NRF Presentation to the Regional Initiative in Science and Education

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25 October 2013
Legislative Mandate of the NRF

Promote and support research

through

- funding, human resource development and the provision of the necessary research facilities

in order to

- facilitate the creation of knowledge, innovation and development in all fields of science and technology, including indigenous knowledge

and thereby to

- contribute to the improvement of the quality of life of all the people of the Republic

*NRF Act, No 23 of 1998*
Pillars of the NRF

Quality of life

S&T outreach (SAASTA)

Research and Innovation Support and Advancement (RISA)

Provision of National Research Facilities

National Research Foundation
National Research Facilities
## RISA Human Capacity Development Excellence Pipeline (R’m)

### Next-generation researchers
- Student support
  - Free-standing scholarships
  - Grantholder-linked bursaries
- Thuthuka PhD track
- Post doc

### Emerging researchers
- Thuthuka post-doc track
- Thuthuka rating track
- Competitive funding for unrated researchers
- Incentive funding for rated researchers
- Competitive funding for rated researchers

### Established researchers
- Blue-skies research
- Targeted strategic investments
- SARCHi
- CoE

### Strategic focus

<table>
<thead>
<tr>
<th>Year</th>
<th>Next Generation</th>
<th>Emerging</th>
<th>Established</th>
<th>Strategic Investments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Student support</td>
<td>Thuthuka PhD track</td>
<td>Post doc</td>
<td>Thuthuka Post-doc track</td>
</tr>
<tr>
<td>2008/09</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Actual</td>
<td>183.20</td>
<td>5.65</td>
<td>23.09</td>
<td>2.38</td>
</tr>
<tr>
<td>2009/10</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Actual</td>
<td>183.53</td>
<td>4.90</td>
<td>27.41</td>
<td>1.96</td>
</tr>
<tr>
<td>2010/11</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Actual</td>
<td>307.34</td>
<td>4.18</td>
<td>48.30</td>
<td>2.41</td>
</tr>
</tbody>
</table>
South African PhD Project
Information Hub

CREATING STRENGTH AND DIVERSITY IN THE SOUTH AFRICAN PUBLIC AND PRIVATE SECTOR

- Doctoral training programmes, funding avenues
- Postdoctoral training and employment opportunities
- Notification of relevant events, seminars, workshops
- Blog
### PhD Graduations per Million of Population per year

<table>
<thead>
<tr>
<th>Year</th>
<th>PhD p/mil</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002/03</td>
<td>21.69</td>
</tr>
<tr>
<td>2003/04</td>
<td>22.8</td>
</tr>
<tr>
<td>2004/05</td>
<td>23.61</td>
</tr>
<tr>
<td>2005/06</td>
<td>25.14</td>
</tr>
<tr>
<td>2006/07</td>
<td>22.99</td>
</tr>
<tr>
<td>2007/08</td>
<td>26.32</td>
</tr>
<tr>
<td>2008/09</td>
<td>24.15</td>
</tr>
<tr>
<td>2009/10</td>
<td>27.89</td>
</tr>
<tr>
<td>2010/11</td>
<td>28.42</td>
</tr>
<tr>
<td>2011/12</td>
<td>31.15</td>
</tr>
<tr>
<td>2012/13</td>
<td>32.56</td>
</tr>
</tbody>
</table>
## Next Generation Researchers

### Number of students supported by the NRF

<table>
<thead>
<tr>
<th>Level Supported</th>
<th>Performance</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd /4th year</td>
<td>286</td>
<td>425</td>
<td>451</td>
<td>470</td>
<td>420</td>
</tr>
<tr>
<td>BTech/Honours</td>
<td>1 696</td>
<td>2 718</td>
<td>1 723</td>
<td>2 951</td>
<td>1 950</td>
</tr>
<tr>
<td>Master’s</td>
<td>2 373</td>
<td>3 566</td>
<td>3 564</td>
<td>3 397</td>
<td>3 390</td>
</tr>
<tr>
<td>Doctoral</td>
<td>1 384</td>
<td>1 973</td>
<td>1 979</td>
<td>2 031</td>
<td>1 715</td>
</tr>
<tr>
<td>Postdoctoral</td>
<td>304</td>
<td>405</td>
<td>402</td>
<td>460</td>
<td>390</td>
</tr>
</tbody>
</table>

Growing student throughput …

3rd/4th year and Btech/Hons doubled in 2012/13
Funding and initiatives for growing the SET base

- Next Generation
  - *South African PhD Project*
  - Bursaries and Scholarships
  - DST – NRF Internship
  - Professional Development Programme

- Emerging Researchers
  - Thuthuka Programme
  - Postdoctoral Fellowships
  - Professional Development Programme
  - Research Career Advancement Fellowships
  - Sabbatical grants for completion of doctoral degrees
Thuthuka Programme

• **PhD Track:** for applicants wanting to obtain a PhD within the funding period;

• **Post-PhD Track:** for applicants wanting to become established researchers, strengthening their research capabilities; and

• **NRF Rating Track:** for applicants wanting to apply for an NRF rating within the six-year funding period.
### South African Demographics (2011)

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>Women</th>
<th>Persons with disability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>% of population</strong></td>
<td>91</td>
<td>52</td>
<td>-</td>
</tr>
<tr>
<td><strong>% of Doctoral graduates</strong></td>
<td>52</td>
<td>42</td>
<td>-</td>
</tr>
<tr>
<td><strong>Target over 3 year period</strong></td>
<td>80</td>
<td>55</td>
<td>4</td>
</tr>
</tbody>
</table>
## Targets for International Students

### Citizen Distribution

<table>
<thead>
<tr>
<th>Category</th>
<th>2011</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>% SA (Citizen &amp; Permanent residence)</td>
<td>94</td>
<td>87</td>
</tr>
<tr>
<td>% SADC (Exc. SA)</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>% Rest of Africa</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>% Outside of Africa</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
• Postdoctoral fellowships: 80% - 100% of the awards have been allocated to foreign candidates. Five per annum.
• Doctoral scholarship: 4 out of the 6 awards were allocated to foreign nationals from the partner countries
• Masters: 4 out of 12 awards were allocated to foreign nationals from the partner countries
• Undergraduate: 4 Botswana students at UKZN per year as per SA/Botswana bilateral agreement. 4 from the partner countries doing a technical degree at DUT.

Partner countries are: Botswana, Ghana, Kenya, Madagascar, Mauritius, Mozambique, Namibia, Zambia
Enkosi, Thank you, Re a leboga, Siyabonga, Dankie