

Human Capital Development Department of Science and Technology



P. Matutu

**Strengthening researcher training
mobility between Europe and SA
14 January 2014**



science
& technology

Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA



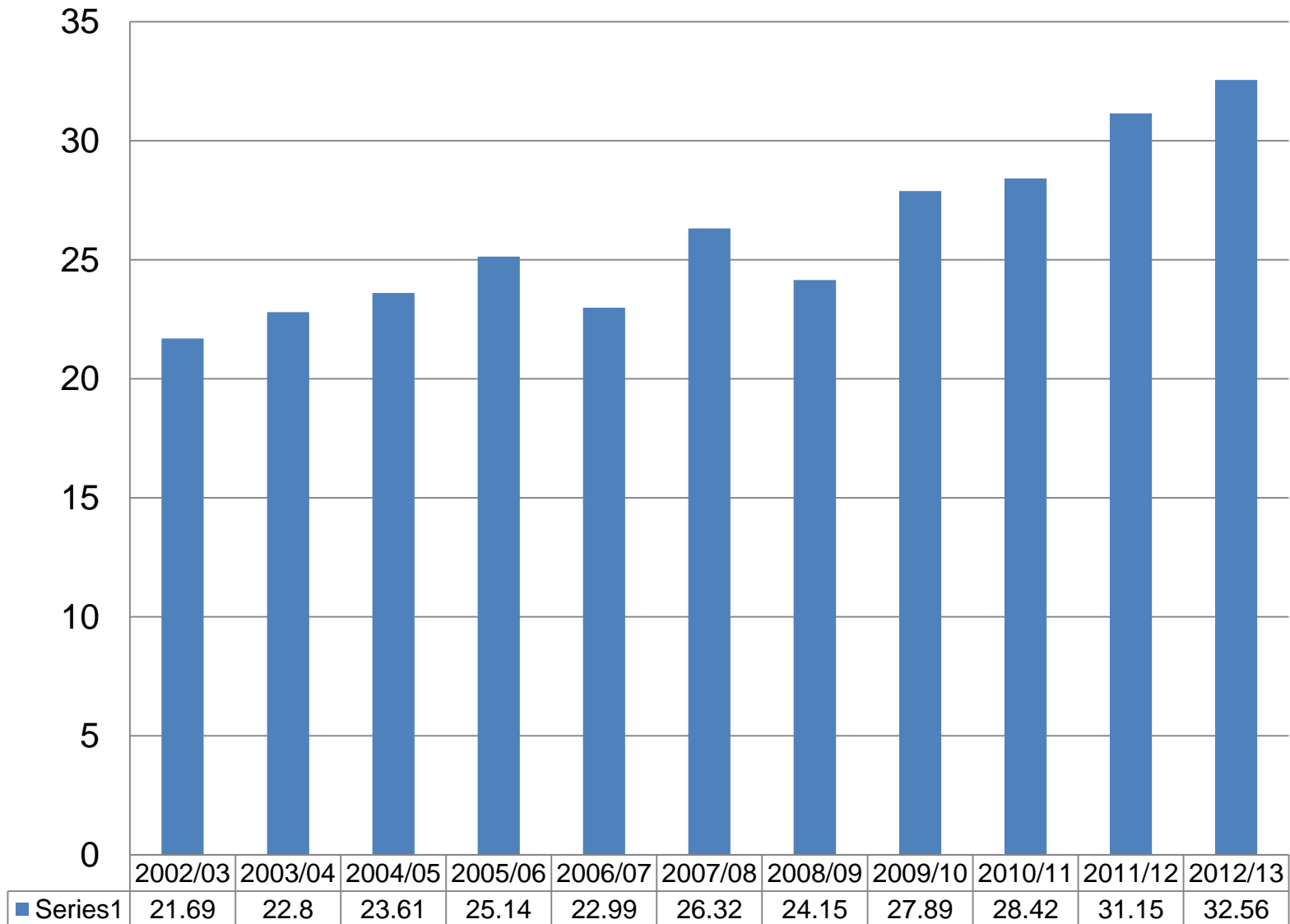
Presentation Outline

- Successes
- Strategic responses to Human Capital Development challenges

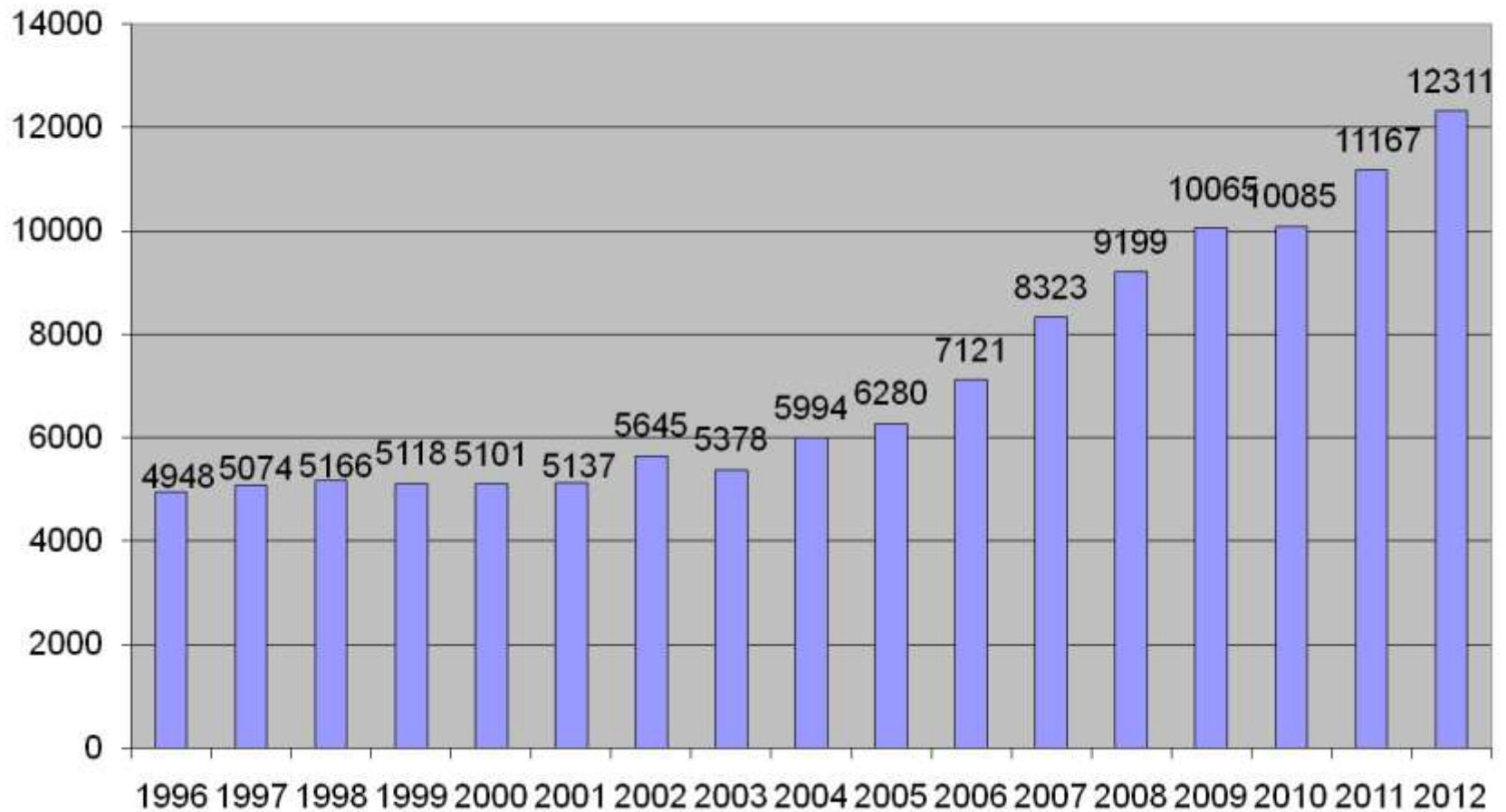
Successes: Developed national policy context

- National development plan (vision 2030)
- South Africa's Human Resource Development (HRD) Strategy for 2010-2030 (DHET)
- Integrated National HRD Plan has recently been developed (DHET)
- Strategy for human capital development for research, innovation and scholarship (DST)

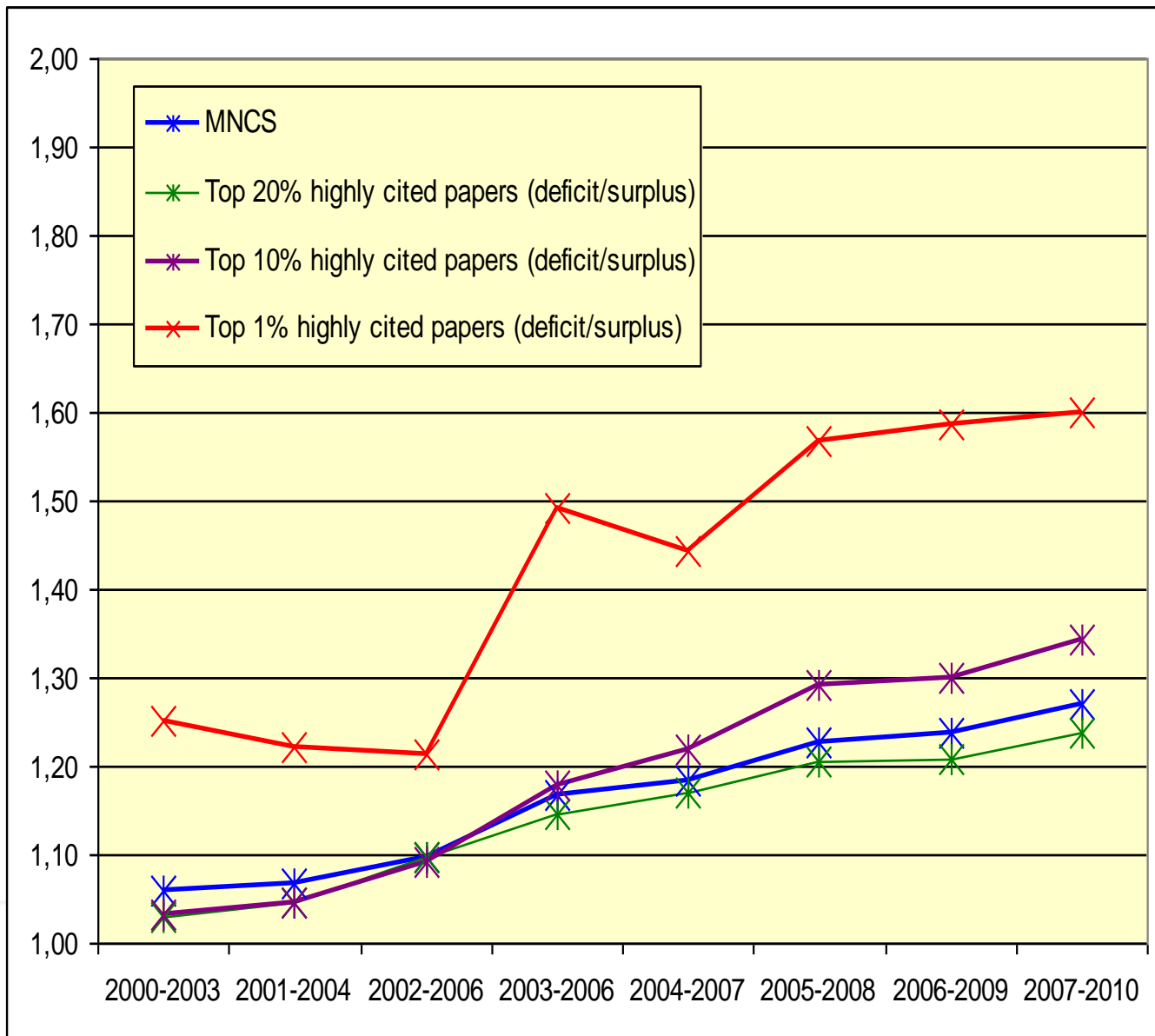
Successes: PhDs per million population, *steady improvement*



Successes: Research output, *doubling in 8 years*



Successes: Impact of research output, improved 30% over 10 years



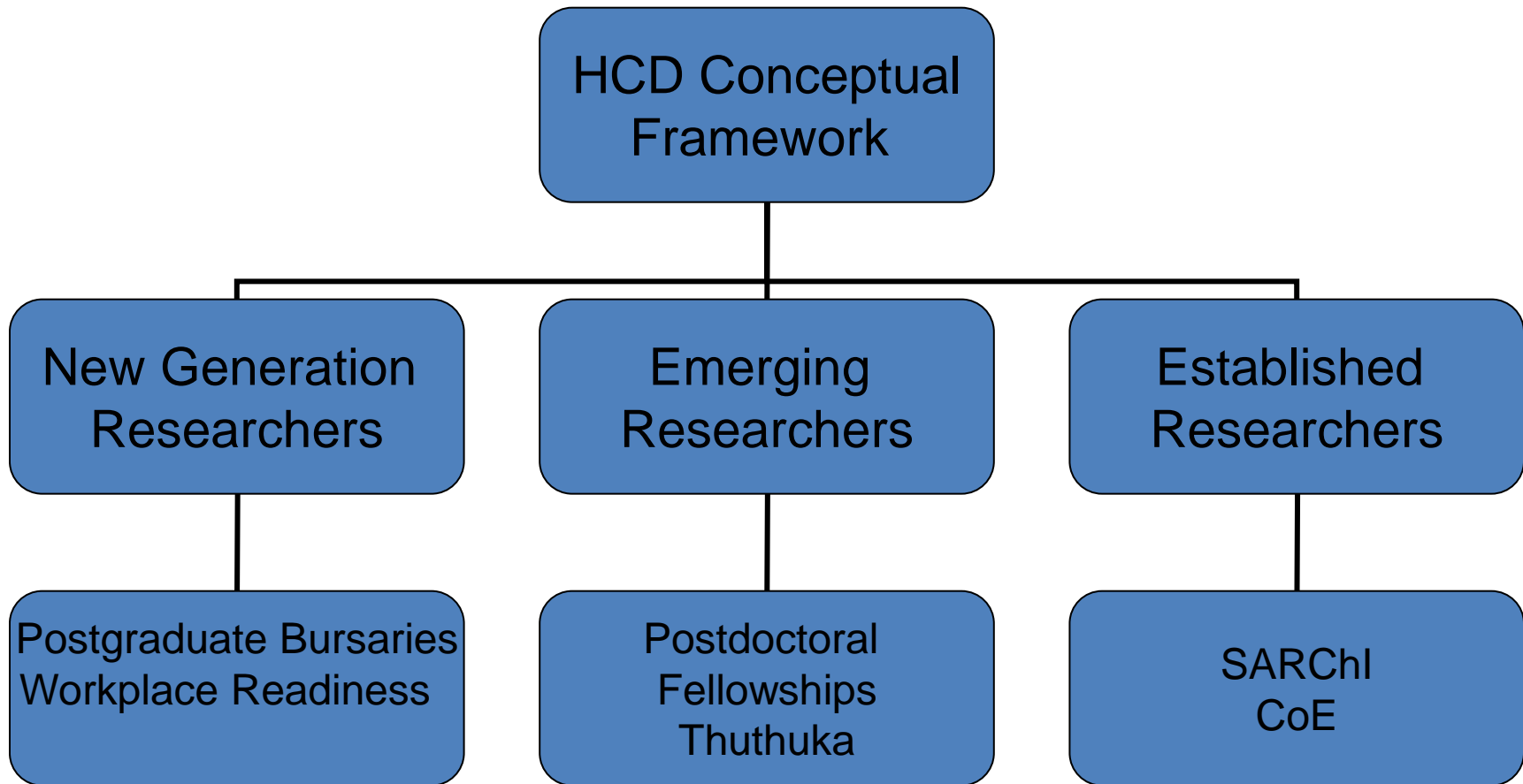


Strategic responses to HCD challenges

- Increasing the number of students enrolled for and graduating with masters and doctoral research degrees
- Increasing the research productivity and training capacity of supervisors and researchers
- Enhancing the role of science councils in research training and scientific production
- Strategically increase research and development support for science and technology domains to maximize their impact on innovation and economic development



Strategic responses to challenges



New generation: Postgraduate bursaries

- **SA vs international:** 87% SA, 5% SADC, 4% rest of Africa, 4% International (non-African countries)
- **International student exchange programmes:** Not more than 10% of HCD funds should be used for this purpose
- **Prioritisation of SET disciplines:** The percentage of supported students from SET domains should be between 70% and 80% of total supported students



Emerging researchers

- Main focus is on recently-graduated PhDs
 - Staff members of universities (Thuthuka Programme)
 - Postdoctoral Fellows
 - Career awards
- Improving staff qualifications (35.7% of academic & research staff with PhDs)
- International cooperation especially on postdoctoral fellows (including importing from other countries in scarce skills areas)



Established researchers

- Focus on excellence and concentration of research efforts
- Three major initiatives:
 - Centres of Excellence (CoEs);
 - South African Research Chairs Initiative (SARChI);
and
 - Funding for Rated Researchers.



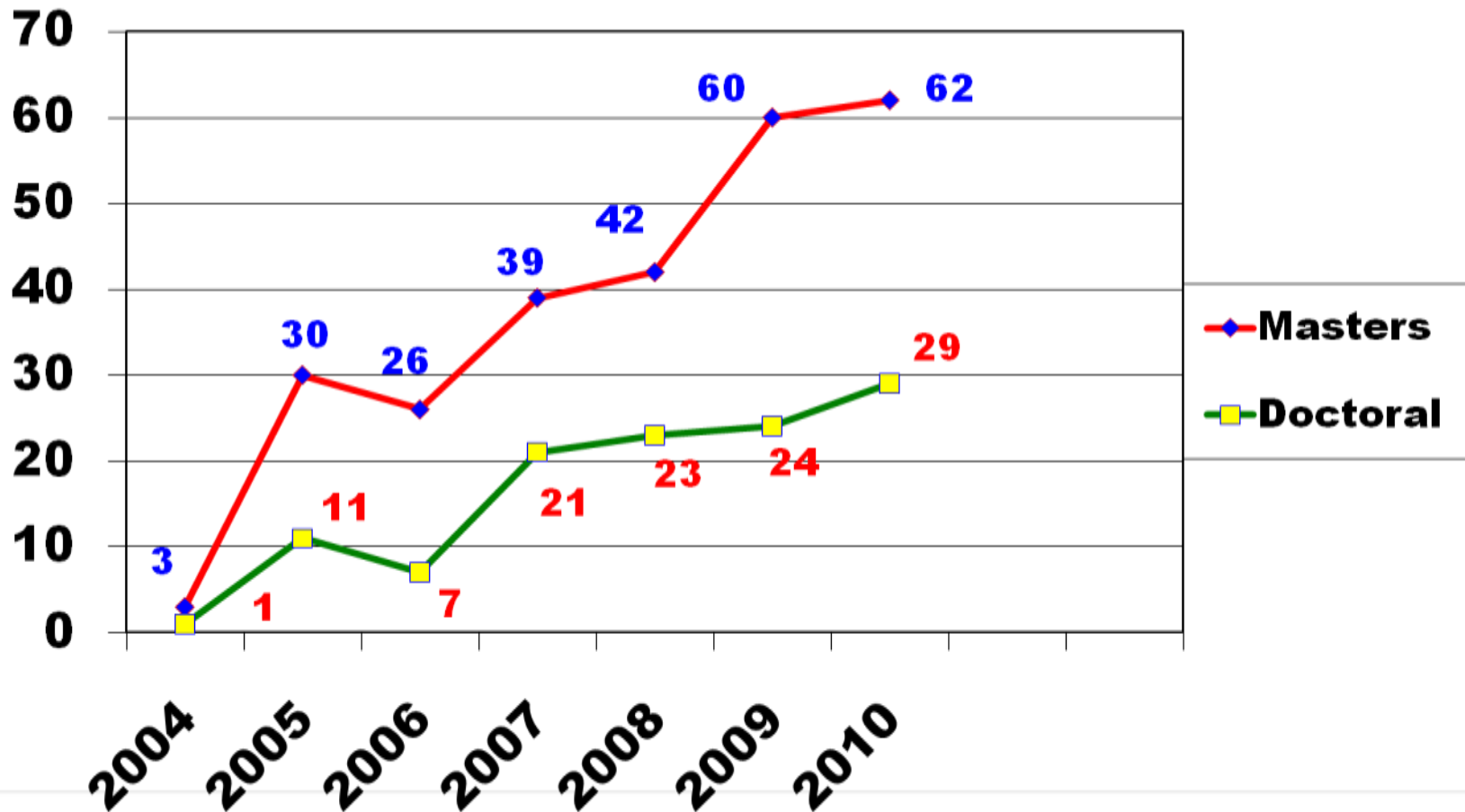


Centres of Excellence (CoE)

- Are physical or virtual centres of research;
- Concentrate existing capacity and resources;
- Enable collaboration across disciplines;
- Enable collaboration across institutions;
- 15 year instruments which work on long-term projects;
- Do locally relevant and internationally competitive research;
- Nine CoEs largely in life sciences; and
- 5 more with at least one in Social Sciences.



CoE output: Masters & Doctoral Graduates





SA Research Chairs Initiative (SARChI)

- Intended to expand and renew the SA scientific research base
- Address historical racial, gender and age imbalances
- Align with socio-economic development priorities
- Increase number of world class researchers in SA





SARChI Overview

The South African Research Chairs Initiative (154):

- 92 chairs awarded by 2010
 - 60 chairs awarded to institutions in 2011/12
 - 2 international chairs still to be awarded (bilaterally-funded)
-
- Award of up to R2.5 million per annum for Tier 1 and R1,5 million for Tier 2
 - Covers salaries, postgraduate students and fellowships awards, research operating costs and small equipment



(a) International Visiting Research Fellow

- minimum of three years towards support for an International *Visiting Research Fellow*
- the international country plays a complimentary role in the selection of an International Visiting Research Fellow

(b) Bilateral SARChI Chair

- the international partner has to commit for a minimum of 10 years towards full funding (R2.5 m per annum) or co-founding (R1.25 m p.a.)
- Chair has to spend a minimum of 50% of the academic year in South Africa
- must maintain a research cooperation programme with (an) institution/s in the partnering country

(c) Bilateral Research Chair

- has all the elements of the Bilateral SARChI Chair except that the period of commitment by the international partner is shorter than 10 years (to qualify as SARChI)
- Period has to be at least 5 years
- high premium placed on the Bilateral Research Chair to mentor a South African successor in view of the limited period of support
- Benchmarking of salaries of *both the Bilateral SARChI and Bilateral Research Chairs*



**Merci
Enkosi**

Ha khensa

Re a leboga

Ro livhuwa

Siyabonga

Siyathokoza

Thank you