



Possibilities and Constraints of Collaborative Research in the Red Sea Arena during Covid-19

by Ian Hoyt, Moustapha Nour Ayeh, Aisha Al-Sarihi, Dheaya Alrousan, Muez Ali, Nathalie Peutz and Alden Young

March 29, 2022 (March 29, 2022)



In May 2018, after months of drought, Cyclone Sagar formed in the Gulf of Aden between the Arabian Peninsula and the Horn of Africa. Reaching a high wind speed of 120 km/hr., the extreme weather event took lives, destroyed homes, and ruined crops in communities across Yemen, Somaliland, Djibouti, and Ethiopia. The westernmost tropical cyclone on record in the North Indian Ocean, Sagar was also the strongest tropical storm ever recorded in Somalia—until Cyclone Gati struck Yemen and the Horn of Africa in November 2020. In October 2021, Cyclone Shaheen entered the Gulf of Oman and made landfall in northern Oman, the first cyclone to do so since 1890. Meanwhile, extreme rainfall in the Horn of Africa caused devastating floods, affecting more than three million people in Sudan in September 2020 and impacting more than 700,000 people in South Sudan by October 2021. This was the worst flooding that the region has seen in 60 years.

“One of the challenges that enhanced regional climate governance and cooperation faces is the paucity of research that assesses the regional implications of climate change across the Red Sea Arena.”



Chapala, Megh, Sagar, Gati, Shaheen. These and other consecutive “record” weather events in the Red Sea and the Gulf of Aden reveal the limitations of conducting research along traditional area studies models. By disrupting such conceptual constraints through a transregional framework, which we call “the Red Sea Arena,”¹ our team hoped to better understand the linked experiences of the climate crisis in an arena typically conceived of as two separate areas: “East Africa” and “the Middle East.” Indeed, one of the challenges that enhanced regional climate governance and cooperation faces is the paucity of research that assesses the regional implications of climate change across the Red Sea Arena.

Initially, Alden Young and Nathalie Peutz hoped to bring scholars from across the arena together, in order to induce researchers who usually specialize in either the Arabian Peninsula or East Africa to collaborate. The Covid-19 pandemic disrupted

our ability to come together and develop a collaborative project in person. Lockdowns kept us inside but Zoom brought the world to our computer screens. Experimenting in this new environment, we discovered that the move to the virtual introduced new challenges even as it expanded our research network and goals.

The Red Sea Arena

The Red Sea Arena, spanning East Africa to the Arabian Peninsula, is one of the most unequal in the world. Marked by vast disparities in security and wealth, these interlinked regions are home to fragile states, newly sovereign states, and oil-rich states with some of the highest GDP and hydrocarbon production per capita in the world. Despite these internal differences, the arena faces common environmental and socioeconomic challenges exacerbated by drought and desertification, water scarcity, and low levels of food self-sufficiency. The arena is also increasingly connected through the growing military, political, and economic presence of the Gulf States in the Horn of Africa and through these societies' mutual dependency on transnational labor and remittances. Our project started with the urgent question of how, in one ecological region, some of the richest and poorest societies in the world are weathering today's profound climatic, economic, and political transformations.

Largely arid and semi-arid, the Red Sea Arena is among the most climate-vulnerable regions in the world. Since the early 1990s, the countries of the African Red Sea littoral have been suffering from longer and more frequent droughts. Similarly, the Arabian Peninsula has been warming and drying at accelerated rates. In the coming decades, both East Africa and the Arabian Peninsula are expected to experience significant warming and drying,

“In the coming decades, both East Africa and the Arabian Peninsula are expected to experience significant warming and drying, punctured by extreme and potentially disastrous precipitation events.”

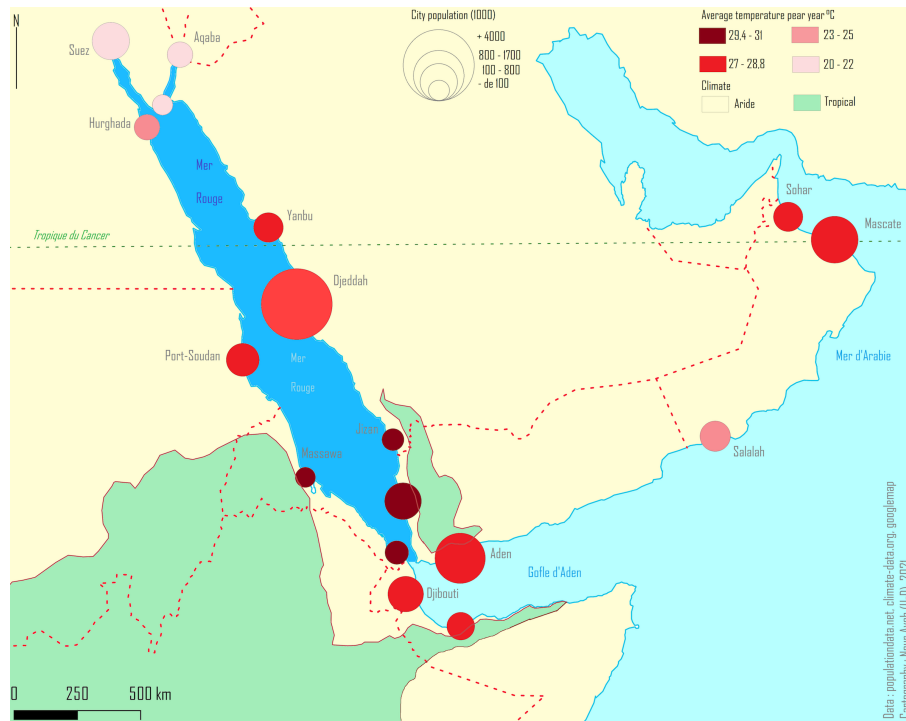


punctured by extreme and potentially disastrous precipitation events.² While the projected challenges in both areas are similar, the countries' readiness to adapt to climate change are not. In the countries of the African Red Sea littoral—one of the poorest and most food-insecure regions of the world³—recent droughts followed by heavy rains are threatening the livelihoods of farmers and pastoralists and have led to deteriorating food security and increasing internal displacement. On the Arabian Red Sea littoral, by contrast, some of the wealthiest and greatest carbon-emitting countries in the world are able to reinvest their petrodollars into adaptive actions such as renewable energy initiatives, carbon capture technologies, cloud-seeding, as well as large-scale farming in East Africa.

Because the climate crisis transcends political borders, its impacts cannot be mitigated or addressed solely at the national level. Various regional and subregional arrangements have been developed across the Red Sea Arena to manage the impacts of climate change (e.g., the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden, or PERSGA, established in 1995 by Djibouti, Egypt, Jordan, Saudi Arabia, Somalia, Sudan, and Yemen).⁴ Yet, very few of the existing arrangements exercise a strong coordinating role in regional policies and initiatives. Unfortunately, most of the existing climate cooperation modalities remain

unilateral or bilateral rather than following the paths of the natural resources across the region.⁵ Nor do these regional arrangements imagine the Red Sea Arena as a whole.

Remedying this motivated our research team to focus not merely on the Middle East or East Africa but to encompass both regions on either side of the Red Sea. Moreover, we sought to include researchers from across the arena as well. This expanded transregional research network, which we named “RedSeaNet,” became key to studying a truly transregional problem: climate change across the Red Sea littoral countries.



Average annual temperatures and urban population sizes in the Red Sea Arena. Cartography by Moustapha Nour Ayeh, 2021.

Casting the “RedSeaNet”

Naturally, the execution of our project was defined by the disruptions of Covid-19. Originally, we had expected to create a collaborative project by first hosting two in-person workshops in Abu Dhabi and Khartoum. Already fraught with unequal geopolitical and financial constraints for scholars from the various countries of the Red Sea Arena, the novel constraints on travel and group gatherings all but eliminated in-person meetings from the project’s planning phase.

At the same time, the mass adoption of online meeting platforms erased many of the obstacles that would have limited our pool of network participants. Instead of visa access or personal availability to travel limiting workshop participation, now any Red Sea scholar with a stable internet connection was eligible. Freed from our prior restrictions, identifying potential team members became an even more collaborative and ethically-engaged endeavor, allowing us to cast our net far wider than initially planned.

“We prioritized locating scholars whose research was not immediately visible within Global North academic circuits due to language barriers or uneven research support and resource distribution.”



Spanning a range of geographies and disciplines, our team of NYU Abu Dhabi student research assistants, which included Ian Hoyt, identified over 100 academics focusing on some aspects of climate change, political economy, and connectivity in the Red Sea region. We prioritized locating scholars whose research was not immediately visible within Global North academic circuits due to language barriers or uneven research support and resource distribution. This list helped us build our fall and spring webinar lecture series. Through this public-facing program of 14 presentations between October 2020 and March 2021, we broadened our existing network of Red Sea region-focused scholars organically and globally. Importantly, the speaker series and the group discussion that emerged following each presentation allowed us to develop our research focus in collaboration with scholars located throughout the region. “Zooming” across regions, time zones, disciplines, and languages was challenging, as well as ambitious and inspiring. Along with the usual Zoom fatigue, we lost connection several times due to power outages and a participant was displaced to a refugee camp when war broke out in his region. And yet, people continued to show dedication to the project despite these and other adverse circumstances.

Emboldened by our unexpected reach, in December 2020, we also began meeting with country-based “teams” of researchers from Yemen, Somaliland, Djibouti, Sudan, and Jordan. While fascinating and exciting, this wide network of parallel Zoom conversations also yielded a multiplication of potential research questions and uncertain levels of commitment. Moving into February 2021, the project had yet to settle on a discrete subject or a core research team. While unburdened from the constraints of in-person workshops, it took several months to appreciate the consequences of losing the support of their day(s)-long structure.

Collaboration across borders

Developed by this transregional and interdisciplinary network of experts and scholars located in the Czech Republic, Djibouti, Jordan, Saudi Arabia, Somaliland, Sudan, Yemen, the United Arab Emirates, and the United States, our team ultimately settled on researching two facets of the climate change emergency. Examining expectations for the near future, it aims to produce the first transregional study of the region’s large youth population’s awareness and perceptions of climate change and its risks. Engaging experiences of the recent past, it also endeavors to strengthen ongoing efforts to conduct impact surveys with the populations most vulnerable to climate change (pastoralists and small-scale farmers) in several countries on both sides of the Red Sea. As our team collaborates across the region in a novel way, we strive to incorporate that which came before and build precedent for that yet to come.

Nevertheless, this collaboration has introduced its own complications. Perhaps our project’s greatest challenge lay in our network’s diversity of research approaches. Thinking pragmatically, it was Dheaya Alrousan who suggested we begin with a baseline survey to gauge the similarities and discrepancies in the youth’s awareness and knowledge of climate change across this economically disparate region. This

simple, but concrete, contribution—attainable during periods of pandemic-related research and travel restrictions—helped us to narrow our immediate goals. Scholars curious about survey implementation pressed ahead further in the next meeting, while many preferring alternative approaches lost interest in the project. But as our team coalesced, our meetings could become more focused.

At the same, the political and economic instability in the region presented their own stumbling blocks. Rolling blackouts in Egypt and Yemen, a military invasion in Ethiopia, and, most recently, the coup in Sudan have impacted our network and core team members' abilities to participate fully, even when the pandemic was under control. Academic constraints in certain countries limited participation, too. A team member in Saudi Arabia was told they could not carry out surveys on perceptions of climate change in the Arab Gulf countries as part of the research team. Research on perceptions of climate change is taken for granted in many countries, but they remain deeply controversial in the context of some of the largest per capita producers of carbon emissions in the world.

Nevertheless, the right constraints can direct and empower progress and push us to rethink our pedagogical and academic practices. For example, Moustapha Nour Ayeh noted how the pandemic accelerated the digital transformation in Djibouti and, in doing so, became a “research accelerator” as well. Established in 2006 and now serving 10,000

“Prior to the pandemic, the university’s lack of teaching staff and financial constraints hindered the development of research in the humanities and social sciences.”



students, the University of Djibouti has been developing rapidly in a challenging environment. Prior to the pandemic, the university’s lack of teaching staff and financial constraints hindered the development of research in the humanities and social sciences. Its professors set up every element of the university, from training programs to management structures. Nevertheless, in collaboration with the University of Senghor (Alexandria, Egypt) the Faculty of Humanities, Languages and Social Sciences had established a master’s degree in risk and natural disaster management focusing on the environment and the sustainable city, two research themes guided by the geographical environment of Djibouti: its extreme aridity, adverse temperatures, and vulnerability to global warming.⁶ Initially, the outbreak of Covid-19 paralyzed the entire university. The two months of confinement imposed by Djibouti’s authorities in spring 2020 were detrimental to the university’s teaching and research. Thus, the university was forced to “modernize” by adopting digital tools. In July 2020, the first thesis defense by videoconference took place between the University of Djibouti and the Catholic University of Louvain (Belgium). Now, all the university departments are creating online courses.

At the same time, the public health restrictions in Djibouti meant that field research had to be conducted more rapidly and efficiently than ever before. While our team’s online discussions stretched across time zones and months, Nour Ayeh and his colleagues’ pilot fieldwork on the current impacts of climate change on pastoral populations in southern Djibouti was compressed in between the country’s Covid spikes. Among their findings were that the pastoralists in this region, stressed by climate-related factors, are now paying Ethiopian migrants to take care of their

livestock (the equivalent of US\$ 0.80/day) while the men move to cities in search of wages. The majority of the respondents are completely dependent on the city to provide for their needs, including food. More than 35 percent expected they will be forced to move to urban areas soon, where they will seek to diversify their income through day labor, while wealthier Djiboutians buy up their lands. Focusing on rural communities, Nour Ayeh's pilot research confirmed the feasibility of a second survey component on the present-day impact of climate change on vulnerable communities to complement our larger survey on the perceptions of climate risks among the region's urban youth.

Conclusion

Constraints and disruptions are hallmarks of crisis. Together, they interact to produce counterintuitive challenges. For RedSeaNet, our eagerness to embrace disruptions yielded unforeseen research delays, as well as accelerations, expansions, and compressions. Crucially, while widening the geographic scope of our project could potentially lead to novel insights, the loss of focused in-person meetings and their replacement by ongoing Zoom meetings made it harder to reach consensus about our research aims. When faced with limited resources, expanding one dimension (e.g., the geographic conceptual framework) requires a narrowing of others (e.g., methodology, team size, etc.). For other scholars looking to study the Red Sea Arena or develop their own transregional collaborations, identifying and leveraging productive constraints will be critical for firmly grasping such dynamic subjects. Adapting to external disruptions requires a coherent vision. Like weathering one of the Red Sea's increasingly common cyclones, collaboration during a crisis requires staying grounded.

Banner photo: "Moustapha Nour Ayeh and his team with a pastoralist family in Djibouti's Ali-Sabieh region, June 2021." *Photo credit: Liban Ali Sougueb.*



Ian Hoyt

Ian Hoyt is an engagement associate at the Pacific Institute working to expand the reach and impact of the UN Global Compact's CEO Water Mandate, for which the Pacific Institute is co-secretariat. With research interests in institution building and international water governance, in 2021 he graduated summa cum laude from New York University Abu Dhabi with a BA in history. Hoyt joined RedSeaNet as an undergraduate research assistant and has continued to support the project after completing his studies.



Moustapha Nour Ayeh

Moustapha Nour Ayeh, Associate Professor of Geography, teaches urban planning and climatology at the University of Djibouti, where he is the director of Social Sciences. Having 15 years of experience in urban planning and risk management as a practitioner and academic, Nour Ayeh has published many documents and articles on urban studies and climatology. He has also prepared the health facility map of the city of Djibouti and has helped design the curriculum of geography, urban planning, and risk management for the bachelor and master's degree at the University of Djibouti.



Aisha Al-Sarihi

Aisha Al-Sarihi is a nonresident fellow at the Arab Gulf States Institute in Washington. She has a research interest in environmental sustainability, energy and climate economics and policies. She obtained her PhD at Imperial College's Centre for Environmental Policy, with a focus on studying challenges and policies for renewable energy adoption in oil-producing countries. Following her PhD, Al-Sarihi pursued her postdoctoral research at the London School of Economics and Political Science's Middle East Centre, working on assessing the economic implications of climate change in the GCC. She also joined the Arab Gulf States Institute in Washington, with a focus on... [Read more >](#)



Dheaya Alrousan

Dheaya Alrousan is an associate professor in Prince El-Hassan Bin Talal Faculty of Natural Resources and Environment at the Hashemite University in Zarqa, Jordan. A chemical engineer by training, Alrousan's research interest spans a wide range of topics linked by the Water-Energy-Food (WEF) nexus, focusing on low-cost clean technologies for drinking and wastewater treatment. He is now researching the effectiveness of projects to improve environmental awareness among children and the consumer perceptions of new sanitation systems.



Muez Ali

Muez Ali is a doctoral researcher at the UCL Energy Institute, a research associate at the Ministry of Finance and Economic Planning in Sudan and a research associate at LSE. His research interests are energy and climate change in developing countries, the political economy of public service provision, social policy and the economic history of Sub-Saharan Africa.



Nathalie Peutz

Nathalie Peutz is associate professor of Arab Crossroads studies at New York University Abu Dhabi. A cultural anthropologist, Peutz has conducted wide-ranging ethnographic research in Yemen, Djibouti, and Somaliland. She is the author of *Islands of Heritage: Conservation and Transformation in Yemen* (Stanford University Press, 2018) and coeditor of *The Deportation Regime: Sovereignty, Space, and the Freedom of Movement* (with Nicholas De Genova; Duke University Press, 2010). Peutz was 2001 fellow of the SSRC's International Predissertation Fellowship program and 2020 Planning Grant recipient of the Transregional Collaboratory on the Indian Ocean.



Alden Young

Alden Young is assistant professor of African American studies and a faculty member of the International Development Studies program of the UCLA International Institute. A political and economic historian of Africa, he is the author of *Transforming Sudan: Decolonization, Economic Development and State Formation* (Cambridge University Press, 2017). Young is particularly interested in the ways in which Africans participated in the creation of the current international order and has research interests on both sides of the Red Sea. He has done extensive fieldwork in Egypt, Sudan, Ethiopia, Jordan, and the United Arab Emirates.