

SOUTH AFRICA: Push to graduate more PhDs

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Hundreds of postgraduate students gathered in Johannesburg this month for the annual conference and fair of the **South African PhD Project**, an initiative supporting a planned five-fold increase in the number of doctoral graduates by 2025. The present graduation rate is 27 PhDs per million of the population - far fewer than Brazil and a ninth that of Australia.

One of the major activities of the project, which is modelled on a PhD project in the US focusing on diversifying research and teaching staff in business schools, is its annual conference and fair. The latest event was held in Johannesburg in early May.

Aimed at masters and doctoral students, it showcased opportunities for study, financial support and research in South Africa and abroad. There were exhibitors from Germany, the Netherlands, Singapore and the US.

South Africa urgently needs to expand its pool of highly-skilled doctorate holders to be globally competitive. The country is seriously under-performing in PhD output even for an emerging economy: its 27 PhDs per million people compares with 42 in Brazil, 172 in South Korea, 240 in Australia and 259 in the UK.

The target is to increase the annual number of PhD graduates from a current 1,200 to 6,000 a year and, by so doing, said Dr Carol Nonkwelo, manager of the PhD Project, "to increase diversity and strengthen the higher education, public and corporate sectors".

The PhD Project is housed at the Pretoria-based **National Research Foundation**, the primary agency supporting development of high-level human capacity and knowledge generation. It is a joint venture with the **Department of Science and Technology** and was formed in late 2007, Nonkwelo told *University World News*, from a realisation that helping to fund postgraduate study was not enough.

"Another component was needed. Too many doctoral students were taking longer than the average of four years to complete their degrees, or were dropping out, and students did not always know about the opportunities out there. The PhD Project provides a marketing, information and support service for postgraduate students."

The average annual growth rate of students enrolling for doctoral studies was 7.3% between 2000 and 2005, according to a recent report for the Council on Higher Education, **Postgraduate Studies in South Africa: A statistical profile**. The report says the annual number of doctoral graduates increased from 882 to 1,176 in that period.

But while first enrolments for masters degrees - tomorrow's doctoral students - rose at an average annual rate of 4.4%, there had been significant declines since 2003, the report says.

And while total enrolments in South African higher education nearly doubled between 1990 and 2005, and the annual number of graduates more than doubled - from 56,744 to 120,385 - the proportion of postgraduate students declined from 31% to 27%.

The report says postgraduates were studying for longer, that the mean age of graduating had risen substantially - to an average of 34 years for masters and 40 years for doctoral students - and that the burden of supervision had increased across all fields of science, to 5.2 masters students and 2.2 doctoral students per supervisor.

"High international demand for South African graduates, together with the continuing brain drain, provides an urgent imperative to increase the production of postgraduate students in order for the country to remain competitive and to be able to generate knowledge that is responsive to a wide range of societal needs," the report concludes.

The results reaffirmed "the pressing need to prioritise the support and funding of greater numbers of postgraduate students and to ensure that there is a clear, easily-accessible and sought-after transition from undergraduate to postgraduate studies".

Nonkwelo said the annual fair had brought students together with representatives of national and international universities, funding agencies and companies so they could learn of opportunities and criteria for study and the kinds of skills required when they graduated.

The project's mandate was to promote and secure foreign and local PhD study opportunities, offer bursary packages to PhD and post-doctoral students, promote PhD education, expand the number of potential doctoral students, and establish partnerships with universities, funders and business. It was also building peer and mentor support networks.

In many cases, doctoral scholarships did not cover the responsibilities of students who also had to provide for families: "We would like to be able to offer more attractive funding," said Nonkwelo.

A major problem in South Africa is supervisory capacity, the result of shortages of academics at universities and lack of qualified staff - only a third of teaching, research and technical staff at universities have a PhD. "To reach the target numbers we have set, we cannot rely entirely on local academics," Nonkwelo explained.

So the PhD Project was encouraging 'sandwich' or 'split-site' studies in which doctoral students, though registered at a South Africa university and with a local supervisor, could also spend time at an institution abroad with an international supervisor.

"The project is still in its infancy," Nonkwelo said. "We are developing systems and building an information database for postgraduates, training partnerships and sponsors. In future we will be a one-stop shop for postgraduate students."