

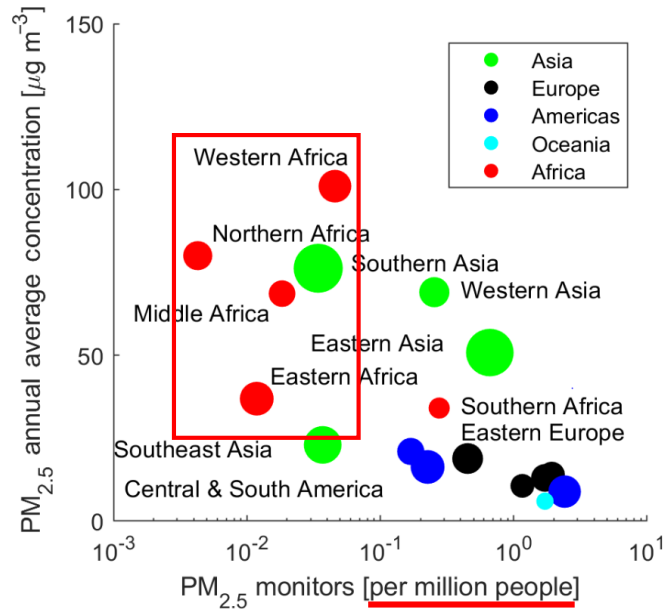


MOPGA/Make Air Quality Great Again: AfricAir and solution-oriented approaches to improving air quality in the Global South



The Problem

Lack of air quality monitoring in Africa

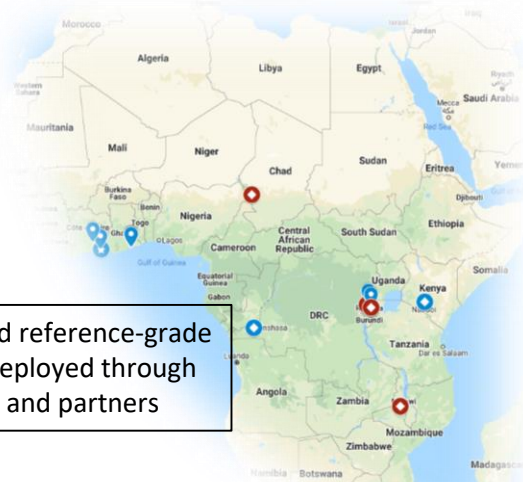


Malings et al., AMT, 2020

- Most African residents estimated to be exposed to PM_{2.5} levels well above WHO guidelines
- Traditional reference monitors are expensive to buy and expensive to maintain, limiting their use in many countries of the Global South

The Solution

AfricAir – A global consortium to increase air quality monitoring capacity in Africa



Low-cost and reference-grade monitors deployed through AfricAir and partners

- 15 institutions from across the globe
- Building infrastructure:
 - 30+ reference-grade PM_{2.5} and gas monitors
 - 50+ low-cost PM and gas sensors
 - Deployed with local African partners
- Building capacity:
 - Air quality/low-cost sensor summer schools (summer 2021)
 - AfricAir virtual symposium series (summer 2021)
 - AfricAir/Make Air Quality Great Again final colloquium in Paris, France (2022)

Our Successes

- Low-cost sensor calibration models for multiple locations across East, West, and South Africa
 - Evaluation of the portability of low-cost sensor models over Africa
- Evaluation of air pollution sources and patterns in Rwanda (Subramanian et al., 2020 Clean Air Journal)
- Evaluation of COVID-19 Lockdown effects in multiple cities in Africa

<http://africair.org/>



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