Conference of Rectors, Vice-Chancellors and Presidents of African Universities (Corevip)

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Keynote address by Prof H Russel Botman, Rector and Vice-Chancellor of Stellenbosch University and a Vice-President of the Association of African Universities

Thank you, chairperson. Good evening, ladies and gentlemen.

We have just seen a DVD on the Stellenbosch University's HOPE Project. I just want to expand a bit.

To start with, I want to focus on why we choose the notion of hope. In the words of Dr Jerome Groopman, Chair of Medicine at Harvard Medical School, "Hope gives us the courage to confront our circumstances and the capacity to surmount them."

That is the point about hope – it is the courage and the capacity. These two have to come together for us to really make a big difference on our continent.

The concept of hope means that we think of a person's potential before we think of a person's last results. To a student, we say we know that you are more than the sum total of information we can collect about you. So, what we want to do is look at that "more".

It also means that a generation takes up the questions of the next generation. We say, we are no longer working for ourselves, we are working for the future. That is why you will not find us involved in corruption, because we are not working for ourselves but for the next generation. Every single cent, blood and sweat will go into their future – that is why we talk of hope.

People might ask, "Are scientists not supposed to work with doubt instead of hope?" In response, let me quote Professor Ernst von Weizsäcker, Co-Chairperson of the Resource Panel of the United Nations Environment Programme. He visited us last year, and here's what he had to say afterwards.

Universities usually concern themselves with the scientific analysis of facts ... [b]ut facts are by definition in the past. What you are doing with the HOPE Project is to look at the future – to improve it for the people of your country and the world. Your methodology is different, altogether riskier ... but I commend you for it ... [it] combines good science with offering society hope.

Universities can eradicate poverty. They can promote human dignity and health, strengthen democracy and human rights, deepen peace and security, and help balance a sustainable environment with a competitive industry.

To be able to do that, we must hold hands and make this continent a leader in higher education.

I want to briefly tell you about two initiatives of the HOPE Project. The first is the "teabag" water filter developed here at Stellenbosch University, which you might have read about. It is a response to the question, how do you secure pure drinking water for people on this continent.

Scientific American magazine last year chose it as one of "10 World Changing ideas". The little filter looks like an ordinary teabag. It fits into the neck of a standard water bottle and delivers clean water as you drink from it – one litre per filter.

Clearly, this invention can make a big difference to the lives of the 300 million people in Africa that do not have access to safe drinking water. People will one day speak of before the filter and after the filter.

This is what happens when you research your own problems instead of always the international questions. You look at your own people, your own needs as Africa.

The outside of the teabag filter is coated in nano-fibres containing a biocide, which means that it kills bacteria as it filters the water. Inside the bag there are active carbon granules to remove chemical pollutants.

Now, over to my second example. It is how we are collaborating with other universities in Africa. PANGeA, which stands for the Partnership for Africa's Next Generation of Academics.

The institutions involved are the universities of Botswana, Dar es Salaam, Makerere, Malawi, Nairobi and Stellenbosch.

We have taken into this programme and our African Doctoral Academy 56 fulltime doctoral students – many of them staff members at our universities, who will be completing their PhDs in a much shorter time than they would have otherwise managed to do. They will then be able to go back and become the next generation of top-class academics of this continent.

Prof George Magoha said this morning there were concerns about the brain drain; concerns that people could move from their universities to another part of the continent. But we are looking at the possibility of joint degrees, so that you would have a degree from your own university and from Stellenbosch University. In this way we can grow together, support each other, become stronger.

Colleagues, the truth is that in the 1960s and '70s Africa spent a lot of money on a lot of issues, but we mostly just spent money, we did not "spend" science. You can't just throw money at a problem. Science is a means to an end – it brings us solutions to our challenges, if we do it well and sustainably.

It is time for the next victory in Africa ... and it has to be in higher education.

Thank you.