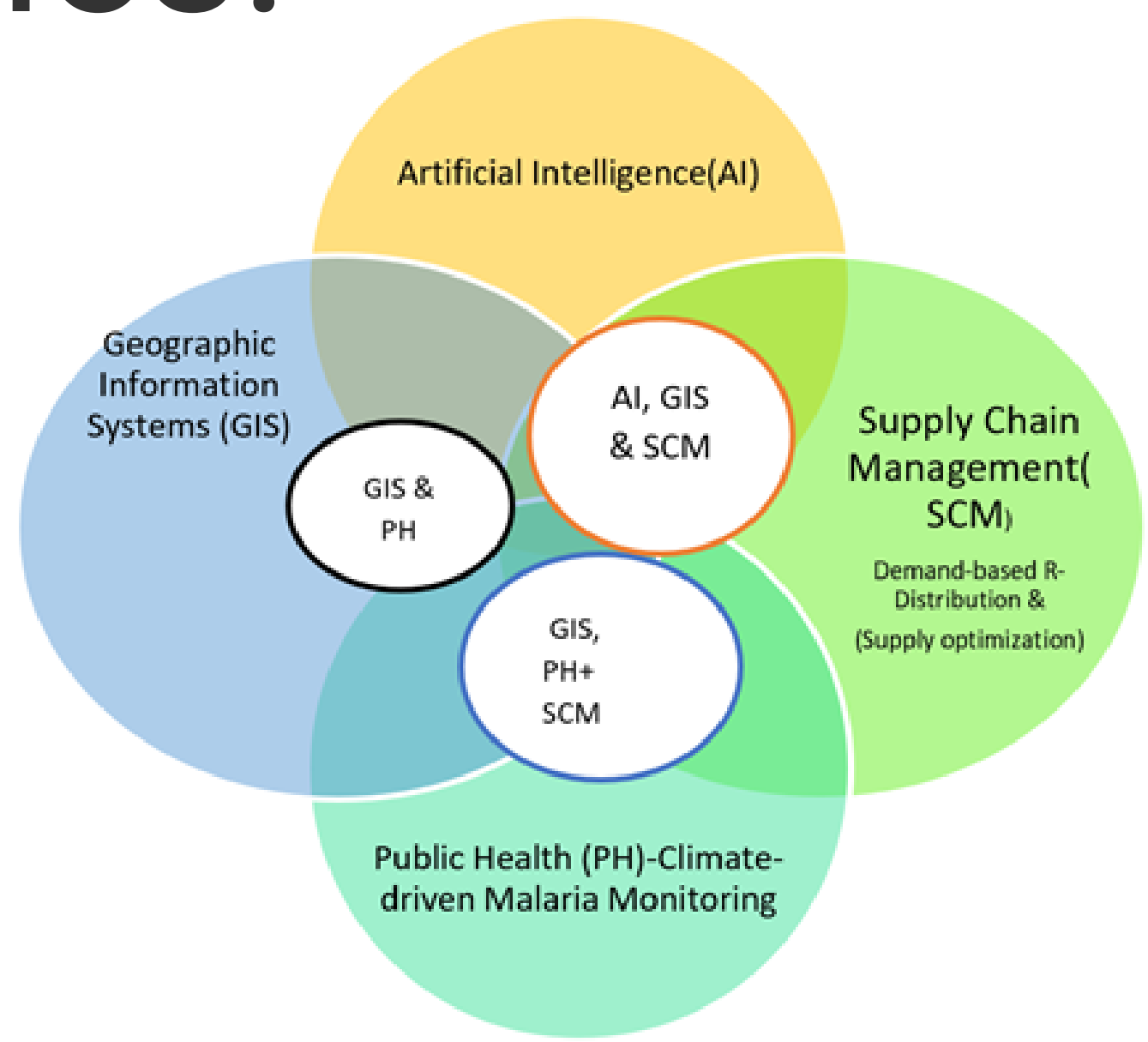
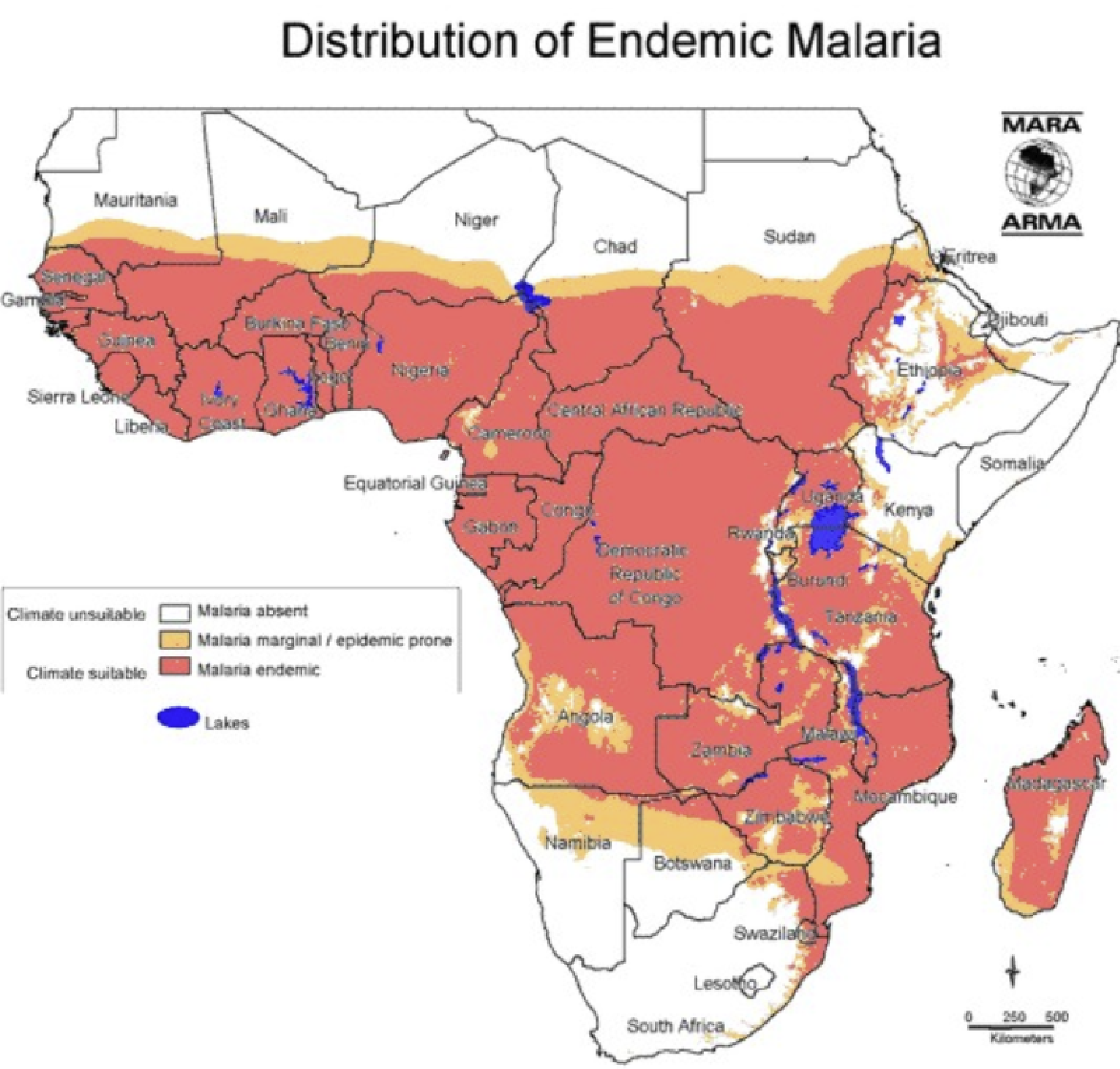


Integrating AI and GIS for Climate-Driven Malaria Monitoring and Demand-Based Resource Distribution and Supply Optimization in Low Developing Countries.

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What if we could stop malaria outbreaks before they happen—saving thousands of lives, reducing healthcare costs, and transforming healthcare delivery in Africa—using the power of AI and real-time climate data?



REAL WORLD IMPACT

Malaria is caused by the **Plasmodium parasite**, spread through bites from infected **female Anopheles mosquitoes**. It remains a major cause of illness and death, especially in poor, rural areas of sub-Saharan Africa and Asia. Uganda reported **12.7 million** malaria cases and more **than 17,000 deaths** in 2022. Stockouts of critical **anti Malaria supplies** are common especially in rural areas, where **pregnant women** are at the highest risk.

DIGITAL INNOVATION

AI and GIS power a system that **predicts outbreaks, maps real-time hotspots,** and optimizes delivery of malaria tools—**where and when they’re needed most.** Built on local health and climate data, it enables data-driven, demand-responsive logistics—scalable across Africa for smarter, faster interventions.

Optimized Hot Spot Analysis



SOCIETAL AND ECONOMIC TRANSFORMATION

Drive targeted delivery, cut diagnostic delays, reduce waste, stockouts, and preventable deaths, and boost inventory efficiency. This scalable system builds resilient, digital health infrastructure—**turning reactive care into automated, just-in-time delivery** networks across Africa, **unlocking both health and economic returns.**

THE ASK: WHY YOUR INVESTMENT MATTERS

We’ve secured initial funding through **CGU’s Transdisciplinary Research Grant.** **Your support can drive** data-driven solution that reduces maternal deaths, lowers healthcare costs, and strengthens disease response systems across Africa. **Together, we can drive equitable access to life-saving innovation powered by intelligence, maps, and algorithms, not just medicine.**

