FUTURE CLIMATE FOR AFRICA

An Embedded Researcher Approach to integrate climate information into decision-making in southern African cities: lessons from FRACTAL

29 August, 2019

The webinar will commence shortly

UKaid from the British people

NERC SCIENCE OF THE ENVIRONMENT

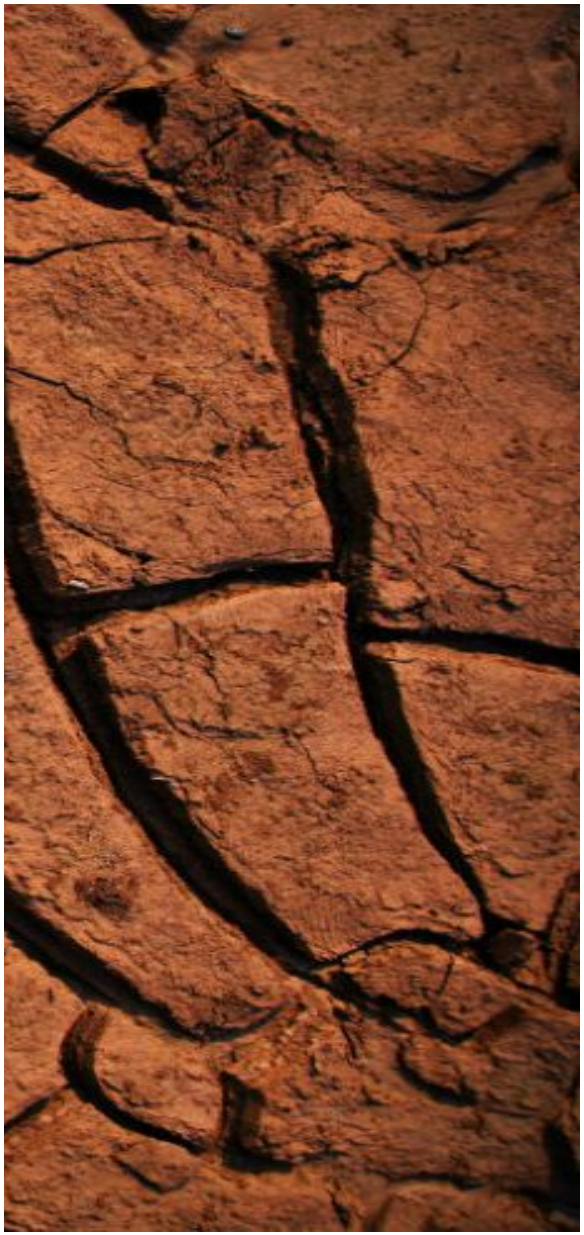
FUTURE CLIMATE FOR AFRICA

WELCOME

For more information:

- Future Climate for Africa
  - Website: www.futureclimateafrica.org
  - Email: info@futureclimateafrica.org
  - Twitter: @future_climate

- Future Resilience for African Cities And Lands
  - Website: www.fractal.org.za
  - Twitter: @FRACTALproject



Webinar Proceedings

29 August, 15:00 SAST

- 15:00-15:05 – Welcome, housekeeping and introductions (Beth Mackay)

- 15:05-15:55 – Presentations
  - Dr Anna Taylor – *conceptual underpinnings, rationale and overview of Embedded Researcher approach*.
  - Dr Lulu van Rooyen – *benefits and inhibitors to the Embedded Researcher approach*
  - Hecralito Constantino Mucavele, Kornelia Ndapewa Iipinge, Brenda Mwalukanga, Rudo Mamombe – *key lessons learnt*

- 15:55-16:10 – Q&A (facilitated by Dr Anna Taylor)

- 16:10-16:30 – Closing Remarks and Wrap-up

An Embedded Researcher approach to integrate climate information into decision making in southern African cities:

lessons from

FRACTAL

FUTURE RESILIENCE FOR AFRICAN CITIES AND LANDS

Who will you be hearing from

- Dr Anna Taylor – FRACTAL embedded research coordinator
- Dr Lulu Pretorius – Durban ER
- Kornelia Iipinge – Windhoek ER
- Brenda Mwalukanga – Lusaka ER
- Hecrálito Mucavele – Maputo ER
- Rudo Mamombe – Harare ER

What will you be hearing about

1. Conceptual underpinnings and rationale of the ER approach;
2. How the ER approach was operationalized in FRACTAL through a coordinated city partnerships approach;
3. The benefits of and inhibitors to the ER approach;
4. The lessons learned that may be transferable to other contexts.
5. Hopefully lots of time for questions & discussion!

What is embedded research

- employed by research institution, in partnership with host organisation to identify & implement a **collaborative, mutually beneficial** research agenda
- spend intensive period **enmeshed** in the culture & operations of other work communities
- opportunities to build personal **relationships**, facilitate the spread of new ideas, and **learn** the constraints and initiatives of BOTH organizations
- knowledge brokers / co-producers and **boundary spanners**

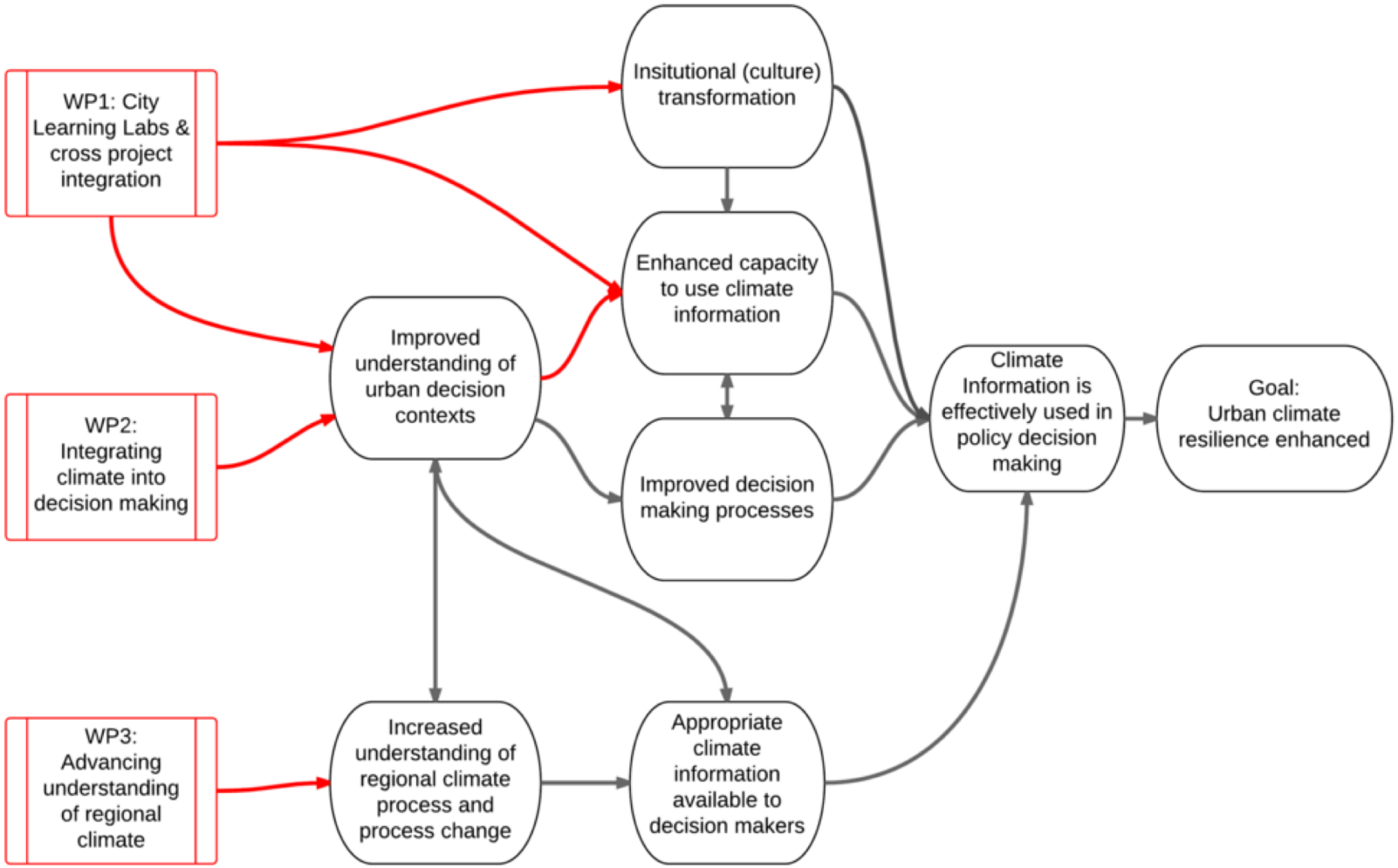
Where does the ER idea / approach come from?

- Relatively recent innovation (2000s)
- Roots in action research, social learning, ethnography and transdisciplinarity [but poorly articulated]
- Mainly experimented with in health and education
- Applied to urban sustainability in Cape Town (Mistra UF 2012-2015)
- Aims to improve research impact on policy and practice, through shaping the research agenda based on knowledge needs within the policy and practitioner communities

WHY DID WE USE ER IN FRACTAL?

- To make cities more climate resilient, climate sensitive decisions (and actions) need to be based on best available understanding of current and future climate
- To develop climate information for use in making decisions, scientists and decision-makers need to work together more effectively
- One way to do that is to have someone acting as a go-between, a colleague on both sides, to build understanding and networks through exposure, familiarity and trust

FRACTAL THEORY OF CHANGE



HOW DID WE OPERATIONALIZE ER IN FRACTAL?

- Full-time ER post for 3+ years in Tier 1 cities = Lusaka, Windhoek, Maputo
- Full-time in self-funded city (Durban) and short-term in Tier 2 city (Harare) and self-funded city (Cape Town)
- Negotiated between city government and local university, coordinated by UCT (project lead)
- Each ER supervised by an academic and a city official (various depts & levels)
- ER work guided by ER coordinator, city task teams, thematic clusters (esp. city learning cluster), FRACTAL coordinator

CORE ROLES OF FRACTAL ERS

- Identify / create entry points for integrating climate information
- Organize Learning **Labs** (logistics, invites, agenda, reporting), city **exchange visits**, training events and workshops
- Governance and decision-making **interviews**
- **Proposals** for additional grants
- Prepare City Digests and blogs
- **Reporting**, reporting, reporting (monthly & annual, verbal & written)
- Present at conferences, participate in training and (co)write

Conceptual Developments

Co-exploration to find entry points → Co-production to create entry points

Integrating climate information into decisions → Evidence-informed decision making

Conceptual Developments

Temporal evolution of integrating knowledge [together & into decisions]	→	Relational agency to intentionally entangle knowledge and decisions
Knowledge is the key to changing decisions	→	People are key to changing decisions

Benefits and value of the ER approach

For project partners:

- Exchange and learning visits (within and between cities)
- Access to funding
- Facilitating interactions btw senior academics & high-level decision-makers
- Facilitating flow of existing- and new information
- Having an intermediary mediate expectations and mandate differences
- Exposure to international platforms
- Build relationships
- Reframe and re-formulate research questions

Benefits and value of the ER approach

For embedded researchers:

- Networking and capacity building
- Skills development - presentation and workshop facilitation, negotiation, teamwork, transdisciplinary research skills
- Increased knowledge of various subject fields and knowledge types, and application thereof
- Satisfaction from being part of a team with a shared goal of building the resilience of African cities in the face of climate change

VALUE WITHIN THE WIDER CITY CONTEXTS

Lusaka

- Improved inclusion of climate info in the city plans
- Policy briefs
- Uptake of the ER approach by the Lusaka Water Security Initiative

Windhoek

- Development of the CoW Integrated Climate Change Strategy and Action Plan
- Convening stakeholders, training, strengthening knowledge of and leadership on climate issues, facilitating an iterative and evidence-based approach to policy development

VALUE WITHIN THE WIDER CITY CONTEXTS

Maputo

- Early warning tool for climate-induced vector- and water-borne diseases
- More coordinated response to early warnings, through Dialogues & Learning Labs

Harare

- Mind-set change about collaboration and co-production; invitation for input and engagement, and sharing outputs
- Improved awareness among officials on incorp climate change in city planning

Durban

- Co-development of climate & biodiversity info for Biodiversity Theme of DCCS

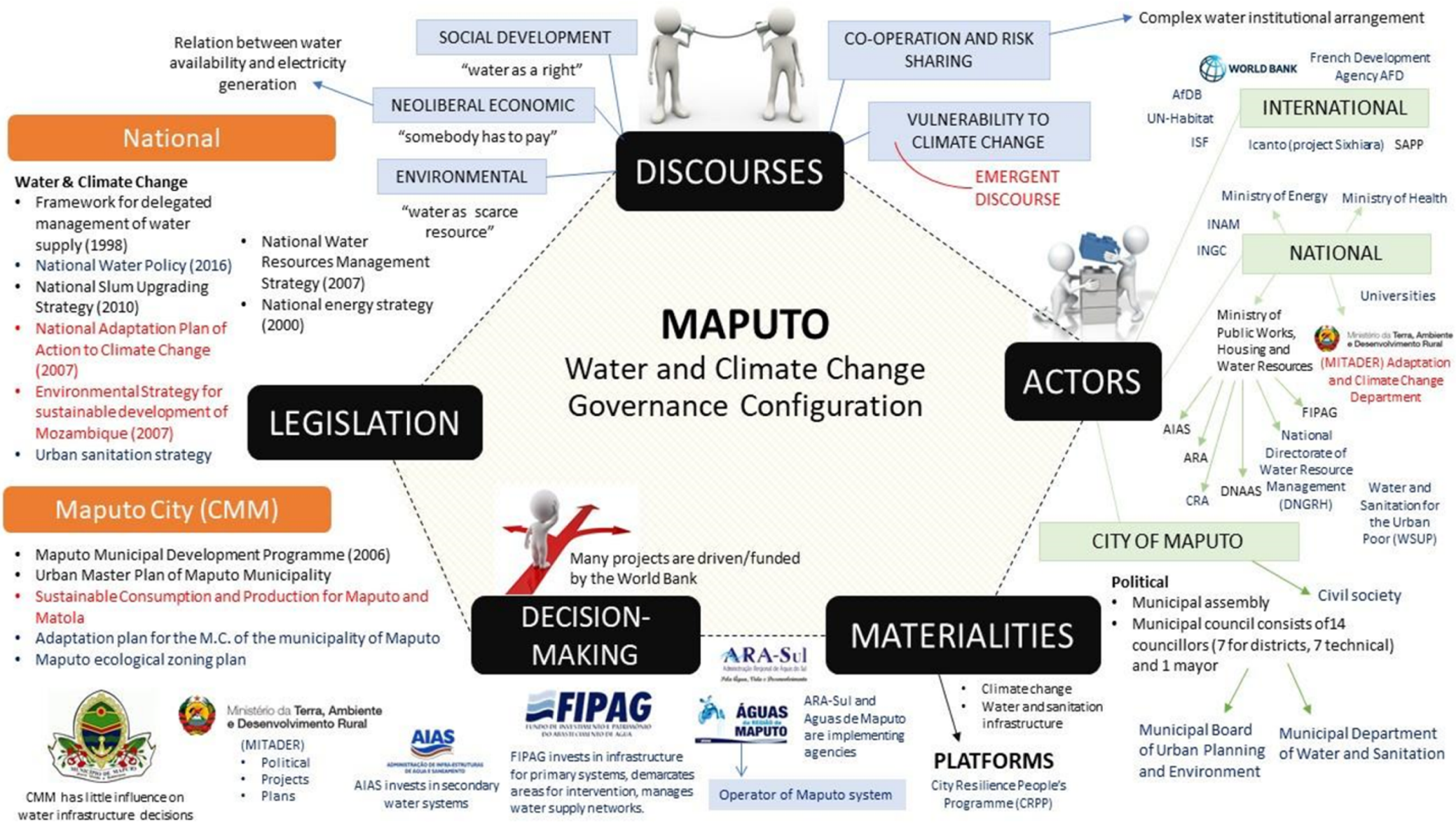
Challenges facing ERs

- Being an anomaly & a hybrid
- Competing logics and demands
- Working beyond one's discipline or profession
- Securing & sustaining relationships with staff
- High turnover rate in city governments
- Dynamic and constrained organizational environments

LESSONS LEARNED

1. To be a link between the academy & the public authorities to increase the understanding and use of climate information, ERs need to be available, dedicated, humble & not afraid to make mistakes!

Example from Maputo


Relation between water availability and electricity generation
SOCIAL DEVELOPMENT
"water as a right"
NEOLIBERAL ECONOMIC
"somebody has to pay"
ENVIRONMENTAL
"water as scarce resource"
DISCOURSES
CO-OPERATION AND RISK SHARING
Complex water institutional arrangement
VULNERABILITY TO CLIMATE CHANGE
EMERGENT DISCOURSE
National
Water & Climate Change
Framework for delegated management of water supply (1998)
National Water Policy (2016)
National Slum Upgrading Strategy (2010)
National Adaptation Plan of Action to Climate Change (2007)
Environmental Strategy for sustainable development of Mozambique (2007)
Urban sanitation strategy
National Water Resources Management Strategy (2007)
National energy strategy (2000)
LEGISLATION
MAPUTO
Water and Climate Change Governance Configuration
ACTORS
WORLD BANK
French Development Agency AFD
AfDB
UN-Habitat
ISF
INTERNATIONAL
Icanto (project Sixhiara)
SAPP
Ministry of Energy
Ministry of Health
INAM
INGC
NATIONAL
Universities
Ministry of Public Works, Housing and Water Resources
(MITADER) Adaptation and Climate Change Department
FIPAG
AIAS
ARA
CRA
DNAAS
National Directorate of Water Resource Management (DNGRH)
Water and Sanitation for the Urban Poor (WSUP)
CITY OF MAPUTO
Civil society
Political
Municipal assembly
Municipal council consists of14 councillors (7 for districts, 7 technical) and 1 mayor
Municipal Board of Urban Planning and Environment
Municipal Department of Water and Sanitation
Maputo City (CMM)
Maputo Municipal Development Programme (2006)
Urban Master Plan of Maputo Municipality
Sustainable Consumption and Production for Maputo and Matola
Adaptation plan for the M.C. of the municipality of Maputo
Maputo ecological zoning plan
Many projects are driven/funded by the World Bank
DECISION-MAKING
MATERIALITIES
ARA-Sul
FIPAG
ÁGUAS do Região de MAPUTO
ARA-Sul and Aguas de Maputo are implementing agencies
Operator of Maputo system
Climate change
Water and sanitation infrastructure
PLATFORMS
City Resilience People's Programme (CRPP)
Ministério da Terra, Ambiente e Desenvolvimento Rural
(MITADER)
Political
Projects
Plans
CMM has little influence on water infrastructure decisions
AIAS
AIAS invests in secondary water systems
FIPAG invests in infrastructure for primary systems, demarcates areas for intervention, manages water supply networks.

LESSONS LEARNED

2. It takes time for the different partners to adapt the ER approach as the relationships take time to develop. Following both institutions rules and regulations may be conflicting at times. Thus patience is needed.

Example from Windhoek

LESSONS LEARNED

3. Co-developing learning & outputs is vital and must focus on the prioritized needs of the city. This requires us to move from our comfort space into unfamiliar terrain to deliver relevant products with & for the city.

Lessons learned

4. The ER approach provides one way to understand the contextual needs for climate information that is timely and relevant. Success of the ER approach requires commitment, building trust and taking risks from both parties.

Example from Harare

For more details

FRACTAL Working Paper

Go to fractal.org.za > Resources > Working Papers

http://www.fractal.org.za/wp-content/uploads/2019/07/Pretorius-L-et-al-Embedded-Researcher-approach.pdf

Thanks for listening, questions please

FUTURE CLIMATE FOR AFRICA

Thank you

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