The state of social science in sub-Saharan Africa

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The social sciences in sub-Saharan Africa continue to operate under conditions that are seriously under-resourced. The fact that there is still sustained and vibrant social sciences research in countries which, with a few exceptions, have little government support, poor institutional facilities and many other challenges says a great deal about the resilience and resolve of the scholars concerned.

Introduction

In sub-Saharan Africa, social sciences and the humanities are predominantly practised within universities. A few countries have government-funded research institutes devoted to the social sciences (for example, the Human Sciences Research Council in South Africa). Independent social research institutes (for example, the Institute for Basic Research in Kampala, and again, many examples in South Africa) and research NGOs are more prevalent in many countries. An increasing number of these research institutes and centres are funded either through international agencies or by donor organizations with little if any government support. But it is not surprising that the history of social sciences in this region is intimately related to the history of African universities.

As Sall (2003) rightly observes, the independence, nation-building and development euphoria of the 1960s and 1970s; economic and social crises; the subsequent structural adjustment process, mainly induced by external actors; the crisis of the state; and the spread of armed conflict have all left their mark on the social sciences, on higher education and research institutions, and on researchers and research communities in Africa. More recently, democratization processes in increasing numbers of African states, the end of the Cold War, globalization, the general conversion to liberal economic doctrines, the information and communications technology revolution, and the popular and intellectual struggles that these processes have engendered, have all impacted on the social sciences in various ways.

Before independence, there were colleges, university colleges or fully developed universities in countries such as Sierra Leone, Ghana, Nigeria, Ethiopia, Uganda, Senegal, Rhodesia and Nyasaland, Egypt, Morocco, Algeria, Tunisia and South Africa. However, the development of social science research and the teaching of the social sciences are very much post-colonial phenomena. Even in South Africa, which has had universities for more than 150 years, university-based social science research only really developed and expanded in the era after the Second World War. In many African nations the post-colonial state built most of the research and training institutions (universities, institutes and centres) in the first few decades after independence, mainly since the 1960s.

Trends in research output

It is well known that Africa's share of world science as measured by papers published in ISI indexes has been declining steadily over the past decades.[1] Various studies by Gaillard, Waast and others have examined this issue (Gaillard, Krishna and Waast, 1997), but arguably the most comprehensive and up-to-date bibliometric analysis of this trend is captured in Robert Tijssen's 2007 article in *Scientometrics*.

In his analysis, Tijssen shows that sub-Saharan Africa has fallen dramatically behind in its share of world science production – from 1 per cent in 1987 to 0.7 per cent in 1996 – with no sign of recovery. This diminishing share of African science overall does not reflect a decrease in the absolute number of papers, but rather an increase in output below the global growth rate. Africa has lost 11 per cent of its share in global science since its peak in 1987; sub-Saharan science has lost almost a third (31 per cent). The countries of North Africa – Egypt and the Maghreb

1. We are aware that any exclusive focus on papers published in the more than 9,000 journals of the Thomson ISI Web of Science ignores a significant body of scholarship published elsewhere: either in local journals or journals (very often francophone or lusophone) not included in the ISI indexes.

(Algeria, Mauritania, the Libyan Arab Jamahiriya, Morocco and Tunisia) – accounted for the modest growth in the African share of the worldwide output from 1998 to 2002.

Table 2.2 presents the breakdown of ISI papers for the social sciences and humanities (SSH) over the past 20 years by country. Only countries that produced more than 200 papers over this period are included. The table shows that over this time, output has increased steadily with an overall growth rate of 112 per cent. A number of countries that did not produce many papers in the ISI journals twenty years ago have recorded huge increases. The noticeable exception is Nigeria, with a negative growth rate (-27 per cent), presumably an indication of the impact of the high-level brain drain on that country. South Africa's domination in sub-Saharan Africa is evident; the country produces about half of all output in the social sciences and more than three times more than Nigeria, the second most productive country.

A breakdown of output by university reveals the domination of South Africa. Eight of the top ten and eleven of the thirty most productive universities are located there. However, the data also raises the question of whether a critical mass of universities exists in the region, which is able to maintain a steady annual output. Only the top seventeen universities are able to produce an average of twenty papers per year in ISI journals. Many traditionally strong universities in countries such as Nigeria, Kenya, the United Republic of Tanzania and Zimbabwe struggle to maintain even these levels of output.

In an attempt to address African journals' lack of presence in international indices such as ISI, the International Network for the Availability of Scientific Publications (INASP) launched a project in 1997 to give African journals greater exposure – African Journals Online (AJOL). According to the latest figures, more than 340 journals are currently indexed in AJOL, which is based in Grahamstown in South Africa and managed by the National Inquiry Service Centre. Of these 340 journals, approximately 100 are categorized as being in the social sciences or the humanities (SSH). This list does not represent all SSH journals published in Africa, but it does allow us to gain a sense of local social science scholarship. We counted the articles produced in the 78 AJOL journals during the period 1999–2007. In addition, we also counted the number of articles published in the 120 SSH journals published in South Africa during the period from 1990 to 2007.

When we look at articles published in AJOL as well as in South African social science and humanities journals, the overall scholarship picture changes considerably.

Table 2.2 > Social science and humanities output by country in sub-Saharan Africa according to ISI, 1987–2007

Year / Number of articles	87–89	90–92	93–95	96–98	99–01	02–04	05–07	1987–2007	% distribution	Overall growth rate 1987–2007
South Africa	975	1,089	1,196	1,462	1,482	1,906	2,785	10,895	50.7%	+185%
Nigeria	748	626	438	382	341	475	542	3,552	16.5%	-27%
Kenya	182	153	189	189	259	353	414	1,739	8.1%	+127%
Zimbabwe	106	145	127	168	122	154	163	985	4.6%	+54%
United Republic of Tanzania	71	63	99	106	111	130	238	818	3.8%	+235%
Ghana	50	87	88	96	124	101	137	683	3.2%	+174%
Botswana	41	42	71	119	117	137	133	660	3.1%	+224%
Ethiopia	42	57	42	56	65	108	147	517	2.4%	+250%
Uganda	16	24	46	60	79	103	159	487	2.3%	+890%
Cameroon	17	54	41	51	66	81	95	405	1.9%	+2,282%
Zambia	72	36	44	25	23	33	73	306	1.4%	+325%
Malawi	25	36	54	40	22	30	48	255	1.2%	+920%
Namibia	7	10	33	38	28	40	48	204	0.9%	+2,814%
Grand total	**2,352**	**2,422**	**2,468**	**2,792**	**2,839**	**3,651**	**4,982**	**21,506**	**100.0%**	**+112%**

Table 2.3 > SSH articles in sub-Saharan Africa by source, 1990–2007

Distribution of articles by index		1990–1992	1993–1995	1996–1998	1999–2001	2002–2004	2005–2007	1990–2007
SSH articles in ISI journals		2,422	2,468	2,792	2,839	3,651	4,982	19,154
SSH articles in non-ISI journals	Non-SA AJOL journals				1,136	1,565	2,247	4,948
	South African journals	4,877	5,252	5,058	4,840	4,746	5,900*	30,673
Total		**7,299**	**7,720**	**7,850**	**3,975**	**9,962**	**13,129**	**54,775**

Source: 1990–2007

Note : There are many South African journals in AJOL which in this table have been counted under South African journals

* Conservative estimate based on information in *SA Knowledgebase*.

First, we see that international publication in ISI journals (19,154 articles during the period 1990–2007) only constitutes about one-third of the total social science scholarship in the region. Given that these figures exclude significant francophone journals and journals not listed on AJOL, the ISI share is undoubtedly even smaller in practice than this figure suggests.

Second, leaving aside South Africa, a small number of countries again produce the biggest shares of the AJOL output: Nigeria (37), Ghana (7), Ethiopia (6), Senegal (5), the United Republic of Tanzania (4), Uganda (5) and Zimbabwe (4). However, of the total (78) number of non-SA AJOL journals on this list, 27 have not produced any articles since 2006. Finally, these figures show how invisible African scholarship in the social sciences and humanities is, and why initiatives to give these publications greater exposure by supporting journals, open access repositories and other measures are so important.

Research institutes, centres and networks

The lack of government support for social science research in sub-Saharan Africa translates into very little support for research institutes and centres dedicated to the social sciences and humanities, whether based at universities or effectively operating as NGOs. CREST compiled a list of research centres dedicated to the social sciences in twenty-five sub-Saharan countries excluding South Africa. Of these, only seventy-nine (or 53 per cent) had an active website at the time of writing this chapter. But even having an active website does not necessarily mean that the website has current contents: we assessed a website as 'current' if it contained news or listed events at the centre during the period from 2007 to 2009. According to our assessment, only 65 (43 per cent of the overall total) of these websites have contents that could (very charitably) be regarded as recent.

A noticeable exception to this trend is the state support for the Human Sciences Research Council (HSRC) in South Africa. The HSRC is a parastatal body, more correctly one of nine science councils, which receives core funding from the South African Government under the national science vote. Its mission is to conduct strategic and applied social science research in support of national developmental goals. In recent years, because of cuts to its parliamentary grant, it has been forced increasingly to compete with other South African research institutions including universities and NGOs for international and national contracts. But it remains a significant national asset with a research staff complement of nearly 165 social scientists working in areas such as democracy and society, education and science, HIV/AIDs and health systems, poverty and development, the world of work and others. More information can be obtained from its website: www.hsrc.ac.za.

The precarious state of many of the SSH research centres in the region is indicative of a more general trend in research and scholarship in many African countries – the deinstitutionalization of science. With the decline in the number of robust and vibrant university-based research centres, we are witnessing an increase in transnational and regional research networks. It could be argued that such networks are emerging as a direct result of globalization, greater international collaboration and increased access to the internet. At the same time, such networks are also filling the void left by the lack of strong national research centres. The vast majority of these networks focus on interdisciplinary and more applied fields of the social sciences. Examples are the SAHARA network for the social aspects of HIV and AIDS, and the African Labour Research Network. These networks are predominantly sustained by international agency funding. Most of them are engaged in a range of activities which include research but also capacity-building and training, networking through conferencing and other means, as well as advocacy and policy work.

Modes of knowledge production

What kind of social science is being practised in African countries? Here we discuss two 'types': academic science in universities, and consultancy science for international (overseas and locally based) organizations.

Academic science refers to science practised by individual scientists or groups within universities. Much of this research is underfunded and is published in local journals that are not internationally visible. This form of research is very often driven by the individual scholar's priorities and interests, and is ultimately aimed at advancing their career. Given Africa's lack of a research infrastructure (strong-research centres with a critical mass, sustained funding and institutional continuity), these scholars end up engaging in projects that do not translate into building institutional capacity.

This individualistic research does not have much influence on society and rarely carries much weight. Governments and decision-makers – but also university bureaucrats – are impressed and influenced by size (large centres, networks and think-tanks) and continuity in scholarship over time. Where social science scholarship is primarily individualistic, it is unlikely to be taken seriously or to influence policy. So its status will be low to negligible.

Perhaps even more serious are the intellectual consequences of this form of research. It leads to fragmentation of effort, lack of critical dialogue within a community of scholars and often a lack of methodological rigour. Discipline-based work will eventually decline and basic scholarship such as social theory will also suffer.

Individualistic research is one side of the coin, of which the other face is consultancy research. 'Consultancy' social science refers to the widespread practice of academics engaging in consultancy work – mostly for international agencies and governments – to augment their meagre academic salaries. It is most prevalent in specific disciplines such as the health sciences, business studies, ICT, and monitoring and evaluation work, but is still widespread and on the increase. In an attempt to quantify the extent of consultancy work in many African countries, and also to shed more light on the underlying reasons for its growth, CREST recently completed a study in the Southern African Development Community region which addressed a number of these issues.[2] The results show that more than two-thirds of all academics in the fourteen SADC countries regularly engage in consultancy.

What were the respondents' main reasons for engaging in consultancy? We distinguished between the responses of South African and other SADC-country scholars, but there was very little difference between these two regions in the answers to our first two questions. First, consultancy is undertaken because the respondent enjoys the variety in topics that this brings (87 per cent versus 82 per cent); second, consultancy is undertaken because of the demand in the market (32 per cent versus 38 per cent).

The other reasons provided, however, demonstrate large differences between the South African and other respondents:

- Inadequate salary (cited as a reason by significantly more SADC respondents): 54 per cent in South Africa and 69 per cent elsewhere in SADC.
- Consultancy advances my networks and my career: South Africa 39 per cent, SADC other 72 per cent.
- My research interests are not addressed by my own institution: South Africa 18 per cent, SADC other 47 per cent.
- Consultancy improves my knowledge and skills: South Africa 78 per cent, SADC other 92 per cent.

A further breakdown by scientific field revealed significant differences, mostly in an expected direction. Large percentages of respondents in the more applied scientific fields where there are close links with industry and also government, such as applied sciences and technologies, earth sciences, engineering and material sciences, engage in different forms of consultancy. Academics in the economic and social sciences also reported high levels of consultancy engagement. In both groups, the majority of respondents reported carrying out consultancy. Perhaps the most surprising result is that a majority of academics in the humanities (61 per cent) indicated that they do some form of consultancy work. The overall picture points to the wide prevalence of consultancy work across all scientific disciplines.

Funding of social science research

State funding of social science research in sub-Saharan Africa is the exception rather than the rule. The majority of social scientists in the region depend on international donors such as Sida/Sarec, NORAD, DANIDA, on the Netherlands, French and British governments in Europe, on various foundations in the USA (most notably Ford, Rockefeller, Mellon, Kresge, Kellogg, Atlantic Philanthropies and Carnegie) or on IDRC in Canada, for their research funding. A distinction should be made between those grants that support social science research more directly (as is the case with CODESRIA, and the Organization for Social Science Research in Eastern and Southern Africa (OSSREA), and more indirect institutional support aimed at strengthening scientific institutions, such as Sida's support of journals in Ethiopia and Carnegie's support of libraries and ICT networks in East and West Africa.

A recent study of the role of international funding in countries in Southern Africa confirms these trends, and perhaps for the first time, indicates how dependent academics in the region are on such donor funding. The study of the SADC countries evoked responses from more than 600 academics. The results showed that a very substantial 42 per cent of all respondents from SADC (South Africa excluded) indicated that they source between 70 per cent and 90 per cent of their research funding from overseas, compared with only 6 per cent of South African respondents. The responses show very clearly the dependence of SADC scientists on international funding, and conversely, how little domestic funding is available for research. The actual state of affairs is probably even worse than these figures suggest. The scientists in our sample were identified because they are the most active and productive researchers in their fields and countries.

2. Study conducted by the Centre for Research on Science and Technology at Stellenbosch University under commission for the Southern African Regional Universities Association (SARUA). Final report is available from the SARUA website: www.sarua.org

Themes in social science research

To what extent does science in the region (including both the social sciences and the humanities) address the most important development goals of the respective countries? Do scientists pursue research that is consistent with national priorities, or are these of secondary concern?

A breakdown of the SADC study by field of research shows that we always need to keep in mind differences between scientific areas. The results show that significant proportions of scholars in all fields either agreed or strongly agreed with the statement that their research agendas are consistent with their countries' development goals. For scholars in the arts and humanities, this percentage was 75 per cent, for the economic and management sciences 87 per cent, and for the social sciences 83 per cent. These proportions compare favourably with fields such as agriculture and health, which are traditionally regarded as the more applied sciences.

Another thematic area to which the social sciences are making an increasingly significant contribution is the burgeoning scholarship on HIV/AIDS in Africa. A bibliometric assessment of the number of HIV/AIDS-related articles with SADC institutional affiliation has shown a steady increase over the past 17 years, from 2,156 in 1990 to 3,305 in 2007, especially between 1999 and 2006. This trend is mainly due to an increased output in the medical and health sciences, but publications in the field of the social sciences and humanities have also increased since 2000 despite a small decline in 2007.

Major challenge for social sciences in sub-Saharan Africa

This review has demonstrated that the social sciences in sub-Saharan Africa continue to operate under conditions that are seriously under-resourced. The fact that there is still sustained and vibrant social sciences research in countries which (with a few exceptions) have little government support, poor institutional facilities and many other challenges says a great deal about the resilience and resolve of the scholars concerned. We should also add that most official science policy statements and national research plans make little mention of the social sciences. The emphasis is on the health sciences (especially HIV/AIDS, tuberculosis [TB] and malaria), popular priorities such as biotechnology and nanotechnology, and the more applied sciences. Where reference is made to the social sciences and humanities, they usually appear in an appendix, in support of the natural sciences. A noticeable recent exception is the latest strategic thrusts of the Department of Science and Technology in South Africa, where the humanities and social sciences are identified as one of five main priorities.

Building an individual and institutional research capacity remains the main priority for the social sciences in the region. And although there are many examples of research capacity-building initiatives sponsored and supported by various international agencies, donor organizations and foreign governments, there is still very little consensus about the most effective approach (Simon, 2000). Debates continue, for instance, on investing in individuals or institutions (Costello and Zumla, 2000; Nchinda, 2002), whether postgraduate training in the global North exacerbates the brain drain (Nchinda, 2002) and on southern African control of research budgets (Lansang and Dennis, 2004; Nchinda, 2002). The science institutions in many sub-Saharan countries have been systematically eroded and destroyed over the past three decades through international economic policies as well as by the devastating effects of domestic policies and events. The cumulative effect of these policies over time has been a decline (at least in relative terms) in scientific output, changes in modes of scientific work, the devaluing and degrading of the science profession, and of course, the brain drain.

Many commentators (Aina, Zeleza and Mkandawire to mention a few) have commented on the lack of indigenous African theories and conceptual models to address the region's social dynamics and challenges. This is not a new observation. It is clear, however, that this call for theoretical innovation and more sociological imagination is even more relevant in an age of globalization and internationalization, of the continuous decline of key scientific institutions including research centres, societies and journals, in many countries, and of the widespread lack of government support for social sciences research in sub-Saharan Africa.

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