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UNU-INRA

Institute for Natural Resources in Africa

UNU-INRA
United Nations University
Institute For Natural Resources In Africa

FIVE YEAR STRATEGY



Who we are

UNU-INRA is a leading voice in Africa’s natural resource knowledge base. As a think tank, our thought leadership is grounded in research and evidence. We bridge the gap between science and policy and promote sustainable development through natural resource governance that is sensitive to climate change.

We harness African talent and empower African researchers, entrepreneurs and policymakers with knowledge to sustainably manage the continent’s natural resources. Established in 1985 with a mandate to strengthen African national institutions’ capacity to manage natural resources, **UNU-INRA** has become known across the region for thought leadership, pioneering research and innovative solutions in support of natural resource management policy, research infrastructure and capacity-building.

Our head office in Ghana and our network of five operating units in Senegal, Cote d’Ivoire, Cameroon, Namibia and Zambia give us a strong presence across Africa. **UNU-INRA** is also one of the 14 institutes of the United Nations University, a global think tank and academic arm of the UN.

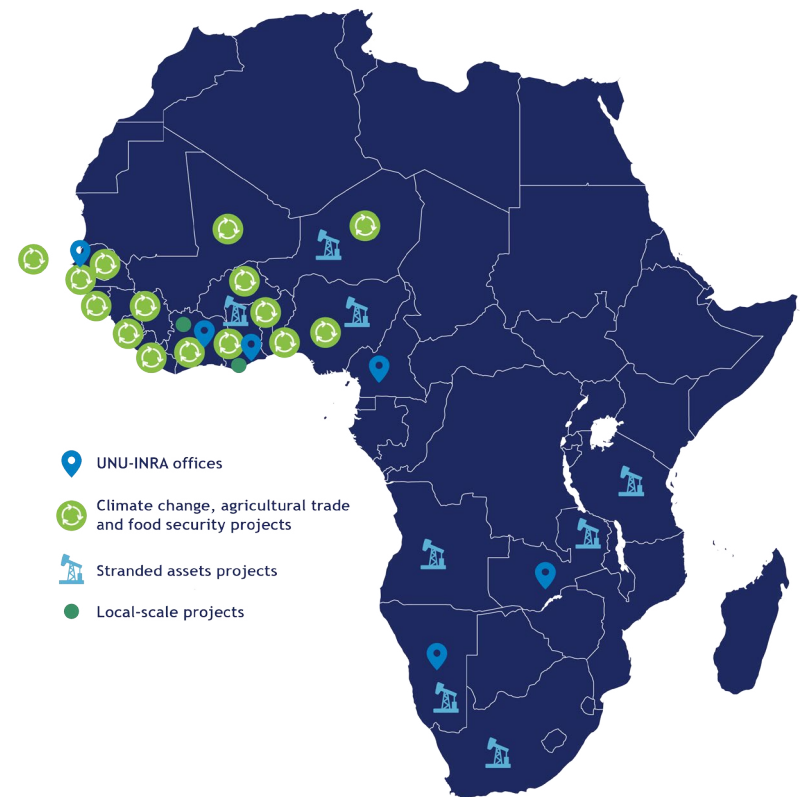
Our vision

To realise the transformational potential of Africa’s natural resources for an inclusive and sustainable future.

Our mission

To amplify African perspectives, promote made-in-Africa solutions and cultivate African natural resource management capacity.

Our presence across Africa



The State Of The Environment And Africa's Natural Resources

Africa has changed radically since **UNU-INRA** was established 34 years ago. We have evolved to meet the challenges of this increasingly interconnected, dynamic and fast-paced reality, in which the continent faces conflict and insecurity, climate change, land degradation, pandemics, and resource depletion.

Agriculture, an important growth sector, whose security lays the foundation for industrial transformation, has been weakly integrated into manufacturing in Africa, leaving it exposed to declining terms of trade, chronic yield gap and annual food imports worth over \$35 billion. Although Africa is home to 60% of the world's uncultivated arable land, it is unable to feed its people. With an estimated population growth of 1.9 billion by 2050, this paradox will only escalate if food security and economic diversification are not achieved.

Africa is also experiencing rapid urbanisation, with the urban population expected to triple by 2050 to an estimated 1.34 billion. The continent's cities risk becoming a fertile ground for social unrest and poverty, especially in mega cities where youth unemployment is rife. Rapid urbanisation will also increase demand for food, energy services, and closing the current energy gap that affects more than 500 million Africans will be critical if the region is to create jobs, develop growth hubs and move towards a climate-resilient future. Urbanisation is also an opportunity for capitalization for economic growth and wealth creation by the community through intra and interregional trade building on the AfCFTA, supply chains, and value addition.

While the region is endowed with hydrocarbon resources in the form of oil, gas and coal, these resources are at risk of becoming stranded, as is already evident from negative trends in global oil prices. To secure a sustainable future for its people and economies, Africa

must explore new ways of securing and diversifying its revenue base. Similarly, aboveground carbon resources will require creative ways for their utilization without amplifying depletion and degradation of vital ecosystems.

Climate change is a constant backdrop to these challenges, with Africa, the continent least able to adapt to climate impacts and manage its complex mix of large-scale weather patterns. Coastlines are under siege, and the region contends with poor soils and extreme events such as frequent floods and droughts. In sub-Saharan Africa weather-related losses are on the increase, leaving behind human casualties and loss of infrastructure and livelihoods.

If Africa is to achieve economic transformation and sustainable livelihoods for its people, it must rise to these challenges, balancing trade-offs with meeting domestic, regional and international agendas.

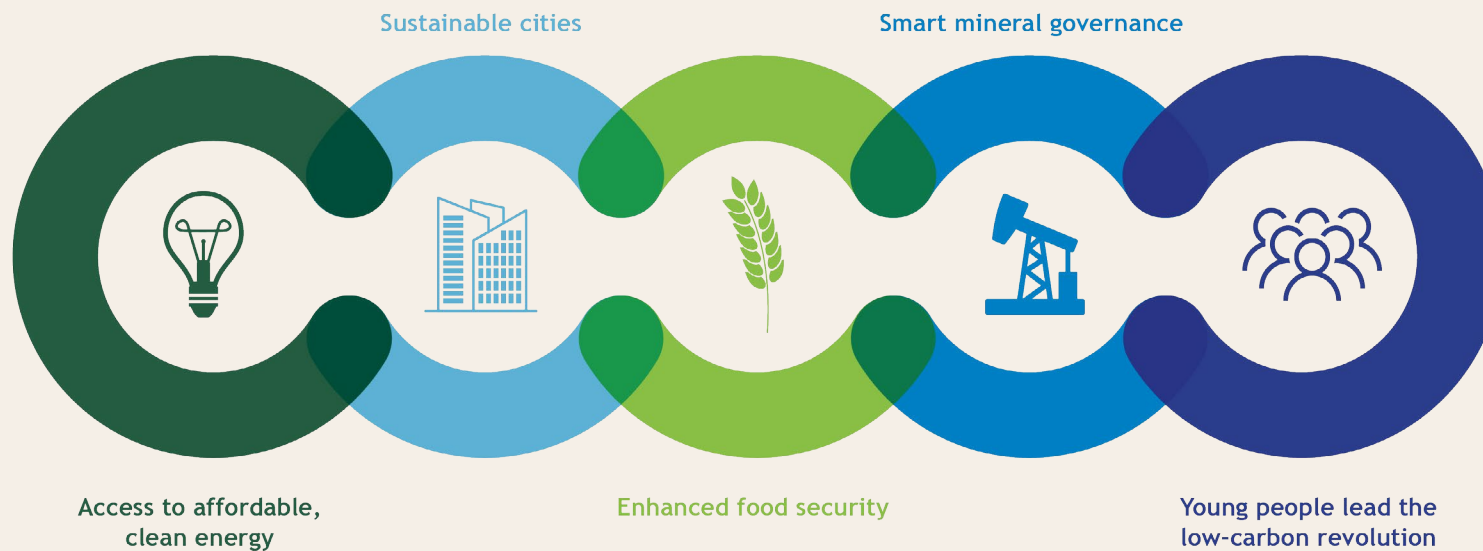
Achieving the Paris Agreement, Agenda 2030 and 2063 will require countries to shift to low-carbon trajectories, reduce vulnerability, and build climate resilience. However, many African countries currently lack the capacity to transition at the same scale and rate as the global North. This presents both a challenge and an opportunity to reimagine Africa's natural resource management and development strategies.

Now is the time to capitalise on the growing climate awareness on the continent: **UNU-INRA** seeks to help Africa chart a new course for sustainable development by amplifying and leveraging knowledge for system-wide change.

Our vision for Africa's future

UNU-INRA envisions a sustainable future for Africa that realises the transformational potential of the continent's natural resources while pursuing inclusive development that protects people and the planet:

- Access to affordable, clean energy for domestic use and industrial development
- Sustainable cities with urban growth models that balance development goals with sustainable technologies and resource efficiency
- Enhanced food security through effective land management and technology-driven cultivation approaches
- Smart, scientifically evidenced mineral governance that understands the global dynamics of demand and supply
- Young people and gender equity in leading the low-carbon, digital revolution with scientific, technological and entrepreneurial capacities



Our theory of change

Africa's past, present and future development is inextricably linked to its natural resources. Thus far, the continent's natural resource wealth has not brought shared prosperity for African people. This historic wrong must be urgently righted with effective, equitable strategies for natural resource management.

UNU-INRA views climate change as the catalyst for reimagining Africa's natural resource development plan. Climate action represents an important lever that Africa can use to reduce its vulnerability and to pull its people out of the underdevelopment that currently traps so much of its population.

A latecomer to industrialisation, Africa can leapfrog polluting technologies and deploy renewable energy at scale. It has a huge advantage in being able to avoid costly retrofits due to climate-related risk and losses. To do so, it must develop climate-smart policies that will make current infrastructure projects fit for the future.

Similarly, Africa must use the risks related to hydrocarbon asset stranding to plan for a diversified economic base that is not locked into the volatility associated with hydrocarbon resources and commodity-driven economies. Both the continent's renewable and non-renewable resources can be managed in ways that offer strategic value to African people in terms of trade, job creation and enhanced growth for a youthful population.

The continent must also seize the moment to decouple development from environmental degradation. A clean and equitable development strategy presents enormous market opportunities: systems capable of delivering affordable energy to people living on less than \$2.50 a day could generate revenue upwards of \$10 billion a year.

African agriculture could also be transformed if smallholder farmers gain access to low-carbon production technologies to increase yields. Food systems and supply chains can be made resilient through infrastructural development and increased adoption of digital technologies.

African countries are keen to adopt clean technologies to power their growth trajectories, support endogenous capacity for innovation, and grow their blue and green economies. To achieve its potential, Africa needs solution-oriented research on the most appropriate and affordable technologies to forge a low-carbon future on the continent – one that widens energy access and delivers on jobs and the Sustainable Development Goals while protecting the environment.

By serving as a platform for scientists to work side-by-side with farmers, entrepreneurs, researchers, financial institutions and policy-makers, **UNU-INRA** will help to shape a new sustainable development strategy for Africa that turns risks into a springboard for locally-led transformation.

A line of camels with loads walking across a rocky desert landscape at sunset. The camels are silhouetted against a bright orange and red sky. The ground is covered in dark, jagged rocks. In the background, there are low, dark mountains.

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How we drive change

UNU-INRA advances natural resource management solutions that meet the needs of African economies, ecologies and societies.

Over the next five years, we will address Africa's developmental challenges using a three-pronged approach: **generating policy-relevant scientific knowledge; creating convening spaces for Africa-focused policy dialogue; and enhancing the natural resource management capacities of state and non-state actors through an effective capacity-building programme.**

Knowledge-based policy

Through sound, science-based research and analysis, we foster knowledge-driven change.

- We contest orthodoxies regarding natural resource-based development
- We bridge the science-policy gap with policy-relevant research
- We provide policy advice on complex, intersectional continent-wide problems across the natural resource management sphere

Dialogue

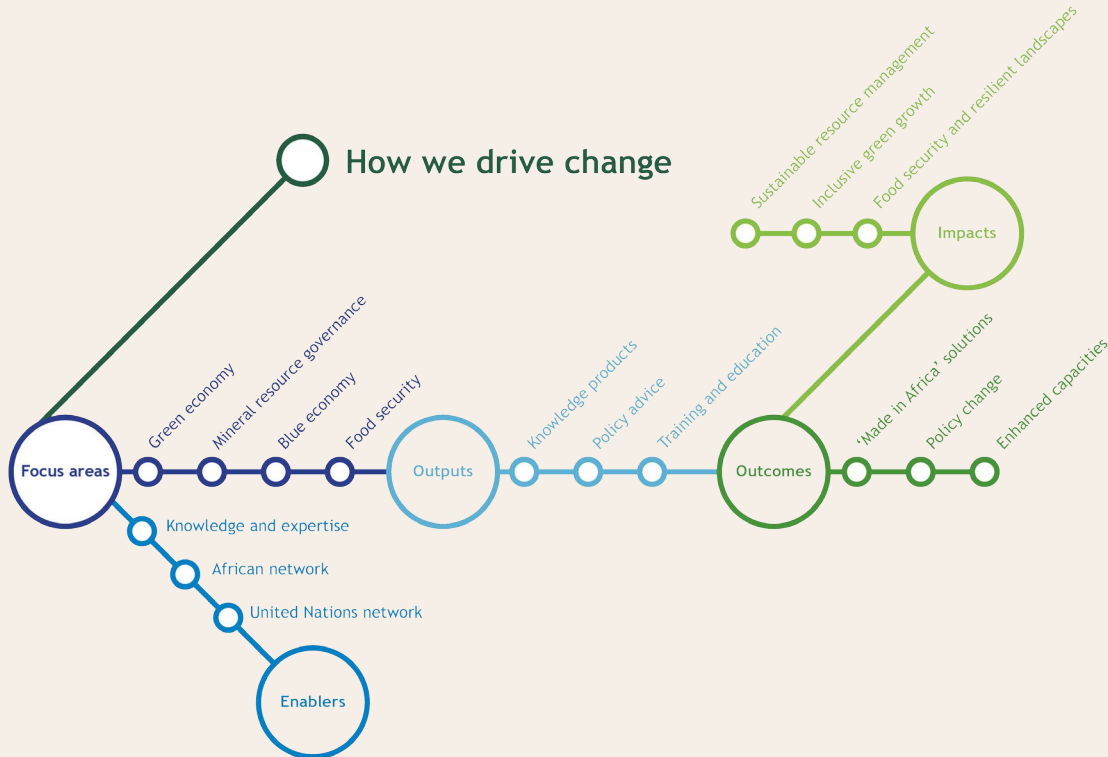
We use our convening power as part of the United Nations network to give a platform to African perspectives and to nurture made-in-Africa solutions to take to the global community.

- We champion innovative and dynamic African perspectives for an inclusive and sustainable approach to natural resource management
- We amplify indigenous knowledge to induce change locally and globally
- We spearhead big ideas and new trends with key changemakers

Building capacity

We empower African experts from academia, government and industry with the knowledge they need to chart a new course for Africa's natural resource management.

- We generate evidence on sustainable pathways for natural resource management in the context of climate change
- We deliver tailor-made courses on climate science, communication and financing
- We equip African scientists and policymakers with skills to adopt and utilise open access data and new technologies for monitoring Sustainable Development Goal indicators



Our focus areas

Over the next five years, **UNU-INRA**'s core activities will centre on four priority focus areas: **green economy and energy transitions, aquaculture and blue economy, mineral resource governance, and agriculture, food security and land**. These priorities are all interconnected and fundamental to our vision for the future of Africa: progress across each will contribute to the achievement of multiple Sustainable Development Goals (SDGs).

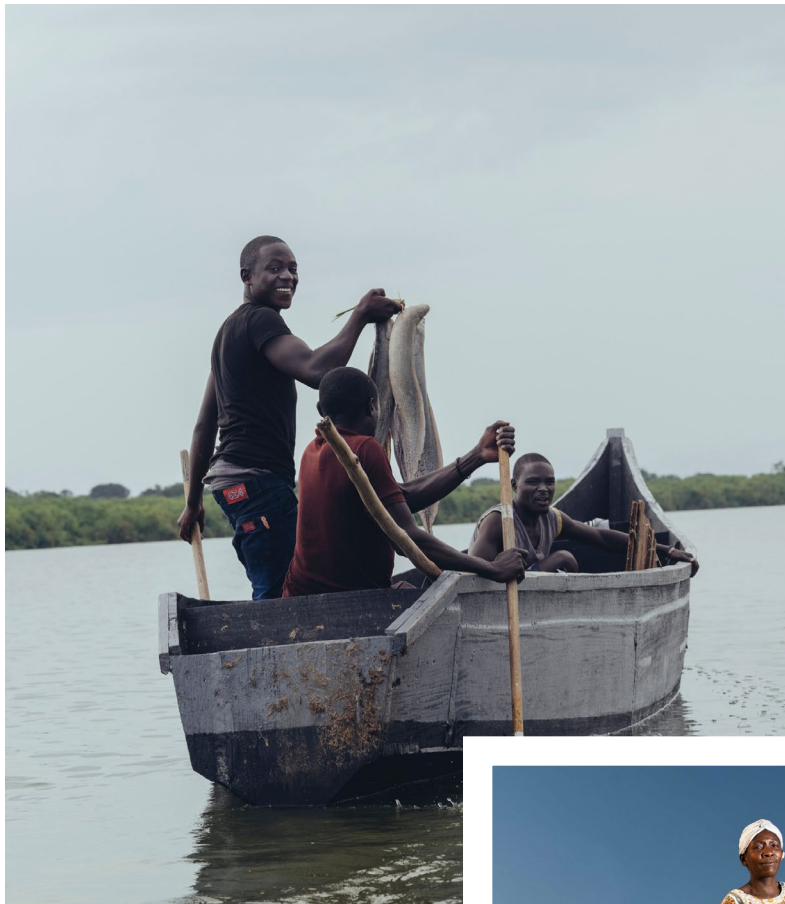
An intersectional approach to gender is essential to drive truly inclusive development and resource management. As such, we aim to include the perspectives and agency of women and other marginalised groups at the core of all our activities and apply a gender-sensitive lens to our priority focus areas.

Accelerating Africa's green transition

An inclusive green transition will enable African countries to achieve sustainable economic development that leaves no one behind.

UNU-INRA will:

- produce evidence-based policy advice to help African countries develop, deploy and scale-up low-carbon technologies in critical economic sectors
- meet demand from African governments to help develop their green economy transition pathways
- advocate for innovative energy solutions that can deliver affordable and clean energy to rural and urban communities



Growing Africa's blue economy

Livelihoods and economic growth supported by our oceans and waterways must be protected from aquatic and marine resource depletion.

UNU-INRA will:

- work with African researchers and policymakers to develop blue growth strategies for the sustainable development of aquaculture
- investigate and recommend disaster risk reduction strategies that enhance the climate change resilience of Africa's freshwater aquaculture farmers and coastal communities
- co-develop and promote innovative water efficiency technologies across sectors such as agriculture to enhance water security

Promoting effective mineral resource governance

To realise the potential of its natural resource wealth, Africa must adopt more inclusive and sustainable approaches to mineral resource governance.

UNU-INRA will:

- make science-based policy recommendations to African governments on mineral resource governance that will support their economies against the backdrop of climate change
- research and recommend strategies to overcome the risks and harness the opportunities associated with the stranding of Africa's hydrocarbon resources
- support the development of more inclusive, sustainable and gender-equitable approaches to artisanal and small-scale mining

How our focus areas contribute to the Sustainable Development Goals



Accelerating Africa's green transition



Growing Africa's blue economy



Promoting effective mineral resource governance



Advancing land-based ecosystem management for food security

Advancing land-based ecosystem management for food security

To achieve food security, Africa's land – under pressure from population growth and climate change – must remain productive and mitigate degradation.

UNU-INRA will:

- promote innovative and climate-smart cultivation technologies that protect food security and the environment
- research successful sustainable land management practices and support their mainstreaming through community-based adaptation approaches
- support the development of and access to climate information services



Our strengths

Our experience, our approach, our established presence across Africa and our relationship with the United Nations all set us apart from other research institutions working on the governance of Africa’s natural resources.



Deep knowledge of natural resource management in Africa

Alongside our mandate – which is focused squarely on the issue of natural resource management in Africa – we have more than 30 years’ experience working in Africa and building relationships with African researchers and practitioners. We are uniquely well-placed to help governments navigate the risks and opportunities of Africa’s natural resource-based challenges.



Political economy analysis

We apply a unique political economy lens to natural resource management, linking issues of ownership, governance and institutions to development and environmental sustainability. Whether a country’s people are able to benefit from its natural resources is dependent on the national, transboundary systems, regional and international political landscape. These challenges must be understood in order to create effective strategies for natural resource-led development.



Inclusive approach

Issues of climate change, land use, small-scale farming, water and sanitation cannot be understood without an intersectional awareness of gender, since women and marginalised groups are disproportionately affected by climate change impacts. Our approach to natural resource management identifies opportunities for advancing gender equity, particularly in climate-related policy.



Networked across Africa

With our head office in Ghana and our network of five operating units in Senegal, Cote d’Ivoire, Cameroon, Namibia and Zambia, **UNU-INRA** has a strong presence in Africa. We are able to work closely with local actors across the continent and to keep our finger on the pulse of natural resource management developments in the region.

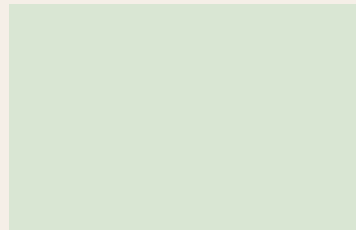
We plan to expand our reach across Africa by establishing new operating units, including at Mohammed VI University, Morocco (focusing on water use efficiency, wastewater treatment and water harvesting); University of Botswana (land management in the Kalahari and surrounding arid land systems); and the Scientific and Industrial Research and Development Centre, Zimbabwe (sustainable and clean energy).

In addition to our operating units, we are growing a broader community of African experts on natural resources through initiatives such as our network of Green Champions and our Mobile College of researchers.



Part of the United Nations family

UNU-INRA is uniquely positioned to take African perspectives on natural resource management to policy discussions at the United Nations and on the global stage. We are also able to tap into a network of 14 United Nations University research institutes across the world, bringing diverse resources to tackle problems that require a multi-pronged response.



Recent highlights

Ghana Climate Innovation Centre (GCIC)

Through our role in GCIC, **UNU-INRA** has influenced Ghanaian policy across science, technology and innovation, agriculture, and water and sanitation.

Our report on the challenges faced by climate and green economy entrepreneurs attempting to scale-up their innovations has become a key input for a Ministry of Environment, Science, Technology and Innovation review committee. A revised science, technology and innovation policy will address blockages identified by **UNU-INRA**, such as weak public-private sector research collaboration, unfavourable financing mechanisms and poor integration of climate innovations into national development planning.

With the crop services directorate of the Ministry of Food and Agriculture, we co-designed a policy research project on agricultural management practices and greenhouse gas emissions in the rice sector. The recommendations from this study are particularly impactful given Ghana's plans to increase domestic rice production and ban importation by 2023.

Finally, the findings from our ongoing policy research into climate-resilient water, sanitation and hygiene (WASH) infrastructure in basic schools will feed into policy revisions at the Ministry of Sanitation and Water Resources, our partners for this project.

Stranded assets

'Stranded assets' has been our flagship research theme over 2019-2020. **UNU-INRA** research revealed low awareness of asset stranding in the policy and regulatory spheres, despite the range of both climate- and non-climate-related drivers of stranding that threaten African economies. We also uncovered tensions between climate policy and governments' resource-led developmental agendas; weak institutional arrangements in the extractive sector exacerbating stranding risks; and hidden opportunities in the diverse stranding scenarios that will require foresight, planning and strategic management.

As the global push to diversify away from fossil fuels intensifies, our ongoing work on this important topic strives to give hydrocarbon-rich African countries new policy options for economic development.

The findings from the initial discussion paper were launched at COP25 in Madrid, and explored further at a side event convened by **UNU-INRA** at the 2020 Africa Regional Forum on Sustainable Development in Victoria Falls and attended by key African energy, climate change and sustainable development stakeholders.

Since then, oil prices have dipped below zero amid the global coronavirus pandemic, reinforcing **UNU-INRA's** message that asset stranding is not a distant eventuality but a present reality. We will use the increased political attention to disseminate our analysis of the opportunities and pathways arising from asset stranding to a wider engaged audience and promote green transformation for Africa.



Green transformation

Our work on the various aspects of green transitions includes quantitative assessments of the impacts of renewable energy on employment and economic growth in Kenya, and research on options for catalysing green small and medium enterprise development in Nigeria to manage climate-induced migration.

We believe that moving beyond green transition to a well-articulated, wide-scale green transformation is key for the future of the continent. Over the next five years, **UNU-INRA** will work with African governments to develop their green economy transition plans, ensuring that the principles of equity and inclusivity, human development, job creation, poverty reduction and environmental sustainability are at the core of future policies.

Kwapong Lectures: Nature Speaks

UNU-INRA's high-level lecture series, 'Kwapong Lectures: Nature Speaks', creates a space for independent thinking that pushes boundaries on the management of Africa's natural resources. Featuring thought-leaders from across the technology, infrastructure, climate change and natural resources spheres, the lectures bring together key audiences from government officials and diplomats to students, academics and journalists to explore Africa's transformation potential.

Measuring success

UNU-INRA's desired impact is long-term and far-reaching. Outcomes range from influence over national policies to greater presence of African voices in global dialogue and decision-making around natural resource management. Our overarching goals include:

- Policy change
- Stronger African influence over international agendas
- Made-in-Africa solutions promoted and implemented at national, regional and global levels
- Enhanced African capacity for natural resource management (including in transboundary systems)

Quantitative evaluation

While the change we seek is long-term and often incremental, **UNU-INRA's** impact is also monitored on an ongoing basis according to concrete metrics such as:

- Contribution to national policy or strategy documents: number of policy advocacy dialogues convened; national and regional policies formulated or revised using **UNU-INRA** recommendations
- Capacity building: number of training events conducted and beneficiaries reached (including stakeholder categories such as students, policymakers and entrepreneurs)
- Knowledge generation and use: knowledge products produced; number of downloads and citations
- Partnerships: quality and mutual benefits of **UNU-INRA's** partnerships with external organisations
- Gender equality: gender balance of participants in our training programmes; beneficiaries of our fellowship grants; participation in programme implementation
- Strategic communication: numbers of event attendees; social media reach and engagement; media hits; number and quality of communication outputs

Qualitative evaluation

Engagement with stakeholders in the natural resource management sphere is vital to **UNU-INRA's** work. Over the next five years, we plan to strengthen the ways in which we invite and use feedback from partners.

- The **UNU-INRA** Advisory Board provides guidance on our policies and processes, and analyses our achievements and progress based on quarterly and annual reports submitted
- We also report to the United Nation University headquarters on a quarterly basis and are evaluated against our annual targets
- All programmes and projects are critically evaluated at their close and lessons learnt are shared within **UNU-INRA** and integrated for future work
- We invite stakeholders to give live feedback during project implementation and will begin to implement annual surveys of key partners to evaluate their institutional engagement with **UNU-INRA**
- We will invite critical external observers to recommend ways we can strengthen our work and ensure it has long-term impact



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