

## Collaborate to Innovate

*The role of development cooperation in innovation*



## **Colophon**

This document reports on the process entitled ‘The knowledge triangle in developing countries: a missed opportunity in university development cooperation?’ which is being carried out within the framework of the Development Policy Review Network (DPRN) and organised by Ghent University, Wageningen UR – Centre for Development Innovation, Nuffic and City of Ghent – Department of North-South cooperation. With the aim being to stimulate informed debate and discussion of issues related to the formulation and implementation of (Dutch) development policies, DPRN creates opportunities to promote an open exchange and dialogue between scientists, policymakers, development practitioners and the business sector in the Netherlands. For more information see [www.DPRN.nl](http://www.DPRN.nl) and [www.global-connections.nl](http://www.global-connections.nl).

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# Report on ‘The knowledge triangle in developing countries: a missed opportunity in university development cooperation?’

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**Responsible organisations:** Ghent University, Wageningen UR – Centre for Development Innovation, Nuffic and VLIR-UOS

## Introduction

During this one year process, which was organised jointly by 2 academic partners (UGent in Belgium and WUR (Netherlands) and two government agencies related to University development cooperation (VLIR-UOS (Belgium) and Nuffic (Netherlands)), attention was paid to current-day approaches adopted in University Development cooperation programmes, and to the potential of focussing on innovation, research & development in these networks.

To this end a study was initiated of how universities in Flanders and the Netherlands embrace economic and social innovation in their university policies along with an investigation of how they are involved in the translation of their research activities into society in terms of innovation and valorisation.

A workshop entitled ‘Collaborate to Innovate’ was simultaneously prepared and held at the University of the Western Cape, in Cape Town, South Africa in early November.

As a follow-up event to the South Africa workshop, a thematic day at Ghent University is scheduled to take place on the ‘Collaborate to Innovate’ idea on 15 February 2011.

## Background to the theme

There is a consensus that science and technology are crucial for development. Investing in the knowledge triangle of education, research and innovation has proven to be important for a knowledge-based society. The same is even truer for developing regions. By taking cooperation between Dutch, Flemish and Southern African Universities as a case study, we organised a workshop to discuss to what extent the (potential) role of African universities in relation to the knowledge triangle is sufficiently acknowledged and supported. We assessed how the aspect of innovation and service to society can be incorporated better into academic development programmes, by investigating both policy strategies in the Low Countries and South Africa, and specific examples of good practices.

The theme of ‘The knowledge triangle in developing countries’ draws on a number of policy-relevant questions which deal with development collaboration on the one hand, and innovation on the other. Examples include:

What is the nature of successful development collaboration between universities in the North and the South<sup>1</sup>? Does everybody gain? If so, we are doing well but if not, can we limit the ‘drain’ of financial investment or human capital? Do we know each other well enough to make the most of this collaboration? And how good are our ‘best practices’?

University development cooperation projects have focused mainly on education and research. In recent years there has already been a trend to incorporate more institutional issues such as research coordination, quality control, etc. However, the so-called knowledge triangle with ‘innovation’ and ‘valorisation’ of the universities’ education and research to society has often been neglected as a potential field of cooperation. This process originated from a belief that there is a great potential for service and innovation in the broadest sense within university research in developing countries, and that this is an opportunity which has by no means been properly explored.

It has also been noted that, in several African countries, the role of the universities vis-à-vis innovation and valorisation has not been fully exploited. Universities can, however, play a driving and leading role in establishing structures and policies to promote innovation and valorisation. They are also key players that can advise the government on policy issues for education, research and innovation. For instance, Ghent university set up a structure called ‘Ghent, Big in Creativity’ (Ghent BC), as well as an online platform and network to stimulate regional cooperation in the field of technology and innovation, and to strengthen the knowledge economy. The three key players who started the platform are the university, the City of Ghent and the regional development agency. The belief is that effective networking is a first step towards product or process innovation, and that the partners within the Ghent BC-network itself continue to learn and improve their innovation activities from contacts with other networks.

Both university development cooperation and Southern African research policymakers acknowledge the role of innovation in achieving growth and welfare. It is, however, important to point out that innovation is not just limited to product development, but also includes new processes such as innovative approaches in the public sector and the social profit and non-profit sector, regional development, and developments that enhance the quality of life. These attributes of ‘innovation’ broaden the perspective of the knowledge triangle concept, but also highlight the significance and possible benefits that result from the synergies between university and entrepreneurs, or the cooperation between research and local communities.

Similarly, the ‘Collaborate to innovate’ workshop addressed the question of innovation: if innovation is more than technological development, how do we define this ‘more than’? If innovation also involves new processes to improve our quality of life and to address the ‘big questions’ such as climate change, sustainable development, energy demands or

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<sup>1</sup> We use the terms ‘North’ and ‘South’ when we talk about a University in an industrialised country versus one in a developing country, respectively.

demographic changes, what is the role of *micro-innovation* and how can universities improve their service to society?

## Activities realised

The process 'The knowledge triangle in developing countries' developed in four stages, each centred around the organisation of a conference which brought many people together from North and South and from a range of expertises. The theme of this conference was 'Collaborate to Innovate' and the idea was to approach the knowledge triangle topic from the premise that collaboration is essential for an effective knowledge triangle.

### 1. Creation of a website

To publicise the workshop and for the call for papers a website was set up that was regularly updated. After the workshop had taken place the website was used to host information, such as the presentations of all the speakers, participants list, pictures etc.

### 2. Call for papers

A call for papers was issued which invited papers on four topics:

- Micro-innovation
- University collaboration beyond capacity building
- University's three-fold mission: education, research and service to society
- Brains on the move

Submissions were received from North and South. Eventually, 17 papers were accepted for presentation.

NB: All the papers submitted, as well as the invited speaker's papers, can be found in the abstract book. The presentations can also be downloaded from the website.

### 3. Inventory of innovation indicators

Key indicators help to identify levels of innovation intensity and design appropriate strategies. A range of indicators designed to measure levels of innovation (e.g. Gross Expenditure on Research and Development (GERD), Higher Education enrolments, patent applications, PhD graduates), which were presented at the start of the conference, set the background for further discussion. Measuring is a first and important step in any process of change, but it serves as no more than a basis upon which to build substantial discussion. A short report on these indicators can be found as a separate DPRN activity within this process.

### 4. Workshop event

On 8–10 November 2010, a workshop was held in the University of the Western Cape (UWC), Cape Town, South Africa. University managers, policy advisors, researchers, NGO representatives and PhD students all participated in debates and discussions. The presentations of this workshop and some pictures can be found on the website <http://innovate.global-connections.nl/>.

## 5. Workshop outcomes

The implicit knowledge that is verbalised during a conference and circulated amongst the participants is, of course, the primary outcome of any public event. Since the workshop took place only 2 months ago, most of this knowledge has not yet been translated into scientific papers or follow-up activities.

The students from UWC compiled a feedback report which was presented during the closing session of the conference. In addition, a paper was published in the UWC Campus Magazine (Appendix 3).

The conference organisers also drew up policy recommendations, based on the ideas presented during the discussions and general observations during the workshop. These recommendations are briefly presented below and are going to be elaborated on to create a full academic paper.

Finally, a follow-up workshop at Ghent University is scheduled as an additional activity resulting from the main project (i.e. workshop in Cape Town) on 15 February 2011.

## Results

### Policy recommendations

The policy recommendations drawn from the conference were the most significant and tangible results of the process, without minimising the impact of the discussions and ideas on everyone's personal academic or development-oriented responsibilities. The following is a brief overview along with some short explanations:

#### *The role of funding organisations*

1. Development aid is not 'charity'. Sponsors should benefit as much as the recipients of the support. In the process of collaboration, there are always dangers and pitfalls in terms of patronage and competition to which both sides should be alert.

*'We should be careful, though, that we do not romanticise the picture of collaboration. It is nice to be idealistic, but when it comes to research funding, there is competition, too, and we should be aware of the fact that the funding will not continue if there is no win-win for both parties.'* (professor, South African university)

2. The distinction made in the North between 'academic research funding' and 'university development funding' is often irrelevant in the South, where almost *all* academic funding has a development component. Rather than maintaining a two-tier funding system in the North, quality standards should apply equally to all types of academic collaboration. Funding from development agencies can be lucrative but does not necessarily help to improve academic quality. If there is no win-win on both sides, the partnership will not be effective.

*'Specific 'development' aid has become an attractive source of funding for universities in the South. But there's a danger in this. We have academics trained abroad, having established a fantastic academic network, but when they return to their home country, they often find it easier to engage in development-oriented networks, NGOs and*

*funding rather than to continue investing in their academic networks. Within a few years, they are cut off from their academic colleagues worldwide and find few incentives to maintain the quality standards through which they were trained.'* (professor, South African university)

3. Bottom-up, small-scale initiatives and initiatives provide the best guarantee for success. Funding agencies in the North and partners in the South would both benefit more from their investments if, within high quality standards, the focus of the projects can be steered from the South.

*'The presentation by Rhoda Malgas on the sustainable development of wild Rooibosch was an excellent illustration to me of the key elements for successful innovation: a demand-driven project, locally engaged, thoroughly researched drawing equally on local and academic knowledge and benefiting not only the university (cf. academic output), but also society (sustainable development in region of wild rooibosch producers) and business (sale of wild Rooibosch).'* (researcher, Flemish university).

4. Awareness ought be raised amongst 'regular' funding agencies of the potential of academic talent in the South – not just for drawing talented researchers to excellent institutions in the North, but for engaging academics in the South in global academic networks and encouraging academics in the North to embrace a more global view on developmental, global and social issues.

*'It strikes me that in the North we keep making a distinction between research-oriented funding, for which quality standards apply, and development aid for universities, for which we often tend to lower our expectations. This does not benefit the South at all. Quality outcomes, in broader areas than just research productivity, should be a minimum standard for any source of funding. Only in this way can we engage a wider group of academics in the North to engage in partnerships with developing, and can we facilitate access to global networks for colleagues in the South.'* (policy advisor, Flemish university).

#### *The role of governments*

1. Universities in the South, just like universities in the North, are dependent on government funding as well as on external funding in order to fulfil their mission of education, research and service to society. Adequate salaries for academic staff guarantee a focus on core academic business. Access to external funds, allocated on the basis of quality criteria, guarantees the necessary dynamics for higher education to flourish.

*'University salaries are too low. We as academics have no choice but to take on so much additional consultancy work. On top of that, the funding opportunities to carry out quality research are far too limited. A lack of research time and resources are the causes of a great deal of brain drain out of Africa.* (Professor, African university).

2. The potential for development in the South is huge, especially in terms of social innovation (e.g., health and sustainable energy). However, unlocking this potential requires political stability and government and private investment. As many innovation experts have



emphasised, knowledge and creativity alone cannot address these challenges without visionary socio-economic policies and an entrepreneurial climate.

*'The lack of participation of government agencies in this workshop is telling of the lack of real engagement with innovation issues. Universities cannot assume this responsibility on their own. And where are the businesses? Our local companies? Is the innovation triangle still incomplete?' (various participants, coffee break conversations).*

3. Although many countries in the South are rich in natural resources, these are often sold 'as they are'. Their potential for innovative development is often left unused. Strategic initiatives at government and regional levels, combined with 'smart' investments, are needed to stimulate innovation in the mining sector.

*'The regions in South Africa that invest least in knowledge-based business, are the regions that have the richest resources. Businesses develop around mining activity and generate a lot of money. Only when natural resources are lacking do local economies turn to brains as a potential for development. We could achieve so much more if we combine the best of both.'* (Professor, South African university).

#### *The role of universities*

1. Universities play an important role in development collaboration, but not until a certain level of capacity building at primary and secondary levels has been achieved. Political instability, safety risks, inadequate infrastructure and a lack of human resources make it very difficult for universities to enter into successful international partnerships. In such countries or regions other types of development aid must take priority.

*'Some African countries have only recently drawn themselves out of war and opposition; some still face these challenges today. When we look at the impressive achievements of the University of the Western Cape, much of these successes are long-term outcomes of the decades of capacity building work already carried out and could not have been undertaken in other more unstable countries. Research infrastructure, academic leadership and trust with other partners develop slowly.'* (policy advisor, Flemish university).

2. In return for their autonomy in decision-making processes, universities must be prepared to accept performance criteria which are linked to rewards (e.g., salaries, bonuses, and infrastructure). Such performance criteria should not only be based on results (e.g. publications, product development) but also on relevance (e.g. social, economic). An autonomous and creative space provides a breeding ground for successful innovation, but performance pressure provides the necessary leverage to turn innovative ideas into productivity.

*'20% of our academics are responsible for probably 80% of our academic output. There is no quality culture'* (Professor, South African University).

*'Well, that's interesting. We have discovered similar performance differences in our university. We all need quality standards. We need to introduce incentives to make sure everyone meets minimal performance criteria.'* (researcher, Flemish university).

3. Collaboration can only be effective if the institutions enter into joint activities and treat each other as equal partners. Internationalisation, long-term collaboration and mutual trust between academic institutions is therefore essential. Rather than seizing every opportunity for collaboration or funding, universities and academics should be in a position where they can refuse funding or partnerships if certain quality criteria are not met, or if there is insufficient 'ownership' of the project on behalf of one of the partners.

*'We have refused sponsorship from a major source. We, too, have conditions to accepting funding. They did not meet our conditions, so we refused. It has made us stronger and more focused. Now, they come to us and respect us, and talk about how we can both benefit from a possible partnership.'* (spokesperson research network, South Africa).

4. Technology transfer offices ought to provide staff training for academics in the field of business skills, so that the knowledge they create can be more easily translated into actual applications, products or processes; alternatively they can engage brokers to facilitate this process. Structures to enable such innovation should be firmly embedded in the university's policies.

*'We have 'brokers' in our centre who are actively engaged in finding economic applications for our research results. This has helped us enormously in establishing contacts locally.'* (research manager, Netherlands).

### **General workshop observations**

Although many academics agreed on the need for universities to focus on their main tasks (education, research and services), they also had to admit that they take on secondary tasks, either to supplement their own income or that of their research groups. Take, for example, consultancy positions in various national commissions, NGOs or private enterprises. Although valuable because of the direct links this consultancy work creates between the university and the labour market, it draws away resources from the education sector in terms of human capital and time. Such outsourcing is a problem in developing countries since the number of academics is too small to be shared in this way without creating negative consequences in their core tasks as educators.

Substantial efforts were made to engage the interest of government agencies (for example South Africa's Department of Science and Technology), technology transfer offices (each of the South African universities with a tech transfer office was directly invited to take part), and private companies that we knew about, like small breeding and seed companies. Nevertheless, they remained absent from this workshop. Their lack of participation made for a somewhat one-sided discussion on collaboration throughout the workshop event, focusing more on university networks than on regional public-private cooperation opportunities.

## Contribution to the DPRN objectives

### **Stimulating informed debate**

The workshop was designed to question policy and practice in university development collaboration, based on Science, Technology and Innovation Research. While the opening presentations were scheduled to initiate the debate from a theoretical angle, the wide range of examples did as much to confirm, challenge and even question the theory. The quotes above illustrate the range of topics covered in this discussion.

As the workshop deliberately addressed a wide range of stakeholders (postgraduate students, government representatives, NGO sector, academics, university leaders and Science, Technology & Innovation experts) the discussions after each presentation wove together a new narrative from which every participant drew information that was useful in their respective field of application. However, all the participants regretted the limited participation of government representatives (only 1 person who was not even able to attend on all of the three days) even though they are an important stakeholder in the knowledge triangle. It may be that they are not convinced of the value of meetings such as these, or that their participation needs to be solicited by different means.

An important contribution was made by a representative body of students who presented their feedback at the close of the workshop, a report which is also included in the workshop outcomes.

### **Involvement of relevant partners**

Academic institutions (UGent, U Wageningen, UWC), government liaison and funding offices (NUFFIC, VLIR-UOS), and regional development bodies or NGOs (Ghent BC, HSRC, ANIE.) were involved throughout the entire process. Several participants in the workshop also play an active role in NGO operations.

The overview below provides a breakdown of the workshop participants by region. The total number of registered participants was 73 (although some additional participants joined in on the event days) – 8 from Europe, 65 from the South. In terms of sectors, 7 participants represented governments or policy/networking bodies, while the remainder were actively involved in universities, either research or management, some of them combined with NGO or policy activities.

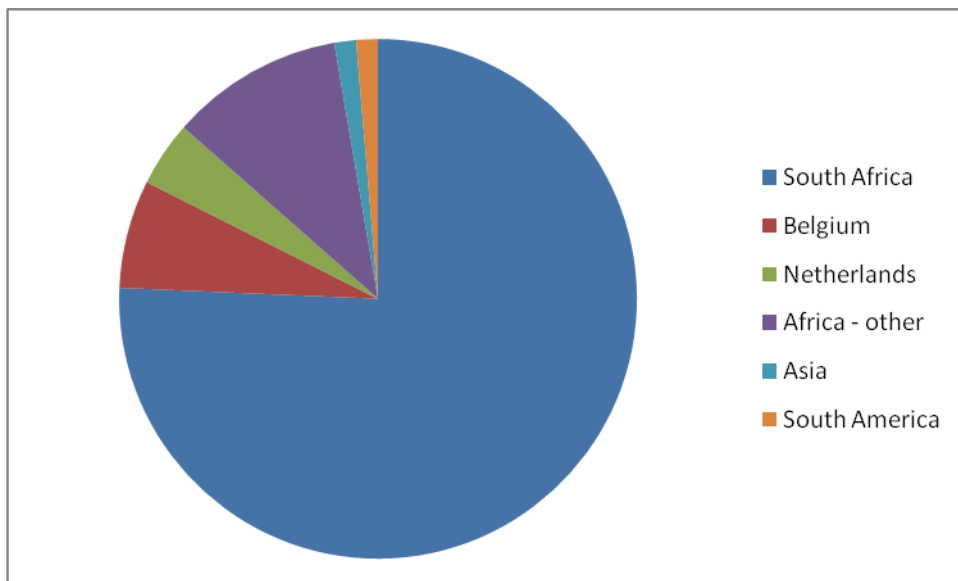


Figure 1: Overview of participants by region

There was a low participation and involvement in the workshop by the business sector. The workshop philosophy opted for was open participation, through an initial open call for papers. This was, for example, sent to Technology Transfer offices of universities in South Africa with the request to distribute it to any spin-off companies they might have. Nevertheless none of the submitted papers were directly from a private partner, and only two mentioned a link with industry. In order to ensure at least some representation from this sector at the workshop we and our partners in the South took a more active approach to recruiting certain speakers. The main reason for not being willing to participate was that most companies (often still very new), could not free up a staff member for three days to attend the workshop. Nor did ‘speakers’ at the conference receive a fee for their contribution – something which may have helped to engage business partners had we provided a budget. Some also told us they doubted whether their story was relevant to others.

When reviewing the workshop we interpreted the above problems of engagement of both government partners and business partners as an indication that the concept of ‘innovation’ is not the same in Southern Africa as in Flanders and the Netherlands, where higher education and research institutes have established strong links with industry. The trust between private partners and universities is at this stage still less institutionally embedded in Southern Africa. However UWC has already been involved in exploring and trying to develop triple helix relationships for several years. Our UWC partners have first-hand knowledge of many of these issues, having worked for several years with the Department of Science and Technology to initiate innovation-related activities in the region and to build an appropriate network.

### Relevance for policy and practice

As policy feedback was one of the key objectives of this workshop and process, the policy recommendations drawn up as one of the outcomes of this workshop are given priority in our dissemination of the workshop outcomes. In particular the involvement of VLIR-UOS and NUFFIC, as key sponsors of university development collaboration in Flanders and the

Netherlands respectively, guarantees that these recommendations will not go unnoticed. Recommendations for starting up projects in the context of university development collaboration (bottom-up, steered from the South), for funding collaboration (equal partnership, quality standards and control) and for establishing a fertile research environment (government's responsibility to provide adequate salaries and infrastructure) are crucial for successful collaboration.

### **Enhancing cooperation and synergy**

As the project was rooted in a number of existing partnerships, which were then extended through each partner's own network, the collaboration initiative provides a better basis for long-term partnerships. In addition to strengthening North-South ties, this workshop was an opportunity for Flemish and Dutch universities and funding organisations to reflect upon their own initiatives and inspire each other with good practices. In addition, the participation of a range of sub-Saharan countries and regions provided interesting networking opportunities for pan-African colleagues.

### **Reactions and evaluation**

In all, more than 75 people participated in the workshop. Some of the participants' reactions during and after the workshop are already mentioned above. In general :

#### **Aspects appreciated by the participants ('tops'):**

- Very active and open debate
- The group shared a lot of common issues
- The discussion was valuable in providing new perspectives on what was being attempted

#### **Suggestions for improvement ('tips'):**

- There should have been more presentations from a geographically balanced region. There were insufficient presentations by participants from other African countries (i.e. not SA). In spite of the low abstract qualities of some of these participants, personal talks with them during tea breaks revealed that they were able to offer a wealth of information. The question is how do we deal with participants who have important knowledge to share, but cannot express themselves adequately. Which platform can we give them within existing workshops to still be able to air their views?
- There should have been more involvement by industry, government and NGOs.
- There is a need to follow up with the group that was present or expressed interest but could not attend. However, as the process is over it is not clear how this can be funded.

### **Reflection**

Factors which contributed to the successes of the workshop were:

- Interdisciplinary collaboration between experts in development collaboration and innovation studies, both from an academic and a managerial perspective;
- Excellent organisation by the local host in South Africa which facilitated distance planning;

- A wide range of speakers (North-South, male-female, university-NGO-government,...) and critical selection (and rejection) of submitted papers;
- The actual practical examples that participants shared during discussions and presentations about their experiences in collaboration.

Factors which contributed to the challenges were:

- Time pressure: each partner became involved in this project because they were interested, but took on this responsibility in addition to regular tasks and commitments;
- A lack of commitment of some partners whose initial enthusiasm to participate thoroughly could not be continued. After the planning phase, they adopted more of a secondary role and provided occasional feedback without assuming an active role in organising or following up on the events;
  - Financial constraints which allowed only limited participation by participants from other African countries (i.e. excluding South Africa);
  - Low participation by business and government (see above).

Experiences regarding intersectoral cooperation and creating synergy were shared and critically analysed. The rather poor representation of some sectors at the workshop made it less immediately valuable as an intervention, but delegates left with important insights.'

## Plan for follow up

This DPRN process has strengthened relationships between academic partners in South Africa and the Netherlands and Flanders.

The University of Ghent wants to follow up the process with a workshop in 2 to 3 years' time. A first preparatory meeting will be held on 15 February 2011 at Ghent University. During this workshop we will convey some of the findings of the South African workshop to the Ghent University academics. We have invited Dr Rhoda Malgas from Stellenbosch University, whose presentation of her work on wild Rooibos tea provided the best explanation of what 'collaborate to innovate' stands for.

Other direct and indirect follow-up is going to take the form of academic publications with Wageningen UR Centre for Development Innovation [link: <http://www.cdi.wur.nl/UK>] writing a paper on 10 year university development cooperation through NUFFIC projects.

Ghent University is going to publish a paper on 'Innovation Indicators and monitoring development', which will discuss why measuring progress is as difficult and as crucial as making progress. This will be based the draft report of Karen Vandevelde on innovation indicators that was written during the process.

A final paper will focus on how University Development Cooperation projects can be more successful in their 'valorisation' to society (this paper will be written by Nancy Terryn).

## Appendix 1– Programme Workshop ‘collaborate to innovate’

### Monday 8 November 2010:

13.30 Welcome and official opening by Brian O’Connell, rector UWC, Cape Town, South Africa

13.45 Video message from Ton Dietz, initiator of the *‘Development Policy Research Network’*

14.00 Introduction: Karen Vandevelde, Ghent University, Belgium: *‘Collaborate to innovate... how the workshop idea came to life’*

14.30 Plenary lecture 1: Nico Cloete, Center for Higher Education Transformation, South Africa: *‘The role of HE and development ; the 3 fold mission of universities’*

15.15 Coffee break

15.45 Plenary lecture 2: Wouter Leen Hijweege, deputy director of Centre for Development Cooperation, Wageningen University, the Netherlands: *‘Knowledge institutions’ role in Innovation processes: Linking research and capacity development across disciplines and scales’*

16.15 Plenary lecture 3: Lochner Marais, University of the Free State, South Africa: *‘Higher Education and regional engagement in the free state: lessons from the OECD-facilitated process.’*

16.45 Plenary lecture 4: Mtinkheni Gondwe, Nuffic, the Netherlands: *‘The role of development co-operation in the knowledge triangle : the Dutch contribution’*

17.15 Round up and discussion, moderated by Nancy Terryn, Ghent University, Belgium

### Tuesday 9 November 2010

*Session 1: University development cooperation beyond capacity building: ways forward; micro-innovation*

9.15 Introduction: Nancy Terryn, Ghent University, Belgium: *‘Examples of university development cooperation beyond capacity building in research and education’*

9.45 Tunde Fatunde, Lagos State University, Nigeria: *‘Spirit of innovation and creativity in Lagos State University ICT’*

10.15 Annelies Verdoolaege, Ghent University, Belgium : *‘The humanities and university development cooperation: challenges and constraints’*

10.45 coffee break

11.15 Pieter Van Heyningen, University of Stellenbosch, South Africa: *‘Understanding Sustainability in Micro-innovation and Innovation Systems as Two-way’*

11.45 Round-up and discussion, moderated by Brian O’Connell, rector UWC

12.45 lunch break

*Session 2: The university's 3-fold mission: education, research, service to society in the face of various constraints and brain drain*

14.00 Linda Lumbasi, ANIE, Kenya 'The African association for the Internationalisation of HE'

14.30 Anna Colletah Chitsike and Nelson Raidimi, ICRA, Pretoria: 'Capacity strengthening in teaching and facilitated experiential collective innovation'

15.00 André Boon, Wageningen, The Netherlands 'Introducing problem oriented education: learning from the 'Intuthuko case at the University of Zululand'

15.30 coffee break

16.00 Glenda Kruss, HSRC, South Africa: 'How do universities develop interactive capabilities to promote social innovation and development in South Africa?'

16.30 Lewis Jonker, UWC, South Africa: 'A regional and multi-faceted approach to postgraduate water education: the WaterNet experience in Southern Africa'(TBC)

17.00 Round-up and discussion moderated by Karen Vandevelde

### **Wednesday 10 November:**

9.00 Rhoda Malgas, University of Stellenbosch, South Africa: 'Science with the people for the people: participatory action research and its role in the conservation of Wild rooibos (*Aspalathus linearis*) amongst small-scale farmers in the Suid Bokkeveld, South Africa'

9.30 Karen Vandevelde/ Mtinkheni Gondwe : 'Monitoring developments and interpreting indicators. Measuring progress is as difficult and as crucial as making progress' followed by 'Ghent and Eindhoven, two innovative regions as case stories'

10.00 Nan Warner, UCT, South Africa: 'Dialogue platforms for university development cooperation: The experience of the Access to Success project'

10.30 Coffee break

10.45 Report of the PhD students of UWC on the workshop

11.15 Closing speaker: Carlos Lucas, UEM, Mozambique

12.00 End of the meeting



## Appendix 2 – List of participants

	Name	Surname	Email	Organisation	Country	Sector
1	Judy	De Graav	degraavj [at] sr.net	Anton de Kom University of Suriname	Suriname	Univ/research
2	Varadharaj	Ragupathy	ragugri [at] rediffmail.com	Gandhigram Rural Institute–Deemed University	India	Univ/management
3	Prof. Magaji	Garba	magakatagum [at] yahoo.com	Ahmadu Bello University	Nigeria	Univ/research
4	Rhoda	Malgas	rmalgas [at] sun.ac.za	Department of Conservation Ecology and Entomology, University of Stellenbosch	South Africa	Univ/research
5	Elie	MISRACHI	emi [at] skynet.be	Free University of Brussels	Belgium	Univ/research
6	Glenda	Kruss	gkruss [at] hsrc.ac.za	Human Sciences Research Council	South Africa	government
7	Pieter	van Heyningen	pieter [at] sustnet.com	Stellenbosch University – Economic & Management Sciences/Sustainability Institute	South Africa	Univ/research
8	Arthur	Johnson	johnsonaa [at] ufs.ac.za	University of the Free State	South Africa	Univ/management
9	Wouter	Hijweege	wouter.hijweege [at] wur.nl	Wageningen Centre for Development Innovation	Netherlands	Univ/management
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11	Alan	Brent	acb [at] sun.ac.za	Stellenbosch University, School of Public Leadership	South Africa	Univ/research
12	Samuel	Fongwa	sam4ngwa50 [at]	University of the Free State	South Africa	Univ/research

			yahoo.com			
13	Aymen	Mohammed Salih	aymenmsalih [at] gmail.com	Ministry of Science and Technology– Sudan Atomic Energy Commission	Sudan	government
14	Lewis	Jonker	ljonker [at] uwc.ac.za	Institute for Water Study, UWC	South Africa	Univ/research
15	Annah colletah	chitsike	chitsikec [at] arc.agric.za	international center for development oriented research in agriculture	RSA	Univ/research
16	Christoff	Pauw	cpauw [at] sun.ac.za	Stellenbosch University	South Africa	Univ/research
17	Helke	Baeyens	helke.baeyens [at] ugent.be	Ghent University – Research Coordination office	Belgium	Univ/management
18	Nancy	Terryn	nancy.terryn [at] ugent.be	Ugent	Belgium	Univ/management
19	Karen	Vandeveldel	Karen.Vandeveldel [at] UGent.be	Ghent University	Belgium	Univ/management
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## Appendix 3 – Overview of process output

- [Paper](#) based on a review of university policy strategies in the Netherlands on the societal relevance of development cooperation as well as scientific research in terms of innovation and valorisation, including examples of best practices in the Netherlands. The paper was written by Ad Boeren en Mtinkheni Gondwe (Nuffic) and is entitled: ‘The role of development co-operation in the knowledge triangle: the Dutch contribution’
- [Paper](#) entitled ‘Innovation indicators’, written by Karen Vandeveldde, Ghent University.
- A call for papers inviting papers on four topics: (i) Micro-innovation; (ii) University collaboration beyond capacity building; (iii) University’s three-fold mission: education, research and service to society; and (v) Brains on the move. Seventeen papers were accepted for presentation at a workshop in South Africa. Abstracts of the submitted papers as well as of the speeches by the plenary speakers of the workshop can be found in the [abstract book](#).
- [Workshop](#) on 8-10 November 2010 in Cape Town, South Africa, with university managers, policy advisors, researchers, NGO representatives and PhD students. Participants discussed how ‘innovation’ and ‘service to society’ can be incorporated better into academic development programmes. The students from UWC compiled a [feedback report](#) which was presented during the closing session of the conference, and also published a [paper](#) in the UWC Campus Magazine.

## Appendix 4 – Relevant literature and policy documents

Annual reports from the national Advisory Council on Innovation South Africa (<http://www.naci.org.za/>).

- Abdul B. Kamara, Lobna Bousrih and Magidu Nyende 'Growing a Knowledge based Economy: evidence from public spending on education in Africa' 2007 Economic Research working paper no. 88, African development bank <http://www.afdn.org>.
- Calestous Juma and Lee Yee-Cheong 'Innovation: applying knowledge in development' 2005 UN Millennium project, task force on science technology and innovation on [www.unmilleniumproject.org](http://www.unmilleniumproject.org).
- Jean-Eric Aubert, World Bank Institute 'Promoting Innovation in Developing Countries: a conceptual framework' April 2005, World Bank Policy Research Working Paper no. WPS3554. On website: <http://www.worldbank.org/reference>.
- Global Innovation Index 2009-2010 : [www.globalinnovationindex.org](http://www.globalinnovationindex.org).
- Hans Maltha and Ad Boeren 'Northern Perspectives on development in higher education and research' Nuffic Conference ' a changing landscape' The Hague, 23-25 May 2005.
- Arnaldo Ventura 'New thinking needed on innovation infrastructure' 2009 Science and development Network [www.scidev.net](http://www.scidev.net).
- White paper 'Africa higher education cooperation for development: meeting regional and global challenges' Outcome of the project 'Access to Success' 2008-2010 through [www.eua.be](http://www.eua.be).
- Anastassios Pouris 'A scientometric assessment of the Southern Africa development community: science in the tip of Africa' *Scientometrics* (2010) 85:145-154.
- Mita Marra 'Knowledge partnerships for development: what challenges for evaluation' *Evaluation and program planning* 27(2004) 151-160.
- Boubakar Barry and Akilagpa Sawyerr 'African Higher Education and Industry, what linkages?' Annual bank Conference on Development Economics June 9-11, 2008, Cape Town South Africa.
- Heather Baser and Peter Morgan 'capacity, change and performance' study report (2008) for The European Centre for Development Policy Management.
- 'Science with Africa' full conference report of the African Union conference in Addis Ababa Ethiopia, 3-7 March 2008.
- Gordon Conway and Jeff Wage 'Science and innovation for development' (2010) downloadable from [www.ukcds.org.uk](http://www.ukcds.org.uk).
- I. N. Barugahara and A. Tostensen 'towards better synergy between S&T and development' workshop report 23-24 April 2009 Kampala, Uganda on [www.caast-net.org](http://www.caast-net.org).
- Pierre Morlachi and Ben R. Martin 'Emerging challenges for science, technology and innovation policy research: A reflexive overview' *Research Policy* 38 (2009) 571–582.
- Peter Rosseel, Erik De Corte, Jan Blommaert and Elke Verniers 'Approaches to North-South, South-South and North-South-South Collaboration' A VLIR-UOS policy document ISBN 97890812450 downloadable from the website.



