

Advisory Group on R&I for Africa-Europe Cooperation



THE AFRICA-EU PARTNERSHIP
LE PARTENARIAT AFRIQUE-UE



FACTSHEET

Background and Mission:

One of the most urgent questions in the AU-EU cooperation is how to make Research and Innovation (R&I) a driver for sustainable development.

In May 2021 Jean-Eric Paquet, Director-General at DG Research and Innovation, together with Marjeta Jager, Deputy Director General at DG International Partnerships, opened a kick-off event and officially launched an Advisory Group (AG) on R&I for Africa-Europe Cooperation. The purpose is to elaborate recommendations on how to best mainstream and boost R&I in the cooperation between the two continents.

Composition and Task:

The AG consists of six high-level experts and six personal research assistants coming in equal representations from Africa and Europe. The experts cover a wide range of crosscutting themes from capacity building, to innovation and digital technologies uptake, data monitoring and policy advice within the four thematic pillars of:

1. Africa-Europe stepped up cooperation in R&I for empowered public health systems
2. Strengthening R&I capacities in Africa focusing on both regional and bilateral cooperation
3. Innovation and technology revolution
4. Green Transition in Africa

The group will work until October 2021 and will present four evidence-based policy papers showcasing recommendations on how to improve R&I strategies including future demands of science, technology and innovation to the AU-EU Strategy, appropriate instruments to be used and an improved dialogue between AU and EU policy makers in the context of political priorities and cooperation.

Methodology and Process

The methodology used to elaborate the studies includes situational analysis such as literature reviews, mapping of R&I collaborative activities, actors and stakeholders, SWOT analysis, case studies and interviews with research actors / institutions and stakeholders.

The development process is accompanied by a series of events to enable lively exchange between policy makers and practitioners from across Africa and Europe with the AG on the four priority areas.

Priorities and first outcomes / key messages of the experts:

1. Empowered public health systems:

Lead: Prof Sonia Abdelhak, Prof Marleen Temmerman, Dr Yosr Hamdi and Nellah Ndaka

Responsible R&I empowers health systems and improves its responsiveness to future challenges and threats. It is a lever to achieve the SDGs. High-quality innovative research is important for improving population health and well-being and for achieving the health-related SDGs.

The experts will focus on 3 priorities:

1. Research and Innovation:
 - Strengthening responsible R&I capacities in Africa, focusing on pandemic preparedness
 - Health systems research
 - Support for a genomic consortium and precision medicine
 - Technology, digitalisation and data
2. Ethics and Regulatory Environment
 - African Medicine Agency in collaboration with EMA
 - ACDC and ECDC
3. Bridging R&I and policy making mechanisms: implementation of research to drive policy making.

2. Strengthening R&I capacities in Africa

Lead: Anneline Morgan and Barbara Dlamini

The funding for research, development and innovation – still remains a key challenge in Africa with funding still below 1% of GDP for R&D. Among these challenges is also weak IP and Technology Transfer systems and weak innovation capacities to support socio-economic development. Key policy messages to inform the strengthening of research, innovation and infrastructure capacities in the Africa-Europe cooperation will be motivated around the following strategic focus areas:

1. STI policy governance and measurement
2. R&I infrastructures
3. Human capacity or capital development
4. R&I priorities
5. Funding
6. International cooperation, partnerships and networks
7. Mechanisms for monitoring, evaluation, reporting and learning
8. Crossing –cutting issues: gender, youth and society

Case studies mapped in key strategic focus areas such as capacity building and mobility programmes; funding initiatives for R&I; Science, Technology, Engineering and Mathematics (STEM) education awareness and capacities; research infrastructures and African-European cooperation partnerships; and initiatives for SMEs and start-ups and the importance of public private and academia partnerships.

3. Innovation and technology revolution

Lead: Samir Abdelkrim, Bosun Tijani, Julie Lanckriet-Goerig and Bunmi Ajala

The emerging technology and innovation ecosystems on the continent are now driving significant value by strengthening the technical efficiency in critical industries. To scale the progress however, Africa must reinvent the approach of building innovation systems by leveraging an extensive network and relationship to deepen the support for innovators and access to knowledge and expertise to create unprecedented value. First key messages are:

- A network approach is needed to build innovation capacity.
- The private sector is a key actor in the innovation ecosystem (building bridges between African and European private actors).
- Knowledge is a key driver of digital transformation (technology transfer between Africa and Europe for mutual benefit)
- Beyond start-ups, research and academic institutions are crucial players in the emerging innovation ecosystem.
- The use of policy, regulations and institutions are champions of innovation (policy exchange and dialogue between Africa and Europe).
- Unlocking counterpart funding is needed for research and innovation.

4. Green transition in Africa

Lead: Prof Daniel Nahon and Prof Leonardus Vergütz

First key messages from the group include:

- The needed scientific knowledge to boost Africa's green transition must be developed in situ, by African scientists/researchers, in local institutions and in collaborative research with European universities.
- These institutions should be connected, and 10 key institutions should be selected to follow the European model of living labs/lighthouses in order to avoid the common problem of having heavy investments to set up research facilities which just disappear with time due to the lack of continuous and sustainable support in the long term.
- There is a need for a framework to optimise investments in Africa, to work on the synergies and to bring governance.
- By securing the soils, the health systems will improve by complying with health-related SDGs, building resilient ecosystems against emerging diseases and climate change, assuring food security and food quality, improving C sequestration and fighting climate change, and avoiding chemical and biological pollution. To achieve that multidisciplinary and integrative research is needed.
- Green transition will create green jobs and start-ups (e.g. development of green energy solutions for smallholder farmers), making Africa a hub of sustainable technology and innovation. Circular economy is also at the core of the green transition in Africa, assuring its sustainable development.
- There is an urgent need to develop green energy parks and technology in Africa and build electricity grids. These solutions should also be developed thinking about the remote areas of Africa, to come up with green energy solutions for smallholder farmers.