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"Reconcile land system changes with planetary health"

Policy and agronomy research as catalysts for implementing Africa's fertiliser and soil health action plan

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Abstract

Africa possesses vast arable land and considerable agricultural potential, yet productivity remains hindered by climate change, soil degradation, and socio-economic constraints. Soil health is central to overcoming these barriers, underpinning sustainable agriculture through improved nutrient cycling, water retention, and plant productivity. Enhancing fertiliser efficiency, both mineral and organic, is vital to restoring soil health and ensuring environmental resilience. The Africa Fertiliser and Soil Health Summit, convened by the African Union in Nairobi in May 2024, emphasised the critical interdependence of soil health and fertiliser use efficiency. The resulting Nairobi Declaration and 10-year action plan set forth a roadmap grounded in multi-stakeholder engagement, research and development, and inclusive policy frameworks to advance soil health and agricultural productivity. This talk explores how integrated policy frameworks and agronomic research can serve as strategic levers to drive the successful implementation of Africa's Fertiliser and Soil Health Action Plan, enabling evidence-based decision-making, scalable interventions, and long-term agricultural resilience. Effective policies, particularly those that are inclusive, evidence-based, and responsive to diverse local contexts, are essential for removing barriers to land access, input use, and finance. Simultaneously, targeted agronomic research must generate context-sensitive, demand-driven insights to improve soil health management and fertiliser use practices on the ground. Operationalizing this strategy requires integrated efforts across sectors: collaborative policy development, robust R&D agendas, adaptive technologies, and inclusive capacity building to support smallholder farmers. Elevating soil health through this combined policy-research lens offers an impactful and sustainable pathway to resilient food systems, environmental stewardship, and equitable economic growth across the continent.

Keywords: Africa, agronomy, fertiliser, policy, soil health

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