KENYAN SCHOLAR PAULINE: ‘I should also try to win the Nobel Prize.’

PILOTLESS FLIGHTS ABOVE THE ANDES LEAD TO BETTER AGRICULTURE

EDUCATION EXPERT ALAN PENNY: ‘This type of research is truly innovative.’
IN THIS ANNUAL REPORT:

04 Pilotless plane maps the Peruvian Andes

06 Investing in university cooperation is something the Belgians do uniquely well

08 Solar cookers: how to get the Senegalese interested?

10 Clarity in Suriname

12 The Nobel Prize: ‘I should also strive to win it’

14 Flemish and Kenyan bioengineers seek better farm crops

16 Belgians and development cooperation: a sense of solidarity but sceptical

18 We are one family

19 Growing cassava in 15 minutes

20 A video says more than a thousand photos

22 Sharing minds in Cuba: the impact of twelve years of cooperation

24 A decade together

28 VLIR-UOS budget 2013

30 What you always wanted to know about VLIR-UOS
A year ago we were pulling our hair out. We had no idea what our budget would be for 2013 or where it would come from. Projects had to be suspended and scholars were suddenly no longer certain whether they could start or continue their training. Thankfully, we finally received the budget we needed for 2013 and the federal government recently approved the plan for 2014-2016.

I imagine you are thinking: ‘Business as usual then?’ Yes and no. Yes, because we are once again focusing on our core business, which is investing in long-term partnerships. No, because the crisis has got us to sit up and take notice. A Nigerian saying goes: ‘During a crisis the wise build bridges and the fools build dams.’

We strengthened our ties with the Flemish government in 2013. The members of the Flemish parliament were able to see the impact of our projects in Vietnam and with the Flemish government we helped organize an international conference on Trauma and Transformation. That collaboration will continue in 2014. We also submitted a memorandum to the Flemish minister-president Peeters with proposals for cooperation in Southern Africa.

A regional focus was and remains the spearhead in the partnership with the Belgian federal government. In 2014 we will elaborate country strategies for Peru and Kenya. We will also reform our selection committees, putting much more stress on regional expertise.

Lastly, we want to get out into the field much more and learn from concrete cases. This annual report is a clear example of that. In particular, we will also take advantage of the mediagenic research into the causes of Nodding Disease to learn lessons about communication and fundraising. We will share our findings with you in the spring of 2015.

Does our model of long-term cooperation with higher education have a future? ‘Absolutely’, say international development and research experts Julie Carpenter and Alan Penny, who evaluated a number of projects for us. You will read more about that in this annual report. We aim to continue to build bridges to expand and strengthen the VLIR-UOS model and raise its profile. Together with you.

Koen De Feyter, chair VLIR-UOS
Kristien Verbruggen, director VLIR-UOS
Researchers at KU Leuven and Universidad Nacional Agraria la Molina (UNALM) in Peru deployed pilotless planes to map land use and improve local agricultural systems. It is cheap and effective. Other countries are now also showing interest in using the technology. We spoke with expert Dries Raymaekers about the test flights above the Peruvian Andes.
How can we map land use in Peru to enable the optimization of local agricultural systems? That is the starting point of the Farming Systems project, a collaboration between KU Leuven and UNALM.

**Drones: Simple and Cost-effective**

Satellite images are handy for charting land use, but the results in the Manta-ro valley in the Peruvian Andes were pathetic. The images provided too little data because of the clouds during the rainy season. The researchers decided to use a drone, otherwise known as an UAV, an unmanned aerial vehicle with built-in camera. It delivered high quality images. The advantage compared with satellite images is that a drone can fly under the clouds and take high-resolution photos. Plus the researcher decides where and when the plane flies. Drones are easy to use and cost-effective, too.

Dries Raymaekers of USENSE, a Flemish company specialized in pilotless flights to take photos: ‘We chart one to two square kilometres of agricultural land per half-hour flight on unmanned flights, with ten times the detail of current satellite photos.’

**Scientific Data for Farmers in the Andes**

In February 2013 researchers at UNALM, KU Leuven and USENSE sent a small plane up above various remote areas of Peru over a four-week period. The flights delivered detailed maps using the newest image processing technology.

UNALM’s regional development centres use the research data to help local farmers improve their small-scale agriculture at great heights. Among other things, they are given advice on the best location for their agricultural activities and the best place to grow their crops.

‘On the map we see big differences in crop quality between the fields,’ says Dries Raymaekers. ‘That allows us to advise farmers on how to make optimal use of the resources they have in those places where agriculture is profitable.’

**Interest from Other Quarters**

Other VLIR-UOS projects have now got on the drones bandwagon, because photos are also needed outside Peru. A North-South-South project has been created to train local farmers to use drones in agricultural and ecosystem research in Ecuador, Cuba, Colombia and Ethiopia.

Watch the video about the flight above the UNALM campus and the flight over the Andes.
WHY WE SHOULD CONTINUE TO INVEST IN UNIVERSITY DEVELOPMENT COOPERATION, ACCORDING TO INTERNATIONAL EXPERTS

‘INVESTING IN UNIVERSITY COOPERATION IS SOMETHING THE BELGIANS DO UNIQUELY WELL’

In 2013 we spoke with two international experts on development and education, Julie Carpenter and Alan Penny. They both know VLIR-UOS well, as they have evaluated several VLIR-UOS programmes in the past. When the interview was held the future of VLIR-UOS was uncertain, as the Belgian government had announced that it would phase out its funding to VLIR-UOS. We asked Julie Carpenter and Alan Penny about the added value and the uniqueness of the VLIR-UOS cooperation model.

You have both been involved in evaluations of several university cooperation programmes worldwide. What distinguishes VLIR-UOS from other donors?

Julie Carpenter: What makes the VLIR-UOS approach unique is the commitment to a long-term relationship. The length of engagement in an Institutional University Cooperation programme of ten or more years is two or three times longer than the programmes that you may find in North America or elsewhere in Europe. This allows a genuine development of capacity and exchange of views between the partners.

Alan Penny: I would highlight the depth and richness of the programme, particularly focusing on research and the inter-collegiality of that work. And secondly there is the economic efficiency of the model. The investment is relatively small for the gain.

What are the gains for the professors involved?

Alan Penny: I always believe that good quality teaching is based on good quality research. In the VLIR-UOS programmes there is a lot of good quality research as is evidenced in the number of publications that are produced in very respected journals. Secondly the professors are bringing into their institution a very different quality of mind, very different ways of thinking about similar problems, and insight, which again enriches not just the professor’s knowledge, but the host institutions’ understanding of these issues.

Can you give some concrete examples of the impact of the VLIR-UOS programmes?

Julie Carpenter: Some universities involved in long-term programmes under VLIR-UOS have really transformed over the course of ten or twelve years. There has been a gain in capacity and ability to manage, but they have also planted the seeds of research programmes that have then gone on to be really significant.

I can give you the example of a research project at Sokoine University of Agriculture in Tanzania, which is called Apopo. It built directly on VLIR-UOS and Belgian funding. It has...
now become a well-established, quite famous programme for mine clearing throughout Africa and in Asia. None of that would have been possible without the first input from the Flemish universities.

Alan Penny: Regarding the cooperation with Ethiopia, Belgian scholars provided an excellent technical input in the development of e-learning and a computer based platform for teaching and learning. They introduced a totally new and very important pedagogic tool.

Secondly the Ethiopians are gaining considerable technical knowledge. For example as part of the institutional cooperation with Mekelle University, looking at the problems in terms of food production. Or with Jimma University in areas such as health and veterinary work.

Probably most important in Ethiopia, I think, is the focus on water. The research into the Gilgel Gibe Dam and around Lake Tana has been very important. If Lake Tana silts up, not only Ethiopia will suffer, but also Sudan, Egypt and many other people downstream. So this is research of academic value, as well as being actually highly strategic.

So university cooperation for development is a good investment?

Julie Carpenter: Yes it is! For a relatively small amount of money, you can get quite a big impact over the long term. And that is efficient use of developing funding.

Investing in the university cooperation is something the Belgians do uniquely well. Maybe the Belgian government does not realize how uniquely you are placed to do this. Other countries do similar sorts of programmes but without that level of knowledge and expertise.

Alan Penny: This kind of research is breaking new ground. It is making a difference for people on the ground by poverty reduction, enabling and facilitating people to actually have a better life. A lot of aid is like that, or is supposed to be like that, but I haven’t experienced any organization that is so closely engaged with people on the ground.

‘The long-term programmes have really transformed the universities’

- Julie Carpenter -

About Julie Carpenter and Alan Penny

Julie Carpenter is director of Education for Change, a UK-based research and consulting company on international development.

Alan Penny is independent social sector consultant. He has worked at the UK Department for International Development (DFID) and the University of Winchester as professor of Education.
SOLAR COOKERS: HOW TO GET THE SENEGALESE INTERESTED?
Janka Vanschoenwinkel, a Flemish student studying commercial engineering at Hasselt University, was given a VLIR-UOS travel grant to go to northern Senegal for her master’s thesis. She studied the use of solar cookers as an alternative to cooking with wood or charcoal. The results were well received in an international scientific journal and at various international conferences.

**WHY DOES THE LOCAL POPULATION NOT USE SOLAR COOKERS?**

Janka looked into what the problem was with solar cookers. She asked 126 people about their expectations using Best-Worst Scaling. For instance, she asked whether the respondents gave more weight to the positive characteristics of solar cookers than the negative characteristics.

The advantages of solar cookers include improved health and more time. Possible disadvantages are the high purchase price, the fact that you have to cook outdoors and the fact that the solar cooker is not suitable for preparing certain traditional dishes. The problem is also that solar cookers have a limited capacity. So you cannot cook a meal for a family of ten.

First and foremost, the study shows that different types of family have different preferences. Factors that play a role include family size and ethnicity. That means different types of solar cookers are actually needed.

A surprising finding is that families attach more importance to their health than any characteristic of the cooker. Yet health benefits are not always why people use solar cookers, because they are not aware of the link. The study also shows that people who own solar cookers do not always know how to use them.

**USING WOOD AND CHARCOAL FOR COOKING DEMANDS TREES, TIME AND LIVES**

A lot of Senegalese families use wood and charcoal to cook their meals. That results in deforestation. Gathering wood takes time too, and as a result girls in particular do not always go to school and women earn less money. The smoke generated while cooking also makes many people sick.

Fortunately there are alternatives, like stoves that operate on gas, electricity or solar energy. The Belgian organization Natuur.koepel set up Sol Suffit, a project to distribute solar cookers among the local population in Senegal.

The project came up against a number of cultural, social and societal barriers, however. The local population turned out to scarcely use the solar cookers.

**COMMUNICATION, TRAINING AND GUIDANCE ARE IMPORTANT**

Janka’s research teaches us that not only socio-demographic aspects have an impact. Communication about the product, user training and guidance are also key.

She shared her research results with the Sol Suffit project managers. As a result, she now works much more closely with local women’s groups. Because solar cookers are mainly used by women. Sol Suffit also tries to define the target groups better.

Janka’s research has been picked up internationally. Energy Policy published an article about it (Volume 67, April 2014, Pages 447–458). She was invited to present the results of her study at the European Association of Agricultural Economists conference in Ghent, the Conference on Sustainable Development of Energy, Water and Environment Systems in Dubrovnik and a symposium of a Dutch solar cooker organization.

Janka is currently taking her doctor’s degree at Hasselt University. She is researching agriculture-specific adaptation to a changing European climate.

For more information about Sol Suffit, see [www.solsuffit.be](http://www.solsuffit.be).
The Institute for Teachers in Paramaribo (Suriname) and the Flemish Thomas More University College have started a two-year project to bolster the only speech therapy course in Suriname. They also want to contribute to the continued development of speech therapy in Suriname. We spoke with co-supervisor Kirsten Schraeyen of the speech therapy and audiology course at Thomas More.

The four-year bachelor’s degree was set up in Suriname in 2007 in response to a social need. There were just three speech therapists working in the whole country, despite the great need of assistance for children with speech, language and hearing disorders.

How did the cooperation come about?
‘The cooperation between the speech therapy course in Suriname and the speech therapy and audiology course at Thomas More in Belgium started in 2010,’ says Kirsten Schraeyen. ‘At the time I visited Suriname within the framework of speech therapy work placements.’
Our initial discussions were mainly about how the speech therapy course in Suriname could guide our students during their placement. We then started discussing speech therapy in Suriname and the challenges people faced there, that is a lack of resources and a great need for scientific knowledge and expertise.

That was why a proposal was submitted for a South Initiative at VLIR-UOS. Long-term cooperation would be a source of added value for the Thomas More course, as we could improve the guidance for Flemish students there.

Is there such a great need for speech therapists in Suriname then?

Absolutely. Qualified speech therapists are urgently needed in rehabilitation centres, schools, hospitals and elsewhere. Permanent follow-up training for qualified speech therapists is lacking. There is also a dearth of proper tools for diagnosing speech therapy tailored to the Surinamese target group.

We want to meet these needs through the project. We are investing to upgrade the curriculum, professionalize the field of action and improve cooperation between the various partners. Until recently, there was scarcely any cooperation between the speech therapy course in Suriname and the field of action they serve. Thanks to the project we are now changing that.

The project also creates spin-offs in other countries. For instance, VVOB Zimbabwe has asked us whether we could support the development of speech therapy there.

Stephanny Wijntuin, Surinamese speech therapy degree student, went to Belgium for four months to deepen her knowledge of speech therapy at Thomas More:

“We were able to observe one of the teachers. It was nice to see how a speech therapist works. We also visited a rehabilitation centre. It was really fascinating, because now I can compare the care in Suriname and Belgium and draw conclusions on how we could tackle things better in Suriname.

The project ‘Upgrading Speech Language Therapy (SLT) in Suriname through quality improvement of the educational SLT-curriculum and development of SLT-health care services’ receives support from VLIR-UOS under the Own Initiatives programme. A large number of partners are involved from Suriname, including the Ministry of Education and Public Development, UNICEF and VVOB.
When we first meet Pauline Kibui (Kenya) in 2013 in Nairobi, she was working as research assistant at the Institute of Primate Research, carrying out research on reproductive health.

Pauline Kibui: ‘Diseases that lead to infertility are of great concern to me. Infertility is rising, because of the lifestyle, climate change, environment alteration and heavy metals in the crops. It is with research that we can solve these infertility problems.’

Pauline applied to do the Master of Science in Molecular Biology at the Vrije Universiteit Brussel, KU Leuven and the UAntwerpen. ‘I believe the Master will enable me to really help my society.’

THE NOBEL PRIZE: ‘I SHOULD ALSO STRIVE TO WIN IT’
PAULINE CANNOT START HER MASTER’S DEGREE IN BELGIUM BECAUSE OF UNCERTAINTY ABOUT FUNDING

A month before our meeting Pauline received the news that she had been selected to receive a VLIR-UOS scholarship to study in Belgium. But there was great disappointment two weeks later when she heard that VLIR-UOS could not guarantee she would get the scholarship because of uncertainty about funding. Her dream was suddenly in tatters.

Education has always been very important for Pauline: ‘I was the first person in my village to go to university. This has motivated others. Because of that, now there are about ten people that have gone to university.

I have been doing a lot of mentoring in my village. I see that the youngsters actually go to school and have a better life. That is why I wanted to advance my education, because I can offer something to my society.’

PAULINE IS DOING A MASTER’S DEGREE IN MOLECULAR BIOLOGY

In June 2013 the Belgian government decided to pay out the full budget to VLIR-UOS. So Pauline, among other selected scholarship students, could finally come to Belgium. We met Pauline again at the beginning of 2014. She is now doing her MSc in Molecular Biology.

What have you learnt so far on the MSc course?

Pauline Kibui: ‘I have learnt laboratory techniques that can be employed to detect diseases. Once back in Kenya, I will use the knowledge to improve reproduction health by developing diagnostic kits for early disease detection.

I greatly appreciate the kind of research that I found going on in Belgium, especially after interacting with professors who have a lot of experience in research and are ready to mentor young scientists. This is what I had always wished for in my research career.’

Has this experience changed you as a person?

‘Yes, it has really changed my way of thinking. I have interacted with people from different backgrounds. This prompts me to think of what can be done to improve the livelihoods of my people. I grew up in a society where the role of women was never recognized and girls would drop out of school at a very tender age to get married. By interacting with different people, I get to learn of different community-based developments that can improve the livelihoods of the community.

It is very interesting to find out how Belgium has been producing Nobel Prize winners. Researchers work hard to achieve this. In early February my class visited various research institutes in Belgium and I noted that ladies are doing very well in the academic and research sector. It was a great motivation that reminded me that the sky is the limit. I should also strive to win the prize.’

‘Met onderzoek kunnen we vruchtbaarheidsproblemen oplossen.’
FLEMISH AND KENYAN BIOENGINEERS SEEK BETTER FARM CROPS

Small teams of Kenyan and Flemish bioengineers visited central Kenya for two weeks in December 2013. They were there to collect data on soil, vegetation, farm crops, climate and the population’s social and economic activities. The students examined which crops were the most sustainable and the most profitable for small farmers.

Twenty-one Flemish and Kenyan students were given the opportunity to do research on the ground. They lived and worked in the countryside for two weeks in groups of four to five students, under the supervision of KU Leuven and Kenyatta University professors.

The stay is part of the KU Leuven’s Master Tropical Natural Resource Management. During the course the students study tropical agriculture and silviculture, soil science and development economics in depth.

For the field course KU Leuven works with Kenyatta University in Nairobi. The two universities have a close, long-term research relationship with the support of VLIR-UOS.
ADVICE ON ALTERNATIVE FARM CROPS

Each team must draw up a recommendation on alternative farm crops. The researchers base themselves on the results of the two-week field study.

If student Benjamin Bukombe of Kenyatta University had to give one piece of advice to Kenyan farmers it would be to use cows: ‘Based on the collected data we see that cattle, and especially cows, fulfil a double role in the cultivation of bananas, maize and so on. They increase income through milk production and they improve the harvest thanks to the manure.’

Will the Kenyan farmers actually be able to follow the advice?

‘You should see it as a guide more than anything,’ says professor Roel Merckx (KU Leuven). There is a validation period to go through before this becomes a solid recommendation.

‘A REAL EYE-OPENER’

Standing with both feet in the Kenyan earth makes a big impression on both students and professors. ‘Finally we are seeing in practice what the professors have been telling us all these years!’ says one of the students.

The field course was a real eye-opener for student Douwe Wittebrood (KU Leuven): ‘What has stayed with me the most is perhaps the huge difference between how you have to approach agriculture in the tropics and here in Belgium. A specific optimal approach can be found for each type of soil and climate. So our European approach is certainly not always the best one.’

‘I could see how Kenyan farmers deal with climate changeability and production systems on their small farms,’ says Benjamin Bukombe. ‘I got a general impression of how we could help our farmers to increase their production.’

The field study in Kenya was supported by VLIR-UOS within the South Initiatives programme. In 2014 VLIR-UOS will elaborate the country strategy for Kenya, organising consultations in Flanders and Kenya.
Belgians find it important to improve the standard of living in developing countries. They are less convinced than they used to be that development cooperation is the best way to do this. And they are less and less prepared to give money for charities that work in the South. That is the gist of the survey by the PULSE research platform.
**Empathic but Critical**

Empathy for poor people in the South has remained stable in comparison with previous surveys. Over 60% of Belgians continue to find improving the standard of living of people in developing countries important. Less than 10% feel it is not important.

But the respondents are critical when it comes to the tools and the feasibility of doing something about poverty. Just 10% feel the money we spend on development cooperation is well spent, whereas the majority (56%) feel it is ‘partly good, partly bad’. Around one in three Belgians feel the money is ill spent.

Emergency aid by international organizations and concrete projects by small well-known organizations get most support from a majority of people.

Should the budget for development cooperation be raised? Barely 13% feel it should be, although a decade ago half the population felt it should be. 34% would like to see the budget cut.

**Know, Give, Do**

The often critical attitude contrasts with the ignorance and the stereotypical picture people have of development cooperation. Reports and campaigns featuring a poignant message or a pointing finger turn out to be counterproductive.

Just 26% of Belgians say they have given money for development cooperation in the past year. In 2010 that was 40%. On the other hand, the group discussions revealed a greater readiness to give goods, buy fair trade products and pay a ‘charity’ supplement when taking part in sports, for instance.

**Room for Nuance and Dialogue**

People sometimes have unrealistic expectations of development cooperation. On the other hand, those involved in development cooperation are not always clear about what has been achieved and what is possible. ‘Organizations would do well to provide correct information to the general public but also to look for occasions where there is room for dialogue, nuance and criticism,’ says researcher Ignace Pollet (KU Leuven).

The above text is based on a press release from the Directorate-General for Development Cooperation and Humanitarian Aid (DGD). You can find an English summary of the report on www.dg-d.be.

---

**The O*platforms are dead. Long live Acropolis**

The Research Platforms for Development Cooperation, known for short as O*platforms, have been wound up after more than four years. Through the programme VLIR-UOS funded scientific research and scientific service provision tailored to Belgian development cooperation policymakers. As well as PULSE – Research Platform Development Cooperation Support (www.pulse-oplatform.com) – two other platforms will wrap up: KLIMOS – Research Platform Climate Change and Development Cooperation (www.kuleuven.be/klimos) and Research Platform Aid Effectiveness (www.uantwerpen.be/aid-effectiveness).

At the end of 2013 VLIR-UOS launched the call for ACROPOLIS, in collaboration with French-language sibling organization ARES-CCD. ACROPOLIS funds policy-supporting research for Belgian development cooperation. Both Flemish and French-speaking universities and university colleges are involved, which is new. The three research themes are sustainable development, development cooperation funding and aid-effectiveness in the context of fragility.
The symposium on larva culture for fish and crustaceans, LARVI 2013, attracted scientists from around the world to Ghent. A lot of participants have a master’s degree or a PhD from Ghent University funded by a VLIR-UOS scholarship. We asked them about the impact of their training in Belgium and the further cooperation within an international network of researchers.

Van Hoa Nguyen is professor at Can Tho University in Vietnam. He first came to Belgium in 1989. Has the many years’ cooperation made a difference for Vietnam?

Without doubt. In the eighties and early nineties we had to buy artemia abroad (artemia are used as food in shrimp farming, for instance). It was very expensive. It took a few years of joint research to develop a system for the production of artemia in the coastal region of the Mekong Delta. That helps the poor population to develop and improve their lives. The salt farmers in the region who switched to artemia integration now earn 3 to 5 times more than they used to.‘

What has stayed with you most from your stay in Belgium?

Brazilian professor Ronaldo Cavalli sums it up in just seven words: ‘Work hard, be honest, treat people well. That is the most important thing I got from my stay in Belgium, even more important than the beer!’

Professor Daniel Adjei-Boateng from Ghana took a master’s degree in aquaculture in 2001 and subsequently did a PhD. He most remembers how knowledge was shared: ‘Because you have colleagues from Vietnam, Ecuador or Indonesia living in sometimes comparable surroundings, you can share knowledge. So we can take on and apply the technology from Belgium.’

‘We are one family,’ says Montakan Tamtin. She coordinates the Larvi Group at the Aquatic Animal Health Research Institute in Pitthanulok, Thailand. ‘There are around seven different nationalities here. We learn from each other, form friendships and get input for research.’

The participants agree: their study in Belgium has had a major impact on their career. ‘I am able to say that VLIR-UOS has laid the foundations for my career,’ says Daniel Adjei-Boateng.
What is the video about?

‘It is about cassava cultivation in Africa,’ says Pascal Boeckx. Millions of farmers grow cassava, also known as manioc, to feed their families. Cassava is resistant to drought and can grow in relatively poor soils. As a food crop it is high in starch but low in protein.

In the video the farmers learn how to increase their cassava yield by growing crops with higher protein contents in the same field. That increases the nutrient supply through nitrogen fixation and farmers do not need to weed as much. The ultimate goal is to increase their income.

Why did you opt for a video?

‘For pragmatic and practical reasons. The project activity stopped for almost a year due to the civil war in Ivory Coast. That meant that we could not conduct the popularization phase as planned. So we decided to make a video in English, French and five local languages for the local farmers.’

Do you have a tip for colleagues who might want to make a video about their research?

Go for quality! Find a professional and avoid self-made YouTube videos if you want to be taken seriously.

‘This method is more beneficial, because the legumes enrich the soil that is already poor, and they allow farmers to have an income.’

-Sess Bouaye Odile, female farmer-

How did the video come about?

‘It is the result of a working relationship with Agro-Insight and all project partners. Agro-Insight is a company that specializes in agricultural communication. The content is also the result of many years’ research into soil fertility in Sub-Saharan Africa.’

Growing cassava on poor soils’ is available to watch at www.accessagriculture.org. The DVD will be distributed to local farmers, NGOs and government agencies in spring 2014.
We feel it is important that research results are not only published in academic journals, but also reach potential end users. Video is a practical medium for that. More and more projects invest in online videos to share acquired knowledge with a wide public. We look at a selection here.

**A VIDEO SAYS MORE THAN A THOUSAND PHOTOS**

The goal of the Infectious Diseases project, which is part of the Institutional University Cooperation with Jimma University in Ethiopia is drawing attention to neglected tropical diseases.

The people involved made a series of practical videos about how researchers can (i) track down parasitic worms in stools, (ii) get organized in the laboratory and in the field and (iii) monitor the efficiency of administered drugs.

The videos are available on YouTube. The first one is ‘*Operational Procedures for Soil-Transmitted Helminths and Schistosoma*’. The initiators are Bruno Levecke (Ghent University), Jozef Vercluysse (Ghent University) and Zeleke Mekonnen (Jimma University).
ON TOUR WITH BANANAS

Rony Swennen (KU Leuven) together with Bioversity International and the Rwanda Agriculture Board called in the Concrete Dreams production house to make eleven videos about bananas in Rwanda and DR Congo. Intended for local farmers, the videos in four languages (English, French, Swahili and Kinyarwanda) are about the commercialization of bananas, cultivation and preparation in food. The project received support from VLIR-UOS under the South Initiatives programme.

As well as the banana videos, Concrete Dreams has shot other educational videos for agricultural consortium CIALCA. Watch them at [www.musa.concretedreams.be](http://www.musa.concretedreams.be).

‘Most of the locals featured in the videos had never participated in a film before’, says filmmaker Sophie Spillemaeckers of Concrete Dreams (on the picture right). ‘To put them at ease, the filmmakers would start each new film by discussing the scenario with the participants. Some of them even got to try their hand at filming.’

CHALLENGES IN DR CONGO AND UGANDA

.Reporter Chris Michel developed a series of videos about cooperation projects in DR Congo and Uganda for VLIR-UOS. The videos are about research into artisanal mining in Kivu, psychotherapy for war-hit families in Uganda, birth control in DR Congo and the search for a solution to Nodding Disease. Watch them at [vimeo.com/vlirus](http://vimeo.com/vlirus).

‘SHARING MINDS’ IN CUBA: THE IMPACT OF TWELVE YEARS OF COOPERATION

The Flemish universities have built some impressive research infrastructure with the Cuban partner Universidad Central “Marta Abreu” de Las Villas (UCLV). The 80 PhDs are not the only proof of that, because new forms of cooperation have also arisen in Cuba. VLIR-UOS funding has stopped, but the cooperation with Flanders continues.
Andrés Castro Alegría, rector of UCLV: ‘The biggest impact is the rejuvenation of the corps of professors. Eighty students have gained a PhD during the programme. The cooperation has also generated 300 articles in major scientific periodicals, providing solutions to challenges faced by society in agriculture. We have also developed the basic infrastructure to conduct research and optimized the ICT infrastructure.

The fact that a hundred or so Flemish professors have also visited our university is another important fact. As well as project monitoring, they gave lessons and took part in conferences. This exchange has had a positive impact on the university’s organization culture and how we do science.’

Osvaldo Fernández Martínez is director of the Institute of Plant biotechnology. As a former project leader he was closely involved in the cooperation. He says the programme’s biggest impact for Cuba is the human capital that has been trained: ‘People with an open mind, who are able to work together and share a sustainability vision.’

The programme has also created new forms of inter-institutional cooperation in Cuba. ‘This is a direct consequence of the VLIR-UOS sharing minds philosophy,’ says Osvaldo Fernández Martínez, ‘in which people from different institutions and disciplines work together.’ Since the end of the Institutional University Cooperation programme UCLV now coordinates the Network ICT, which unites various Cuban universities with VLIR-UOS funding.

Andrés Castro Alegría: ‘Thanks to the Close the Gap programme, we have also contributed to the computerization of libraries and hospitals.’ Close the Gap gave a new life to pre-owned computers through VLIR-UOS in Cuba.

‘Absolutely,’ says Osvaldo Fernández Martínez. ‘Various PhD research projects are ongoing at Flemish universities. And the researcher graduates are involved in joint research, which results in joint publications.’

The Institutional University Cooperation with UCLV got underway in 2003. On the Flemish side, Vrije Universiteit Brussel, Ghent University, University of Antwerp and KU Leuven were involved. The most important themes were ICT, English communication and boosting training and research in agriculture and biology, pharmacy, clean technologies and informatics. The programme was officially wrapped up in February 2014.
A DECADE TOGETHER: READY, STEADY, GO!

Various 10-12-year partnerships got underway in 2013 within the Institutional University Cooperation and Networks for University Cooperation programmes, with universities in Tanzania, Uganda, Vietnam, Ecuador and Cuba.

SUSTAINABLE MANAGEMENT OF SOIL AND WATER IN TANZANIA

The goal of the cooperation with the Nelson Mandela African Institution of Science and Technology (NM-AIST) in Tanzania is the sustainable development of soil and water in the Pangani river basin and improvement of living conditions. On the Flemish side, KU Leuven, Vrije Universiteit Brussel and University of Antwerp are involved.

‘We develop methods to meet local needs,’ says Flemish programme coordinator Luc Brendonck (KU Leuven). ‘That is innovative because scarcely any research has been done on these specific needs in the region.’

One of the projects comprises research into soil management and the selection of banana and bean varieties to raise agricultural productivity. The researchers also examine how vegetable nutrients in wastewater can be reused thanks to water purification.

Read more about the cooperation with NM-AIST

The partners planted trees at the university to represent the sustainability undertaking
COMMUNITIES IN CONTROL IN UGANDAN UNIVERSITY

The local community in western Uganda set up the Mountains of the Moon University (MMU) and has always had a seat on the board of governors. The university works for the community. In association with Ghent University, KU Leuven and Vrije Universiteit Brussel MMU is working on building capacity for community training and research. The goal is a better yield in agriculture, cattle breeding and aquaculture.

The programme involves the community through action research and the distribution of research results through service centres. Attention is also given to the institutional strengthening of MMU in ICT, libraries, labs, human resources management and administration.

Read more about the cooperation with Mountains of the Moon University

NETWORKS AND PLATFORMS BRING UNIVERSITIES TOGETHER

In 2013 VLIR-UOS started three Networks for University Cooperation. A Network brings together universities in Flanders and the partner country for twelve years to find an answer to national education and research challenges. Each Network focuses on a specific theme – ICT in Cuba, Biodiversity in Ecuador and Bioscience for Food in Vietnam.

In Uganda two Flemish-Ugandan research platforms were launched on the themes ‘Governance’ and ‘Insecurity’. A Platform is a network of researchers focused on a specific theme within the country strategy. The Platform brings together individual research projects and provides implementation advice.
GRE@T: ENTREPRENEURSHIP IN TANZANIA

The cooperation between Mzumbe University in Tanzania and Ghent University, Vrije Universiteit Brussel, University of Antwerp and Hasselt University was given the name GRE@T, which stands for ‘Governance and entrepreneurship through Research, Education, Access and Technology’. The programme targets research into good governance and entrepreneurship through e-learning.

During the official programme launch the participants met the members of the women’s cooperative for the treatment of food, which is supported by the Belgian Development Cooperation through UN Women. GRE@T offers support in entrepreneurship to this type of cooperative.

Read more about the cooperation with Mzumbe University

SUSTAINABLE DEVELOPMENT IN EASTERN CUBA

The cooperation with Universidad de Oriente in Santa Clara focuses on research, innovation, education and the application of research results in eastern Cuba. The partners want to improve the academic activity and sustainable development in the region.

The selected themes are in line with Cuba’s policy priorities and the country strategy of VLIR-UOS, that is food security, agricultural development, environment and climate change, health and educational support, new sources of energy and the improvement of science and technology. In addition, the programme also wishes to improve the university’s ICT infrastructure, as well as the application of English and science courses.

Read more about the cooperation with Universidad de Oriente

BETTER ECOSYSTEMS AND RURAL HEALTH IN VIETNAM

Hue University (HU) wishes to contribute to Vietnam’s regional and national development together with the five Flemish universities. The programme mainly focuses on research into aquaculture, cattle breeding and crop cultivation, coastal and lagoon eco systems and rural health. The topics are chosen because they are crucial for the university, the region and the country. Support is also given to the institutional management and service of the university, among other things through ICT.

Read more about the cooperation with Hue University

The length of the roots of water plants serves as an indicator for the water quality in Tam Giang lake.

<< Photo: Christophe Goossens

26
CROSSING THE FINISH LINE

A number of long-term Institutional University Cooperation programmes in Ethiopia, South Africa and Cuba (see previous article) were brought to an end in 2013, early 2014. The parties involved are ready to take on new challenges.

SPECTACULAR ECO IMPROVEMENTS AND BETTER AGRICULTURAL PRODUCTION IN ETHIOPIA

The institutional cooperation with Mekelle University and the Flemish universities officially ended in September 2013. The researchers shared the knowledge they acquired during the international Livelihood 2013 congress.

The cooperation began in 2002. The goal was first and foremost to improve the living conditions of farmers by using water and soil more intelligently. The development of libraries and internet was also essential.

Seppe Deckers (KU Leuven) coordinated the cooperation with Mekelle University at the Flemish end. He sees a clear impact in the region around Mekelle: ‘There are spectacular eco improvements in the region and agricultural production has increased sharply. The difference from other regions is clearly visible.’

‘WE HAVE DONE SOMETHING EXTRAORDINARY IN SOUTH AFRICA’

During the Apartheid era in South Africa the University of the Western Cape (UWC) was labelled a ‘coloured school’ and received no benefits from the state. By 1994, when Apartheid ended, it was on its knees, bankrupt.

UWC, in association with VLIR-UOS and University of Antwerp, Ghent University, KU Leuven, and Vrije Universiteit Brussel, ended a ten-year cooperation programme titled ‘The Dynamics of Building a Better Society’.

Now – in 2014 – UWC is one of the top ten universities in Africa. UWC Rector Brian O’Connell: ‘This is all because it starts with the affirmation that we received from the people of Belgium: “We believe in you and we will help you”. And we took that help and we have done something extraordinary.’

As part of the cooperation programme, among other things five centres of excellence were established. ‘The centre of excellence on sports and development is unique in South Africa,’ says Brian O’Connell.

Watch the video and read the book on ten years of cooperation at www.vliruos.be/uwc.
### South Programmes

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional cooperation and country cooperation (IUC programmes, thematic networks, research platforms and other national/international cross cutting projects)</td>
<td>10,010,000</td>
<td>28.85%</td>
</tr>
<tr>
<td>Projects with a duration of 1 to 5 years (TEAM, Research Initiatives Programme, South Initiatives)</td>
<td>5,150,000</td>
<td>14.84%</td>
</tr>
</tbody>
</table>

### Research in Flanders

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy oriented research: O*platforms</td>
<td>384,833</td>
<td>1.11%</td>
</tr>
<tr>
<td>International Conferences (INCO)</td>
<td>234,403</td>
<td>0.68%</td>
</tr>
</tbody>
</table>

### Education Programmes in Flanders for Students from Developing Countries

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Course Programme (ICP)</td>
<td>2,355,032</td>
<td>6.79%</td>
</tr>
<tr>
<td>International Training Programme (ITP)</td>
<td>262,500</td>
<td>0.76%</td>
</tr>
<tr>
<td>Short Training Initiatives (KOI)</td>
<td>75,000</td>
<td>0.22%</td>
</tr>
</tbody>
</table>

### Scholarships for Education Programmes in Flanders

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICP PhD scholarships for researchers from developing countries</td>
<td>969,335</td>
<td>2.79%</td>
</tr>
<tr>
<td>ICP scholarships</td>
<td>5,604,548</td>
<td>16.15%</td>
</tr>
<tr>
<td>ITP scholarships</td>
<td>470,260</td>
<td>1.36%</td>
</tr>
<tr>
<td>KOI scholarships</td>
<td>189,000</td>
<td>0.54%</td>
</tr>
<tr>
<td>Short Research Stays scholarships</td>
<td>544,000</td>
<td>1.57%</td>
</tr>
<tr>
<td>Coordination costs, unforeseen and ICP Get Together Day</td>
<td>948,857</td>
<td>2.73%</td>
</tr>
</tbody>
</table>

### Scholarships for Flemish Students

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel grants for Flemish students</td>
<td>500,000</td>
<td>1.44%</td>
</tr>
<tr>
<td>Flemish PhD scholarships (VLADOC)</td>
<td>1,213,626</td>
<td>3.50%</td>
</tr>
</tbody>
</table>

### Structural Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2 compensation</td>
<td>35,000</td>
<td>0.10%</td>
</tr>
<tr>
<td>Education costs for Flemish universities</td>
<td>3,000,000</td>
<td>8.65%</td>
</tr>
<tr>
<td>VLIR-UOS secretariat and cofounding contacts at universities</td>
<td>2,750,606</td>
<td>7.93%</td>
</tr>
</tbody>
</table>

### Total

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>34,697,000</td>
<td>100%</td>
</tr>
</tbody>
</table>

---

Below is a summary of the VLIR-UOS budget for 2013. Precise insight into expenditure will only be available in the autumn of 2014, as we will not receive the project receipts until then.
Scholarships* accounted for 48% of all budgeted VLIR-UOS resources in 2013, with 52% going to projects. Scholarships allow people from the South or from Flanders to follow a course. These are work placements, research stays, short trainings, master’s degrees and PhDs.

Projects bring people together for research, education or social service. The main project costs are:

- **Travel costs** (international and local)
- **Infrastructure**, such as laboratory equipment and ICT
- **Operating costs**, such as collecting data, organising workshops and communication
- **Scholarships for trainings, MScs and PhDs** (although in the breakdown above these costs are included in scholarships rather than projects)

The Flemish professors are not paid for the time they invest. We do pay for project support in the South, for fieldwork and support staff, and travel and overnight costs of Flemish professors.

(* Here we have included the scholarships that are part of projects and programmes.)

**DOES VLIR-UOS SPEND MORE ON PROJECTS OR SCHOLARSHIPS?**

**WHICH THEMES ARE MOST COMMON IN VLIR-UOS PROJECTS?**

The theme of almost 3 in 5 projects that began or continued in 2013 was health, agriculture or environment.
Do we have a better gender balance when it comes to professors in Flanders than in the South? No. It turns out that just 13% of all Flemish supervisors and project leaders on projects starting or continuing in 2013 are women, while 22% of supervisors and project leaders in the South are women.

Is this alarming? No and yes. No, because according to figures of the Flemish Interuniversity Council just 13% of professors are women. So our figures are in line with the overall average in Flanders. But, yes, it is alarming, because that figure is exceptionally low.

Why are so few Flemish women professors? We asked gender expert Nathalie Holvoet of the Institute for Development Policy and Management at University of Antwerp: ‘All university participation percentages decrease when women have children. Specifically for VLIR-UOS projects, supervisors have to go on foreign trips. That is quite an obstacle, especially for women, because it is not so easy to fit it into family life. Unfortunately, that still goes more for women than for men.’

Who has most female project supervisors, Flanders or the South?

More than half of all scholarship students* from the South come from Africa. Among the projects, too, in over half of cases the partner is from Africa.

Which continent is number two? For scholarships it is Asia. Around one in three scholarship students come from Asia. For the projects it is Latin America, with 28%, compared to 16% for Asia.

Which country delivers the most scholarship students? The top five in descending order are Ethiopia, Bangladesh, Kenya, Philippines and Uganda. Together they account for half of all scholarships.

In descending order, the five countries that hosted most projects in 2013 are Vietnam, DR Congo, Cuba, Uganda and Ecuador. The top five is a little different based on budget per country. DR Congo is first, followed by Ethiopia, Cuba, Ecuador and South Africa.

(*These are only scholarship students within training programmes, such as ICP, ITP and KOI)
PARTNERSHIPS BETWEEN UNIVERSITIES AND UNIVERSITY COLLEGES IN FLANDERS (BELGIUM) AND THE SOUTH, LOOKING FOR INNOVATIVE RESPONSES TO GLOBAL AND LOCAL CHALLENGES

ABOUT VLIR-UOS
VLIR-UOS supports partnerships between universities and university colleges in Flanders (Belgium) and the South looking for innovative responses to global and local challenges.

VLIR-UOS funds cooperation projects between professors, researchers and teachers. VLIR-UOS also awards scholarships to students and professionals in Flanders and the South. Lastly, VLIR-UOS helps to strengthen higher education in the South and the globalisation of higher education in Flanders.

VLIR-UOS is part of the Flemish Interuniversity Council and receives funding from the Belgian Development Cooperation. More information: www.vliruos.be

ABOUT THE ANNUAL REPORT 2013
In compiling this annual report we tried to find a balance between the various higher education institutions and the partner countries. If you have an interesting case you feel deserves a place in the 2014 annual report, if you have any comments you would like to share over this annual report, email hans.vandewater@vliruos.be.

Coordination en editor-in-chief: Hans Van de Water
Design: Shortcut
Printed by: Geers Offset
Cover picture: Seppe Deckers
Publisher: Kristien Verbrugghen, VLIR-UOS, Bolwerksquare 1a, 1050 Brussel

You can download the digital version in English and Dutch on www.vliruos.be
D/2014/10.960/2