

**Occasion: DAFF CC Adaptation  
Plan Workshop  
Place: Cape Town  
Date: 14-16 March 2017**



**science  
& technology**

Department:  
Science and Technology  
**REPUBLIC OF SOUTH AFRICA**



# Presentation Outline

- **Research focus**
  - Organising frameworks
  - Research programmes
- **Funding instruments and opportunities**
  - DST managed
  - External funding and support



# GC Research Plan

10-Year Global Change  
Research Plan for **South Africa**



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- ✓ Key principles underlying GCRP include:
  - ✓ Adopts a systems approach;
  - ✓ Trans/inter and multi-disciplinary approach to research;
  - ✓ Recognition of SA's advantageous geographical location of being surrounded by three oceans that influence the climate system of the region
- ✓ 4 knowledge areas and 18 research themes, with specific research questions



**A**

## **Understanding a changing planet**

- 1 Observation and monitoring
- 2 Dynamics of the oceans around southern Africa
- 3 Dynamics of the complex internal earth system
- 4 Linking the land, air and sea
- 5 Improving model predictions at different scales

**B**

## **Reducing the human footprint**

- 1 Waste-minimisation methods and technologies
- 2 Conserving biodiversity and ecosystem services
- 3 Institutional integration to manage ecosystems and ecosystem services
- 4 Doing more with less

**C**

## **Adapting the way we live**

- 1 Preparing for rapid change and extreme events
- 2 Planning for sustainable urban development in a South African context
- 3 Water security for South Africa
- 4 Food and fibre security for South Africa

**D**

## **Innovation for sustainability**

- 1 Dynamics of transition at different scales – mechanisms of innovation and learning
- 2 Resilience and capability
- 3 Options for greening the developmental state
- 4 Technological innovation for sustainable social-ecological systems
- 5 Social Learning for sustainability, adaptation, innovation and resilience

*The Global Change Research Plan identifies four major cross-cutting knowledge challenges and 18 key research themes.*



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# Key programmes & initiatives



**ACCESS**

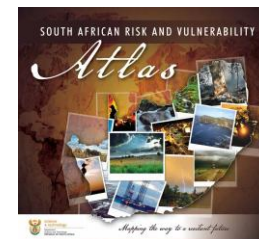


Applied Center for Climate & Earth Systems Science



**SAEON**

South African Environmental  
Observation Network



GCSSRP

RVSC

FBIP

ESSFP



SADC STI-  
IFCC 2020

FUTURE  
EARTH

HORIZON  
2020

OTHERS



# Global Change Performance and Investment Council

Intn'l Resource Mobilising Team

Science Committee

South African Environmental Observation Network (SAEON)

Space Agency (Global Change Monitoring Network)

SA Polar Research Entity

Knowledge Brokering Support Unit

Africa Earth Observation Network (AEON) programmes

Inkaba ye Africa/ !Khure Africa

Centre of Excellence

Applied Centre for Climate and Earth Systems Studies (ACCESS)

*Large scale research programme*  
Global Change, Society, and Sustainability

R&V science centres

South African Risk and Vulnerability Atlas (R&V Atlas)

Bureau for Global Change Science



# Funding Instruments & opportunities

- **Funding covers research, HCD and infrastructure**
- **SARChI** – Five (UCT, RU, NMMU; WITS); R3m/annum
- **COE** - 11 (ACCESS); R 8-10m
- **Bursaries** – High-end skills; SARChI linked, targeted (programme linked) or free standing
- **Infrastructure** – Research facilities; SARIR (SA Marine and Coastal Research Infrastructure); programme linked
- **Researchers support** – mobility; training; participation in international collaborative research; research grants







**Thank You**

