



African
Union



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Fourth African Union - European Union Agriculture Ministerial Conference



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Partnership for sustainable
agriculture
and food system

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THE SILICON VALLEY OF THE GREEN TRANSITION

Professor Daniel B. NAHON
Geochemist of tropical soil
Aix-Marseille University

Former General Director for R&I of France
Former President of CIRAD



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The Silicon Valley of the Green Transition

In what context is Africa to achieve its Green Transition?

- Climate change: a big toll on the environment
- Lands warm more than oceans: Northern Hemisphere will be hotter than the South
- African population will double in the next 3 decades
- Africa needs efficient agriculture, respecting the environment
- Africa holds 60% world's arable soils (nonrenewable resource)
- Agriculture consumes 4 times more energy than industry, contributes 40% to climate change and consumes 86% of fresh water
- 60% of the African population do not have access to electricity
- Despite all efforts, arable soil degradation is still on the rise in Africa, desertification in Sahel is still progressing, and land grabbing by other countries affects 100 million hectares of African arable soils



The Silicon Valley of the Green Transition

This clearly shows that the scientific-political concept of *SOIL SECURITY* is at the core of the Green Transition in Africa

The great connector of our major societal changes



- _ Needed scientific knowledge must be developed in Africa by African scientists in close collaboration with European universities sharing PhDs and Postdocs (300 Program)**
- _ Create/support Living Labs and Lighthouses following the European model, involving stakeholders and smallholder farmers**
- _ Securing African soils for a resilient, sustainable and productive agricultural complex system which needs a multidisciplinary and integrative cutting-edge research in order to define new farming practices adapted to African soils, so different from European soils**
- _ Reduce by 60% the carbon footprint of African agriculture mitigating soil erosion, deforestation, loss of biodiversity, savanna and domestic fires**
- _ Development of digital tools (rapid access to markets, startups creation, quantifying, modeling, monitoring...)**



The Silicon Valley of the Green Transition would consist of:

- 1- Define 10 institutions/universities as Living labs or Lighthouses in which scientific research and technological innovations of excellence would be carried out to train young Africans through research (gender equality) capable of understanding the complex systems specific to African soils
- 2- Set up a framework of soil, water and air observatories to gather and ensure the quality and availability of data in Africa
- 3- Create an innovative green entrepreneurship around the concept of soil security, including the link between exact sciences, natural sciences, health sciences and social sciences
- 4- The most urgent and pressing issues are in the Northern Hemisphere of Africa, where arable soils are most at risk, droughts are most acute, water shortages are most important, but also where solar energy and desalination projects can be launched on a large scale



