

This summary is based upon the ACU report Current Practice in Research Ethics: Global Trends and New Opportunities for African Universities (2007) which is made available to members of the **Research Africa** network. Key excerpts are included in the summary.

1. Introduction

Research Ethics has emerged as one of the most well-developed policy areas within the sphere of Research and Innovation Management. As such, for African institutions looking to strengthen their policy frameworks, develop increased collaborations, and increase research outputs, a thorough appreciation of global trends in Ethics will be vital.

Drawing on data compiled in the Association of Commonwealth Universities (ACU) *Research Management Good Practice Index (the Index)*, this report analyses Research Ethics policy documents in place at African institutions and at institutions around the world, and identifies key trends in these documents.

2. The Research Management Good Practice Index

At the time the report was written, the *Index* included 659 distinct documents which are in place at 92 institutions around the world, though this figure is constantly changing as new documents are contributed and the *Index* is updated. Documents in the *Index* have been either submitted to the ACU directly by the authoring institution for inclusion, or have been included through ACU-based research into universities' policies. As such, the document sample in the *Index* must be considered to be illustrative and subject to continual updating.

260 of the documents in the *Index* relate to Research Ethics, and they are in place at 64 institutions across 9 countries. Seven African institutions have contributed 19 Ethics documents to the sample. African contributing institutions are based in South Africa, Botswana, and Kenya. In the full report, special attention is paid to case studies from African institutions to help us link global policy trends with developments in an African context.

For the purposes of this report, Research Ethics has been divided into four sub-themes, including: Human Research Ethics; Animal Research Ethics; Conflict of Interest; and Ethics in Graduate Supervision. Documented examples of current practice have also been distinguished as: policies; guidelines; template forms; and services. All documents have also been searched for particular "policy elements," or particular passages and provisions, to allow for a qualitative comparison of document content across the sample. The report's appendices provide maps of policy elements which compare commonalities in specific provisions and passages across institutions and countries.

The purpose of the *Index* is to provide users at emerging institutions and Predominantly Undergraduate Institutions (PUIs) in the **Research Africa** network with an interactive policy tool that allows them to study outstanding examples of current Research Management practice around the world, and to learn from innovations that have proven successful in different institutional contexts. The objective of consolidating this information and making it more accessible is to encourage such institutions to develop the policy infrastructures which are necessary to generate sustainable research outputs, attract new funding, retain research staff, and strengthen their roles in local economies.

3. Key Findings in Research Ethics

The Ethics documents in our sample have been drawn from: Australia, Botswana, Canada, the Republic of Ireland, Kenya, New Zealand, the Republic of South Africa, the United Kingdom, and the United States. The great majority of policy documents are drafted in English, though 11 documents are written in French, and one is in Afrikaans.

Key Points from Africa

- 38% of documents indexed from African institutions cover Human Research Ethics, while 37% of documents from non-African institutions cover this sub-theme, reflecting an instance of regional parity.
- 47% of documents indexed from African institutions are policies (as opposed to guides or forms), while 50% of non-African documents are also policies.
- Non-African documents emphasise Conflict of Interest, with 31% of documents in this sub-theme. Only 16% of African documents, however, cover Conflict of Interest.
- Every South African institution in the sample has ensured the confidentiality of Human Research subject identities in their policies, which no other country has done.
- A high proportion of Animal Research Ethics documents from African institutions include some of the world's most detailed application forms and rigorous policies. There is a high degree of coherence between the policy elements in place among differing South African institutions, reflecting national coherence in this area.

Other Key Points

- The United Kingdom is the only country to have emphasised Conflict of Interest above other sub-themes. The most common sub-theme is Human Research Ethics.
- Australia has the highest proportion of documents indexed in Ethics, with 29% of documents. The United States has submitted 28% of documents, Canada has contributed 20%, and the United Kingdom has submitted 13%.
- Australia dominates in its development of Ethics in Graduate Supervision, contributing 20 documents to the sample of 35.
- Human Research Ethics exhibits greater global consensus than other sub-themes. 25% of policy elements in this sub-theme are common to a majority of HEIs in the sample. Only 15% of Conflict of Interest elements are common to a majority of HEIs, and 4% of Animal Research Ethics contain elements common to a majority of HEIs.
- In Conflict of Interest, the United States leads with a high number of policy elements across institutions. 49% of the element count in this sub-theme is attributed to American institutions, reflecting a relatively cohesive national approach.
- Also in Conflict of Interest, every Australian document in the sample requires the disclosure of staff and family material interests in external research projects. Also, every U.S. document in the sample requires the same, as well as reporting on indirect benefits, and reporting on consultancy activities
- Human Research Ethics and Animal Research Ethics are dominated by policies and submission form documents, with a relatively smaller share of guidelines. This reflects a high degree of institutional engagement with research in these sub-themes. Conflict of Interest, conversely, is led by guidelines, reflecting a trend in case-by-case management of issues in this sub-theme.

4. Total Current Practice in the Index, by Country and Document Type

Table 1

Country	Policy		Form		Guide		Service		Grand Total	
Australia	69	39.2%	54	30.7%	47	26.7%	6	3.4%	176	26.7%
United States	83	49.4%	53	31.5%	29	17.3%	3	1.8%	168	24.5%
Canada	105	71.4%	16	10.9%	23	15.6%	3	2.0%	147	22.3%
UK	28	32.9%	15	17.6%	30	35.3%	12	14.1%	85	12.9%
South Africa	18	36.0%	8	16.0%	14	28.0%	10	20.0%	50	7.6%
New Zealand	5	29.4%	3	17.6%	4	23.5%	5	29.4%	17	2.6%
Botswana	3	60.0%			1	-	1	-	5	0.8%
Mauritius							4	100%	4	0.6%
Ireland	1	-	1	-					2	0.3%
Kenya	1	-							1	0.2%
Namibia							1	-	1	0.2%
Nigeria					1	-			1	0.2%
Singapore	1	-							1	0.2%
Tanzania					1	-			1	0.2%
Grand Total	314		150		150		45		659	
	47.6%		22.8%		22.8%		6.8%			

Table 1 illustrates the totality of policy documents included in the *Index* as of August 2006, including all Research Management themes and all document types. Australian institutions have made the highest contribution to the *Index*, with 176 policy documents catalogued. Of these, 39% of Australian documents are policies, while 31% are forms and 27% are guidelines. Our sample of U.S. policy documents shows a higher proportion of policies, with nearly 50% of U.S. documents falling into this category. Only 17% of U.S. documents in the *Index* are guidelines.

Canada, which contributes the third-highest number of documents to the *Index*, has an even higher proportion of policy documents: 71% of Canadians submissions are policies, the highest proportion in the *Index*, while 15% of documents are guidelines, and just 11% are template forms, which is the lowest proportion in the *Index*. This suggests that developing a high volume of Research Management policies tends to take precedence over the provision of actual contract templates and forms available online in Canadian institutions.

The United Kingdom has a relatively high proportion of guidelines in the *Index*: indeed, it is the only country from which we have found more guidelines than any other document type. 35% of UK documents are guides or strategies, while 33% are policies, and 17% are template forms. A relatively high number of online services, such as staff expertise databases and costing tools, are in place in UK institutions as well. Compared with other countries catalogued in the *Index*, British universities double the average number of online services.

African institutions, as indicated, do not make up a large quantity of the total contributions to the *Index*, though South Africa has 50 documents included at the time of writing. South African documents tend towards guidelines and strategies, with 28% of contributions falling into this category, beating the average of 22.8%. Although South Africa is slightly below average on the number of policies contributed to the *Index*, their proportion of 36% is nevertheless higher than the UK average. It should be noted as well that a number of South African institutions were unable to contribute policy documents to the *Index* at this point in time due to ongoing policy revisions.

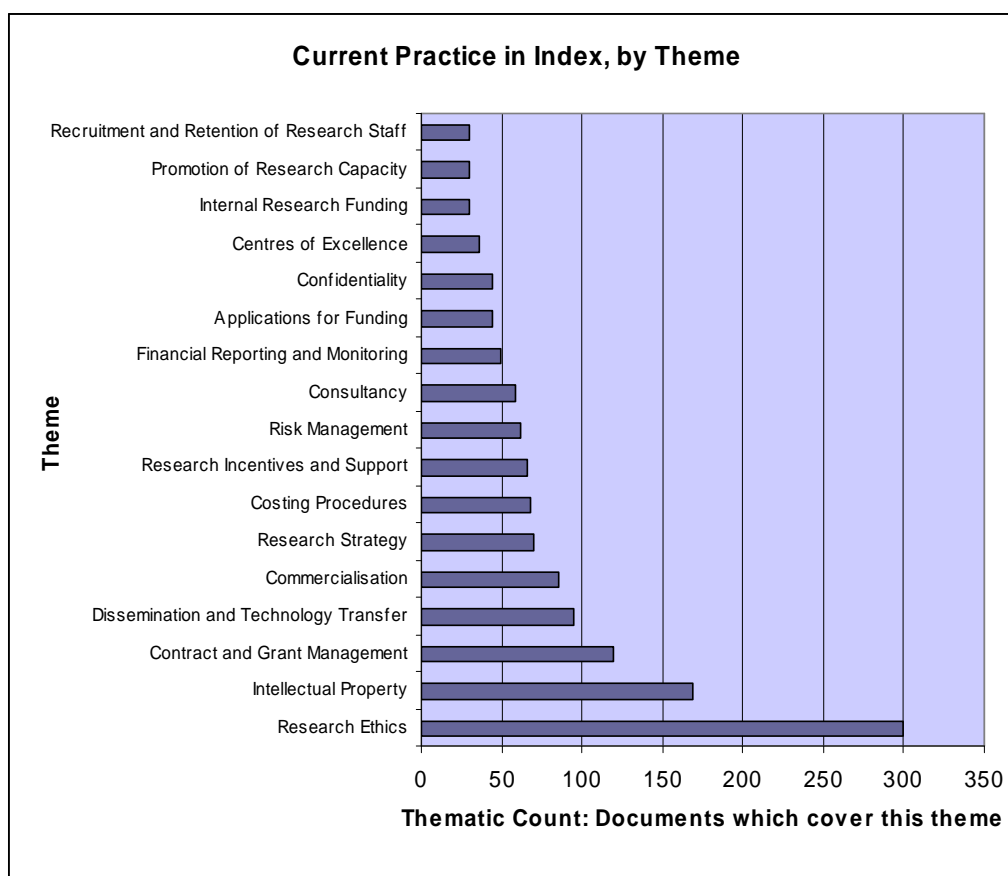
5. Current Practice in the Index, by Theme

Table 2

Theme	Total	
Research Ethics	300	20.6%
Intellectual Property	169	11.6%
Contract and Grant Management	119	8.2%
Dissemination and Technology Transfer	95	6.5%
Commercialisation	85	5.8%
Research Strategy	70	4.8%
Costing Procedures	68	4.7%
Research Incentives and Support	66	4.5%
Risk Management	62	4.3%
Consultancy	59	4.0%
Financial Reporting and Monitoring	49	3.4%
Applications for Funding	44	3.0%
Confidentiality	44	3.0%
Centres of Excellence	36	2.5%
Internal Research Funding	30	2.1%
Promotion of Research Capacity	30	2.1%
Recruitment and Retention of Research Staff	30	2.1%
(all others combined)	102	7.0%
Grand Total	1458	

Percentages may not add to 100 due to rounding

Figure 1



Many catalogued documents cover more than one Research Management theme, leading to a higher thematic count than total documents. As such, the 659 documents in our catalogue cover a range of 1,458 thematic points. **Table 2** demonstrates that Research Ethics is the most common, with 300 thematic hits, 21% of the thematic count. Some of these documents relate to two or more sub-themes within Ethics (for example, Human Research Ethics, Animal Research Ethics, and Conflict of Interest can be components of the same document).

Intellectual Property is the second best-attended theme in the *Index*, with 11.6% of thematic counts included within IP. These 169 thematic hits span just 98 documents (which include sub-themes in IP such as Ownership, Conflict Resolution, and Management), meaning that IP documents constitute 14.9% of the totality. In the *Index*, strictly IP Management issues are distinguished from Dissemination and Technology Transfer, as well as Commercialisation, which are treated as separate themes with their own specific policy frameworks.

Contract and Grant Management make of 8.2% of the thematic count with 119 thematic points covering this theme, including sub-themes of Contract Negotiation, and Applicable Laws.

6. Research Ethics in the Index, by Sub-theme and Document Type

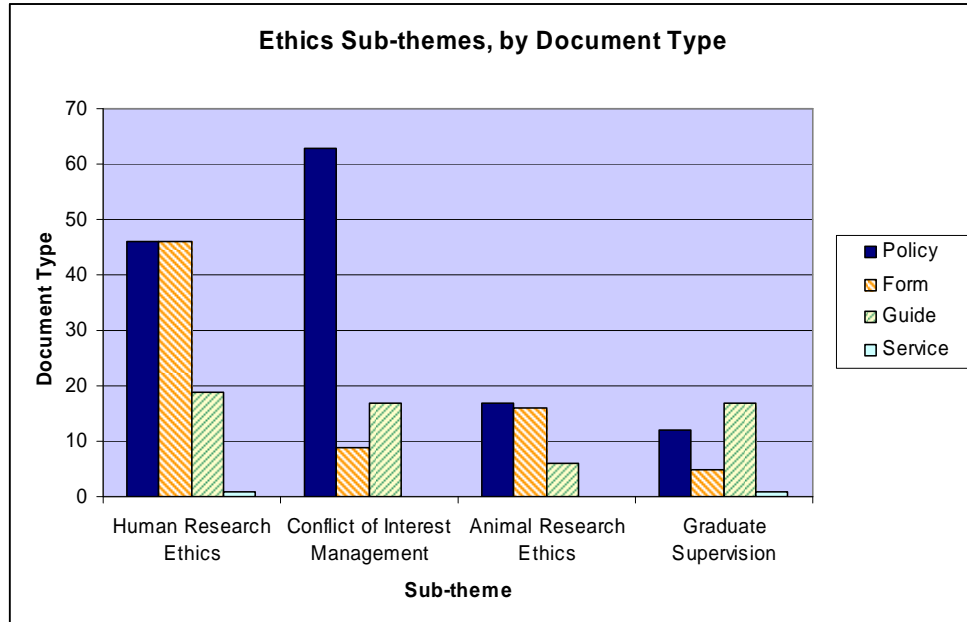
Table 3

Sub-theme	Policy	Form	Guide	Service	Grand Total	
Human Research Ethics	46	46	19	1	112	37.3%
Conflict of Interest Management	63	9	17		89	29.7%
Animal Research Ethics	17	16	6		39	13.0%
Graduate Supervision	12	5	17	1	35	11.7%
General	8	1	16		25	8.3%
Grand Total	146	77	75	2	300	
	48.7%	25.7%	25.0%	0.7%		

Percentages may not add to 100 due to rounding

In **Table 3**, for both Human Research Ethics (HRE) and in Animal Research Ethics (ARE), we see near parity between the number of policies and the number of forms that have been implemented. 46 policies and 46 forms have been drafted in HRE, together forming 83% of the documents in this sub-theme. Similarly in ARE, we have indexed 17 policies and 16 forms, which together form 84.6% of the documents in this sub-theme. Guidelines comprise 16.2% of the total HRE documents, and 15.4% of the total ARE documents, while services are negligible in both sub-themes.

Figure 2



Conflict of Interest Management (COI) occupies the second-highest number of Ethics documents in the *Index* at 30%. In this case, forms make up a relatively low proportion of documents in this sub-theme: 63 out of 89 documents (or 71%) within COI are policies, 19 of 89 (or 19%) are guidelines, and only 9 of 89 (or 10%) are forms. This reflects a heavy emphasis on establishing precise regulatory frameworks in the area of COI, setting rules against which researchers' conduct can be measured, and reprovved if necessary. Forms which with researchers might report suspected instances of COI, however, are not nearly as abundantly produced as the policies themselves. While nearly a fifth of COI documents are guidelines and strategies, the much stronger emphasis on policy indicates that many institutions have prioritised the development of definite rules and regulations, as opposed to promoting non-binding strategic objectives in this area. The scarcity of forms also suggests that many institutions are better prepared to respond to allegations of COI than they are aggressively investigative of researchers' activities in this area.

7. Research Ethics in the Index, by Sub-theme and Country

Table 4

Sub-theme	Australia	United States	Canada	United Kingdom	South Africa	New Zealand	Botswana	Ireland	Kenya	Grand Total	
Human Research Ethics	26	39	28	7	9	2	1			112	37.3%
Conflict of Interest Management	19	32	15	19	1		1	1	1	89	29.7%
Animal Research Ethics	16	6	8	3	6					39	13.0%
Graduate Supervision	20	2	6	4	1	2				35	11.7%
General	6	4	4	5	4	2				25	8.3%
Grand Total	87	83	61	38	22	6	2	1	1	300	
	29.0 %	27.7%	20.3%	12.7%	7.3%	2.0%	0.7%	0.3%	0.3%		

Percentages may not add to 100 due to rounding

The largest body of Ethics documents catalogued in the *Index* relate to Human Research Ethics. 36 institutions across six countries have contributed 112 policy and form documents to Human Research Ethics.

Table 4 shows that, of documented good practices, Australia has the highest thematic count at 87. The country appears to have dominated in developing policies relating to Ethics of Graduate Supervision, as 20 documents from Australian institutions relate to this sub-theme: more than all other countries combined. Yet, Australia has only 26 documents relating to Human Research Ethics, which places the country third in this sub-theme. Although Australian documents we have indexed do not emphasise Human Research Ethics, this sub-theme is nevertheless the best-attended overall.

The ratio between Human Research Ethics and Animal Research Ethics is the closest in Australia compared with other countries. Australian institutions have submitted 21 HRE documents and 16 ARE documents, while Canadian institutions emphasise HRE over ARE by a factor of 25 to 8. U.S. institutions exhibit an even greater HRE emphasis, by a factor of 37 to 6.

The United Kingdom is the only country in this sample to emphasise Conflict of Interest above all other sub-themes, with just under half of UK documents at this time relating to COI.

Again, however, it must be borne in mind that this sample represents only documents which have been submitted to the *Good Practice Index* by contributing institutions, or documents that have been retrieved from public-access web pages on the institutions' web sites, and does not necessarily indicate that such policy frameworks do not exist. This sample has relied largely upon policy examples submitted to us by obliging institutions, though other institutions may well maintain internal policy frameworks outside of public view, or may be currently in the process of developing new frameworks.

8. Policy Element Maps

Rather than only explore the total document count between institutions and countries, the full report provides "policy element maps" which provide details of the specific provisions and passages that policy documents can contain. This allows us to provide a qualitative comparison of documents and illustrate which documents incorporate elements of global standard practice (defined in the report as elements which are implemented in at least 50% of the institutions in the sample), and which ones incorporate innovative and rare elements in their documents.

Table 5 below demonstrates a basic element count for Human Research Ethics, and includes all HEIs in the sample, both within Africa and in the global sample. This shows which elements in this sub-theme have been identified, and how they fit across the spectrum from rare to standard.

Table 5

Rank	HRE policy documents <i>explicitly</i> provide these elements:	Count	% of HEIs with this Element
1	Stipulation that Ethics Committee approval must be granted	26	76.5
2	Confidentiality of subject identity is ensured	24	70.6
3	Free and informed consent must be obtained	22	64.7
4	Regulations regarding blood, tissue, and/or DNA samples	21	61.8
5	Harm versus benefit assessment	20	58.8
6	Assent from vulnerable subjects to be obtained	18	52.9
	Ethics Committee composition/mandate is described	18	52.9
	Faculty sub-committee composition/mandate is described	18	52.9
7	Safeguarding minimal risk	17	50.0
8	Method of soliciting research subjects, achieving inclusiveness in sample	15	44.1
	Subject to be made aware of right to withdraw from study	15	44.1
9	Appeals, disputes, or complaints procedures described	14	41.2
	Regulations for progress/annual reports	14	41.2
10	Certain exemptions for research in public environments	12	35.3
	Methods of ensuring data security	12	35.3
11	Clinical trials procedures included	11	32.4
	Managing research involving deception	11	32.4
	Research and social responsibility	11	32.4
12	Behavioural science and invasion of privacy	10	29.4
	Managing bio-safety hazards	10	29.4
13	Responsibility for overseeing policy	9	26.5
	Level of expected risk must be declared	9	26.5
	Reporting on adverse effects must be submitted	9	26.5
14	External organisations participating in study must be declared	8	23.5
	Policy distinguishes between volunteers and compensated subjects	8	23.5
15	International collaboration procedures and stipulations	7	20.6
	Disclosure of project funding source	7	20.6
	Managing Outside Professional Activity	7	20.6
16	Research staff must be trained to the level demanded of the project	6	17.6
	Procedure for reporting variations to original submission	6	17.6
17	Research findings intended for dissemination/open for critical review	5	14.7
18	Age range of subjects must be declared	4	11.7
	Specific policy elements regarding use of placebo	4	11.7
19	Visiting researchers rights/prohibitions dealing with human subjects	3	8.8
	Gender ratio of subject sample must be declared	3	8.8
	Projects where research leads to a formal qualification	3	8.8
20	Subjects who withdraw can demand data relating to them will be destroyed	1	2.9

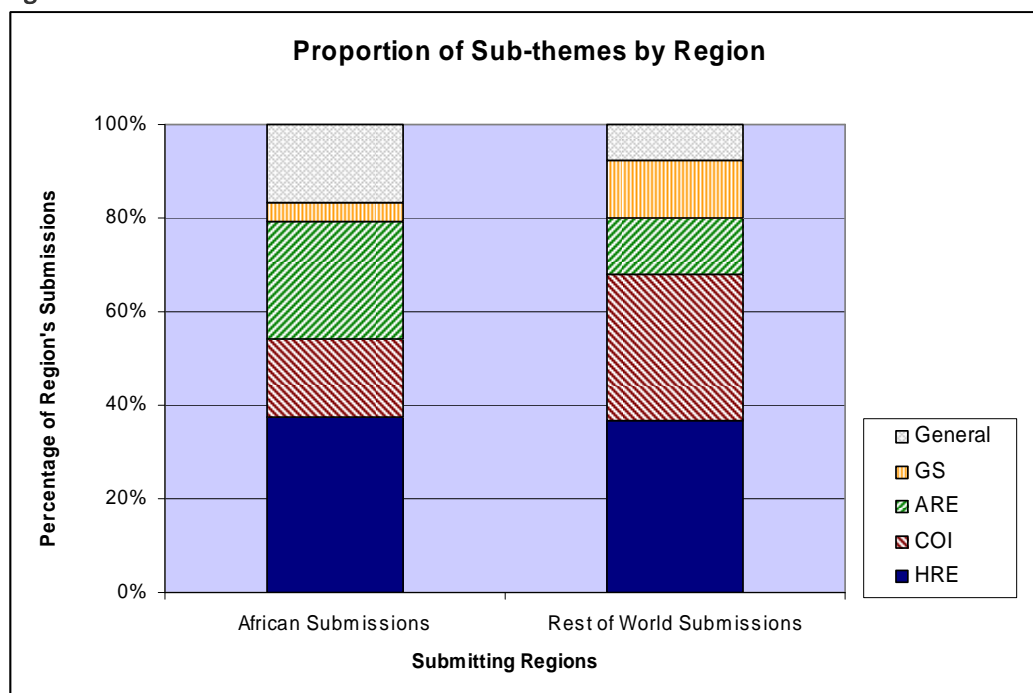
This table demonstrates that 26 institutions in our sample have explicitly ensured the confidentiality of human research subjects in their policy frameworks: thus, regardless of the number of Human Research Ethics policy documents and forms a specific institution has produced, it will only be counted here once if it has provided this element somewhere in its overall framework.

The full report provides full element tables for each sub-theme, as well as full charts of elements by HEI, for each country by sub-theme, and an investigative comparison and discussion of the findings.

8. Comparing Trends Between African and non-African Universities

The full report provides detailed comparison of the state of Ethics policy development among our African sample, and compares trends in document type, in sub-theme, and in policy element provision in Africa. In one example, the report compares the proportion of sub-themes that have emerged from the African and the non-African sample, comparing Graduate Supervision (GS), Animal Research Ethics (ARE), Conflict of Interest (COI), and Human Research Ethics (HRE).

Figure 3



This comparison illustrates that the African sample has a stronger emphasis on Animal Research Ethics than is found in the World sample, though the African emphasis on Conflict of Interest is correspondingly lower. This chart also demonstrates a lower number of Graduate Supervision documents currently submitted to the *Index* from African universities.

The report explores several specific case studies from African universities and provides special sections within each sub-theme which identify policy trends and differences between institutions in Africa and in the rest of the world.

9. Summary

This extended executive summary highlights some of the broad findings of the full report "Current Practice in Research Ethics: Global Trends and New Opportunities for African Universities." The full report provides in-depth analyses of each sub-theme within Research Ethics, including policy trends between countries and institutions, details of key case studies in best practice, special sections on developments among African institutions, and investigation of policy element maps which identify commonality between specific passages or provisions in the policies we have tabled. For each sub-theme and country, the full report explores the diverse array of policy frameworks that have been constructed at dozens of universities: ones which resonate with global standard practice, and ones which emphasise unique policy elements, addressing local circumstances and/or particular institutional experiences. Striking examples of best practice achieve a balance between these strategies.

The full report is available to members of Research Africa via the **Research-Africa.net** website. The *Research Management Good Practice Index* will be made a publicly-available, web-based service which users can access to search for examples of current practice. Public-access to the *Index* is estimated for mid-2007.