



Sixth annual Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals

Sharing Ghana's Experience with STI4SDGs Roadmap Development

In 2019, Ghana, together with Kenya, Ethiopia, Serbia, and India started the journey to pilot the STI4SDGs Roadmap preparation, out of the conclusions of the three UN Science, Technology, and Innovation (STI) Forums held from 2016-2018, and which highlighted the urgent need for the use of well-coordinated STI Roadmaps in the attainment of the SDGs at all levels; global, continental, and national.

The decision to accept the pilot status without necessarily questioning financial resources was a clear indication of the country's commitment to put STI as the fulcrum of its development agenda. The task was assigned to the CSIR- CSIR-Science and Technology Policy Research Institute (STEPRI) directorate to coordinate the development of the framework with some technical and financial support from UNESCO Ghana and the Ministry of Environment, Science, Technology, and Innovation (MESTI).

The process was started with a zero draft action plan for the development of the roadmap by STEPRI and presented to the MESTI. After it had been improved at a validation workshop later, the outlined activities were rolled out.

This led to the formation of a Technical Task Team (TTT) with representation from all relevant institutions and stakeholders including policy makers, government officials, civil society, private sector players and the youth to oversee the development of the Ghana's STI4SDGs Roadmap initiative. A very significant aspect of the TTT is the involvement of the office of the President in the person of the Presidential Adviser on the SDGs, who doubled as a Co- Chair with the Chief Director of MESTI. CSIR-STEPRI played the role of a lead facilitator and technical support with some funding support from UNESCO and MESTI.

The first task of the TTT after validating their action plan at a workshop was to conduct a Situational Analysis by the Research Team at CSIR- STEPRI led by Dr Esegbe, and some members of the TTT with the objectives to (i) review the current state of STI in the country with respect to institutional capacities, human resources, research and development programmes and policies; (ii) review the STI Policy, SDGs plans and Development Plans to identify inter-linkages; and (iii) assess the current situation regarding the targeted SDGs and STI ecosystem to ensure a coordinated and well-constructed roadmap or framework.

The situational analysis of STI4SDGs Report was then validated by expert group consultation and the Technical Task Team. Findings from the situation analysis of the STI4SDGs set the basis for the development of the STI4SDGs Roadmap in 2020.

While accepting the relevance and importance of STI in all the SDGs the technical task team and the expert group at a workshop agreed to select seven (7) of the SDGs with the understanding that the successful implementation of these could lead to the realization of the remaining ones. Those selected were the SDG 1 (No poverty), SDG 2 (Zero hunger), SDG3 (Good Health and Well-Being), SDG4 (Quality Education), SDG6 (Clean Water and Sanitation), SDG8 (Decent Work and Economic Growth) and SDG9 (Industry, Innovation, and Infrastructure).

While in the process of finalising the roadmap, and recognizing the importance of some of the findings from the situational analysis, four (4) policy briefs have been developed from the findings from the situational analysis these include (i) policy brief on conceptualizing STI4SDGs roadmaps: an actionable strategy aimed at accelerating the achievement of SDGs using STI, (2) policy brief on review of the STI policy, SDGs and development plans and the inter-linkages, (3) policy brief on assessment of STI capabilities to meet prioritized SDGs, and (4) policy brief on harnessing innovation potential of the Ghanaian youth for the attainment of the SDGs.

Ghana's STI4SDGs Roadmap has detailed STI actionable strategies for all-inclusive access to improved healthcare services and leaving no-one behind. The healthcare systems are being upgraded with focus on retooling of existing health facilities and construction of new ones. The roadmap being developed in the COVID-19 era has recognized that investments in digital technologies for epidemics and pandemic planning, surveillance, testing, contact tracing, quarantine and health care in

general are crucial for the socioeconomic development of our nation. Equally important is research into public health, clinical characterisation, and management of pandemics to inform policy.

The STI4SDGs Roadmap therefore highlighted key programmes including (i) improving quality of healthcare delivery and public health through the application of STI, (ii) improving emergency preparedness and management of epidemics and pandemics such as COVID-19, Severe Acute Respiratory Syndrome (SARS), Ebola and Lassa Fever (iii) strengthening technological capability needs and capacity building, and (iv) improving nutrition and healthy dietary practices and lifestyles.

Secondly Ghana's economy is an agrarian one and so our STI4SDGs Roadmap highlights strategies that would ensure sustainable food production and processing systems incorporating climate resilient agricultural practices. Through the implementation of flagship projects such as 'planting and rearing for food and jobs' as well as 'planting for export and rural development' Ghana has been promoting agriculture as a viable business among the youth. Modernization of the agriculture sector cannot be achieved without application of STI. Our research scientists, together with extension officers of the Ministry of Food and Agriculture are promoting the adoption of productivity improvement technologies such as greenhouse production systems and biotechnology applications for improved breeding.

Human capital for sustainable development is critical. To accelerate the achievement of SDG4 targets, the STI4SDGs Roadmap details SMART Education strategies to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030. There are on-going educational reforms centered on competence building, creativity and entrepreneurial skills development at all levels of education. We have taken measures to promote Science, Technology, Engineering and Mathematics (STEM) at all levels of education.

With regards to Industry, Innovation and Infrastructure (SDG 9), three key programmes have been highlighted in the STI4SDGs Roadmap including (i) improving access to quality STI education that response adequately to industry needs, (ii) creating enabling environment for strong private sector participation in sustainable development, and (iii) improving access to finance and infrastructure

by industry players particularly empowering women owned SMEs to spur economic growth and development.

Ghana is vigorously pursuing an industrialization agenda through: (i) a stimulus package/fund arrangement for selected distressed but viable local companies; (ii) one-district-one factory flagship programme; (iii) strategic anchor industrial initiatives focusing on petrochemicals, iron and steel, integrated aluminium, pharmaceuticals, automotive, industrial salt, garment and textiles, among others; and (iv) industrial subcontracting exchange programme that seeks to link SMEs to feed large-scale enterprises.

Let me emphasise here that the review and consultation process as well as the selection of the seven SDGs as key priorities in developing the STI4SDG roadmap was informed by existing frameworks such as the national development planning framework, the coordinates programme of economic and social policies(2017-2024) national budget statements, the Ghana Beyond Aid policy framework, and SDG status of implementation reports among others, developing the framework efforts have been made to ensure that policies and programmes are aligned to various organisations and institutions to ensure mainstreaming and ensure sustainability of the recommended programmes and actions locally with little external support.

Concluding, I would like to highlight the fact that the process for the development of Ghana's STI4SDGs roadmap has led to a home-grown document, which can be embraced by all. Key policy briefs have already been drafted for ready adoption and use; it is a sustainable roadmap with institutional mechanisms for mainstreaming STI. It therefore lends itself to tackle developmental challenges confronting us with the use of STI. Thus, to drive the attainment of the SDGs using STI, we draw attention to the need to (i) avoid over-reliance on foreign expertise, (ii) strengthen institutional coordination and institutionalise mechanisms for monitoring and evaluation of STI4SDGs strategies and (iii) increase resource allocation for research and development. In this regard, we promote international collaborations and partnerships among Member States, and sharing of innovative ideas on what works and what does not particularly during this STI Forum engagements.

Thank you for your attention.

