HIGHER EDUCATION
AND ECONOMIC DEVELOPMENT IN AFRICA

Strengthen and Expand the Higher Education Research and Advocacy Network in Africa in order to:

- Enhance information capacity building for evidence-based policy-making and management
- Develop a better understanding of the national higher education commissions and their possible role in policy coordination
- Study the incentive/reward supplementation of the income of academics
- Elaborate the university development projects 'knowledge-connectivity' model
- Democracy, the university and student development
- Maintain and strengthen advocacy, and
- Continue the Higher Education Masters in Africa programme and include a Doctoral programme.

Funding Proposal for Phase 2
Submitted to the Carnegie Corporation

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CHET

CONTENTS

1   HERANA PHASE ONE

Phase 1 of the HERANA project comes to an end in December 2010, although the finalisation of reports and some advocacy activities (articles in *University World News* and country/institutional report back meetings) will continue well into 2011.

The findings of the HERANA project are contained in eight country reports, a 50-page synthesis report and a book which combines the synthesis report and key findings from each of the eight country reports (all three publications to be published by mid-2011). (HERANA reports published to date can be found on the CHET website at http://www.chet.org.za/programmes/herana)

Some Main Findings and Implications:

The development model of the three OECD systems (Finland, South Korea and North Carolina) studied in this project are what the World Economic Forum competitiveness report classifies as 'innovation-driven' – in other words, these countries have agreed that knowledge and education are key productive factors in development. Three from the sample of eight African countries (Mauritius, South Africa and Botswana) are in the efficiency phase, meaning that improved efficiency and higher education and training are increasingly playing an important role in economic development. The other countries (Ghana, Kenya, Tanzania, Uganda) are in the process of moving from 'factor' (natural resources and low skills base) towards efficiency and, by implication, an increasing importance for education and training.

This study showed that the three efficiency-driven systems already have substantially higher participation rates in higher education but that, with the exception of Mauritius, none of the other countries has a consistent development model, nor is there an agreement (pact) that knowledge is a key productive factor. In the rest of the sample there are emerging knowledge policies, but they are mainly in one government department, with weak coordination and implementation.

The absence of a pact means that there are different and competing approaches to what should drive development and a lack of agreement about the role of higher education in development. It seems that the widespread belief in Africa that education in general, and higher education specifically, is a private good, and not a productive factor, is still dominant.

Traditionally, development models assumed that development, and education, are sequential, from primary (factor), to secondary (efficiency), to tertiary (innovation). A number of highly successful countries such as Finland and South Korea, and a number of the fast-developing countries such as China, India and Brazil, have instead adopted parallel processes of strengthening primary and secondary education, accompanied by massive investments in higher education and research. In our sample, neither the governments nor the development aid donors seem to accept this parallel process, despite the fact that the governments of the donor

countries support the OECD, and new World Bank, mantra that higher education is key in the knowledge economy.

Although donor aid in Africa has not reached the ambitious targets set at the 2005 summit, reaching 61% of these targets still amounts to a substantial increase in development aid to Africa in general, and to higher education in particular, and to significant amounts of funds.

The question is not only about more aid but, equally importantly, how to spend the aid more effectively. For African countries to move from being providers of raw materials and receivers of foreign aid to the next stages of development that will make them part of the global knowledge economy, will mean a number of parallel developments. Key is the strengthening of the universities, and particularly the flagship universities.

The results presented in this study show that the main strengths of the universities are in undergraduate education, but they are very weak in knowledge production, producing students with doctorates and publishing internationally.

As was the case with the European university tradition before the second world war, and till fairly recently the Latin American model (Swartzman 2010), the universities in our sample are still predominantly organised as teaching institutions, despite some rather grandiose mission statements and claims to be knowledge producers. But just as was the case in Europe, Latin America and Asia, the challenge facing African universities are to expand their role beyond teaching to research and to become significant contributors to what Douglass, King and Feller (2009: 1) calls "globalisation's muse": "Universities and higher education systems, for both real and romanticised reasons have become globalisation's muse: in essence a widely recognised route to full participation in the knowledge society."

The results of this is study shows that from some national policies, to university leadership discourses and strategic plans, to a number of 'world class' development projects, there is an increasing intention, and some exemplary practices to joining the knowledge society. To encourage and support these initiatives, both at national and institutional levels, this project argues, amongst others, the following:

Firstly, there needs to be considerably more agreement between governments, funders and university leaders that knowledge and higher education are key productive forces.[1] This means that while capacity-building is important, consensus-building is equally important – capacity-building without agreement on 'capacity for what' may be part of the 'bottomless pit' syndrome in Africa.

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[1] More countries will have to accept the quote on the new Botswana Tertiary Education Plan: "Diamonds are NOT forever".

Secondly, the strengthening of knowledge is essential. Development in higher education in Africa is not an esoteric search for indigenous knowledge, but the strengthening of post graduate training and research at universities as specialised institutions whose core business is knowledge. In the words of Coleman and Court (1993):

> [T]he development contribution of universities lies less in their effectiveness as extension agents than things which universities alone are capable of offering … the creation of knowledge, understanding and intellectual integrity.

Thirdly, it is clear from this investigation that in order to 'refocus' universities, attention will have to be paid to incentive structures. Top priority is to address the serious shortage of national, continental and global research funds which incentivises academics to do research, rather than mainly consultancy and 'triple teaching'. What needs to be incentivised is PhD supervision and research programmes that strengthen the academic core and make these flagship universities part of the global academic community, and connects them to local/regional development.

Fourthly, all the universities in the sample have exemplary development activities/projects that both connect to national and or local development needs while also strengthening the academic core. The problem is that are simply too few of them and these projects are mostly driven by exceptional individuals. The challenge will be to institutionalise these activities and to expand the scale and the sustainability.

Finally, to develop differentiated support policies for governments, funders and institutional leaders, research on higher education, and reliable and systematic higher education information systems are key to providing data that strengthens evidence-based decision-making, and weakens the prevailing over-reliance on 'higher education commonsense'.

Unique Features of HERANA

Some of the unique features of the first phase of the *Higher Education and Economic Development* project included the following:

1. Applied the principles (rather than copied the practices) of three OECD systems that have successfully connected higher education to development, to an African context.
2. Developed a conceptual framework – the 'development triangle' – that explores the dynamics between national government, universities and funders.
3. Operationalised the central concepts of pact, academic core and knowledge-connectivity in an African context, but with equal relevance in many other countries and contexts.
4. Provided empirical evidence about the government policies, and the differences and similarities between important universities, in eight African

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countries, which can serve as a basis for evidence-based policy-making and management.

5. Assembled the most comprehensive and systematic data set on a group of sub-Saharan African universities ever compiled.
6. Connected a Network of more than 50 academics, administrators and postgraduate students in higher education studies in more than 12 countries. (See Appendix 2 for list of Network participants.)

Impact of HERANA

Determining 'impact' is difficult at the best of times and particularly so before the project is concluded. Nevertheless, it is possible to identify various areas of real or potential impact, namely the production of new knowledge – both for academic purposes and for national and institutional policy and planning; and, networking, raising awareness and stimulating debate about the importance of higher education for development.

Production of new knowledge

The HERANA projects contribute to the existing, somewhat limited, body of knowledge about higher education in Africa and, in particular, the relationship between higher education and development. New knowledge has been produced in the following areas:

- The ways in which three successful OECD countries link higher education and economic development, identifying nine similarities, despite very different contexts and practices.
- An analytical framework that includes concepts such as 'pact', 'academic core' and 'connectedness' as a lens through which to investigate and understand the complex relationships between higher education and economic development. These concepts have been operationalised through detailed sets of indicators.
- The nature and strength of the academic core of eight 'flagship' universities in Africa. This includes a never-done-before cluster analysis of 28 universities in sub-Saharan Africa.
- A methodology, with a set of indicators, to assess the relationship between external connectedness and the academic core in the development-related (engagement) activities of universities.
- Comparative data on the 'cognitive democracy' of students at three prominent universities in Africa.

This new knowledge has and will be utilised in various academic settings. The study on the three OECD countries has been published and has been prescribed for the joint NOMA masters course (Western Cape, Oslo and Makerere universities). The analytical framework and some of the indicators were presented as part of the opening keynote address at the Consortium of Higher Education Researchers annual

conference held in Oslo in June 2010 (250 participants from 35 countries). Following the CHER presentation, we have been invited to make presentations during 2011/12 at the universities of Bath, Milan, Gent, Melbourne, Toronto, New York, Georgia and Berkeley. The book on the conference proceedings will have an opening chapter on the project and Springer has approached us to do a book on the project. A number of institutions have approached us to further discuss the 'engagement' methodology, which some have reported will be a useful tool for managing internal and external interests around external funding. Finally, the student democracy report was presented at an international student leadership seminar in South Africa, in a session with former President Thabo Mbeki, and was very positively received.

In total the project is going to produce 20 publications, at least 10 masters dissertations and two doctorates. In addition to the academic contribution to knowledge, the HERANA projects have also contributed empirical and comparative evidence which can (and has, in some cases) be used by universities and government ministries / agencies for evidence-based policy and planning.

The most direct policy influence thus far has been on NORAD and the South African Department of Higher Education and Training (DHET). During the three years of the project, three HERANA presentations were made at NORAD headquarters. Subsequently, the new NORAD guidelines for development aid in higher education have been significantly influenced by the project, both in terms of content and process. In addition, two HERANA members have been official reviewers of the new NORAD approach to funding aid.

The South African DHET has commissioned CHET, through financial assistance from the Ford Foundation, to develop a proposed methodology for differentiation that uses the cluster analysis method developed for the HERANA project and has agreed that for capacity development in the Department, some officials will join the HERANA project group in the next project cycle.

The Quality Division of Makerere, the Tanzanian, Botswana and Mauritius Tertiary Education Councils have started discussions with CHET about developing an evidence-based indicator system. In March 2011 the HERANA project findings and implications will be presented to UNESCO's division of Science Policy and to the International Social Science Council in Paris.

Perhaps the greatest impact thus far in terms of evidence-based management is that all eight universities in the network have signed up to participate in the second phase of HERANA for the data capacity building and the promotion of evidence-based management component. Some of these institutions, such as Makerere and Dar es Salaam, have already used the HERANA data to improve their university 'fact' books.

Networking, raising awareness and stimulating debate

Perhaps one of the most powerful areas of impact is, and will be, raising awareness and stimulating debate about the importance of higher education for development and some of the critical features that need to be put in place. The HERANA projects have already made a visible contribution in this regard by providing platforms for networking and dialogue between national and institutional stakeholders in the eight countries, including academics and students working in the higher education studies field.

To begin with, the network now includes more than 50 academics, university leaders and postgraduate students in higher education studies in more than 10 countries. In addition, the project has developed a working relationship with the eight universities in Africa with at least two 'dedicated' collaborating senior people in each institution, and contacts in at least one government department in each country, as well as the tertiary / higher education council or commission.

This is the first time that CHET projects have had a dissemination strategy built into the project plan from the start and it has paid off. Thus far, a total of 15 seminars have been presented at all eight participating universities; Botswana, Dar es Salaam, Ghana, Nairobi, Makerere, Mauritius and Nelson Mandela Metropolitan University. These seminars have been attended by more than 900 participants from government departments, universities and funding agencies. Participants have included ministers and senior officials from the ministries of education, science and technology and finance; tertiary education and research council representatives; vice chancellors and senior university leadership, and professors and project leaders. A second round of presentations with key findings and implications is planned for 2011.

Beyond the immediate network membership, HERANA has sought to bring issues relating to higher education in Africa to the attention of a much wider audience on the continent and internationally. One such strategy is the HERANA Gateway, a specialised search engine which provides a central point for the dissemination of research-based information on higher education in Africa to relevant experts and decision-makers. This year, the HERANA Gateway has had more than 3,000 users from 108 countries.

Another strategy is *University World News* Special Africa editions and fortnightly Africa newsletters which were launched in 2008 in collaboration with the HERANA project. By the end of December 2010, there were more than 27,000 people in 150 countries receiving the weekly global edition. Of *UWN's* total of 27,026 registered readers, 13,280 receive the Africa edition. This includes some 7,500 people who receive both the Global and Africa editions, and people in Africa as well as readers outside the continent with an interest in African higher education. More than 6,000 of UWN's readers are based in Africa, in 29 countries. The biggest readerships are in South Africa (2,978), Egypt (1,241) and Nigeria (703) followed by Mauritius (135), Namibia (129), Uganda (92) and Morocco and Kenya with 90 readers.

In the six months to the end of September 2010, UWN received on average 75,400 unique visitors to the website per month, and on average 670,000 page views a month. Amongst the readers, 28% are university leaders or senior managers (including vice chancellors, deans or heads of departments or units), 37% are lecturers or researchers, 10% are administrators, international officers or other non-academic staff, and 25% are others (students, journalists, Public Relations officers, conference organisers and consultants).

Official recognition came when UNESCO selected UWN as media partner to the 2009 World Conference on Higher Education in Paris, and again when UWN became a media partner to the OECD's Institutional Management in Higher Education 2010 general conference, *Higher Education in a World Changed Utterly: Doing more with less*.

Thus far five HERANA articles have been published on the UWN website and at least another five are in the pipeline. By way of concluding this section, we note that Sir Peter Scott, vice chancellor of Kingston University in the UK and former editor of *Times Higher Education*, had the following to say about the positive impacts of the UWN:

> *The impact of UWN on comparative higher education studies has been to provide a comprehensive, reliable and (above all) sustained evidence base which up to now has largely been lacking. Other higher education publications have tended to downplay their international coverage as the cost of providing such coverage has increased and also as domestic agendas have become more dominant; UWN, therefore, has filled a crucial gap. Its impact on policy borrowing is potentially even more important. Its contributors are experienced journalists, often based in the countries from which they report. Their brief is to explain the complexities of higher education policies to a genuinely international audience – not to simplify them for a particular national audience. Above all, UWN provides a powerful link between comparative higher education and policy borrowing – by providing a more extensive evidence base and offering more sophisticated, and nuanced, analysis.*
> (UWN, 17 October 2010)

2   HERANA PHASE TWO: PROPOSED PROJECTS

A report back seminar for the *Higher Education and Economic Development in Africa* project was held in Franschhoek on 25–27 August 2010. At this seminar, the project team presented the preliminary findings for the eight case studies[2] to 40 participants, including representatives from the eight participating universities and other invited guests. (See Appendix 1 for the list of seminar participants.)

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[2] The eight case studies include: Botswana and the University of Botswana, Ghana and the University of Ghana, Kenya and the University of Nairobi, Mauritius and the University of Mauritius, Mozambique and the Eduardo Mondlane University, South Africa and the Nelson Mandela Metropolitan University, Tanzania and the University of Dar es Salaam, and Uganda and Makerere University.

As part of the seminar proceedings, a discussion was held with the representatives of the Ford Foundation and Carnegie Corporation present at the meeting, and the representative from NORAD (via telephone), who supports the Higher Education Masters in Africa (HEMA) programme. At this meeting it was decided to develop a funding proposal for a second phase of HERANA, focussing on the Higher Education and Economic Development component, for the period January 2011 to December 2013. The proposal to Ford and Carnegie will be to maintain and strengthen the Network, and to do research and capacity development in selected areas (see below). NORAD funding will continue until 2013, and a new request for proposals will go out from them in 2011. During Phase 2, the HERANA Network will also explore complimentary projects with additional funding

A number of possible projects have been identified on the basis of the Phase 1 findings and framework. These are elaborated below.

HERANA Phase 2: Key achievable next steps

1. Consolidate and expand the Network

2. Information capacity building:

   a) Improve and maintain the academic core database

   b) Strengthen evidence-based policy-making and management

3. Study the national higher education commissions and involve them in advocacy (pact and coordination)

4. Study the incentive/reward supplementation of the income of academics

5. Elaborate the university development projects 'knowledge-connectivity' model

6. Explore the feasibility of an African Research Council

7. Maintain and strengthen advocacy
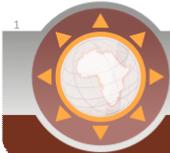
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2.1   CONSOLIDATE AND EXPAND THE NETWORK

The Network already includes more than 50 people from 12 countries (see Appendix 2). Ideally, we want three people from each of the eight African universities, including

a senior institutional leader (deputy vice chancellor or registrar level involved with or responsible for overall planning), a senior person in the planning division, and a data manager. In some institutions we already have such a team, but not in all. In addition to the growing number of young higher education studies scholars, such a Post-docs, Doctoral candidates and Masters graduates, we need a few more senior academics from African universities. We are in the process of strengthening our international network through developing relationships with the Centre for Studies in Higher Education (Berkeley, US) and the Centre for Research on Higher Education Systems (Milan, Italy). The HEMA programme also offers the opportunity to involve more academics in teaching and research.

2.2   SUPPORT INFORMATION CAPACITY BUILDING FOR EVIDENCE-BASED POLICY-MAKING AND MANAGEMENT

Two central concepts for information capacity building are 'information' (statistics) and evidence-based policy-making. Statistical systems can be seen as institutions and as institutional practice (March and Olsen 1989). The basic assumption is that the way information in an institution is organised has implications for how the institution works. Information serves different purposes, and different information systems can be designed for securing different goals and purposes. Such goals may include maximising effective decision-making, maximising the democratic ideal of informing the public and the citizens, and maximising trust among actors in competitive markets. Trust in the quality of information and in the institutions generating information is important for securing trust in government and democracy.

Evidence-based policy and management is a discourse or set of methods based on empirical information which informs the policy process, rather than aiming directly to affect the eventual goals of the policy. Policy based on systematic evidence is considered to not only produce better outcomes, but also to provide more opportunity for democratic participation (Sutcliffe and Court 2005; Weil et al 2003). Sutcliffe and Court provide two contrasting examples in this regard. The first is how Tanzania implemented a process of health service reform that was informed by the results of household disease surveys, which ultimately contributed to a 40% reduction in infant mortality. The second is how the HIV/AIDS crisis deepened in a number of countries because governments ignored the evidence on both causes and treatment. In higher education, evidence-based policy-making and management could, amongst others, counter the tendency by new university vice-chancellors to proclaim that they are going to "put the institution in the top 100 within five years" while the institution's Doctoral and research outputs are declining, rather than increasing.

From both the HERANA and the Performance Indicator projects it has become apparent that the management of information is an indicator of the degree of institutional coherence, or fragmentation, of the organisation. While in some cases fragmentation is the result of a shortage of trained staff or inappropriate technology, the biggest problem appears to be the lack of institutionalisation of data and

procedures. Because institutionalisation is the basis for evidence-based policy and management, it is very problematic when 'once-off' data sets are used to influence decision-making.

Generally speaking, institutionalisation is defined by Johan Olsen (2007) as a relatively enduring collection of rules and organised practices derived from collective identities and belongings, and embedded in structures of meaning and resources. Behaviour is rule-driven and constitutive rules and practices prescribe appropriate behaviour for specific actors (such as university staff) in various situations; structures of meaning explain, justify and give direction to behaviour. Structures of resources make actors more or less capable of acting according to prescriptive behavioural rules and laws. The degree and form of institutionalisation impact both motivation and capacity to follow institutionalised rules and codes of behaviour.

In the context of the proposed HERANA Phase 2 projects, institutionalisation refers to procedures, data and technology, and to the ways in which these procedures, data and technology are connected between different components of the institution – from registration to graduation. Often, institutions address one component of the process, such as a new information technology (IT) system or an imported information package, rather than all components in the system. It is the process of institutionalisation of information that this project wants to address, with particular reference to developing comparable cross-country business data plans.

The data profiles of participating universities

The combined HERANA and Performance Indicator projects developed institutional profiles (29 graphs) based on the following data:

- Head count student enrolments
- Full-time equivalent student enrolments
- Graduates
- The efficiency of graduate outputs
- Permanent academic and administrative staff
- Academic staff qualifications
- Ratios of full-time equivalent students to full-time equivalent academic staff
- Research publications
- Weighted research outputs in the form of Masters and Doctoral graduates, together with research publications
- Research outputs of academic staff, measured as ratios of research outputs to permanent academic staff members
- Total income and expenditure in local currency and in US dollars at market rates, and
- Government income and student fees per full-time equivalent student and graduate in US dollars at market exchange rates.

CHET is increasingly sharing data with the Centre for Research on Science and Technology (CREST) and, in constructing the new profiles, we would want to add more resource output information informed by CREST's work.

Data problems

CHET obtained student and staff data for the 22 South African universities from the HEMIS data of the Department of Higher Education and Training (DHET). Financial data and research output data are not included in HEMIS but were obtained directly from the Department. Because data on the seven other African universities could not be provided by a national government department, the participating universities agreed that the data should be obtained directly from them. A data template was sent to these universities during May 2007.

Many of the first data tables returned by the seven African universities during 2007 and early 2008 were inconsistent and incorrect. It was decided that the best way of resolving the data problems would be to send a task team to the universities concerned to discuss the problems which they had with the template, and to collect as much raw data as possible on site. The task team visited the participating universities during 2008/2009. In its report, the team offered this account of some of the reasons why universities had experienced difficulties in completing the data templates:

- Some universities could not extract the required data because they did not have appropriate or functional electronic student and staff databases. In these cases, the data were only available in the form of summarised tables in print format.
- Where electronic databases were in place, the data were often incomplete, classifications were inaccurate, graduate sets were incomplete, and not all marks used to indicate student success in specific courses had been captured.
- A number of universities had no central management information office in which complete sets of the data were stored either in electronic or hard copy format. In these circumstances, data had to be collected directly from faculties or other relevant administrative departments. A consequence of this decentralisation was that different versions of data on students and staff were held by the university's various operational units.
- Problems had occurred with the merging of historical staff and student records when colleges or other entities had been incorporated into universities.
- Because the focus of some universities was almost entirely on full-time student enrolments and their full-time staff establishment, their information on part-time students and part-time staff was poor and incomplete.
- The concepts of full-time equivalent students and full-time equivalent staff were not widely used or understood. The data elements needed to make the

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necessary calculations were not, as a result, available in a usable format in the case of most of the universities.

• Financial data are coded very differently across institutions, making it virtually impossible, for example, to determine how much research income the institution has.

Proposed project activities

Maintain and expand indicator databases

This component would, first of all, undertake an annual update for the existing institutional indicator database for the South African universities and the seven other institutions participating in the Performance Indicator project. This would allow institutions to not only use the indicator data for their own institutional planning, but also to continue to make comparisons. In addition, we aim to expand the indicator base to include more indicators on research output and financial issues. These would include further research output indicators and an expanded set of financial indicators, covering sources of income, expenditure categories and student unit costs.

This information will be used to update the data on the Interactive Database which was developed during the Performance Indicator project. The performance indicator data of the 29 institutions plus Unisa (the dedicated distance university in South Africa) will be available via an on-line graph and data table-generating tool. Hosted as part of the CHET website[3], the tool allows users to select universities and indicators, and to generate the relevant graphs and associated data tables on-the-fly. The graphs can be downloaded as images and the data tables as Excel spreadsheets. The website also makes each institutional profile available as a downloadable PDF file; provides definitions for key terms and data constructs; and, provides links to relevant comparative data (e.g. World Bank's Knowledge Economy Index or UNESCO's EFA Global Monitoring Report) hosted on other websites.

During the three years we will also do a comparative report on changes within institutions and between institutions, in a time series.

Build information processing capacity

The capacity building component will draw on the senior institutional contact people we have developed as part of the HERANA Network (see Appendix 2).

Capacity development in the project would include the following components:

• Development of a cross-national data framework: Participants from a range of African universities would discuss the definitions and application of data

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[3] See the CHET website: http://www.chet.org.za/indicators/

concepts which would serve useful purposes in performance measurement, national and institutional planning, and in cross-national comparisons.
- Application of new framework: Determining how data concepts apply in different institutional contexts, and determining what an appropriate business plan for data management would be for each institution – including the use of data in planning and performance measurement.
- Some case studies of the use of data for planning and performance measurement within each participating institution.

A possible additional component of capacity development (with separate funding) could be to bring the Tertiary Education Network (TENET) into the project. TENET uses DITCHE, a donor-funded capacity development programme that aims to assist public higher education institutions to improve their use of information technology. It was initially conceived of as a programme to improve the quality and effectiveness of network and other IT operations in public higher education and has grown into a comprehensive programme encompassing the triad of 'people, process and technology'. In 2007, the DITCHE programme was expanded to include formal training in IT process management. Hitherto DITCHE had focused on people and on technology training, but had devoted almost no attention to process training. This deficit was remedied with the introduction of a formalised training programme in IT service management.

Another possible contributor is Integrated Tertiary Software which provides data analysis services to 16 of South Africa's universities, and is operating in at least 10 other African countries. It could be useful to bring this very experienced company into the discussions about data definition, capturing and analysis.

Revisiting the indicators of a 'strong' academic core

The HERANA project operationalised the Burton Clark concept of 'strengthening the academic core'. As was highlighted in section 2 above, as a point of departure, the following indicators were identified in order to rate the strength of each university's academic core:

Input indicators:
1. **Increased enrolments in science, engineering and technology (SET):** In African governments and foreign development agencies alike, there is a strong emphasis on SET as important drivers of development (Juma 2005). Included in SET are the agricultural sciences, architecture and urban and regional planning, computer and information science, health sciences and veterinary sciences, life sciences and physical sciences.
2. **Increased postgraduate enrolments:** The knowledge economy and universities are demanding increased numbers of people with postgraduate qualifications.
3. **A favourable academic staff to student ratio:** The academic workload should allow for the possibility of research and PhD supervision.

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4. **A high proportion of academic staff with doctoral degrees:** Research (CHET 2010) shows that there is high correlation between staff with doctorates, on the one hand, and research output and the training of PhD students, on the other.
5. **Adequate research funding per academic:** Research requires government and institutional funding and 'third-stream' funding from external sources such as industry and foreign donors.

Output indicators:
6. **High graduation rates in SET fields:** Not only is it important to increase SET enrolments, it is crucial that universities achieve high success rates in order to respond to the skills shortages in the African labour market in these fields.
7. **Increased knowledge production in the form of doctoral graduates:** There is a need for an increase in doctoral graduates for two reasons. Firstly, doctoral graduates form the backbone of academia and are therefore critical for the future reproduction of the academic core. Secondly, there is an increasing demand for people with doctoral degrees outside of academia (e.g. in research organisations and other organisations such as financial institutions).
8. **Knowledge production in the form of research publications recognised in ISI journals:** Academics need to be producing peer-reviewed research publications in order for the university to participate in the global knowledge community and to contribute to new knowledge and innovation.

The concept of the 'academic core' and its original set of indicators have been received with great interest, but also with various suggestions for improvement. During Phase 2, we will revisit the concept and the data requirements, and will provide an expanded set of academic core indicators.

Promote the importance and use of indicators

At the same time that we improve capacity to institutionalise information processes, the importance of information, and the use of information at different levels, needs to be promoted. While within the institution the aim will be to institutionalise a simpler but more workable information capturing and information flow, there is also the issue of improving information interpretation for planning – both at the leadership and the government levels.

All eight HERANA universities would need to be involved in the first two steps of the capacity development component, namely, developing a cross-national data framework and setting conditions for the application of the framework.

Currently the two main consultants on indicators are Ian Bunting, retired Chief Director, Department of Education, and Charles Sheppard, Director of Management Information at the Nelson Mandela Metropolitan University and consultant to the

Deputy Director General, DHET. The Performance Indicators group also includes Gerald Ouma (University of the Western Cape) on higher education financing; Rolf Stumpf, retired Vice Chancellor of NMMU; and, Anthony Melck, Chief Operations Officer at the University of Pretoria. CHET now has a cooperation agreement with CREST at Stellenbosch regarding research indicators. During the next phase Gerald Ouma will spend time with Bruce Johnstone at Buffalo University and Charles Sheppard with John Douglass at Berkeley.

Deliverables

Some of the tangible outcomes of the above-mentioned project activities will include the following:

- The maintenance, updating and expansion of the newly-developed Performance Indicator Interactive Database on the CHET website.
- The development of new indicators, in particular those which relate to research and financial performance.
- Production of new data manuals which set out (a) the broad parameters of the data framework, (b) definitions of the academic programme, student, staff and financial data concepts employed in the framework, and (c) the main requirements for an institution's information business plan.
- Redefinitions of the concept of and indicators for the academic core.
- Promotion of the use of indicators through high-level workshops on the interpretation and use of performance indicators in strategic planning.
- Strengthening of the existing network of institutional researchers and administrators in the eight African countries.

2.3   INVESTIGATE THE ROLE AND FUNCTIONS OF NATIONAL HIGHER EDUCATION COMMISSIONS/COUNCILS

In 1995, the National Commission for Higher Education (NCHE) proposed, in its new governance framework for South Africa, the establishment of a national council/agency that could provide expert technical services to the then Department of Education. The two main motivations were the expected lack of capacity in the new department and the possibility of an expert body with some distance, or 'independence', from both the department and the institutions. The government accepted the NCHE's proposal in a revised form, and the Council on Higher Education (CHE) became a quality council (temporarily!) and an advisory body. Currently, the CHE's role seems to be shifting towards becoming a kind of agency for the DHET responsible for quality and qualifications (certification). When we wrote the HERANA Phase 1 proposal, little did we know that, by 2009, seven of the eight countries (Mozambique being the exception) in our HERANA group would have some form of a higher education commission or a council.

As part of the HERANA project we interviewed at least one person in each of these councils and our preliminary observations were the following:

- They are all involved in quality and/or certification to a greater or lesser extent.
- They are all experiencing 'role tensions' or 'role confusion', and are constantly in the process of redefining or renegotiating their roles.
- They are not intermediary bodies, as the World Bank misclassified them at a seminar two years ago; rather, they are 'in-between' agencies that are subject to pressures or tensions from competing interest groups such as ministries, departments, and private and public institutions.
- With the exception of South Africa (at the current moment), they have more expert capacity and status than their national departments of education.
- They are ideally located to play a greater coordinating role with regard to 'knowledge policies'.

In terms of the HERANA findings about the importance of linking and coordinating knowledge policies, these 'somewhat independent' bodies with 'negotiable' roles seem ideally suited to play a coordinating and advocacy role. Some of the tertiary education councils, as they are called in Botswana and Mauritius, are already linking higher education to human resource development. For instance, in Botswana, the 'diamonds are not forever' knowledge economy policy was developed by the Tertiary Education Council, which is now also responsible for the new national human resource policy. And, during the interviews, the representative of the Kenyan Commission on Higher Education talked a lot about making higher education more responsive to the labour market and development.

Proposed project activities

A project on the higher/tertiary education commissions/councils could do the following:

- Make a systematic comparison of their current functions and roles in their respective higher education systems and develop a typology;
- Investigate their future role and function aspirations;
- Investigate the relationship between the commission/council and national departments of education and science and technology;
- Bring about greater interaction, and mutual understanding between the commissions/councils in the eight countries, and key national stakeholders and university leadership; and
- Involve the commissions/councils in HERANA feedback workshops and advocacy.

Work on commissions or councils is already being undertaken by some members of the Network. For instance, Tracy Bailey is doing her PhD (UWC/Oslo) on the use of research in higher education policy-making using the South African CHE as her case

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study. We also have a Masters student, Keitumetso Lebotse, doing a study on the Botswana Tertiary Education Council, while Prof Njuguna Ng'ethe from the University of Nairobi has done a first preliminary survey of the East Africa Councils.

Deliverables

Some of the tangible outcomes of the above-mentioned project activities will include the following:

- Develop a typology of roles and functions of higher education commissions/councils;
- Make proposals regarding the possible roles and functions of such bodies in the African context;
- Bring about greater interaction/understanding of the functions and possible roles of the bodies amongst themselves, government and funders; and
- Promote the possible uses of performance indicator data for their work.

2.4 STUDY THE INCENTIVE/REWARD SUPPLEMENTATION OF THE INCOME OF ACADEMICS

In studying the academic core of the eight African universities, the HERANA study found 'contradictions' between the input and output variables. For example, at a number of the institutions, permanent academics are well qualified (high percentage of Doctorates), have relatively manageable workloads (staff-student ratios of around 1:20), and an increasing enrolment in Masters degrees, but very low Doctoral graduations and research publications (see diagram below).

Institutional clusters according to input and output indicators

	% SET enrol	% PG enrol	Inverse Stud: Staff FTE	% Staff PhD	Res Inc per Acad	M grad per Acad	D grad per Acad	Articles per Acad
UDSM	0.15	-0.09	0.89	0.52	-0.58	-1.28	-0.68	-0.74
Makerere & NMMU	-0.75	-0.67	-0.74	-0.83	-0.45	0.08	-0.37	-0.36
UCT	1.35	1.43	0.59	1.14	1.48	1.11	1.42	1.47
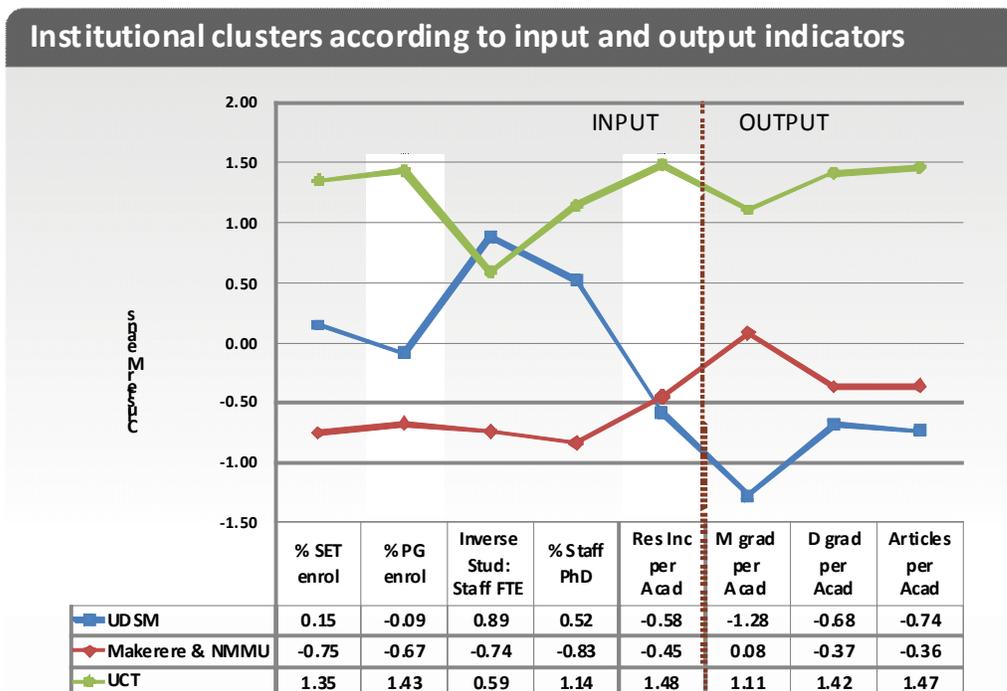
There are two possible explanations for these contradictions that we want to explore. The first is the shortage of research funds and the possibility that academics are supplementing their incomes through activities, such as additional teaching and consultancy, which distract them from supervision and research that could be published. As part of strengthening our research on the academic core, we will explore 'research income' in more detail and see if we can detect a relationship to research output.

The second aspect that we want to investigate is the complex relationship between academic income, academic performance and incentives. In their widely cited study of international comparisons of academic salaries, Rumbley et al (2008: 10) say the following:

> *Significantly salaries may be only one part of the total compensation package for the academic profession. In many of the countries in this study, professors earn extra remuneration by teaching more courses than what they are required to teach, obtaining research grants with extra compensation, publishing articles in prestigious journals and perhaps yielding bonuses from the university doing outside consulting, appearing on television or writing articles in newspapers, or even holding more than one academic job at a time. In several countries professors are paid extra for grading examinations, sitting on special committees, supervising doctoral students, and doing 'other' academic tasks. This study does not take such extra remuneration into account.*

The authors add that "the attitudes and commitments in several countries show that people are attracted to academe for a variety of reasons beyond financial remuneration" (ibid.).

In summary, what Rumbley and colleagues are saying is that academics do supplement their income (but the authors do not know by how much); that this might differ in different countries; and, that academics do not only work for money. Of course, all this contributes nothing to understanding the relationship between academic income, academic performance and incentives.

Even a cursory glance at the literature confirms the statement by Frey and Neckermann (2008) that the means of motivation prevalent in the scientific community is a neglected area in the literature, particularly the relationship to monetary compensation. In their study they comment on two developments of 'immediate policy relevance'. The first development is the movement to extend pay for performance programmes of for-profit firms to not-for-profit firms such as universities. One example they give is the Vienna University of Economics which pays 1 000 francs for an article published in an 'A journal' and 3 000 francs in an 'A+ journal'. The second trend is the explosion of awards, which go beyond 'doctor honoris' to a whole range of new innovations such as 'best paper' and other kinds of university prizes. The authors say that "academics are very fond of awards" (ibid.: 2) – apparently Milton Friedman personally listed at least 50 such awards in *Who's Who in Economics*. Frey and Neckermann conclude that "these two developments, the

rising prevalence of pay-for-performance programs and the increasing use of awards, occur simultaneously and independently of each other" (ibid.: 3).

In a related research project, Henrekson and Rosenberg (2000) argue that despite large levels of R&D spending and comprehensive government support schemes in Sweden, the weaknesses in the incentive structure resulted in Swedish academics performing relatively poorly in comparison to their US counterparts. This raises the important point that performance is not only related to financial support for research and innovation, but also to the incentive structure for academics.

Combining the findings of the HERANA project, the relevant literature, and discussions with Prof Murray Leibbrandt from Southern Africa Labour and Development Research Unit (SALDRU) at the University of Cape Town, the proposed project activities are outlined below.

Proposed project activities

- **Comparison of academic salaries in the HERANA universities:** Using the databases from the Performance Indicators project together with SALDRU data sources, we could make a purchasing power parity (PPP) comparison of average compensation packages and the remuneration of senior professors in the eight African universities. This could be a Rumbley et al type cross-system comparison which we could also correlate with performance.

- **Comparing academic remuneration to the public and private sectors:** Using data that SALDRU has access to in different sub-Saharan African countries, it would be interesting to investigate comparative differences and similarities between the eight countries between academic, public sector and private sector remuneration.

- **Academic incentives structures:** Conduct a survey of a carefully selected sample of social science/humanities staff in the eight African universities on income supplementation in terms of additional teaching, consultancy, research and private sector activities. The survey will try to get a better understanding of the explicit and implicit incentives that operate in the different institutions. The study will also try to determine to what social/consumer levels academics aspire.

For this project, CHET will cooperate with SALDRU which, in addition to doing the household surveys for the President's Office, has considerable experience in this area. Patricio Langa, the new UWC Post-doc, did his PhD on academic capital and will also contribute.

Deliverables

Some of the tangible outcomes of the above-mentioned project activities will include the following:

- For the first time, reliable comparative salary data amongst eight sub-Saharan African countries will be compiled;
- Academic salaries will be located within different country contexts;
- Information on certain aspects of the incentive regimes for academics in a group of African countries, and the possible effects these could have on their supervision and research functions, will be provided; and
- A CHET book on the incentive/reward structure of academic remuneration will be published.

2.5   ELABORATE THE DEVELOPMENT PROJECTS 'KNOWLEDGE-CONNECTIVITY' MODEL

In order to ensure that the core activities of teaching and research are to some extent aligned with national development priorities and can thereby contribute to development in society, universities increasingly emphasise the need to engage with relevant external stakeholders. Furthermore, much of what might be termed the development-related activities of the university usually fall within the 'third mission', which is variously referred to as 'engagement', 'service' or 'community outreach'. Such activities might include long-term research programmes on development issues, academics serving on committees in the public or private sector, providing support to small businesses, responding to requests for short courses, or undertaking consultancy research for external clients.

One of the assumptions of the HERANA analytical framework is that a university has a greater capacity to make a *sustained* contribution to development when its development-related activities contribute to strengthening the academic core of the university, and when there is articulation/connectedness with key stakeholders.

'Strengthening the academic core' was operationalised to include the extent to which the projects feed into teaching or curriculum development; are linked to the formal training of students; enable academics to publish in academic publications (journals, books etc); are linked to international academic networks; and, generate new knowledge (versus applying existing knowledge). When projects are operating far out in the 'extended periphery', disconnected from the academic core, this weakens the academic core and leads to 'projectisation' (e.g. academics spend much more time managing and implementing one or more externally-funded projects than being involved in degree education and basic research activities).

'Articulation' refers to the extent to which the aims and activities of development-related activities articulate with national development priorities and the institution's

strategic objectives. When there is some degree of coherence, it can be said that the projects are playing their role in the pact. When there is little or no coherence, the institution's contribution to development becomes fragmented and the pact is weakened. Articulation with institutional objectives and/or national priorities can also be taken as a proxy for relevance.

'Connectedness' refers to the linkages the project has with two of the groups of stakeholders in the pact triangle – the government (usually through specific government departments or agencies) and external stakeholders (e.g. industry, small businesses, communities such as fishers or small-scale farmers). In particular, our focus is on the extent to which there are linkages with an implementation agency, that is, an external body which takes up the knowledge and/or its products generated or applied through research or training. Our notion of connectedness also takes into account linkages generated through sources of funding. The first aspect in this regard is whether the project/centre obtains funding from one or more of the three stakeholder groups, namely government, an external funder or the university itself. The second aspect has to do with the extent to which the project/centre develops a relationship with its funders over time. This latter aspect is determined through the nature of the financial sustainability of the project.

In analysing selected development-related activities of the eight African universities, we applied ratings for articulation, connectedness and strengthening the academic core. This enabled us to plot the projects on a graph so indicating the extent to which they have the potential to make a sustainable contribution to development. There were two limitations to the analysis. The first was that the analysis was based on a small number of projects rather than a large representative sample. Secondly, the projects selected had an in-built bias since they were selected by institutional leadership on the basis of their economic development or poverty reduction focus.

Although a work-in-progress, this methodology has the potential to provide an empirical basis for investigating so-called 'engagement' or 'third mission' activities – along the lines of knowledge and connectivity. It can also be used as a tool by universities to assist in maintaining an appropriate balance between external development needs and agendas and maintaining a strong core of the university (e.g. when negotiating external funding or evaluating internal project proposals). The potential usefulness of this methodology was echoed by the August seminar participants.

Proposed project activities

In Phase 2, the idea would be to further elaborate and refine the methodology through an in-depth study of the projects at two of the universities in the original sample. This would comprise the following two components:

- A review of the literature relating to the indicators, namely articulation/connectedness and strengthening the academic core; and
- An investigation of a large sample of projects at the two universities in order to test some of the hypotheses inherent in the methodology through, for example, a comparison of 'traditional' academic projects and 'development' or 'engagement' projects, and a comparison across disciplinary areas. The influence of external funders (e.g. industry, foreign donors) would also be considered.

To start with, the project team would include Tracy Bailey, who worked on devising the methodology and rating the projects in the HERANA Phase 1 project, and Francois van Schalkwyk, who is currently completing his HEMA Masters degree on engagement activities, in which he has undertaken a literature review and developed a working typology of engagement activities at two African universities.

Deliverables

Two possible kinds of outputs could be generated:

- An academic output, that is, to further develop the theory about the relationship between knowledge and connectivity in relation to the university's contribution to development, including the tension between the 'core' and 'periphery'; and
- A refined and elaborated methodology for rating projects along the knowledge-connectivity axes which could be a useful tool for universities to use when negotiating with external funders or assessing proposals.

2.6   DEMOCRACY, THE UNIVERSITY AND STUDENT DEVELOPMENT

The concluding section of the HERANA Phase 1 report on democracy and student development[4] states that:

> Overall the research shows that the university's potential to act as a training ground for democratic citizenship is best realised by supporting students' exercise of democratic leadership on campus as a way of developing and fostering democratic leadership in civil society. Several related findings point towards a distinct student pathway to leadership in civil society. In order to realise the African university's democratic training ground potential, the university's response to student political activity, student representation in university governance and other aspects of extra-curricular student life, need to be examined for ways in which African universities can instil and support democratic values and practices.
>
> In conclusion, student leadership in various forms of student political activity and various types of student organisations is therefore one of the most promising

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[4] *The University in Africa and Democratic Citizenship: Hothouse or Training Ground*? Report on Student Surveys conducted at the University of Nairobi, Kenya, the University of Cape Town, South Africa, and the University of Dar es Salaam, Tanzania

places for African universities to act as training grounds for democratic citizenship. Strengthening student development in various organisational and leadership contexts through specific training and targeted support represents a key opportunity for the African university to simultaneously enhance student life and the university's contribution to citizenship development and the development of a national democratic political culture.

The following implications for African universities can be derived from the findings and conclusions in this report:

- It is necessary to stimulate a series of dialogues between governments, institutional managers, student development professionals and student leaders on student development as citizenship development in Africa.
- In-depth investigations into democratic best practice of student development in general, and student leadership development in particular, should be conducted to issue in a series of handbooks for student development professionals in African universities.
- The number of surveys should be extended to other African universities along with the in-depth investigations into best practices of democratic student development.
- A study of the role of youth and students in particular, and members of local universities in general, in the current political transitions in West and North Africa (e.g. Ghana, Senegal, Egypt) should be conducted as a contribution towards a deeper understanding of the role of students in democratisation processes in Africa.

A number of implications are drawn from the findings and conclusions of the first set of HERANA student governance studies. Thus, targeted follow-up work, building directly on Phase 1, is proposed involving different modes of interaction. In particular the Student Governance Report proposes inter alia:

- A series of dialogues between governments, institutional managers, student development professionals and student leaders.
- Further investigations should be conducted towards gaining a deeper understanding of the role of students and graduates in democratization processes in Africa.

Proposed project activities

In Phase 2 the aim is to, using the same three institutions (Dar es Salaam, Nairobi and UCT) follow up with further explorations of student attitudes towards democracy, particularly in the aftermath of the north Africa 'revolutions. Of particular interest would be to with the assistance of alumni offices, survey a group graduates who had left the institution 3-5 years earlier and to determine how they differ from students at the university. Of interest would be to explore whether we could draw a sample of graduates who are employed, and a sample who are unemployed. Such information

would be illuminating in terms of both university-post university attitudes and behaviours, and regarding possible post graduate changes.

The inclusion of up to three additional countries and universities (e.g. American University of Cairo; Cairo University; University of Accra; Cheikh Anta Diop University of Dakar) will greatly strengthen the existing findings and conclusions, put them into the context and perspective of the political developments in West and North Africa, along with developing a close working relationship between an expanding HERANA network of higher education researchers and the Afrobarometer Head Offices (in Accra). However. the current funding will not cover this, so attempts will be made to secure additional funding from Ford Foundation (Middle East) and other possible sources.

Purposes of HERANA Phase 2

- Through a series of dialogues advocate and enhance democratic citizenship development in universities
- Continue to develop a better understanding of African universities' contribution to democratic citizenship
- Develop the existing knowledge base in Africa on student development/student affairs for citizenship development as contribution to the further development of the HEMA masters programme
- Initiate more comprehensive follow-up projects with this funding from Carnegie Corporation

Deliverables of HERANA Phase 2

- A series of dialogues between governments, institutional managers, student development professionals and student leaders on the findings of HERANA research, its implications, and ways to translate key findings into student development practices;
- Develop in-depth case studies of student leadership/student development practices at the existing case universities
- Conduct a review of existing international and local literature on "student development for citizenship development" as a basis for developing a bigger project of in-depth investigations into best practices.
- Elaborate proposals for follow-up projects, including (1) in-depth investigations into existing democratic best practice of student development/student leadership development in Africa ("student development for citizenship development"); and (2) looking at recent graduates of the current case institutions (UCT, UDSM, UON) and expanding the number of case studies to (North/West) African countries currently in political transition.

2.7   MAINTAIN AND STRENGTHEN THE ADVOCACY ACTIVITIES

Overview of advocacy activities for 2008–2010 (Phase 1)

Advocacy activities for Phase 1 of the HERANA project have included the following:

The HERANA web site

The HERANA web site[5] provides information about HERANA (including project overviews, aims, methodology, contacts, etc.). HERANA project outputs (commissioned papers, reports and books) are edited, designed, typeset, proofread and made available for download as PDFs from the website. Selected outputs are printed and disseminated at conferences and seminars as well as via traditional book distribution channels (including a print-on-demand service linked to online bookstores such as Amazon). Newsworthy HERANA activities are listed in the News section on the CHET website's home page and seminars in the Events section.

The HERANA website also includes an invaluable collection of national and institutional policy documents for the eight HERANA country and university case studies.[6]

The HERANA Gateway

The aim of the HERANA Gateway[7] is to provide a central point for the dissemination of research-based information on higher education in Africa to relevant experts and decision-makers. This is done in the form of a Google-powered search engine which indexes only websites hosting information on African higher education. The HERANA Gateway currently indexes close to 20 different African higher education-relevant websites (including all PDF, Word and PowerPoint documents).

The number of visitors to the HERANA Gateway (1 520) is relatively low for the period under review but had remained stable compared to the previous year. However, the target audience for the HERANA Gateway website is relatively small – policy-makers, researchers and academics with a particular interest in African higher education research. Given the relatively small number of users targeted, a more useful indicator would be the number of repeat visitors to the HERANA Gateway website – 14% (or 212) of visitors return to use the HERANA Gateway on a regular basis. The statistics reveal two other encouraging trends: (1) University World News (a network partner) is now the greatest driver of traffic to the HERANA Gateway and (2) there is an increase in the number of African countries in the top 10 originating countries list (South Africa, Nigeria, Kenya and Malawi).

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[5] HERANA web site: http://www.chet.org.za/programmes/herana/
[6] http://www.chet.org.za/manual/internal/files.php
[7] HERANA Gateway: http://www.herana-gateway.org/

HERANA Gateway site statistics 1 January 2010 to 31 December 2010

Number of unique visitors:	1 520
Percentage visitors that have visited the Gateway more than once:	14%
Number of originating countries:	108 countries
Top originating countries:	USA (237) South Africa (236) UK (86) India (77) Norway (59) Germany (54) Nigeria (41) Canada (40) Kenya (37) Malawi (35)
Referring websites:	UWN (52.63%) Google (24.47%) Direct (10.39%) CHET (4.21%)

University World News (UWN) Special Africa and fortnightly Africa editions

The UWN Special Africa edition, produced twice a year, includes articles on a specific and topical higher education theme. The first two editions covered differentiation in higher education, and racism in South African universities, respectively. The UWN also produces fortnightly Africa Editions of its online newsletter which comprise original articles written by correspondents in Africa and, to a lesser extent, articles pertaining to African higher education written by journalists elsewhere. There are also 'news briefs', an African feature or publication report, and a selection of non-African articles drawn from the UWN global edition.

By mid 2010, the UWN had 23 699 registered readers, of which 11 076 were readers of the Africa Edition. More than 6 700 Africa Edition readers were based in Africa, in 34 countries. The biggest readerships were in South Africa (3 060), Nigeria (1 384) and Egypt (1 377). In April 2010, UWN had 86 103 visitors to the website and 660,391 pages viewed.

World University News has now received funding from Ford Foundation and WUN and HERANA will continue to work closely together, with an independent funding strategy for WUN.

Planned advocacy activities for 2011–2013 (Phase 2)

Maintain the HERANA web site

Updated information (including information about new Phase 2 projects) and new project outputs will be added to the existing HERANA web site. HERANA-related news items and seminars will also be added to the relevant sections of the CHET web site. Updated and new policy documents will be added to the web site.

Maintain and improve the HERANA Gateway

The plan for 2011 to 2013 is to increase the number of sites currently being indexed by the HERANA Gateway Google server. Also, based on expertise developed over the initial phase of the project, we will continue to hone the accuracy and relevance of search results. Finally, we aim to undertake additional promotional activities through UWN and email campaigns (see below).

The HERANA mailing list

A valuable list of contacts in African higher education has been gathered and collated during Phase 1 of the HERANA project. The list includes institutional contacts, contacts in relevant government departments and agencies, and higher education researchers and consultants. The list has been imported into an online mailing database enabling targeted email campaigns. Phase 2 will see further additions and refinements to the list. Particular focus will be placed on the addition of ministries and commissions to the mailing database. Phase 2 will also include the launch of targeted email campaigns to inform subscribers about the activities and outputs of the HERANA project.

African postgraduate research on-line

The aim of this sub-project is to increase the visibility and accessibility of postgraduate higher education research on and from Africa via an online database supplemented by selective print publications. This would include publishing African Masters and PhD-level dissertations; publishing dissertation briefs on UWN; and, publishing conference proceedings/reports.

Publication will take the form of the following:

- E-theses
- Selecting the top dissertations annually and re-packaging them as books (as e-book and/or printed) for publication
- Publishing briefs of selected dissertations on UWN, and
- Edited or unedited collections of conference proceedings and/or reports.

Seminars and Presentations

During Phase 1 the HERANA group made more than 15 presentations to over 1000 people, ranging from ministers of education to academics. Continuing this will be part of planned report backs, as well as responding to invitations.   During September 2010 we received invitations to make presentations to the HERS academy (100 women leaders from 10 different African countries),   UWC workshop together with Ghent University, Belgium and Wageningen University Research Centre for Development Innovation, the Netherlands, NUFFIC (the Netherlands) and VLIR-UOS

(Belgium), the UNESCO launch of the World Social Science Report,   and at the Manuel Castells lecture at the Open University of Barcelona. This work will continue as a corollary to electronic and print media distribution.

2.8   NORWEGIAN MASTERS IN HIGHER EDUCATION STUDIES IN AFRICA (HEMA)

In order to build a capacity to continue to study higher education in Africa, a Masters-level programme was established as part of HERANA. HEMA is a collaborative programme involving Makerere University, UWC and Oslo University offered under the auspices of NORAD's Programme for Master's Studies (NOMA). The main objective of the project is to contribute to the strengthening and further development of higher education in Africa through building quantitative and quantitative capacity with respect to expertise on African higher education.

Since the commencement of the programme in 2008, Makerere University has enrolled a total of 12 students (eight cohort I and four cohort II), and 16 students (10 cohort I and six cohort II) have enrolled at UWC. As part of the collaboration, students from Makerere and UWC spend a semester at Oslo University. UWC's two cohorts of students have already been to Oslo and only Makerere's first cohort has been to Oslo. A third cohort of students will be enrolled in 2011.

The NOMA cooperation has contributed to institutional development and capacity building, especially at Makerere and UWC in the following ways:

- Strengthening of the higher education studies programmes, mainly through joint development of course readers and staff and student exchanges.
- Development and enhancement of research capacity: For the past three years, staff from the three collaborating institutions have been involved in two multi-country research projects coordinated by CHET and Makerere University. The two research projects are: Higher Education and Development, and Higher Education and Poverty Reduction. The two research projects involved HEMA students in the three countries.
- Expansion and strengthening of expertise in higher education studies: The programme is achieving its intended key goal of developing expertise in higher education in Africa. The students enrolled in the HEMA programme are from the private and public sectors; namely, teachers, higher education councils, university staff, private researchers, private media and non- governmental organisations.
- Several cohort I students at Makerere and UWC have successfully completed the programme. The first graduate from UWC obtained a distinction and has already started a Doctorate at another university.

Expanding the programme

The programme currently has funding for another cohort that will complete in 2013. A senior programme officer from NORAD has indicated that discussions are underway to call for proposals that will continue the Masters programme, and add a PhD component. Discussions have also started to include Eduardo Mondlane University (Mozambique) in the Network since they have considerable higher education studies capacity. NORAD has indicated that programmes such as HEMA, which connect course work with a research programme, will be favoured.

3   NETWORK COORDINATION/SECRETARIAT STRUCTURE

The Network Secretariat/Management Support Structure provides support to, and ensures links between, the research and advocacy groups, monitors implementation, and is accountable to funders.

Secretariat staff includes Nico Cloete (Project Manager), Tracy Bailey (Project Coordinator) and Angela Mias (Project Administrator). Outsourced support services include TENET (Len Lotz, information technology); CHEC and Ngubane and Co. Inc. (Kathy Graham and Marlene Titus, financial services); Millennium Travel (Linda Benwell, Letitia Muller, travel and events coordination), and Compress.dsl (Francois van Schalkwyk, publications and website).

4   HERANA 2: OUTCOMES AND INDICATORS

Desired outcomes
- Acceptance by a group of at least five sub-Saharan African countries of a standard higher education data framework, covering students, research outputs, academic and administrative staff, academic staff salaries and other benefits, and institutional income and expenditure.
- Acceptance by these five countries of a common set of elements which together constitute the academic cores of their universities.
- Acceptance by these five countries of performance indicators, based on a common view of the nature of the academic core and on a standard higher education data set.

First performance indicators
- By December 2011: meetings with institutional executives, finance officers and planners from universities in the seven sub-Saharan African countries to discuss and reach agreement on (a) data framework, (b) constituent elements of the academic core, (c) performance indicators based on approved data and the academic.
- By March 2012 dialogue meetings with three African universities about 'campus democracy'.
- By June 2012: publication of new manuals which set out details (a) of the data framework, including definitions of concepts and calculation methodologies;

(b) of the elements of the academic core, (c) of the methodology for calculating performance indicators.

- By August 2012: training meetings with institutional planners and data managers from universities in the five countries on the implementation of standard higher education data framework.
- By September 2012: Meeting with finance, human resource executives and a select group of academics from these universities on the compiling of comparative salary data.
- By December 2012 first surveys of democratic attitudes of post university students.
- By November 2012: Participating institutions produce first data sets and first accounts of the academic core of their institutions.
- By February 2013: Participating institutions produce first analyses of academic staff salaries and benefits.
- By June 2013: Report on a typology of incentives for knowledge production in universities.
- By November 2013: Reports produced on (a) quality of data submitted by institutions, (b) content and evaluation of the academic cores of the participating universities; (c) comparative performance indicators.
- By December 2013 draft reports of democracy dialogues and changing attitudes of post university students.

Longer term indicators
- By May 2014: Presentation of research findings at two international conferences and five workshops at African universities.
- By July 2014: Publication of report on a typology of the roles and functions of national higher education commissions and institutional governing bodies.
- By August 2014: Improved networking, raising of awareness and stimulation debate on HERANA projects, to be indicated by (a) at least 5000 visits to the HERANA website, (b) at least five articles published in University World News, and (c) at least one doctoral and five masters students undertaking research on HERANA-related projects.
- By October 2014: Final report on incentives for knowledge production in universities.
- By October 2014: Draft publication of a book on (a) performance indicators in African flagship universities, (b) the strengthening/weakening of the academic core of these universities, and (c) incentives structures in universities in Africa.

4 SUMMARY BUDGET: OCTOBER 2011–SEPTEMBER 2014

The budget below is still rather broad brush, mainly because research groups have not yet met and worked out specific amounts. All amounts are rounded off and are informed by the following:

- For overheads and salaries, approximately half of CHET's work is allocated to HERANA.
- Exchange rate USD 1= ZAR 7. Budget is in dollars since many payments (commissioned work and travel) will be in dollars.
- Rates are USD 500 per day for senior researchers and USD 150 for research assistants.
- Rates for Project Director and Project Coordinator are based on current packages for CHET Director, and at civil service deputy director level for project coordination, respectively.

HERANA Phase 2 Budget: October 2011 – September 2014

Type of expenditure	Amount	Total ZAR	Total USD
CHET: 3 years 6% inflation			
Overheads	R1, 010,914	R 3,306,002	$472,286
Salaries and out sourced services	R 2,295,088		
Enhance information capacity			
Professional services (295days@R3 500; 88 days@R1 050)	R 1,125,000	R 2,535,000	$362,143
Workshops (8 institutions x 3 participants x 4 visits plus 1workshop x 20 participants) @ R10,000/participant)	R 1,160,000		
Print and distribution of manuals and reports	R 250,000		
National commissions			
Professional services (70 days @ R3 500 / day)	R 245,000	R 780,000	$111,429
Commission visits (2 people x 8 visits @ R12 200 / visit)	R 195,000		
Joint workshop (3 people x 8 institutions x R10 000)	R 240,000		
Report production and distribution	R 100,000		
Academic incentive/reward systems			
Professional services (70 days @ R3 500; 100 days@R1 050))	R 350,000	R 1,000,000	$142,857
Survey (3 institutions @ R100 000 / institution)	R 300,000		
Joint workshop (20 participants x R10 000 / participant)	R 200,000		
Report publication and distribution	R 150,000		
Explore the knowledge-connectivity model (in-depth study of three institutions)			
Professional services (60 days @ R3 500 / day)	R 210,000	R510,000	$72,857
Workshop of expert group (20 participants @ R10 000 / participant)	R 200,000		
Report and dissemination	R100,000		
Strengthen advocacy			
HERANA Gateway	R 115,000	R 430,000	$61,429
HERANA web site and updates	R 105,000		
Dissertations on line and University World News	R175,000		
Mailing list updates and 3 mail campaigns a year	R35,000		
Student Governance			
Professional services (100 days @ R3 500; 100 days @ R1 050)	R 455,000	R 1,239,000	$177,000
Joint workshop x2 (20 participants x R10 000 / participant)	R 400,000		
Report publication and distribution	R 384,000		
TOTAL		**R9,800,002**	**$1,400,000**

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APPENDIX 1:
LIST OF PARTICIPANTS AT THE AUGUST 2010 SEMINAR

HERANA project group

Name	Institution	Position
Nico Cloete	Centre for Higher Education Transformation	CHET Director
Tracy Bailey	Centre for Higher Education Transformation	Project Manager
Peter Maassen	University of Oslo	Director, HEDDA
Pundy Pillay	University of the Western Cape/CHET	Extra-Ordinary Professor/Consultant
Gerald Ouma	University of the Western Cape/CHET	Senior Lecturer/Consultant
Ian Bunting	Centre for Higher Education Transformation	Consultant
Charles Sheppard	Nelson Mandela Metropolitan University	Director of Planning

Performance Indicators contacts

Name	University	Position
Silas Onalenna	Botswana	Assistant Director, Institutional Research
Amandina Lihamba	Dar es Salaam	Acting Director, Directorate of Public Service
Patricio Langa	Eduardo Mondlane	Faculty of Education
Alfred Quartey	Ghana	Director, Planning
Joseph Budu		Registrar
Florence Nakayiwa-Mayega	Makerere	Dept of Planning and Development
Anjana Daiboo	Mauritius	Office for Quality Assurance
Bernard Waweru	Nairobi	Registrar
Charles Sheppard	NMMU	Director, Planning

HERANA institutional contacts

Name	University	Position
Isaac Mazonde	Botswana	Director, Research and Development
Daniel Mkude	Dar es Salaam	Department of Linguistics
Maria da Conceição	Eduardo Mondlane	Faculty of Education
Ben Ahunu	Ghana	Provost of the College of Agriculture and Consumer Sciences
Vincent Ssembatya	Makerere	Faculty of Science
Henri Li Kam Wah	Mauritius	Associate Professor, Faculty of Science
Samuel Kiiru	Nairobi	Project Assistant, Institute for Development Studies
Heather Nel	NMMU	Director, Strategic and Institutional Planning

Other participants

Name	Country	Position
Claudia Frittelli	United States	Programme Officer, Carnegie Corporation
Francois van Schalkwyk	South Africa	CHET Consultant
John Butler-Adam	South Africa	Programme Officer, Ford Foundation
John Douglass	United States	Centre for Public Policy, Berkeley University
Karen MacGregor	South Africa	Editor, University World News
Michele Rostan	Italy	Director, Centre for Research on Higher Education Systems, Milan
Monique Ritter	South Africa	CHET Consultant
Njuguna Ng'ethe	Kenya	Institute for Development Studies, University of Nairobi
Praveen Mohadeb	Mauritius	Mauritius Tertiary Education Council
Richard Neill	Botswana	Director, Policy and Planning, Tertiary Education Council, Botswana
Thandi Lewin	South Africa	Chief Director, University Policy, Department of Higher Education and Training
Thierry Luescher	South Africa	CHET Consultant
Trish Gibbon	South Africa	Director, Planning, University of Johannesburg

Higher Education and Economic Development

Project group:

Academic advisers	• Higher Education Studies: Peter Maassen (University of Oslo) and Nico Cloete (Director: CHET) • Development Economics: Pundy Pillay (CHET Consultant) • Sociology of Knowledge: Johan Muller (University of Cape Town) and Johann Mouton (University of Stellenbosch)
Researchers	• Nico Cloete (Director: CHET) • Pundy Pillay (CHET Consultant) • Peter Maassen (University of Oslo) • Tracy Bailey (CHET Consultant) • Gerald Ouma (Kenya and University of the Western Cape) • Romulo Pinheiro (University of Oslo) • Patricio Langa (Mozambique and University of Cape Town) • Samuel Fongwa (Cameroon and University of the Western Cape) • Biko Gwendo (Kenya and University of the Western Cape)
Contributors to reports	• Ian Bunting (CHET Consultant) and Charles Sheppard (Nelson Mandela Metropolitan University) for analysis of the academic core data • Nelius Boshoff (University of Stellenbosch) for data on research output
International reviewers	• Manuel Castells (University of Southern California and Open University, Barcelona) • David Dill and James Sadler (University of North Carolina at Chapel Hill) • Misug Jin (Korea Research Institute for Vocational Education and Training) • Timo Aarrevaara (University of Helsinki)

Institutional contacts:

University of Botswana	• Isaac Mazonde (Director, Research and Development) • David Katzke (Deputy Vice Chancellor, Finance and Administration) • Silas Onalenna (Assistant Director, Institutional Research)
University of Dar es Salaam	• Daniel Mkude (Dept of Linguistics) • Amandina Lihamba (Acting Director, Directorate of Public Service)
Eduardo Mondlane University	• Maria da Conceição (Faculty of Education)
University of Ghana	• Ben Ahunu (Provost, College of Agriculture and Consumer Sciences) • Alfred Quartey (Director, Planning) • Joseph Budu (Registrar)
Makerere University	• Vincent Ssembatya (Faculty of Science) • Florence Nakayiwa-Mayega (Dept of Planning and Development)
University of Mauritius	• Henri Li kam Wah (Faculty of Science) • Anjana Daiboo (Office for Quality Assurance)
University of Nairobi	• Samuel Kiiru (Institute for Development Studies) • Bernard Waweru (Registrar)
Nelson Mandela Metropolitan University	• Heather Nel (Director, Strategic and Institutional Planning) • Charles Sheppard (Director, Management Information)

Higher Education and Democracy

Senior researchers	Robert Mattes (UCT Democracy in Africa Research Unit)
	Njuguna Ng'ethe (Institute for Development Studies, Nairobi)
	Thierry Luescher (University of the Western Cape)
Researcher	Samuel Kiiru (University of Nairobi)
Research trainees	Danga Mughogho (Centre for Democratic Development, Ghana)
	Angolwisye Mwollo-Ntallima (University of Dar es Salaam)
International reviewers and contributors	David Court (Consultant, Kenya) and Michael Bratton (Michigan State University)

The network secretariat/management support structure

The Network Secretariat/Management Support Structure provides support to, and ensures links between, the research and advocacy groups, monitors implementation, and is accountable to funders.

Secretariat staff includes Nico Cloete (Project Manager), Tracy Bailey (Project Coordinator) and Angela Mias (Project Administrator). Outsourced support services include TENET (Len Lotz, information technology); CHEC and Ngubane and Co. Inc. (Kathy Graham and Marlene Titus, financial services); Millennium Travel (Linda Benwell, Letitia Barreto, travel and events coordination), and Compress.dsl (Francois van Schalkwyk, publications and website).