

OCTOBER 08

Higher Education

The increased priority given to poverty reduction through sustainable economic growth requires that we look again at the contribution made by Higher Education (HE). An improved HE system is critical to strong and sustainable development and the ability to compete in a knowledge oriented world, but in many developing countries HE systems are in a poor state. The challenge is to expand access, especially for disadvantaged groups, whilst raising quality. With limited public money, achieving this will require innovative financing, considerable reform and time. This paper explores some of the major policy issues.

Definitions

- Higher education (HE) in this paper refers to advanced tertiary level education delivered by a network of teaching and research institutions (including universities, research centres, university colleges, and distance education centres), offering a range of programmes and qualifications.¹

Key Points

- Demand has driven rapid growth in higher education enrolment across the world; an estimated 138 million students enrol in tertiary education each year, 45 million more than in 1999. Much of this growth has been in East Asia - in China enrolment is now 20%.
- Availability of places is insufficient to meet demand. In South Asia, India has the world's third largest HE system and plans to raise enrolment from 11% to 15% by 2012, while in Bangladesh enrolment rates are just 6% and in Pakistan 5%. In sub-Saharan Africa regional enrolment rates are 5%, the lowest in the world. Nigeria and South Africa enrol 10% and 15% respectively but Uganda and Ethiopia just 3% and Tanzania 1%.
- African HE systems are being rebuilt after years of neglect, while India's expansion reflects ambitions to be a leading knowledge economy.
- Sustained growth will depend on HE producing highly skilled workers and developing or adapting new knowledge and technologies.

¹ The boundaries between HE and technical and vocational education can be difficult to define clearly, particularly where educational systems are developing. See DFID briefing paper on Technical and Vocational Skills Development.

- Better healthcare and education requires more skilled professionals to design and deliver services. Upgrading infrastructure needs many more engineers.
- HE contributes to effective governance, policy making, planning and policy-focused research.
- Higher education institutions (HEIs) can connect knowledge and expertise to people and communities, from scientific advances to bespoke solutions to local problems.
- Expansion has undermined quality. The rise of the private HEIs - some very good but some not well regulated - continues to be significant. Quality assurance is essential.
- Public funding in developing countries is unlikely to increase very much and institutions need new ways to generate income.
- Staff and students are increasingly mobile and research networks are international. Retaining talent is a major issue.

Background.

Higher education systems in many African and South Asian countries are in a poor state. During the 1960s and 1970s, some institutions gained international reputations, but during the 1980s and 1990s they suffered under pressure to rapidly expand. More students were completing primary and secondary education and the demand for HE places was very strong. Governments were unable or unwilling to provide sufficient funding.

Kenyan government directives in the late 1980s requiring universities to double their intakes without additional funding were symptomatic. Studies suggesting public investments were better directed to lower levels of education, notably from the World Bank, were particularly influential in the 1980s in guiding policy. The commitment to Education for All from 1990 and later to UPE and the MDGs further constrained government budgets for HE expansion. As the public system struggled, private HEIs emerged to meet demand.

Since 2000, however, there has been renewed interest in HE across the international community as its role in East Asian economic growth began to be considered. A number of major reports from the World Bank, UNESCO and the UN Millennium Project (see Annex C) argued strongly in favour of HE for development. Particularly high profile was the 2005 Commission for Africa's assertion that HE could be powerful in enabling wider development. The Commission, and other groups, argued for greater consideration of science and technology (S&T), areas which have also been prioritised by African Union and New Economic Partnership for African Development (NEPAD) programmes.

The principal policy issues.

HE is increasingly international and borderless with growing mobility of staff and students and global research agendas. Developing countries find themselves trapped between a need to compete and participate at international level, while also addressing specific national and local needs. The investment which is needed will be expensive and it is uncertain where this money will be found; the rise of private HE and increased cost-sharing by students seem inevitable consequences. Finance and governance systems will need to reform to meet these challenges. Expansion is also driven by a need to make HE more accessible and equitable. A balance needs to be struck between supporting infrastructure projects and human capacity development through training individuals. Achieving this whilst also harnessing HE for development and growth presents further challenges. Five policy issues are considered.

1. More and better higher education can be powerful in driving growth but access and equity also need to be considered.

A lack of research on the impact of HE on growth in developing countries means reliable statistics are not widely available. However, spectacular growth in East Asia has been strongly linked to human capacity development. Between 1960 and 2005 South Korea raised enrolment rates from 5% to 91%², while in Taiwan the number of HEIs increased from 8 in 1952 to 117 in 1989, the latter focusing on adapting imported technologies for the private sector. China has made good use of its HE sector to do the same³, while India's current growth is undoubtedly linked to its long-term investments in developing a high-level national skills base.

A recent African study looking at the potential effect on technological catch-up and productivity calculated that a one-year increase in Africa's total HE education stock (eg increases in years of HE study averaged across the whole population) could boost incomes by 3% after 5 years, and eventually by 12%⁴. Harnessing HE to drive growth will require opportunities for the best students to be supported in top institutions. It is not the size of the HE system which will drive growth – or the numbers trained – but the quality of education it delivers, and the skills it develops⁵. This helps to explain why previous expansion has not delivered the anticipated growth, since quality was severely compromised in the process.

Access. In many cases the quality and cost of education at primary and secondary levels reduce enrolment rates and affect retention and completion; this in turn limits progression to HE. While many countries have abolished user fees at primary level, and have increased female participation, poor quality schooling and other financial or family pressures on low-income pupils leads to low attainment and causes many to drop out. Tanzania achieved 98% primary enrolment in 1980, following rapid expansion, but a drop in quality meant this fell to 47% by 2002⁶. While Bangladesh has near universal primary enrolment, only 65% of pupils make it to their last year of primary school; enrolment at secondary level is just 47%, and a large proportion of

² Matthews and Hu (2007: 92-97)

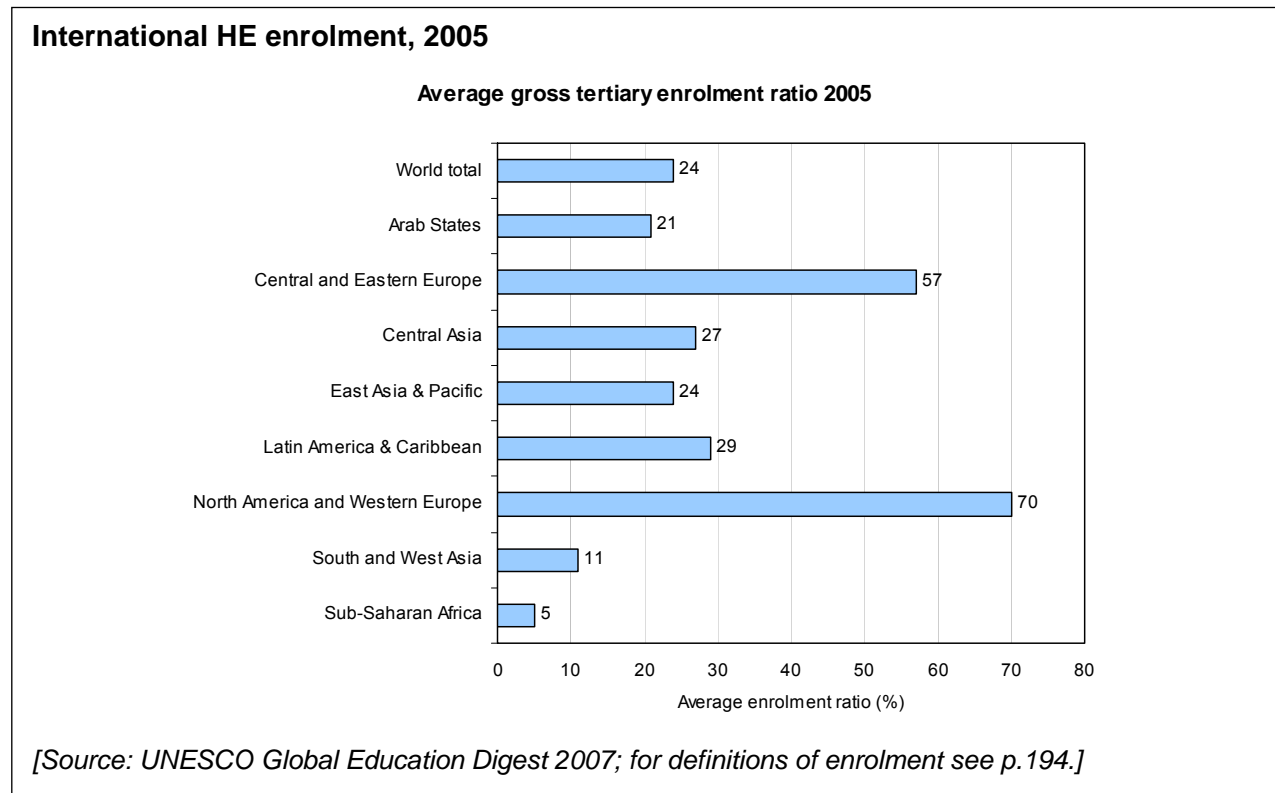
³ UN Millennium Project (2005)

⁴ Bloom et al (2006)

⁵ Hanushek and Wößmann (2007)

⁶ Thin (2006): With external support near universal enrolment has now been regained.

HE students are reportedly drawn from a small group of urban preparatory schools⁷. In Malawi only 34% reach the last year of primary school, and secondary enrolment rates are as low as 24%⁸. Socio-cultural barriers often mean girls' access to education is harder still⁹. With such severe access and quality problems lower down, HE access and equity clearly depend on improvements to the system as a whole.



Equity. Expanding HE in its current form is likely to further concentrate opportunity amongst relatively privileged groups. Increasing access for underrepresented groups (female and lower income students, and those from particular regions or communities) is essential if HE is to play a real part in transforming, rather than reproducing, social inequality. Appropriate strategies will differ from country to country, and according to the current balance of participation, but affirmative action, financial aid and new locations or modes of delivery are all likely to play a part. Equity in HE is closely related to the wider status of disadvantaged groups, and the levels of opportunity available in other spheres of life, particularly in access to primary and secondary education.

In Tanzania and Uganda women represent just 32% and 38% of total HE enrolment respectively. Both countries have established affirmative action programmes to address this, offering slightly lower entrance thresholds and additional pre-entry teaching programmes; increased enrolment rates have been reported as a result¹⁰. In Kenya several public universities have introduced bridging courses to provide

⁷ Quddus, M. (1999)

⁸ UNESCO (2007b)

⁹ Lewis and Lockheed (2008)

¹⁰ Figures from UNESCO (2007b); see also Morley et al (2007) and Bunyi (2003)

remedial tuition in key subjects for students who meet the minimum requirements but do not reach the admission cut-off point¹¹. More famous are India's constitutional measures to increase access for the lowest castes¹². In Bangladesh, where female participation in HE is also low (33%), the Asian University for Women has been established to afford greater opportunities to female students.

Affirmative action programmes are not without problems. Mandating a proportion of places to disadvantaged groups can be important for social equity, but may damage the competitiveness of HEIs, and the quality of graduates they produce if entry standards are lowered as a result. Decisions need to be taken on how differential access should be weighted, how it should be monitored, and when and how such rules should be phased out before they breed new inequalities of their own. While female participation may be raised via affirmative action, this may still benefit wealthier groups and do little to expand enrolments among female students from poorer backgrounds or rural communities as was reported at Makerere University¹³. A DFID-funded study at Sussex is currently evaluating the success of existing attempts to widen participation, in order to improve future initiatives¹⁴.

A system which aims to balance growth with equity and access will inevitably require different forms of HE to achieve this. Alternative models and locations for delivery, such as open and distance learning (ODL), which can vastly increase access¹⁵, or additional campuses in rural areas, present other options for increasing participation. In Kenya, Jomo Kenyatta University of Agriculture and Technology has accredited regional tertiary colleges to deliver its programmes, while Kenyatta University has established new provincial centres to deliver its distance learning programme¹⁶. There is also scope for collaboration between institutions within countries, to provide greater opportunities in particular areas. Where normal study schedules are not appropriate, greater flexibility via ODL, or through modular credit-bearing courses, may be valuable.

2. Funding: Expanding higher education is expensive.

At a time when financing for HE in developing countries – and globally – is moving increasingly towards cost-sharing, with students and their families paying more towards the cost of study, widening access is becoming more challenging. Loan schemes are a common way for governments to expand HE at lower cost to the state, and are based on the assumption that whatever their socio-economic status at enrolment, as higher earning graduates they will be in position to repay this investment.

Between 2002 and 2003, university admissions in Ghana rose from around 41,000 to 54,000, apparently as a result of student loans and scholarships which offered more students the opportunity to study – although the extent to which this increased access amongst poorer students is uncertain¹⁷. The degree to which upfront costs

¹¹ Mwiria et al (2007)

¹² Kapur and Crowley (2008:56)

¹³ Morley (2006:75)

¹⁴ www.sussex.ac.uk/education/wideningparticipation

¹⁵ See DFID paper on Open and Distance Learning www.dfid.gov.uk/pubs/files/open-distance-learning.pdf

¹⁶ Mwiria et al (2007:30)

¹⁷ Atuahene (2008)

and loans may deter lower-income students is widely debated and some form of financial aid package, from institutions or from central government, is inevitably needed to support the poorest students.

Paying students may make different decisions on what to study. The decline of public funding means students must increasingly pay all or part of the costs, either as self-sponsored students in public HEIs, or by attending private institutions. A number of Indian universities now generate 20-50% of their costs through student fees¹⁸. This will have particular implications for the state's ability to plan its human capacity needs. Students who pay more to study are likely to choose courses based on their perceptions of future employment prospects, and this may not meet a state's existing or potential need for professionals in other areas – business, financial and IT-related courses are often popular as a result. For HEIs, this may create significant distortions in funding: certain courses or departments will attract fewer students and generate less revenue, although their programmes may be of considerable developmental importance. Mechanisms to encourage enrolments in certain areas – eg through scholarships – and internal cross-subsidisation between departments are likely to be required. Paying students will invariably expect more from their institutions. A move to cost-sharing is therefore tightly bound up with improving overall quality, and will undoubtedly need to be pursued in stages¹⁹.

The private sector is growing to meet demand, but may have different objectives from governments. Private HEIs have emerged to meet the demand that underfunded public institutions could not. Some are for-profit, others non-profit institutions, with some of the latter sponsored by religious or charitable foundations. Public institutions in some countries are also able to earn substantial private income through private sponsorship. In India around 75% of tertiary institutions are estimated to have some degree of private finance; in Africa this was estimated to be a third in 2005²⁰. Private HE has several advantages: institutions are generally freer to innovate, unencumbered by some of the impediments to reform which public HEIs face (existing structures, governance) and are less susceptible to political manipulation. For governments they come at little or no financial cost, and ostensibly satisfy the expansion problem, and many countries have allowed private provision to expand for this reason.

However, private institutions also change the nature of HE, favouring courses and subjects which generate swift returns and which do not require expensive facilities (such as scientific laboratories or extensive libraries). They are also unlikely to invest in long term research, which may be of considerable value to national development but takes longer to achieve and which may not have commercial value. Private HEIs can often offer better salaries, enabling them to attract the best staff from public institutions, but without themselves contributing to the training of future academic staff (eg through postgraduate study).

The biggest issue is undoubtedly quality. Although some private HEIs are very good, others are spectacularly poor. The different incentives of private HEIs can mean low

¹⁸ Agarwal (2007)

¹⁹ See Mamdani (2007) for a discussion of some of the problems experienced by Makerere

²⁰ Gupta (2007); Kapur & Crowley (2008:79)

quality standards and, as in India, corners are frequently cut to maximise profits²¹. Despite the explosion in private sector HE, many countries have been slow to introduce good regulatory mechanisms, causing unfettered and uneven expansion, sometimes of dubious value to national education systems. Access and equity are rarely concerns of private providers – although exceptions may be those sponsored by charitable or religious foundations. If they are to play a greater role, measures to encourage private HEIs to address equity may be necessary, for example via tax incentives for scholarships offered to low-income students, or legislation guaranteeing a number of free tuition places, as is the case in Bangladesh.

3. International and local demands need to be balanced.

Changes are needed to make HE more relevant, but programmes should not be too narrowly focused. HE has multiple and sometimes competing needs. Moves to re-fashion HEIs in some countries as development-orientated institutions have led to new programmes specifically focused on national labour market and development priorities. However, there needs to be a balance between ‘vocational’ and broader skills. Employers frequently cite the importance of graduates who have studied courses which develop flexibility, creativity, critical thinking and problem solving skills, rather than those which concentrate on specific job areas and produce students who struggle to find appropriate employment. India’s long-term investments in scientific and technical skills training have helped to create and sustain an impressive technology-linked growth. This has contrasted with a comparative lack of scientific and technological capacity particularly in universities in African countries.

Different types of higher education are required. HEIs operate increasingly as part of international networks, in teaching and research. Research agendas are defined globally and students and staff are mobile across borders. At the same time HEIs are expected to contribute to local development needs. The ability to do both is a particular strength of HE, but time and resources are finite, and different institutions or types of institution should be supported to do different things. Differentiated HE systems – which provide wide access to HE but also allow the development of a world-class advanced research and teaching institutions are needed. The Carnegie Corporation, for example, has prioritised the development of 7 existing institutions to become world-class universities. However this is not a realistic aim for most African universities. Locally-focused institutions, responding to defined local needs and acting as brokers of knowledge via extension and outreach remain critical. International research agendas are unlikely to steer sufficient attention to developing-country problems such as tropical agriculture or neglected diseases and it is therefore important that institutions are supported to undertake research which tackles local and national needs.

Centres of excellence may be valuable but investment is needed in existing institutions too. Considerable debate has focused on the idea of centres of excellence, particularly in Africa. The international network of highly specialised CGIAR research centres in agriculture (www.cgiar.org) have been particularly successful, and the Wellcome Trust has established its own prestigious health research centres in Kenya, Malawi, South Africa, Thailand and Vietnam. A new network of African Institutes for Science and Technology, based on the successes of

²¹ Agarwal (2007:14)

the Indian Institutes of Technology, has been planned, with the first currently being built in Abuja, sponsored by the World Bank and Nigerian government, and supported by IIT-Bombay (www.nmiscience.org/aist.html, www.aust-abuja.org). The logic has been to create research centres of international standing, focused on the specific needs of developing countries, where existing centres are inadequate. They might potentially allow countries to pool resources, in order to achieve what each would be unable to do independently, and are able to act as hubs for cooperation between researchers from different countries and institutions.

There is a danger, however, that centres of excellence will detract from the need to revitalise existing institutions, many of which, such as the University of Ibadan in Nigeria, were once centres of excellence in their own right. Regional centres may concentrate development in just a few countries and others may lose out. A capacity building as well as a research function will therefore be critical. HEIs often carry a degree of national pride, and it is uncertain whether countries will be willing to divert resources from developing their own HE sectors to support centres hosted elsewhere. In reality it is likely that a measure of investment in both regional centres and in existing national institutions will be needed, in such a way that complementarity and collaboration are encouraged. Developing concentrations of excellence in specific fields will also be supported through better networking, especially electronically, and partnerships between institutions, nationally and regionally. It may be more useful to think of networks of excellence such as the USHEPiA initiative in Eastern and Southern Africa (www.ushepia.uct.ac.za).

Higher Education Institutions are an interface between global knowledge and community needs. The fact that HEIs are located within a specific community or region, while also connected to international networks of research and learning, makes them valuable sites for development activity. They offer an interface through which new knowledge or technology can be adapted and transferred to meet local needs, and can develop specific solutions to local problems. The Kigali Institute of Science and Technology (KIST) in Rwanda is a good example. KIST has developed food processing solutions to support local income generation, low cost pumps to improve water access and irrigation and new biogas stoves²². Bangladesh Agricultural University has helped to improve the local fishing industry, partly through research partnerships with UK HEIs, including developing new methods for processing the catch to support local income generation²³.

Community feedback and indigenous knowledge is important in ensuring technologies are designed appropriately. Kenyatta University has brought Kenyan herbalists into its medical research team to do just this. However, incentives, training and communication for university staff and students are often insufficient to integrate indigenous knowledge and the demands on HEIs to compete internationally may undermine valuable community-focused work.

²² Lwakabamba (2003), for a review of World Bank work in Rwanda, including KIST see Watkins and Verma (2008)

²³ DFID has supported this through the DelPHE and Commonwealth Scholarship Schemes (see Annex A)

4. Improving quality is critical, especially as HE expands

Better regulation, quality assurance and accreditation are needed. Expanding the numbers of students will not drive growth or contribute new and valuable research, unless it is accompanied by major quality improvements. More importantly there is little point in expanding HE to offer more places unless quality is first improved for existing students. Despite having one of the world's largest HE systems, many of India's graduates are not well trained to meet its workforce needs and graduate unemployment is high²⁴. The escalation in private provision, where profit is often the principal motive, where entry criteria may be lower than in public institutions, and where governments have been slow to develop effective regulatory mechanisms, makes addressing quality imperative.

Improvements in national regulation and accreditation systems are vital, but quality also needs to be defined by local conditions. Basing assessments on very different HE landscapes in other countries can be unhelpful. HE systems can be complex – India particularly so with institutions often a blend of public and private financing, differing degrees of government, academic or administrative control and with private colleges delivering public university programmes through affiliation²⁵. There are growing numbers of distance learning programmes, both national and international, and branch campuses or offshore institutions around the world. Malaysia is a good example²⁶. State oversight has often not kept pace with this emerging complexity, and numerous gaps have developed. One Indian state approved 97 private HEIs to operate country-wide in 2002 (subsequently overturned three years later by a Supreme Court judgement)²⁷.

Both government and independent or semi-independent bodies have a role to play, and better interaction is needed between national and state or district authorities, ministries of education, HE councils, and admissions and examinations boards. The importance of a new regulatory framework was emphasised in the recommendations of India's National Knowledge Commission²⁸. New professional accreditation of courses in some subjects may also be needed. At the same time, regulation must avoid unnecessary complexity, and be sufficiently flexible to allow HEIs sufficient space for reform.

Teaching and resources matter. Achieving substantial improvements will primarily depend on the quality of teaching. Many teaching staff are underpaid and under-resourced, or forced to find additional better paid work elsewhere. As a result, retaining talented and qualified staff is difficult, with the best often attracted to positions abroad. Nigerian federal universities only have half of the academic staff they need²⁹. Qualification levels of teaching staff are also often low. Expansion has meant a masters degree has become a sufficient entry qualification for lecturers across African HEIs, and few staff hold PhDs. There are currently drives to increase qualifications, such as a Nigerian directive that all lecturers be PhD-qualified by 2009.

²⁴ Altbach, (2006), Kapur and Crowley (2008:76) for discussions study of African graduate employment see Al-Samarrai and Bennell (2003) and Mugabushaka et al (2007)

²⁵ Agarwal (2007:3)

²⁶ Verbik and Merkley (2006)

²⁷ Agarwal (2007)

²⁸ Government of India (2006, 2007b)

²⁹ Pereira (2007)

This up-skilling will not be achieved rapidly, not least when so many positions are already vacant and with a lack of capacity and funding for postgraduate education. Lecturers forced to take time out for their own studies are also unlikely to do much to improve the quality of their teaching in the short term. Overstretched library and IT facilities and dilapidated laboratories all impact further on teaching and learning quality and make it difficult for staff to move away from the common traditional-learning models which prevail.

Partnerships and scholarships can help to raise quality. Individual staff can play a catalytic role in improving quality. International partnerships between HEIs or scholarships to allow staff and students to study abroad can lever the resources and expertise which developing countries need to make more rapid quality improvements. Examples of successful partnerships are numerous, and include research collaborations, individual scholarships, and thematic or institutional capacity building. A number of partnerships between UK and African or Asian universities are currently being supported by a range of donors. UK government funding includes the Development Partnerships in Higher Education (DePHE), The England Africa Partnerships (EAP) to be re-launched as Education Partnerships in Africa scheme (Aug 2008) and Commonwealth Scholarships schemes (see Annex A). The split-site training awards of the latter can be particularly valuable, providing an opportunity for doctoral researchers to spend a third of their time at a UK university, benefiting from joint supervision and better access to current research materials. As African and South Asian HE becomes stronger, external involvement is likely to increasingly be in the form of partnerships and collaborative research.

5. Governance and financing

HEIs need sufficient autonomy for reform. The ability of publicly funded HEIs to achieve reform is at present limited by their internal governance, administrative structures and policy, and by their relationships with the state. For sustainable reform to take place HEIs need to be granted sufficient autonomy to take control of their own affairs, balanced with sufficient state oversight. Regenerating public HE is likely to require institutions to be freed to compete effectively with private counterparts, especially in terms of income generation. The well-reported experiences of Makerere University in Uganda point towards the transformation that such autonomy can bring³⁰. However, not all of these reforms have been entirely positive, in particular the commercialisation of degree programmes by some Makerere faculties impacted severely on the quality of education delivered³¹.

Historically part of the problem has been the tendency for governments to exert considerable control over decision making, frequently appointing much of the senior management team, which has over-politicised the sector, encouraged rent-seeking and compromised academic freedom. Public HEI staff being employed as de-facto civil servants, with guaranteed jobs, and advancement based on length of service rather than performance, has given little incentive to improve quality. In return for autonomy, governments may expect greater accountability and seek to link funding to performance.

³⁰ Court (1999); Musisi and Muwanga (2003)

³¹ Mamdani (2007); Musisi and Muwanga (2003: 43)

Paying for reform. To achieve reform HEIs are likely to need to generate substantial funding themselves, while at the same time reducing existing costs in non-essential areas. The University of Dar-es-Salaam has pruned back or reconfigured services, such as catering, housing and transport, and many other HEIs have sought to reduce costs in similar ways³². At the same time it has sought to provide university services commercially, providing IT consultancy, and offering evening and weekend courses to members of the public. The potential of generating income from such activities is not insignificant; figures from the University of Nairobi indicate that 20% of its budget now comes from student fees, and 60% of its utilities bill is covered from income generating activities³³.

Professional training programmes may also be a viable income stream. Several universities in Kenya and Uganda have developed dual-track modes of teaching, in order to admit both ordinary and fee-paying students in parallel, with the latter effectively subsidising the education of the former³⁴. Around 80% of students at the public Makerere University pay fees³⁵. A considerable number of students currently spend significant amounts studying abroad, due to the unavailability of places at home. A substantial amount of money might therefore feasibly be brought into the national system, if opportunities and quality were good enough to encourage such students to continue to study at home. Almost 132,000 Indian students were studying in the US, UK and Australia in 2006 and in 2002 around 6,000 Kenyan students were estimated to be studying overseas³⁶. In managing the balance of fee-paying and ordinary students HEIs must of course take care to ensure that a two-tier system is not created.

Consultancy is a prime way for HEIs to generate revenue, but many institutions which have established units to do this have had a disappointing return, primarily because such work is frequently undertaken by academics independently, to supplement poor salaries. Ways of encouraging this work to be brought formally within the institution – most obviously linked to increased remuneration – will be needed. HEIs also need to develop greater expertise in accessing and managing external funding opportunities, which will require the development of dedicated research management units. The South African Research and Innovation Management Association (SARIMA) and the West African Research and Innovation Association (WARIMA) networks (www.sarima.co.za, www.warima.org), and the Research Africa project (www.research-africa.net), supported by DFID are notable initiatives to develop research management structures in Africa HEIs.

Cost recovery implications. If HEIs move to greater cost recovery through student fees, only the wealthiest students will be able to afford the up-front investment this entails. Even basic tuition fees represent a disproportionate investment for most students as a proportion of family income. Government loan schemes or other deferred payment forms (eg graduate taxes) are a common solution, but require a huge up-front injection of money until this can eventually be recouped and recycled as new loans. There is no single model. Ghana has attempted to do this partly

³² World Bank (2003); Cooksey et al (2003)

³³ Mwira et al (2007:69)

³⁴ Court (1999), Mwiria et al (2007)

³⁵ Figures from 1999, quoted in Musisi and Muwanga (2003)

³⁶ Verbik and Lasanowski (2007); Mwiria et al (2007)

though its Education Trust Fund, which, financed from an increase in VAT, supports capital investment as well as a loan scheme³⁷. While student loans can reduce the need for public funding, they do not replace the need for government support.

Sophisticated student record systems are also needed to manage disbursement and to recoup loans and relative administration costs tend to be high. Previous attempts to institute loan schemes have experienced high default rates and considerable resistance in countries where HE has previously been provided freely. Recent assessments of Ghana's cost recovery indicate that only a small proportion of the loans have been repaid. In India, privately financed loan schemes have been established, but face similar problems.

On the basis of its ability to expand access and recover costs, South Africa's National Student Financial Aid Scheme is generally regarded as one of the few successes³⁸. A further challenge comes with judging relative need. Student loans offered to all, and at the same level, effectively subsidise the investments of wealthier students at the expense of the average tax payer. Means-testing relative need is complicated especially when family incomes are hard to assess. Makerere University instead uses measures such as father's education and vehicle ownership³⁹. An alternative may be a graduate tax, but many of the problems remain, added to which is a need for effective national tax collection systems.

Private and philanthropic investment could provide further funding.

Philanthropic and corporate investment has become important for many HEIs internationally, with some US universities being very successful in raising funds. This may be possible for other countries as their economies expand. In India, the Tata group of companies has established a number of HE and research centres, including the Tata Institute of Social Sciences and the Tata Institute of Fundamental Research, both deemed universities, while the Bangladeshi NGO BRAC established the non-profit BRAC University in 2001. Businesses may also be prepared to pay for or co-fund research that is useful to them. Private financing will need to be sought carefully, however, to ensure that HEIs resources are not only directed at commercially-focused research, or find knowledge or academic interests controlled by private entities. In India many private HEIs have been funded by wealthy individuals or families, who are often heavily involved in the administration and management of institutions, and with the potential for a significant proportion of the sector to be controlled by relatively powerful private owners.

What this means for governance. While traditionally HEIs have been self-governing academic communities, the need to generate income and compete for external funding, may mean that greater involvement of business and industry is needed in HE governance. Bringing representatives from outside of academia onto councils or governing bodies, and rethinking the role of those already in place may be necessary to guide HEIs as they negotiate new ways of working. Careful management will undoubtedly be needed: not only are academics likely to be

³⁷ Manuh et al (2007); Atuahene, F. (2008); Johnstone (2004); 'Ghana' profile of International Comparative Higher Education Finance and Accessibility Project

www.gse.buffalo.edu/org/intHigherEdFinance/CountryProfiles/Africa/Ghana.pdf

³⁸ Johnstone (2004)

³⁹ Kapur, D. and M. Crowley (2008)

resistant to attempts to remove their autonomy, but HEIs are also not businesses. To force them too far in this direction is likely to compromise some of their most valuable contributions to society, such as the pursuit of basic research and the freedom to generate knowledge without tying this to profit or income.

The state's role has undoubtedly changed, but while no longer the primary or only funder of HE, it has an important job as regulator of the sector, and to correct distortions which increased private provision and self-sponsorship may cause. National legislative environments, dictating how HEIs interact with the state and with national HE councils and other bodies will be particularly significant, but the structures of responsibility and authority within and between these must be well defined to ensure they operate effectively.

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Annex A: DFID and UK government support for developing country HE

- **Research Funding:** DFID's 2006 White Paper emphasises the importance of technology and the role of research in evidenced-based policy-making. It also highlights the need to build capacity in developing countries to do research which directly addresses the priorities of the poor, and commits to a doubling of the annual research budget by 2010 to £220 million – which at current levels would make it the (joint) 4th largest research donor (ODI 2007). Funding includes support for a number of Research Programme Consortia, tackling key development problems between UK and Southern HEIs, and a new Research Into Use programme to improve the development impact of knowledge generated by previous DFID-funded research.
- **Development Partnerships in Higher Education (DeIPHE):** £15 million over 7 years (2006-2013) to support collaborative partnerships which work towards the MDGs and promote science and technology; encouraging north-south and south-south knowledge transfer (www.britishcouncil.org/learning-delphe.htm).
- **Commonwealth Scholarships:** Through this scheme DFID helps to train the researchers and professionals which developing countries urgently require in order to meet the Millennium Development Goals and other international targets. Split-site PhD scholarships, allowing students registered at developing country universities to spend a third of their time in the UK, are also funded, as is a distance learning masters programme. The **Commonwealth Shared Scholarship Scheme**, a long running joint initiative between DFID and UK universities, supports scholarships for developing country students who would not otherwise be able to study in the UK (www.cscuk.org.uk)
- **Sector and Budget Support:** DFID also supports higher education through the provision of general sector and budgetary support to partner governments, allowing them to allocate education resources to meet national planning needs.
- **Multilateral funding:** 40% of DFID funding is to multilateral institutions, including the EC, World Bank and UN, some of which is effectively spent on HE and research programmes (see below).
- **Association of African Universities regional capacity building:** £3.5 million Challenge Fund, over 3 years, to contribute to the revitalisation of HE in Africa, by supporting partnerships with other sub-regional and national HEIs. Also support to the AAU-hosted Working Group on Higher Education (WGHE)
- **Other UK Government:** In addition to DFID, some funding for international HE activity, including in developing countries is provided by other Departments. The DIUS England-Africa Partnership Scheme (www.britishcouncil.org/learning-eap) (to be succeeded by the **Education Partnerships in Africa** programme) provides support to strengthen capacity and support collaboration. DIUS also supports the Africa Unit to facilitate HEI partnerships. **The UK-India Education and Research Initiative** (UK-IERI, www.ukieri.org) is supported by a number of departments, including DIUS, BERR and the FCO. As a response to the Crisp report, DFID and the DOH have allocated funding for a new **Health Links Scheme**.
- The Research Councils and National Academies (www.rcuk.ac.uk, www.royalsociety.org, www.britac.ac.uk and www.raeng.org.uk; DIUS-funded) support international research collaboration, which includes some support to developing country researchers.

Annex B: Key international actors in the field of HE

- Funding for HE is provided bilaterally and also through multilateral organisations such as the **World Bank, European Commission and UNESCO**. Mapping international support for HE, and calculating overall donor funding, is therefore complex. ODA figures report total funding for the education sector as a whole, and specific support for basic education, but do not disaggregate funding for HE. Many agencies also support HEIs through research funding programmes.
- Continental and national HE and research organisations have an important role to play, such as the Association of African Universities (www.aau.org) and the Association of Indian Universities (www.aiuweb.org).
- In absolute terms **France, Japan and the US are the largest bilateral funders of education**, but they do not necessarily play the greatest role in HE support. Other donors provide less funding overall, but often do so in very focused and responsive ways and offer useful examples of **alternative modalities and mechanisms** of HE assistance.
- The **Scandinavian countries and the Netherlands** play a major role, both in funding, and in influencing wider HE funding debates on HE and research for development. Sida (Sweden), Nuffic (Netherlands) and Norad (Norway) all provide significant bilateral funding directly to southern HEIs (www.sida.se; www.nuffic.nl; www.norad.no)
- A number of **private foundations** such as the Wellcome Trust (UK) and Gates Foundation (the world's largest research funder) are major research funders, particularly in health and medical sciences; the Asian Women's University in Bangladesh is also backed by Gates.
- **The Partnership for Higher Education in Africa** brings together Carnegie, Ford, MacArthur, Rockefeller, Hewlett, Mellon and Kresge foundations. The Partnership has identified a number of priority universities and countries, and funding covers major ICT infrastructural projects, in addition to research and leadership support (www.foundation-partnership.org). The foundations also support research on an individual basis.
- In **Canada**, CIDA and the Association of Universities and Colleges of Canada (AUCC) established the University Partnerships in Cooperation and Development programme, investing some C\$364 million since 1994 in collaborative projects between Canadian and developing country universities as part of Canada's strategy for international development (www.aucc.ca/upcd-pucd/index_e.html). Funding specifically for research is provided by IDRC (www.idrc.ca).
- Many countries include scholarships for developing country students to study overseas as part of their overall support for HE capacity building. Where these are aligned with wider capacity building initiatives they can be a very effective form of support.

For an assessment of international research funding for development see Jones and Young (2007)

Annex C: Further reading

Websites

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- International Higher Education www.bc.edu/bc_org/avp/soe/cihe/newsletter/
- International Network for Higher Education in Africa www.bc.edu/bc_org/avp/soe/cihe/inhea/ - includes an extensive thematic bibliography (www.bc.edu/bc_org/avp/soe/cihe/inhea/publications.htm) and country profiles
- Network for Policy Research Review and Advice on Education & Training (NORRAG) www.norrag.org
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