

Collaborate to Innovate:

The role of university development cooperation in innovation

🌐 The knowledge triangle

The knowledge triangle – education, research and innovation – is crucial for development. It is widely felt that collaboration between Southern and Northern academic and non-academic partners to achieve greater innovation can and should be improved. In 2010, Ghent University, University of the Western Cape, Wageningen UR Centre for Development Innovation, Nuffic and VLIR-UOS, in cooperation with the City of Ghent (North-South Department), initiated a one-year process to discuss ways in which university development cooperation programmes can lead to innovation.

It is generally accepted that science, technology and innovation are needed for economic growth. This is also true for developing countries in Africa. To sustain growth, the region has to harness science and technology in various sectors, integrate in global markets and transform its economy in the face of globalisation. Against the background of brain drain and limited support for research and development, Africa risks losing out, unless initiatives are taken to provide incentives for innovation.



The 'Collaborate to Innovate' process included a 3-day conference at the University of the Western Cape (Source: <http://www.uwc.ac.za>).

Process organisation

The 'Collaborate to innovate' process was carried out within the framework of the Development Policy Review Network (DPRN) by:

- Ghent University
- University of the Western Cape
- Wageningen UR Centre for Development Innovation
- Nuffic
- VLIR-UOS
- City of Ghent, North-South Department



UNIVERSITY of the
WESTERN CAPE



Innovation refers to the process of turning knowledge into a competitive advantage providing economic and social benefits. This means innovation is not just limited to the development of new products, but includes innovative approaches to regional development and other societal issues employed in the public and non-profit sectors. These attributes of innovation place the concept of the knowledge triangle in a broader perspective, and highlight the possible benefits that spring from cooperation between universities, companies, governments and local communities.

There is a great potential for innovation coming from university research in developing countries, but this opportunity has so far largely been underexplored. University development cooperation projects usually focus on education and research, sometimes incorporating more institutional issues like research coordination and quality control. However, the knowledge triangle – linking education and research to innovation – is often neglected as a potential field of cooperation.

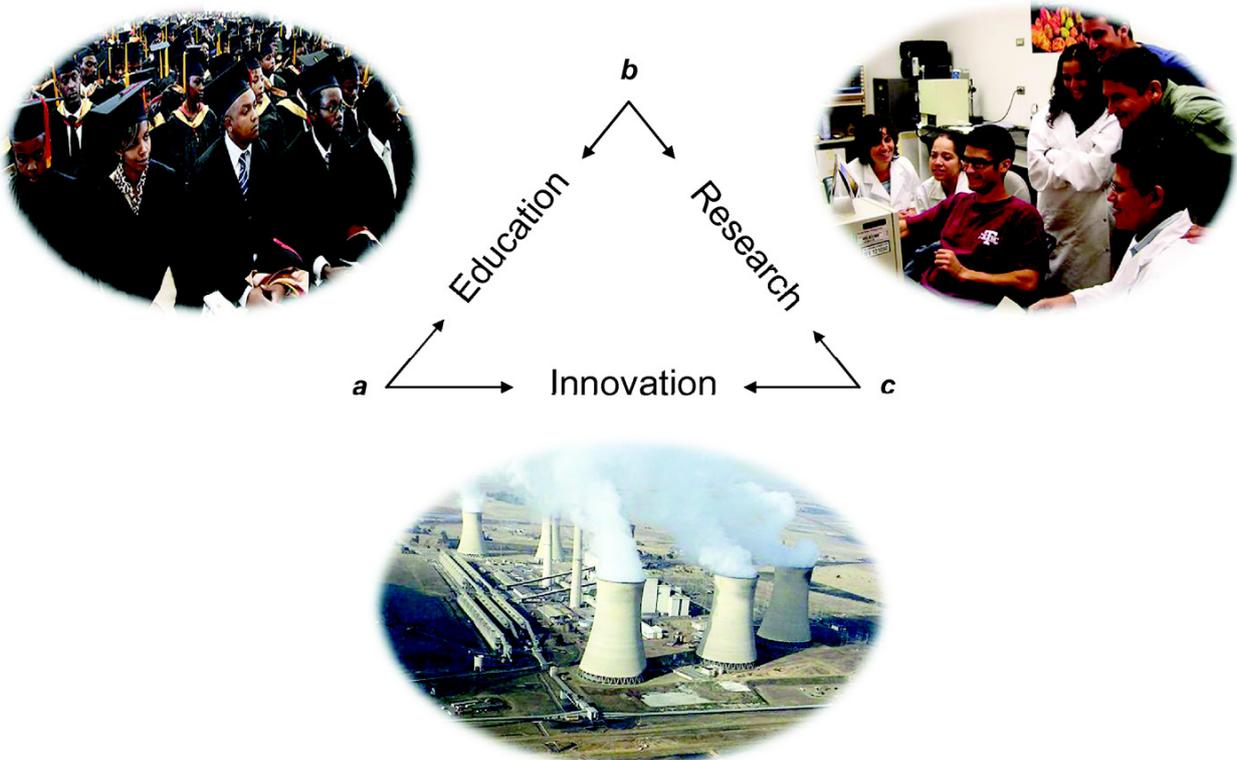
🌐 **How can the knowledge triangle be supported in developing countries?**

There is a huge potential for innovation in the South, especially in the health, energy and agricultural sectors. The process organisers formulated several recommendations for funding agencies and governments on how to promote innovation in developing countries through the knowledge triangle.

Recommendations for funding agencies

- Development aid is not ‘charity’. Sponsors should benefit from the support as much as the recipients. If there is no win-win on both sides, the partnership will not be effective. Both sides must be alert to the dangers and pitfalls of patronage and competition inherent in partnerships.
- A two-tiered funding system, with distinct funding sources for academic research and university capacity-building programmes, may not be beneficial to long-term collaboration between universities and even restrict actual university development in the South because quality standards for capacity building are lower than for academic performance. Quality standards (i.e. for publications and degrees) should apply equally to both types of academic collaboration.

Components of the Knowledge Triangle



- Bottom-up and small-scale initiatives offer the best guarantee for success. Both funding agencies in the North and partners in the South benefit more from their investments if the projects can be steered from the South.
- Awareness ought to be raised amongst 'regular' funding agencies like Nuffic and VLIR-UOS that academic talent in the South has greater potential than being a source of talented researchers for excellent institutions in the North. The funding agencies should encourage academics in the South to engage in global academic networks and those in the North to embrace a cooperative spirit in which researchers from the global South are considered equipollent partners in research

Recommendations for governments

- Universities in the South, just like universities in the North, are dependent on government and external funding to fulfil their mission of education, research and service to society. Adequate salaries for academic staff guarantee that they can focus on their core academic business. Access to external funds, allocated on the basis of quality criteria, creates the necessary incentives and dynamics for higher education to flourish.
- In terms of social innovation (e.g. on health and sustainable energy) the potential for development in the South is huge. Unlocking this potential, however, requires political stability as well as government and private investment. Knowledge and creativity alone cannot bring about innovation without visionary socioeconomic policies and an entrepreneurial climate.
- Although many countries in the South are rich in natural resources, these are often sold unprocessed, which leaves their potential for innovative development mostly un-



Glenda Kruss of the Human Sciences Research Council (South Africa) presenting her paper on the role of universities in developing interactive capabilities to promote social innovation and development in South Africa. She wrote her paper in response to the call for papers that was set out by the process organisers.

used. Strategic initiatives at government and regional levels, combined with 'smart' investments, are needed to stimulate innovation in the mining sector.

🌐 The role of universities

There is no shortage of innovative ideas and excellent practices at Southern universities, but the lack of business-university networks and attractive career perspectives hinders the unlocking of their potential. There is a need for more pro-active support for entrepreneurship and research & development at Southern universities. Below are some of the possibilities and limitations to this support.

- Universities in the South can play an important role in development collaboration, but not until a certain level of capacity building has been achieved at primary and secondary level. 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 Southern countries or regions other types of development aid must take priority.

- 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 be solely based on academic performance (e.g. publications or product development) but also on societal relevance. 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.
- Collaboration can only be effective if the institutions enter into joint activities treating each other as equal partners. Internationalisation, long-term collaboration and mutual trust between academic institutions are therefore essential. Rather than seizing every opportunity for collaboration or funding, universities and academics should be in a position in which they can refuse funding or partnerships when certain quality criteria are not met or if there is insufficient project 'ownership' for one of the partners.
- Technology transfer offices should provide academic staff with training in business skills, so that they learn to translate new knowledge more easily into actual applications, products or processes. Alternatively, these offices can act as brokers to facilitate this 'translation' process.

Follow up

This DPRN process helped to strengthen the relationships between academic partners in South Africa, the Netherlands and Flanders. The University of Ghent intends to follow up the process with a workshop in two to three years. Other follow-up will take the form of academic publications. Authors affiliated to Wageningen UR Centre for Development Innovation will write a paper on 10 years of university development cooperation through

Nuffic projects. Karen Vandervelde (Ghent University) is preparing a paper on 'Innovation indicators and monitoring development', which discusses why measuring progress is as difficult and as crucial as making progress. This will be based on the draft report on innovation indicators written during the DPRN process. A paper by Nancy Terryn of Ghent University will focus on how University Development Cooperation projects can be more successful in their 'valorisation' to society.

Process output

The 'Collaborate to innovate' process centred on an international conference in South Africa. Following a call for papers, several presentations were held.

This resulted in the following publications:

- Abstract book with the summaries of the thirteen papers that were written by conference participants.
- Paper: 'The role of development cooperation in the knowledge triangle - the Dutch contribution'.
- Paper: 'Monitoring developments and interpreting indicators. Measuring progress is as difficult and as crucial as making progress'.
- DPRN process report.

All publications are available on the website: <http://innovate.global-connections.nl>

This infosheet was made by DPRN. With a view to stimulating informed debate and discussion of issues related to the formulation and implementation of development policies, DPRN created opportunities to promote an open exchange and dialogue between scientists, policymakers, development practitioners and the business sector in the Netherlands and Flanders from 2003-2011.