

Henry Mitchell Scholarship Report
Research Stay on the University of the Western Cape
Feb. 6 – Mar. 30, 2024

Ashley-Ann Davis
Doctoral Candidate in Engineering Management at
Missouri University of Science and Technology

Introduction

As a Doctoral Candidate in Engineering Management with research focus on climate resilience strategies for developing countries, particularly small island developing states (SIDs), I had the privilege of embarking on a research trip to Cape Town through the University of Western Cape (UWC) in collaboration with the University of Missouri Columbia. This trip would not have been possible without the Henry Mitchell Scholarship. I am extremely grateful for the scholarship committee for selecting me and allowing me to have this life-changing opportunity. This report documents the objectives, methodologies, key findings, and implications of my research trip.

I was particularly interested in South Africa for my research due to the country's ongoing energy crisis and recent commitments to increasing investment in renewable energy. My goal for the trip was to delve into the energy crisis and its renewable energy transition, given the country's recent commitments to initiatives such as the Just Energy Transition Investment Plan (JET IP) which the country launched at COP 27 in November 2022. I sought to understand the intricate challenges and opportunities surrounding climate resilience strategies, with the intention of extrapolating insights for application in other developing countries, particularly SIDs. During my time there I was able to witness the impacts of loadshedding firsthand and how it has become a normal part of life for many South Africans despite the disruptions that are caused. It also became obvious that for families and businesses that could afford solar panels, generators, or inverters, they simply did not feel these negative impacts.

The Interviews and Key Findings

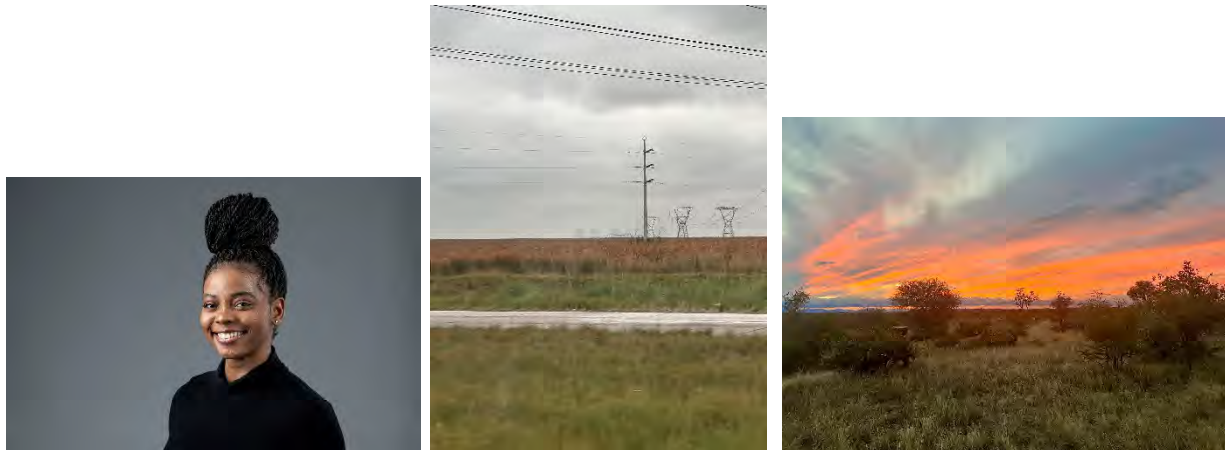
During my time in Cape Town, I conducted interviews with over 20 subject matter experts in the fields of energy and policy from UWC and other local organizations including the Institute for Poverty, Land and Agrarian Studies (PLAAS) and Public Affairs Research Institute (PARI). These interviews provided invaluable insights into the complex dynamics of South Africa's energy landscape. By adopting an interdisciplinary approach, I aimed to gain a comprehensive understanding of the multifaceted issues at hand.

Through interactions with UWC faculty members, I uncovered the nuanced layers of South Africa's energy crisis, intricately intertwined with the country's historical context, social

dynamics, and political landscape. Key challenges such as governmental corruption and disparities in access to energy solutions emerged as significant obstacles. It became evident that addressing these challenges requires holistic, interdisciplinary approaches that transcend traditional engineering solutions. It became evident that many of these challenges would also be found in Small Island Developing States (SIDs) and would require a similar approach to find effective and lasting solutions.

These findings underscore the importance of context-specific approaches and community engagement in the formulation of climate resilience strategies. Community-driven initiatives can circumvent systemic barriers and foster inclusive solutions. Moreover, efforts to address economic disparities and combat corruption are imperative for fostering an environment conducive to sustainable development.

It was also energizing to see how involved UWC is in being a part of the solution. Several professors were also members of other organizations focused on addressing the issues and a lot of the research being conducted at UWC addressed the nation's challenges including the green hydrogen research being conducted on campus.



Images: Me (left), Coal Plant in Johannesburg (center), South African Sunset (right)

Exploration of Cape Town

Beyond the academic pursuits, my time in Cape Town afforded me the opportunity to immerse myself in the vibrant culture and natural beauty of the region. From hiking iconic landmarks like Lion's Head and Table Mountain to exploring picturesque beaches such as Clifton Beach, Muizenberg beach, and Camps Bay every weekend, every experience enriched my experience of South Africa. I also visited historic landmarks like Cape Point and the Cape of Good Hope, where I got engaged—a moment that will forever hold a special place in my heart. I visited the

V&A Waterfront often to indulge in books at my favorite bookstore, to grab bite, watch the sunset or watch local performers. I indulged in the local cuisine and being a lifelong touter that Kansas City barbecue is the best, South African braai is a worthy contender. I also formed lasting friendships with my roommates in Obs with whom I did activities like yoga on the beach and attending Cape Town's many markets. The moments made my stay truly memorable. After two months I felt like I was a part of the community in Observatory. On my daily runs around the neighborhood, I started to get to know some of the neighbors and I was even on a first-name basis with the staff at a nearby vegan café because of how often I frequented it. Additionally, during my brief visit to Johannesburg, I explored Constitution Hill and learned about South Africa's apartheid history which provided valuable insights into the country's complex heritage.



Images: Hiking Lions Head (left), Sunset at Clifton Beach (center), Crafts at the Market (right)

Acknowledgments

I express my sincere gratitude to the Henry Mitchell Scholarship for providing me with the invaluable opportunity to undertake this research trip. I extend my heartfelt thanks to Prof. Uphoff for his instrumental support in facilitating connections with faculty at UWC, providing me with a list of places to visit and food spots to try, and handling setting up my accommodations during my stay in Cape Town. Prof. Uphoff even set up a safari for me at Kruger National Park, which as a wildlife lover, will forever be a core memory of mine. Additionally, I am grateful to Dr. Oboh-Ikuenobe for helping me with the application process of this scholarship. I am immensely grateful for the UWC faculty members, including Prof. Mercia Southon and Bradley Rink for setting aside an entire half a day for me to meet with almost all the faculty members of the Geography, Environmental Studies and Tourism Department and get their individual insights based on research they were conducting. I'd also like to thank Prof. Fiona Anciano and Prof. Pretorius from the Political Studies Department, and Prof. Leslie Petrik from the Chemistry Department, for their generosity in sharing their expertise and insights and for connecting with other industry subject matter experts. Special thanks to Umesh Bawa, the director of International Relations at UWC, for his warm welcome to UWC and other introductions that he made on my behalf.



Images: Cape Point moments after engagement (left), Elephants at Kruger (center), Constitution Hill (right)

Conclusion

My research trip to Cape Town was a formative experience that deepened my appreciation for the complexities of climate resilience strategies in developing countries. The insights gleaned from this immersive experience will undoubtedly inform my future research endeavors and academic pursuits. I am profoundly grateful for the support of the Henry Mitchell Scholarship and look forward to contributing to the global discourse on sustainability and resilience.