Vision Statement which has been formally adopted. • A Mission Statement which reflects the character of the Instituti • A Strategy which indicates short, medium, and long term objectiv
Research (35%)	• Research Policy and Strategy. • Facilities and equipment to support the research strategy. • Mechanisms to ensure compliance with ethical standards.
Technological Infrastructure (25%)	• Facilities and platforms for e-learning. • Access to the internet for students and staff. • Management Information Systems.

While research is an HEA non-core requirement for private HEIs, IRs provide measurable metrics [...]

Why Mandate IRs Adoption in Zambia (3)

Registered Private HEIs



Africa Open University

Reg No: HEA/059
Reg Date: June, 2017
Mode: ODL
PLot No. LN-1002/20/1, Masaiti Road
P.O. Box 230045, Skyway, Ndola, Zambia
Phone: +260 971 054 108 / 0 971 054 110

Africa Research University

Reg No: HEA/001
Reg Date: February, 2016
Mode: FT and ODL
Contacts: Suite 142, Carousel Centre
Corner of Lumumba Road
P.O. Box 32481, Lusaka
Phone: +260 955 885672

African Christian University

Reg No: HEA/011
Reg Date: March, 2016
Mode: FT and ODL
Contacts: Plot No. 3773213, off Lake Road, Twin Palm, Woodlands
P.O. Box 320161, Lusaka, Zambia
Phone: +260 955 009 228 / 0 978 559 228

Ambassador International University

Reg No: HEA/060
Reg Date: August, 2016
Mode: FT
Contacts: Off Great East Road Rufunsa
P.O. Box 166, Chongwe, Zambia
Phone: +260 972 842 608

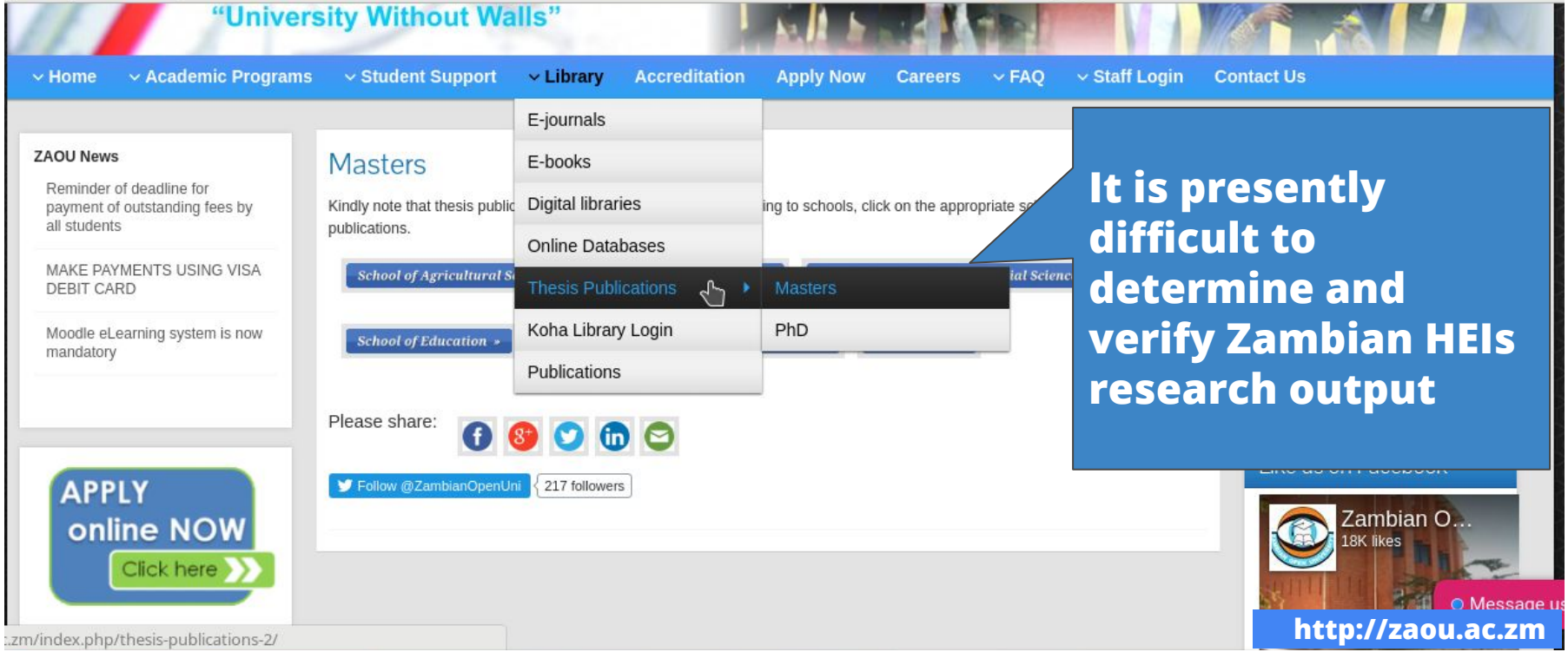
Cavendish University

Reg No: HEA/003
Reg Date: February, 2016
Mode: FT and ODL
Contacts: Corner of Great North and Washama Road Villa Elizabeth
P.O. Box 34625, Lusaka, Za\mbia

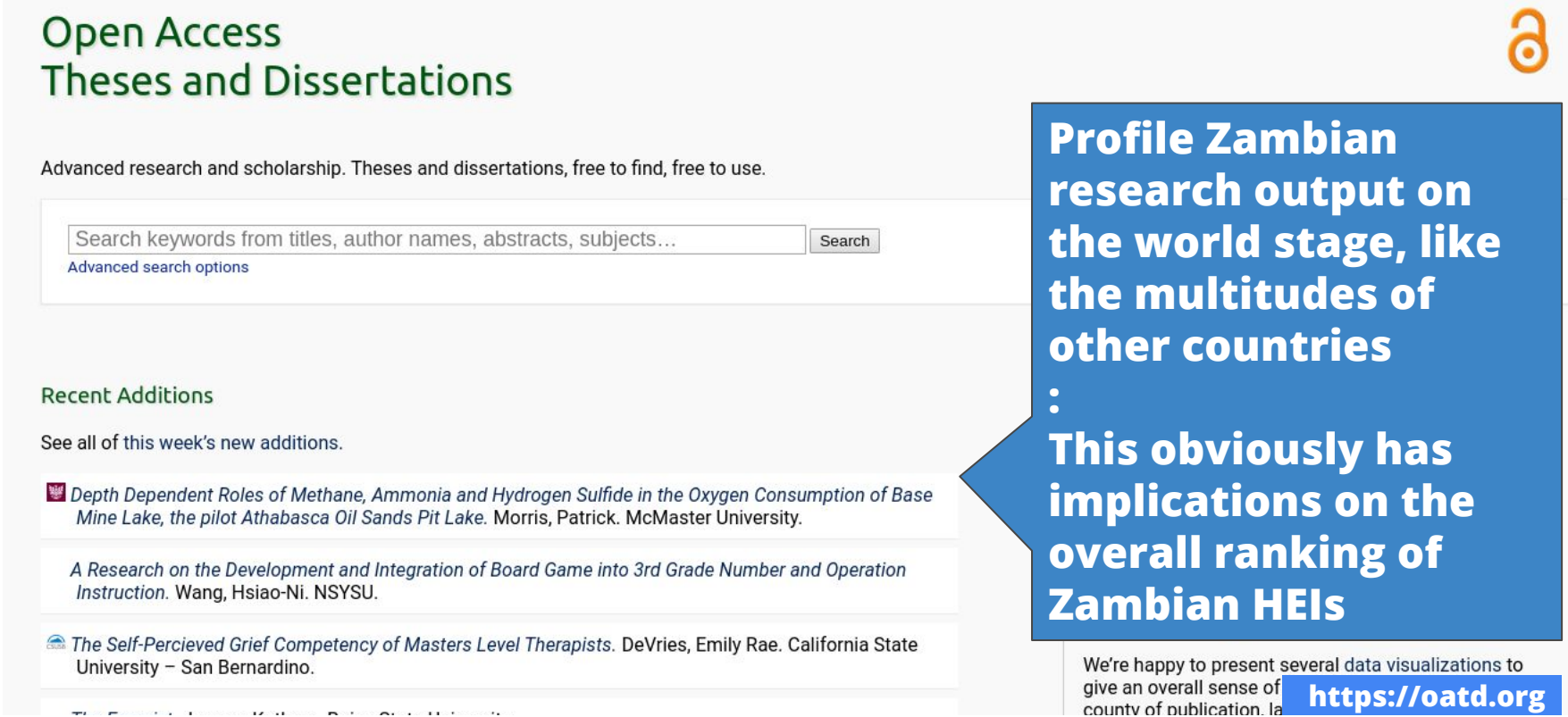
http://www.hea.org.zm

- **Preliminary analyses suggest that of the 66 HAE public and private HEIs accredited by HEA, only two have functional IRs**
  - The University of Zambia and Copperbelt University have functional IRs

Why Mandate IRs Adoption in Zambia (4)



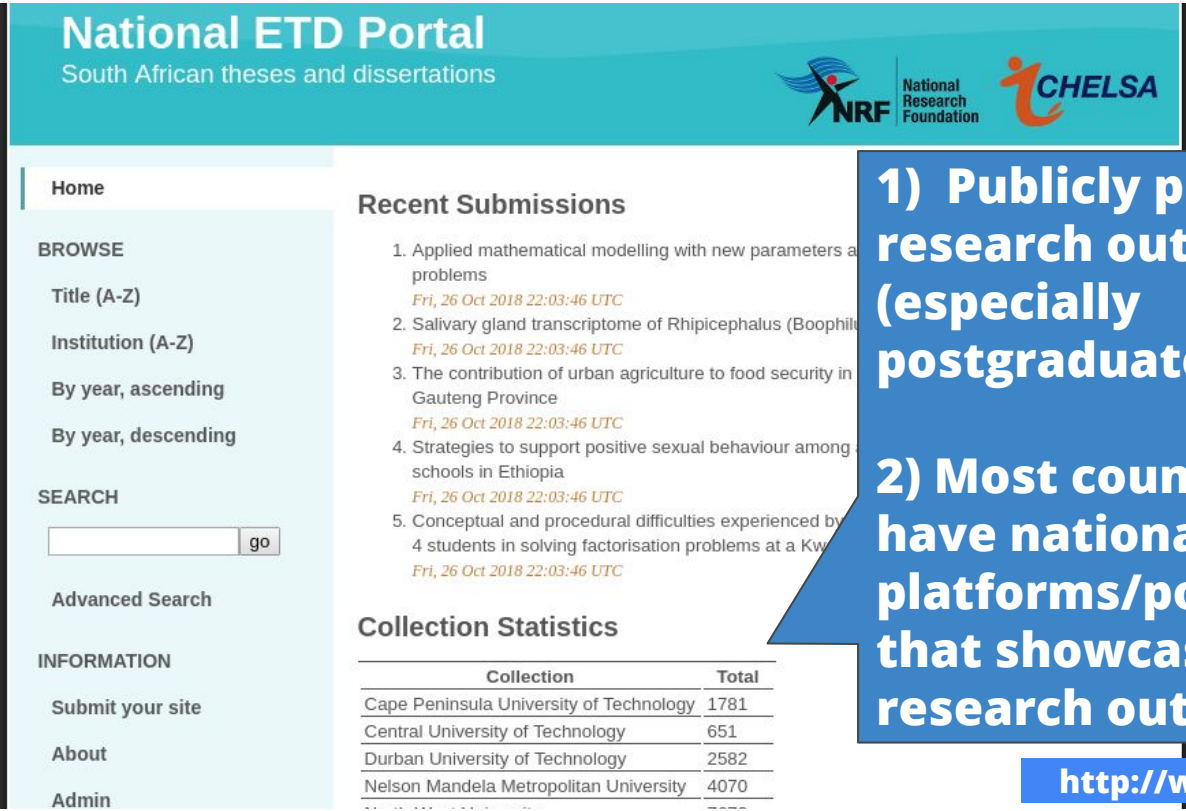
Why Mandate IRs Adoption in Zambia (5)



Profile Zambian research output on the world stage, like the multitudes of other countries :

This obviously has implications on the overall ranking of Zambian HEIs

Why Mandate IRs Adoption in Zambia (6)

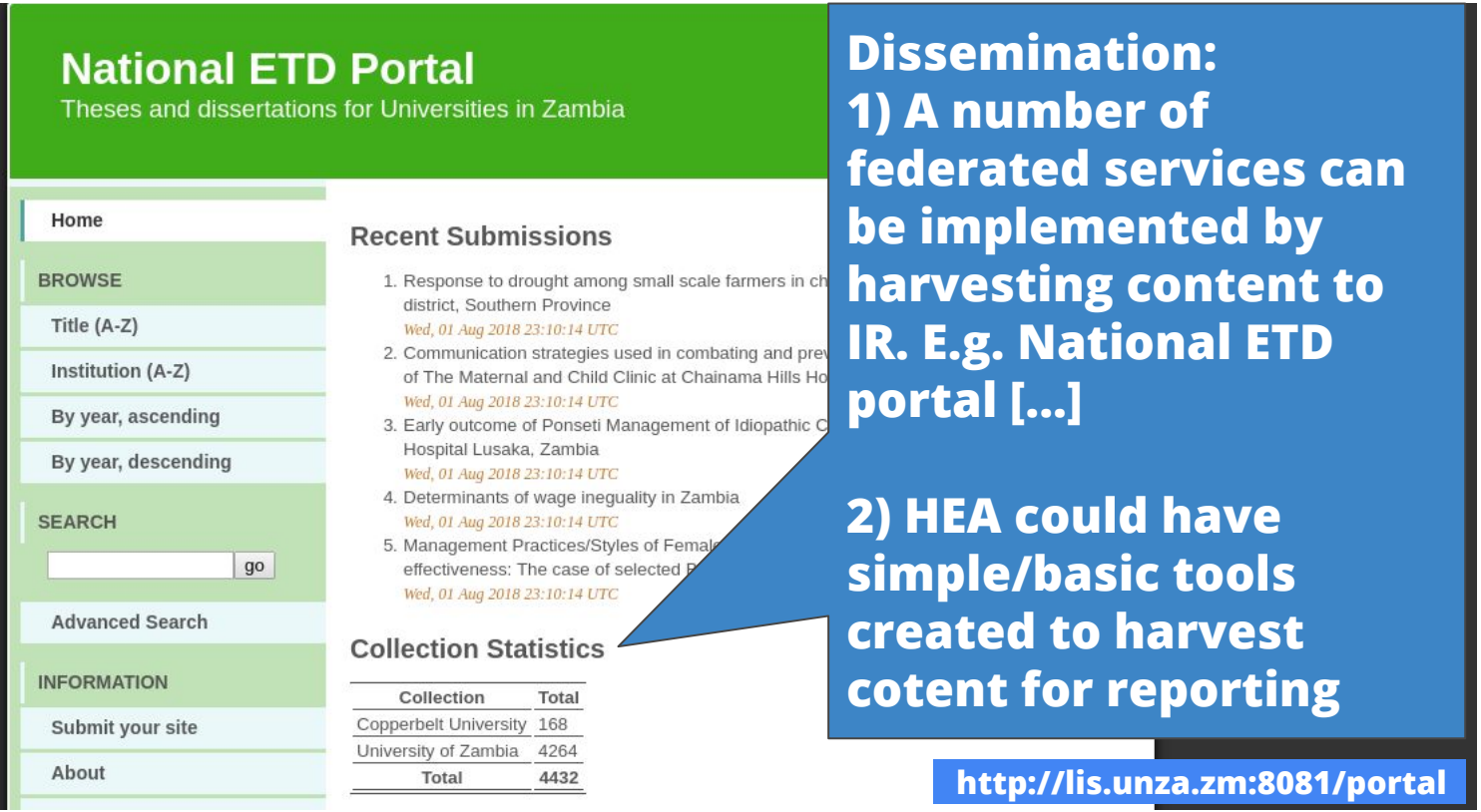


1) Publicly profile research output (especially postgraduate output)

2) Most countries have national platforms/portals that showcase research output

http://www.netd.ac.za

Why Mandate IRs Adoption in Zambia (7)



Dissemination:
1) A number of federated services can be implemented by harvesting content to IR. E.g. National ETD portal [...]

2) HEA could have simple/basic tools created to harvest cotent for reporting

http://lis.unza.zm:8081/portal

Enforcing adoption and implementation

- **HEA to adopt IRs as quality assessment tool**
- **HEA to be part of the key stakeholders to develop a national open access policy:**
  - Mandate all higher education institutions to have OA policies aligned with the national policy.
  - Mandate open access to all publicly funded research.
  - Mandate all higher education institutions to have IRs and online journals.

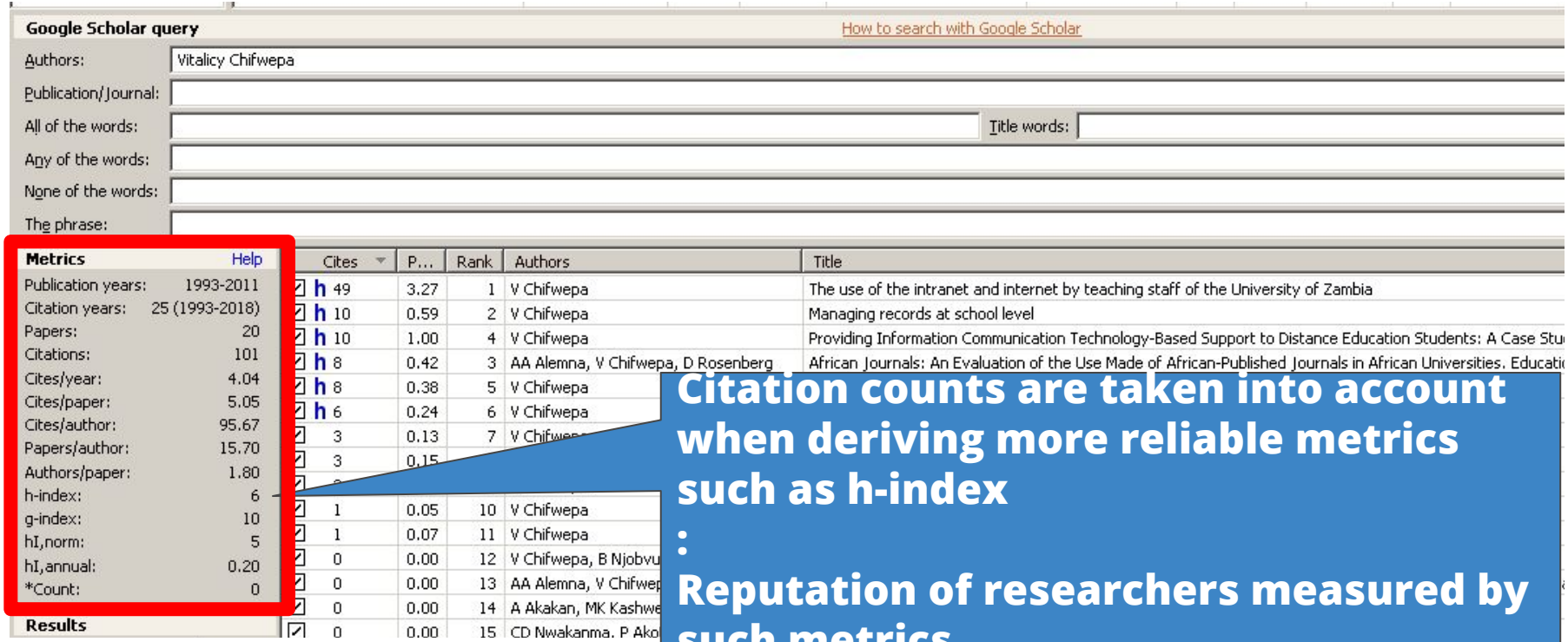
Implementation of IRs

- **Institutional 'OA' policy/mandate to be used as a driving force.**
  - Decide on content to curate.
- **There are numerous Free and Open Source IR software tools available.**
  - Installation, configuration and administration.
  - Local expertise exists to help institutions install and configure IRs.
- **Institution IT departments can easily handle installation and configuration, while libraries would manage ingestion of content and IR management.**

Implications of IR Adoption (1)

- **Sensitise academic staff in HEIs on the value of IRs.**
  - OA influences citation count.
  - Some HEIs in Zambia, e.g. UNZA, have started using citation count as metrics for assessing performance of academics.
- **Training institution staff on how to work with IRs.**
  - Library staff would require training in workflow management.
  - IT support staff would require training on administration of IRs.

Implications of IR Adoption (2)



Citation counts are taken into account when deriving more reliable metrics such as h-index

:

Reputation of researchers measured by such metrics

Publish or Perish

Conclusions

- **The UNZA's Department of Library and Information Science will be hosting an OA and IR implementation workshop in the next coming weeks**
- **There is a need to initiate works on a national Open Access Policy**
- **Policy and technology are not panaceas.**
  - Policy implementation and a mandate could potential facilitate implementation of OA and IRs
  - Studies would need to be conducted

Bibliography

[1] UNESCO (2015), Introduction to Open Access. http://unesdoc.unesco.org/images/0023/002319/231920E.pdf

[2] Webley, L., T. Chipeperekwa and H. Suleman (2011), Creating a National Electronic Thesis and Dissertation Portal in South Africa http://pubs.cs.uct.ac.za/archive/00000748

[3] Lynch, C.A., 2003. Institutional repositories: essential infrastructure for scholarship in the digital age. https://muse.jhu.edu/article/42865/summary

Thank you for your attention!

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