

# South African research policy and practice in the digital age

Workshop on Electronic Publishing and Open Access  
A developing Country Perspective

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# **Making Knowledge Work for Development**

**Whose knowledge, for what,  
for whom?**



# The importance of research dissemination



# The body count



# The body un-count

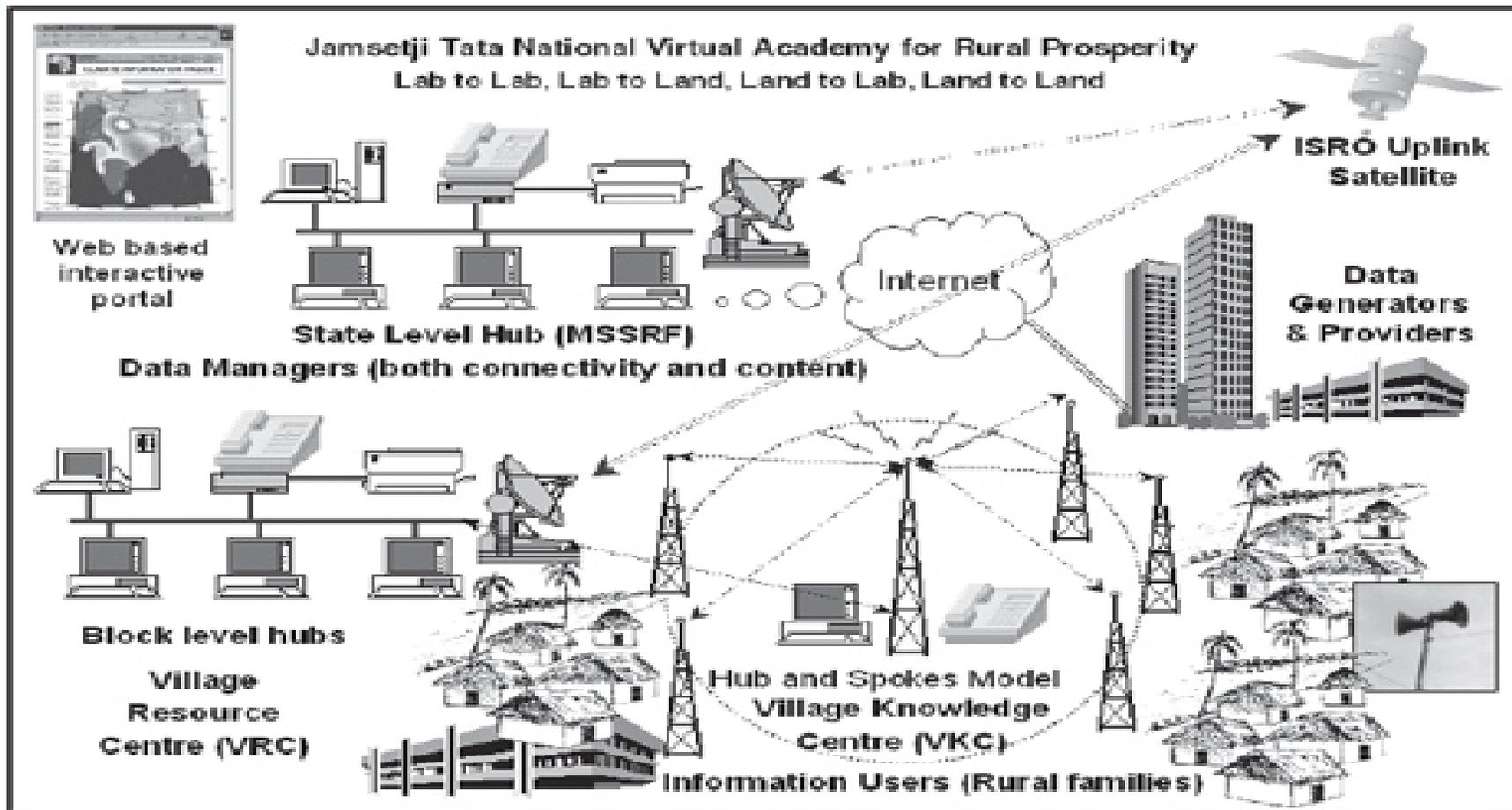


Figure 6.1: *ICT-enabled knowledge flow*

The benefits of research are derived principally from access to research results. To the extent that the dissemination of research results is less than might be from given resources, we can argue that the welfare of society is sub-optimal. Currently access to research is restricted and the means to gain access is determined by a market in which a number of publishers have a dominant position.

Wellcome Trust.



In Africa, with its urgent development needs, research dissemination can be a matter of life or death.



# But African knowledge is marginalised ..

- Africa produces around 3% of books published, but consumes around 12%.
- Africa produced 0.2% of online content in 2002 – if South Africa is excluded, 0.02%.
- The major Northern scholarly journals account for 80% of articles. 163 developing countries produce 2.5%.
- SA has just 0.5% of the articles in Thompson Scientific indexed journals.



# Research in South Africa

In 2003, South Africa spent R1.6 billion (US\$ 320 million) on publicly-funded research in universities

# Research dissemination in South Africa

'Formal' publishing



# Journal publication

- Around 255 journals published in SA recognised for state subsidy.
  - 23 are in ISI indexes; 14 in IBSS
  - 220 accredited by the Department of Education
- Ageing cohort of researchers publishing – mostly white male
- 55-60% cater for social sciences, law and education
- Print runs below 1,000 and institutional subscriptions average below 250.



# The place of SA journals in the global system

- Around 3,500 papers with at least one SA author published worldwide in 2000. 7,000 articles when one includes SA-accredited journals. This represents 0.5% of total.
- SA journals constituted 19-23 of the journals in the ISI indexes, with 350 articles(0.2%) (the rest of Africa only 2 journals)
- Of the top-cited 1% of ISI journals, 1.5% had an SA address
- SA ranks 26th, with Sweden in no of ISI journals



# University Presses

- 6 university presses under pressure to 'break even', publishing low volumes
- The result – convergence with the upper end of the trade market
- Unable to publish specialist research output
- The HSRC is a dual stream OA digital and for sale print publisher



# 'Grey' publishing

- Scholarly NGOs are successful research publishers
- Research centres like the Centre for Government and Plaas produce important and prolific research publications
- Business schools training materials, research reports from research units...
- Resource collections from units such as Mayibuye ANC archives..



# Conventional scholarly publishing does not work well in Africa

Very real barriers to dissemination within and between African countries and in the North

The 'core journal' philosophy that underlies the citation indexes marginalise even further those on the periphery

The system works to create a 'club' that excludes outsiders through its selection processes and value criteria



# African research policy on centre stage

- World Bank has changed direction – higher education now seen as a key driver for African economic growth
- NEPAD calling for input into African Science and innovation facility
- Funding is likely to be available for R&D
- Higher education policy suddenly a critical field



# Research policy - the need

There is a fundamental need to develop policies and strategies that would grow the output and effective dissemination of Africa-based research in and from Africa, for African development, in the most appropriate media and formats



# Policy- making – the challenge

Policy-makers need the capacity to look forward, to plan policies that will still be viable in 2016, not just 2006 (let alone 1996)



- Policy-makers need to discern, based on their expert knowledge, the future trajectories of the subject and the interventions that might improve its development ...

(NEPAD 2005)



'The common mimetic route is to define the nature of capacity-building in terms of what is now seen as important. This may well be a recipe to become obsolete before one's time. The world (of science and more generally) may well evolve in such a way that present-day exemplars will be left behind.'

Arie Rip 'Lock-ins and the Heterogeneity of Knowledge Production' In Kraak *Changing Modes* 2000



# What does this mean for African research publication policy?

New technologies and new modes of production offer real opportunities to break the cycle of dependency and dysfunction

The problem is the predominance in African HE policy of received, outdated paradigms and policies



# Some preconceptions to be dissipated

- Research dissemination is not the business of universities
- Scholarly publishing is all about personal promotion
- Journal articles are the best way to publish research
- Scholarly publishing is a profit-based business
- And therefore universities do not need to fund it
- International is by definition superior



# Policy-making in South Africa - the reality

Two, clashing policy discourses



# Research policy – the Department of Science and Technology

- Strong commitment to development goals and poverty reduction, research to meet national needs
- Uses the language of 'Science' and 'Innovation'
- Acknowledges the 'African reality' and stresses the importance of the humanities and social sciences
- Talks of the importance of the information revolution
- Promotes the idea of collaboration across disciplines, institutions and countries



# But....

- Uses counts of patents and accredited journal articles as measures of success
- Contradictory approaches to IP policy
- Dissemination and publication hardly appear
- The 'information revolution' appears to apply only to the technological vehicle, not the contents no 'communication' in ICT
- Instrumentalist approach to communication of research findings



**What would be the shape of a publication and communication policy to deliver development-focused goals?**



# Research publication policy – the Department of Education

- Talks of the need to promote research to meet development goals
- Identifies the importance of the social sciences as mediators of research knowledge
- Talks about the 'changing modes of disseminating research and output'



# But...

- 'Publish or perish' and publishing by numbers
- The system is a mechanical one of numerical counts – number of journal articles, number of patents
- Journal articles are seen as the major output
- 'Originality' and personal achievement supersede collaboration
- International citation indexes are the measure of quality



**The effect - a collision between a 21<sup>st</sup>  
century research policy environment  
and a 19<sup>th</sup> to 20th-century research  
publication policy**



We forget too readily that the accepted scholarly publishing system is not 'traditional' but a very recent invention – a combination of the massification of education and the corresponding consolidation of publishing by media baron Robert Maxwell



As Paul Zeleza has argued, tvery  
forcefully, the system is biased against  
women, racial minorities and scholars  
from outside the metropolitan centres  
and is built around Western realities,  
paradigms and values



# Why journals?

- The emphasis on mainstream journals in international indices skews research priorities – critical research areas of importance to the developing world can be marginalised
- Local researchers target international priorities for reasons of prestige and promotion
- Restricted access to international research findings can block development needs
- Local- interest research gets second-rate status
- Journal information out-of date by publication



# The costs of this model

- Universities ignore the real costs of their contribution
- In Australia the cost of getting an article published (authoring, peer reviewing, editorial activities) is AUD19,000.00
- A monograph costs AUD115,000.00
- The costs of administering the evaluation and assessment process are even higher

Government of Australia, Department of Education, Science and Training.  
*Research Communication Costs in Australia: Emerging opportunities and benefits.*

# Open Access – a counter-movement

- The importance of access to research knowledge, particularly when it is publicly funded
- A more logical economic model
- Digital dissemination increases reach
- Massively increased impact, particularly for content from developing countries
- A rapidly growing movement – now 20,000 OA journals



# Open Access in South Africa



# The Academy of Science Report

- Proposals for a research publication strategy, commissioned by the DST
- Detailed analysis of accredited journal publication
- Recommends Open Access publishing
- Support for publishing and quality control by ASSAf
- Ring-fencing of a percentage of the publication grant paid by government
- <http://www.assaf.org.za/>



# Recommendations of the ASSAf report

- Centralised management of journal publication; consolidation and rationalisation of journals
- Open Access – championed by the Department of Science and Technology:
  - 'gold route' journals
  - federation of repositories, augmented by centralised repository
- National harvesting as an urgent necessity – preferably by the NRF
- DST should become involved in international initiatives for more equitable listing and indexing systems



# The HSRC Press – Open Access monographs

- Online Open Access publication of books, research reports, discussion papers. 250 publications online
- Parallel print publications for sale at subsidised prices
- Professional publishing
- Intensive marketing
- Investment by the HSRC



# The results

- Dramatic increase in impact - first stop for policy-makers, government, academics
- International reach
- High levels of downloads
- Publications used in university courses
- Rapid publication for immediate impact
- List focused on priority development needs
- <http://www.hsrcpress.ac.za>



**Now the Council for Scientific and  
Industrial Research is following  
suit, with an Open Access policy**



# Research repositories

- Taking off slowly, somewhat fragmented
- There is a need for a policy driver to ensure more rapid development of repositories
- A need for a much more integrated approach to all Open Access initiatives



Research publication needs to be put on the agenda for debate and discussion

Dissemination and publication need to be recognised as worthy of support

Research and publication skills are needed for effective dissemination



<http://www.evegray.co.za/>  
[http://blogs.uct.ac.za/blog/gray\\_area](http://blogs.uct.ac.za/blog/gray_area)  
<http://www.policy.hu>  
<http://www.cet.ac.za>

