

Communiqué on Emerging Paradigms, Technologies and Innovations for Sustainable Development: Global Imperatives and African realities

By

Delegates of the 2012 African Technology Policy Studies Annual Conference and Workshops Hosted by the African Union Commission at its Headquarters, Addis Ababa, Ethiopia, 19 – 21 November 2012

Preamble:

The African Technology Policy Studies Network (ATPS) convened a delegation of Ministers, academia, private sector and civil society to deliberate on *emerging paradigms, technologies and innovations for sustainable development: global imperatives and African realities* in a post Rio+20 world. Delegates were drawn from Africa, Australia, Europe, United States of America and India.

The conference which was hosted by the Africa Union Commission at its headquarters in Addis Ababa, Ethiopia recognised that:

- Only the mastery and unremitting application of science and technology can guarantee human welfare, human happiness and the achievement of sustainable development goals on the continent
- The important role for science, technology and innovation is recognized by African Heads of States in their various declarations including the Lagos Plan of Action, the AU/NEPAD Consolidated Plan of Action (CPA), amongst others.
- The Africa Union with the support of its development partners has made steady progress in mounting programs and initiatives for the implementation of the CPA. These commendable efforts need to be strengthened and sustained through targeted investments in STI policy institutions and networks on the continent including the ATPS;
- Whereas African economies have recorded improvements in Gross Development Product (GDP) growth and in the application of STI including the mobile telephony and telecommunications, and space technology during the past decade, the

continent has not fully reaped the benefits afforded by science, technology and innovation for inclusive sustainable development;

- STI led development requires strong leadership commitment and concerted investments in endogenous capacities at all levels: education, institutions, governance, technology development and transfer, deployment, diffusion and regulation.
- The ATPS remains a formidable and unique network in 30 countries (27 in Africa and 3 Diaspora chapters) building Africa's STI capacity today for sustainable development tomorrow.

The delegates observed that:

- Africa has a comparative advantage for transitioning to a low carbon development pathway that is inclusive, sustainable and resource efficient.
- If supported by endogenous research and capacity building, some emerging technologies and existing sustainable development practices on the African continent can help to improve productivity and resource efficiency for inclusive development in Africa.
- Social innovations provide opportunities for enhancing economic growth and social prosperity through youth employment, entrepreneurship and value creation.
- African Universities stand to benefit from the mainstreaming trans-disciplinary research and teaching to overcome the weak collaboration and coordination that exist between disciplines, universities, industry, the public sector and civil society in Africa.
- African countries are not effectively harnessing the untapped potential of the continent's bulging youth and women population for development.
- Africa's development must focus on industrialisation, wealth creation and diversification of energy sources to include renewable energy options.

Recommendations:

- Africa needs to lead its own dialogue on low carbon development and green growth; and proactively invest in the required capacities to ensure African ownership of the inevitable transitioning processes that are unfolding globally.
- There is a need for a shift towards trans-disciplinary teaching and research approaches to encourage collaboration and networking across disciplines and between universities, the productive sectors and civil society, with special reference to innovation-driven value addition, employment creation and inclusive development strategies.

- In order to harness the resource potential for productivity improvements in Africa, urgent and significant investments is required in STI education and research to build endogenous capacities for appropriate technology development, diffusion, deployment and regulation.
- Harnessing the opportunities for social innovations will require a favourable policy environment, incentive structures, innovation incubation, training and mentorship in entrepreneurship.
- Proactive measures to harness the potentials of the youth and women in STI policymaking and implementation are necessary pre-requisites for achieving the Sustainable Development Goals (SDGs) in Africa.

Addressing these policy recommendations is critical to fostering self-ownership and democratic governance of STI which are the imperatives for sustainable development. This is urgently needed to ensure that Africa can effectively engage in the rapidly unfolding green growth paradigm which is likely to constitute the *'third industrial revolution'*.

Appreciation:

Delegates expressed appreciation to the African Union Commission for its assurances of continued support for ATPS as a continental think tank and resource to be harnessed for further development and implementation of STI policies.

Delegates further expressed appreciation to ATPS Development Partners for their continued support.