



Towards 2018:

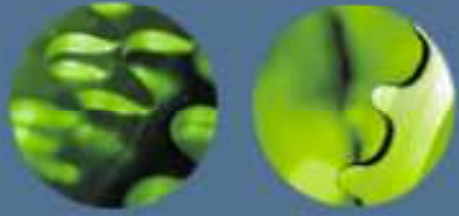
South Africa's 10-Year National Innovation Plan

Presentation to Inkaba Ye
Afrika Workshop:
22 October 2007



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Principles of the 10 Year Innovation Plan

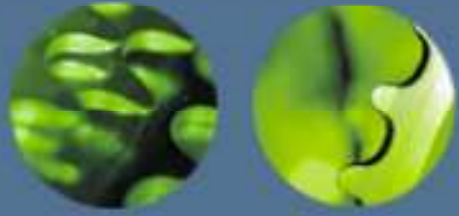
Principles informing 10 Year Innovation Plan:

- Articulates an innovation path to contribute fundamentally towards the transformation of the economy to a knowledge economy
- Based on premise that government's growth targets require a significant investment in innovation
- Contribute to economic growth and job creation

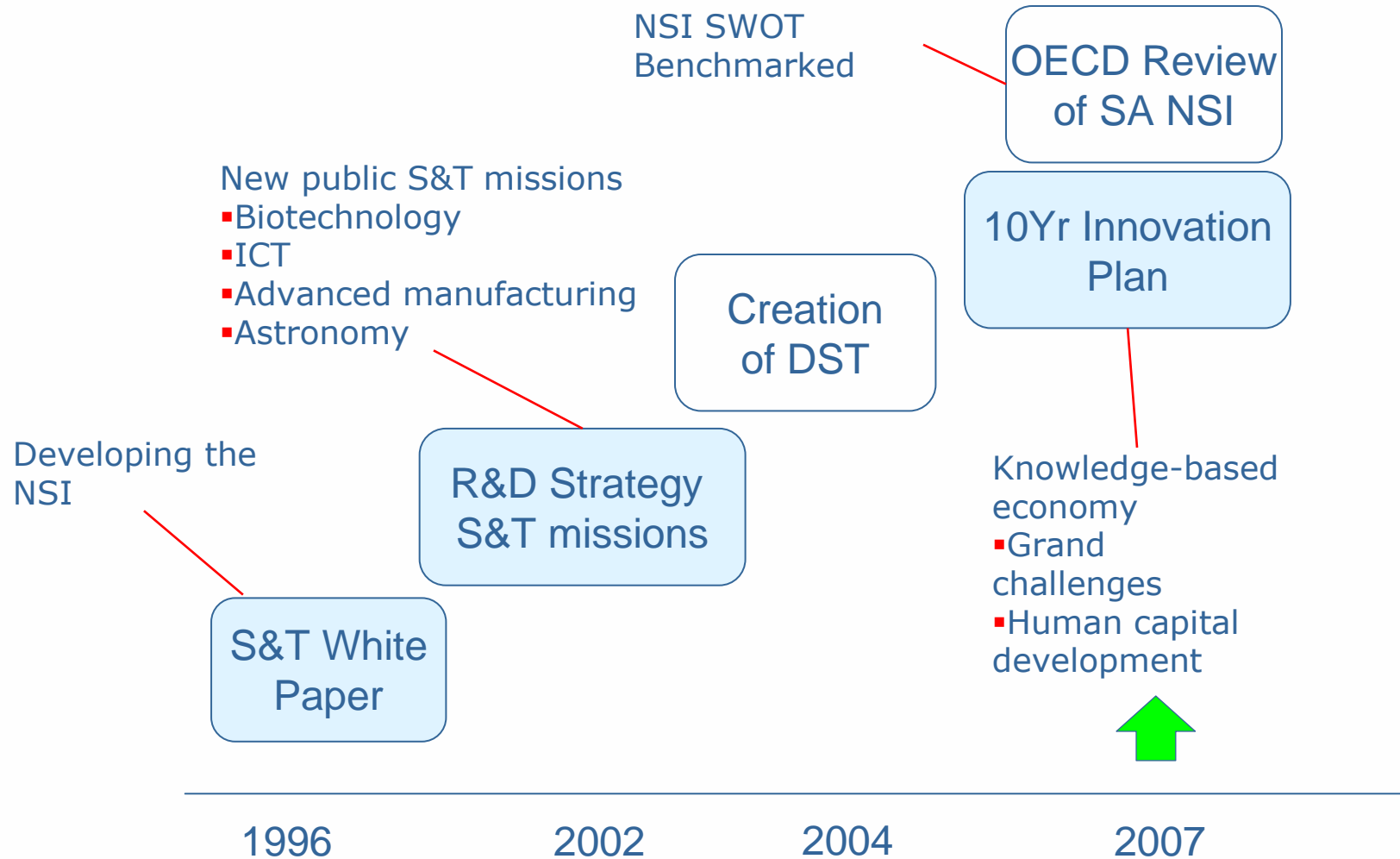


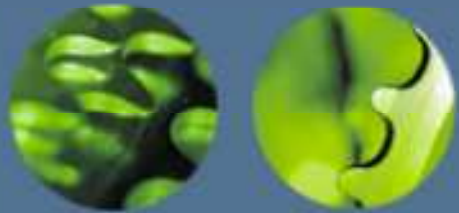
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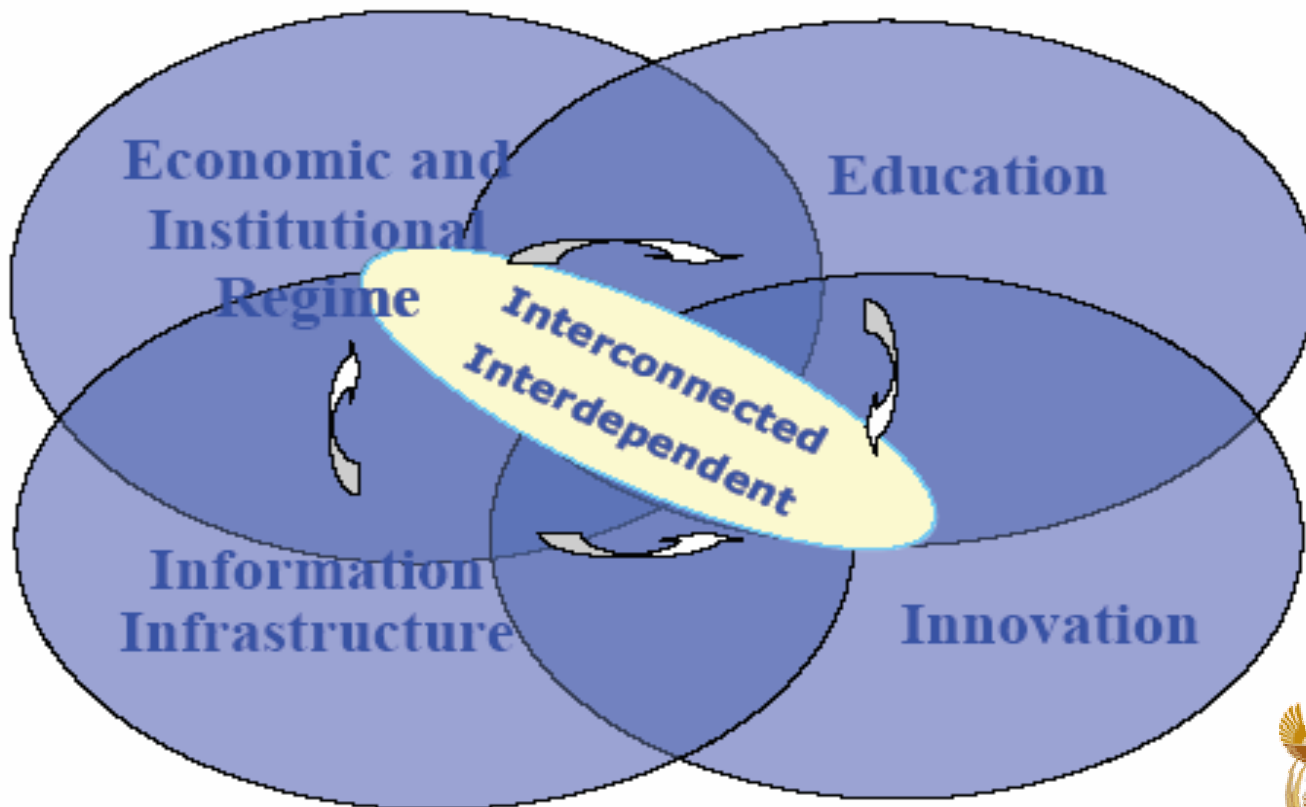
Policy landscape

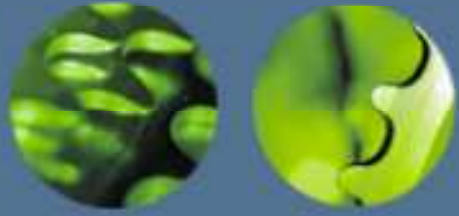




The Knowledge Economy

The Four Pillars of the Knowledge Economy





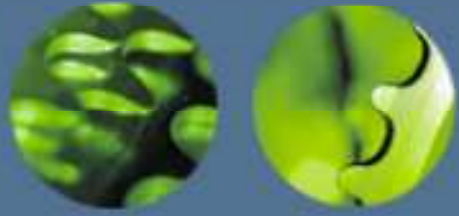
Towards a Knowledge Economy

- Knowledge is the basic form of capital for Innovation
 - Knowledge generation, accumulation and exploitation:
- Economic growth is driven by Innovation
 - Key driver for Innovation is “high-end” human capital: PhD
 - PhD as the key foundation for achieving the objectives of the National System of Innovation (NSI)

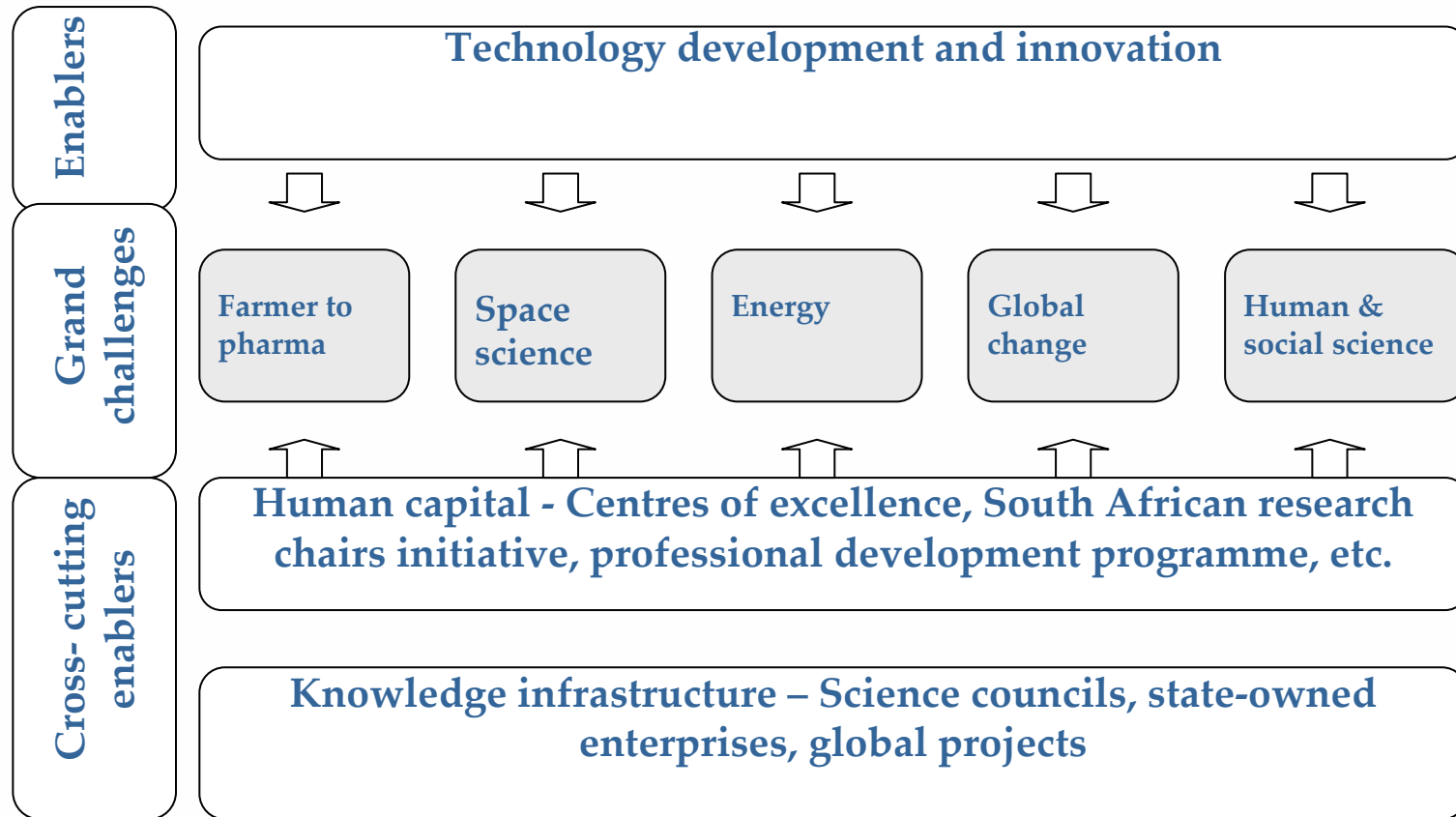


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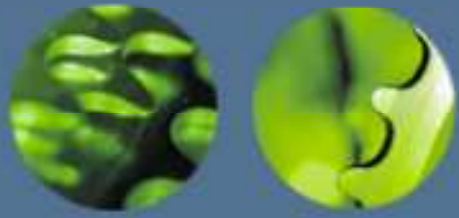


Knowledge generation



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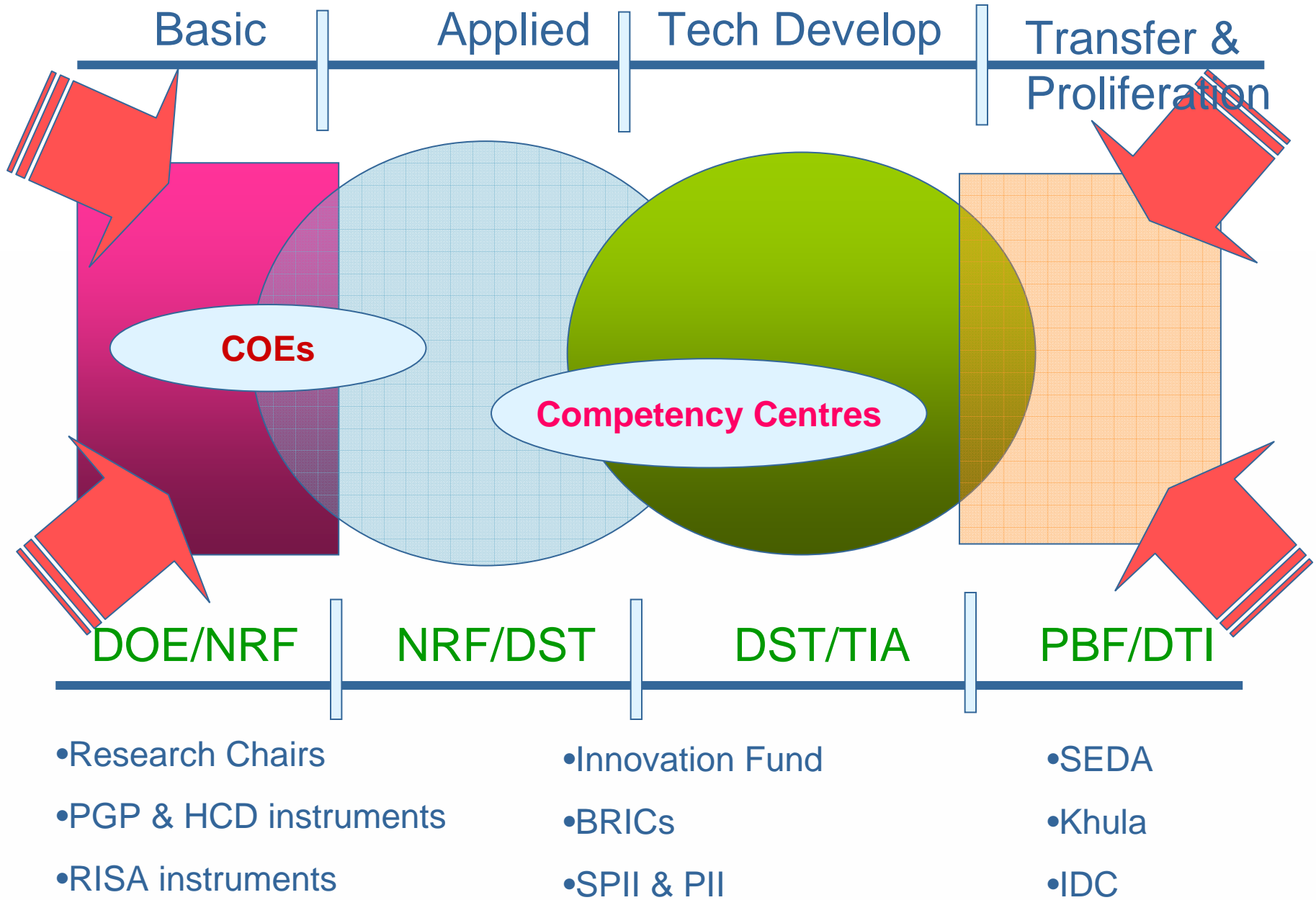
Knowledge Generation and exploitation

- **Early-stage research (for example nanotechnology where the innovation is uncertain and projected well into the future);**
- **Science missions (exploiting the ‘living laboratories’ of local resources and geographic advantage to generate meaningful scientific research outputs/knowledge products);**



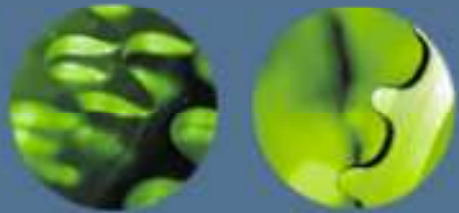
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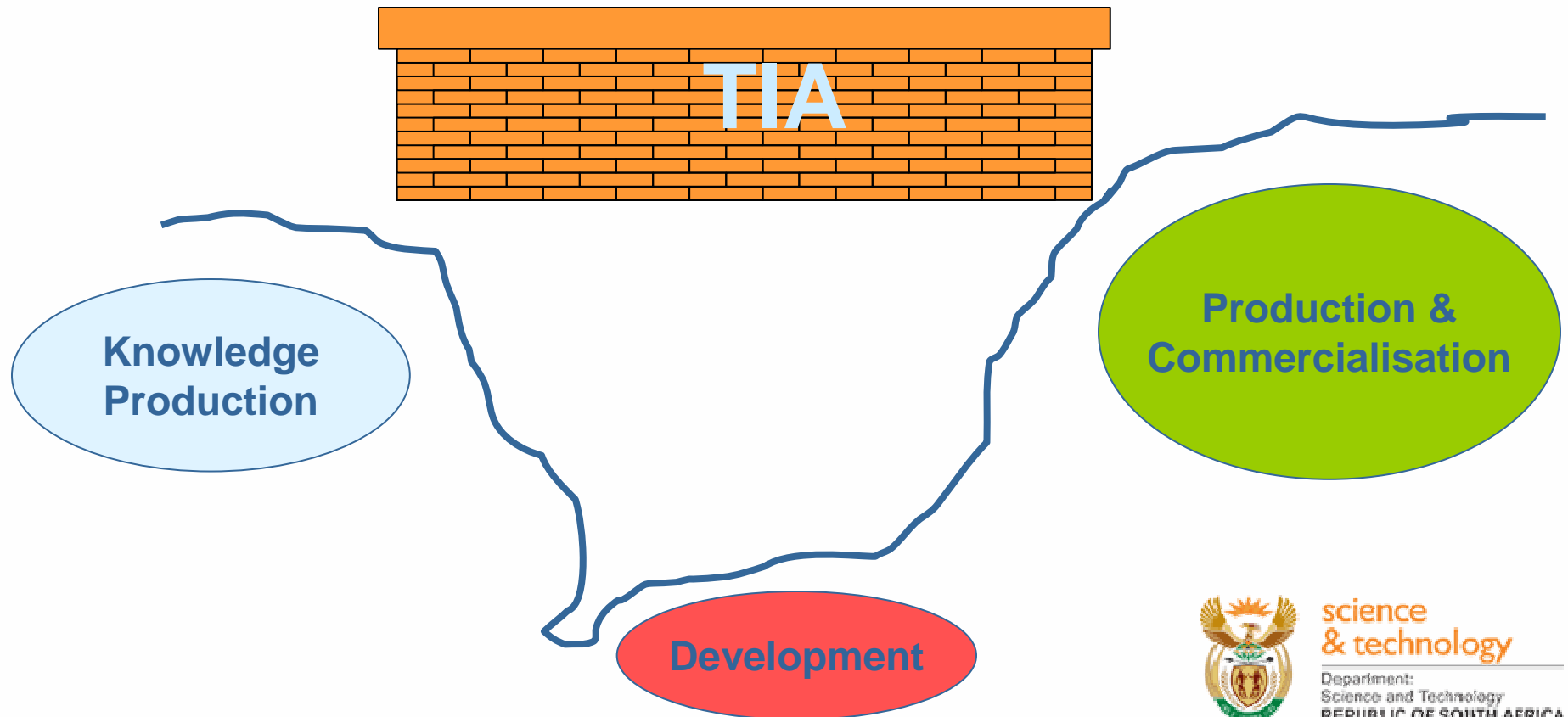
Publications/new knowledge

Patents/new knowledge products



Innovation Instruments cont:

Bridging the “Innovation Chasm”



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Basic

Applied

Tech Develop

Transfer &
Proliferation

NRF

**Specialist
Research Funds**

**International
Research Funds**

TIA

IDC

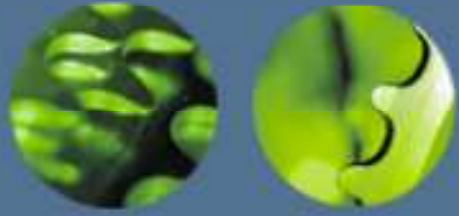
**Venture
Capital**

SEDA

PBF

Publications/new knowledge

Patents/new knowledge products



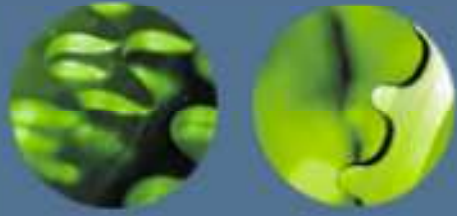
Innovation as a National Competence

1. **Technology Innovation Agency (TIA)**
2. **Intellectual Property Rights Bill (IPR)**
3. **Centres of Competence**
4. **Public Benefit Foundation (PBF)**
5. **Regional Innovation Systems**
 - **Technology Parks**



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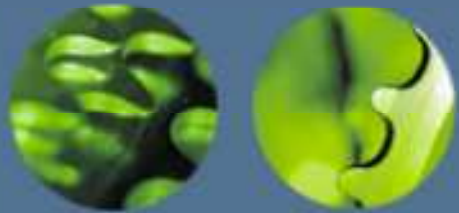
Human Capital Development:

- Increase the number of knowledge workers:
Researchers
- Increase the productivity of researchers
- Address inequalities: Race, gender, regional & institutional distribution
- Introducing appropriate Innovation Instruments in the National System of Innovation

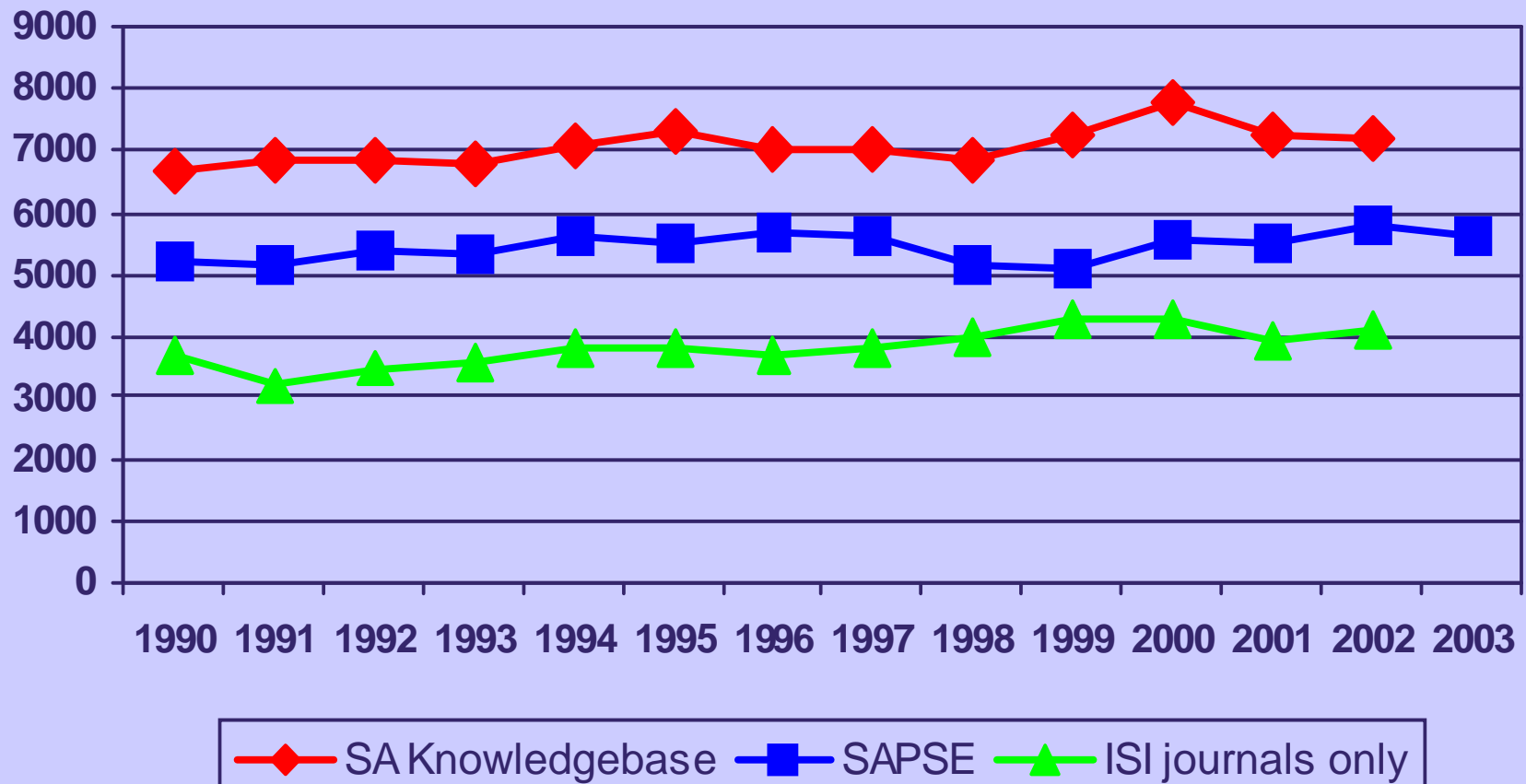


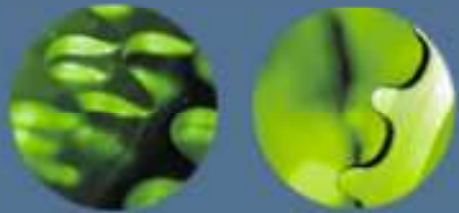
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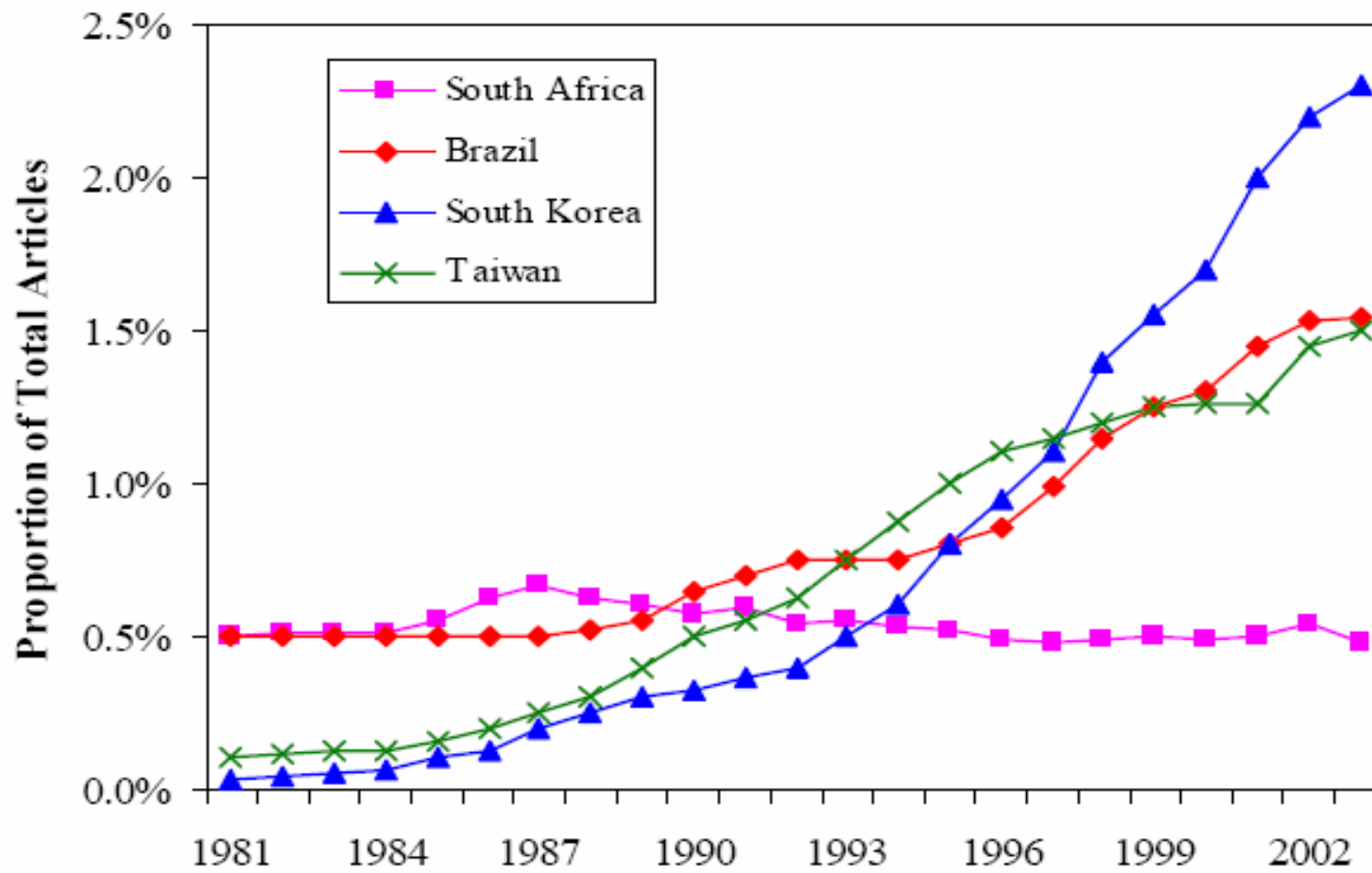


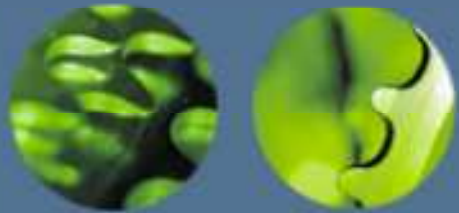
Research Outputs: Scientific Journals



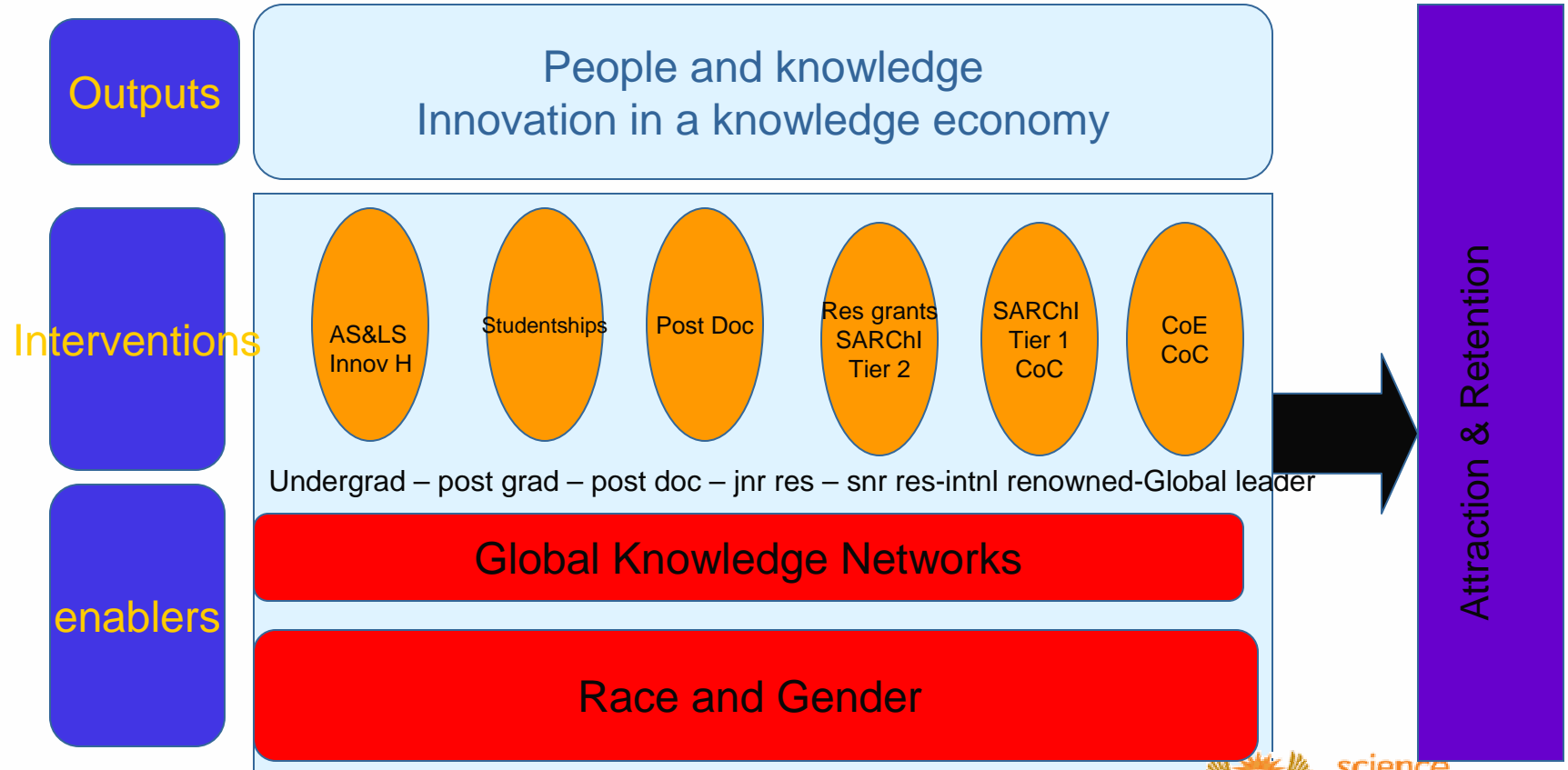


Research Outputs: International Comparison



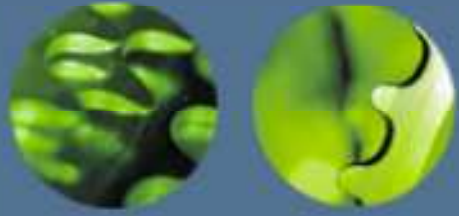


Set HCD Strategy

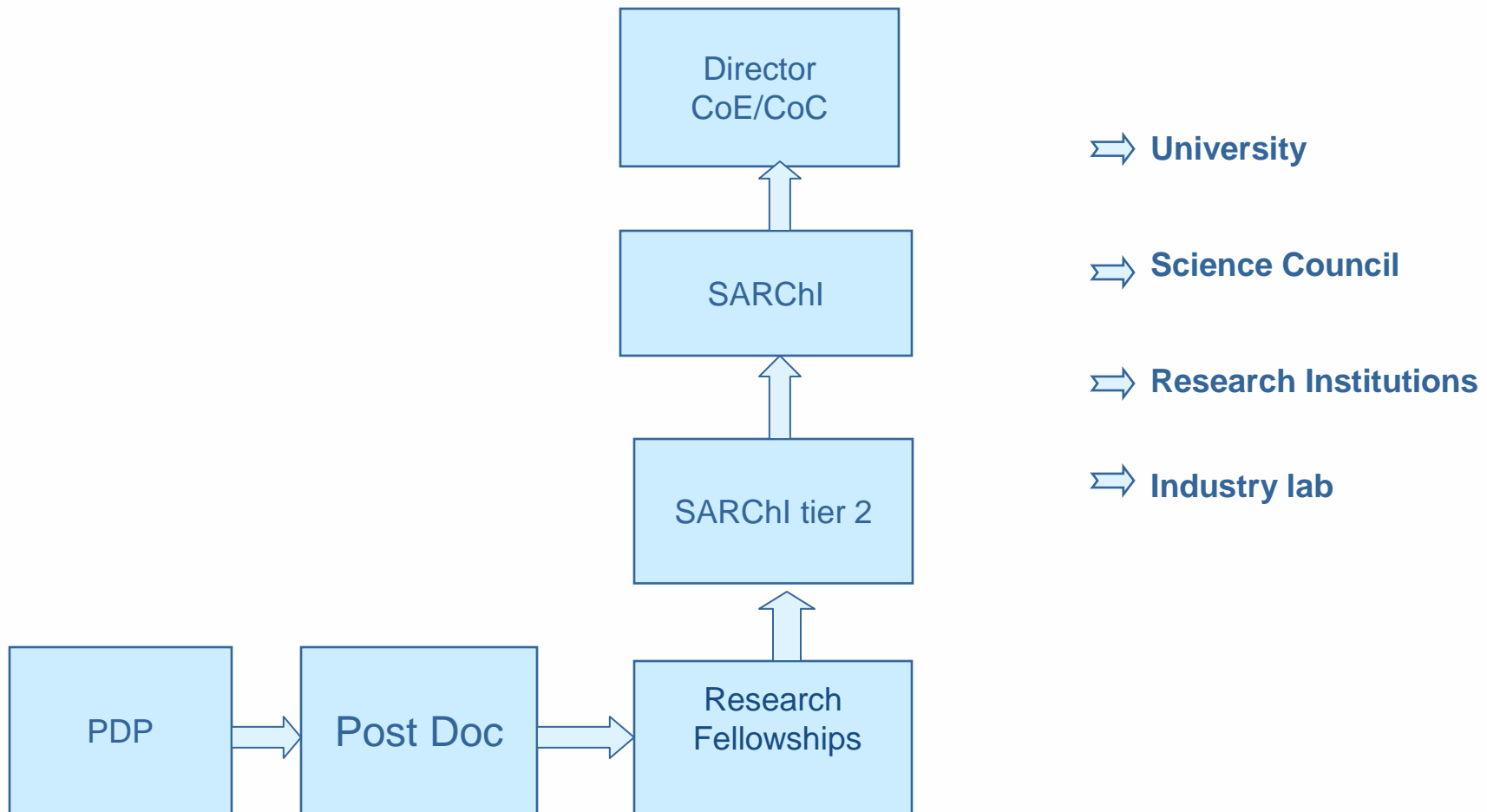


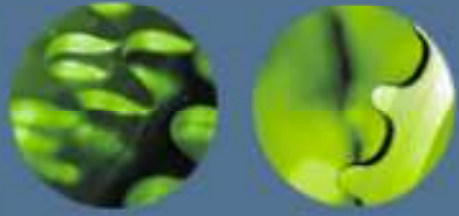
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Career Development





Conclusions

- Four “grand challenges” as a mechanism to create focus and developing a research agenda with specific national outcomes
- Ensure innovation as a national competence strengthened by appropriate mechanisms
- Enhance country’s ability to generate new knowledge
- Provide required infrastructure
- Application of knowledge to generate new products and services



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