

Durban Research Action Partnership

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The Durban Research Action Partnership (DRAP) was officially launched on the 30th January 2017 at the Durban Botanical Gardens. The research partnerships between local governments and their academic institutions represents a win-win situation where the power of research institutions can be harnessed to develop both capacity and knowledge that is useful to the local government. Although this research partnership was officially launched beginning of 2017, eThekweni Municipality and University of KwaZulu-Natal had involved in number of research programmes prior the launch. These research programmes aim to generate knowledge and learning to address the gap between scientific research, policy development and management within a local government.



Together at the launch of D'RAP are (from left) Dr Albert van Jaarsveld, Mr Errol Douwes, Professor Rob Slotow, Professor Mathieu Rouget, and Dr Sean O'Donoghue.

[Global Environmental Change Research Programme – Phase One: - KwaZulu-Natal Sandstone Sourveld \(2011 - 2014\)](#)

[Reforestation Research Programme \(2014 – 2017\)](#)

[Global Environmental Change Research Programme – Phase Two: Durban Metropolitan Open Space System \(2015 – 2018\)](#)

Global Environmental Change Research Programme – Phase Three: Rivers Source to Sea (2019 – 2021)

The third phase of the GEC research programme, concluded in December 2021, broadened its scope of work from being biodiversity focused to guiding the implementation of all ten themes of Durban

Climate Change Strategy (DCCS), brought together around the central unifying theme of “*Rivers: Source to Sea*”. This was achieved through undertaking multi-disciplinary research projects which related to the ten DCCS themes.

This phase addressed some of the shortcomings of the previous phases (Phase 1 and 2). Firstly, with the development of the theme, “*Rivers: from source to sea*”, was chosen after engagement in a transdisciplinary process between UKZN and EM stakeholders. This linked biodiversity, climate and people as rivers are the “lifeblood” of ecosystems and communities. Social aspects of the GEC programme were previously under-explored so the development of this theme aligned research with the global Sustainable Development Goals (SDGs). EPIC has also been expanded after the pilot in 2019 through the School of Built Environment and Development Studies (BEDS). A research coordinator was appointed for the next few years and the programme is funded through the D’RAP allocation of the NRF Community of Practice (COP) Programme. This has helped D’RAP expand more into social aspects.

There have been notable outcomes so far from those students who are further along. The first is a paper submitted to the *South African Journal of Science* for publication from one of the PhD students looking at lightning detection and monitoring titled: “Lightning monitoring and detection of techniques: progress and challenges in South Africa”. The second is a working model of potential scenarios of future land use change for two river catchments, the uThukela and uMngeni, which is to be used to assess future streamflow responses

The COVID-19 pandemic resulted in many changes in 2020, with disruptions continuing into 2021. Some post graduate students were allowed back on campus from June 2020 if they required access to lab facilities etc. otherwise they continued to work from home. Through successive waves of Covid, restrictions were tightened and then eased up as the year progressed, with some students were set back in progress with their studies. As a contingency, students’ supervisors were encouraged to guide students to tackle aspects of the research that could be done at home, for example manuscript preparation and literature reviews to ensure the continuation of research. Students were working off campus and to assist were provided with 1GB data packages once off during lockdown from UKZN so they had internet access to continue their studies remotely.

A total of nine MSc students, one PhD student, three post docs were supported under GEC phase three. D’RAP funds did not only provide bursaries but provided opportunities for work experience. This has helped with capacity building by giving students exposure to work so they can build their CVs, and this was in line with the objectives of building capacity to early career researchers. Nine students were appointed (i.e. **5 Honours and 4 Masters**) for two months at the standard UKZN pay rates (**3 Male, 6 Female, 5 Black, 2 Indian, 1 Coloured, and 1 White**) in semester one. Four of these contracts were extended for two more months after review of progress (i.e. **2 Masters and 2 Honours; 2 Male, 2 Female; 1 Indian, 1 Coloured and 2 Black**). Nine students were also appointed (i.e. 6 Honours and 3 Masters) for two months again at the standard UKZN pay rates (**3 Male and 6 Female, 9 Black**) in semester two.

While it has not been possible to secure City funding for GEC Phase Four, the DRAP steering committee will continue to meet quarterly to maintain the partnership and institutional collaboration. The committee is overseeing the implementation of the Durban [Educational Partnerships for Innovation in Communities \(EPIC\)](#) project, implementing the NRF-funded Biodiversity: Community of Practise Project, and engaging with the municipality’s Research and Policy Advocacy (RAPA) Unit to translate research outputs into policy through a series of workshops. DRAP also oversees implementation of

the Sustainable and Healthy Food Systems research programme, funded by the Wellcome Trust, which aims to understand the nexus between sustainability, nutrition and health. SHEFS has recently been awarded an extension of contract for 2022. Other research programmes within DRAP include the BRICS Coastal Governance Adaptation and Miji Bora projects.

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