

REALIZING THE POTENTIAL OF STI FOR ALL TO ACHIEVE THE SDGs

GEORGE OWUSU ESSEGBEY (PHD)
**SCIENCE AND TECHNOLOGY POLICY RESEARCH
INSTITUTE (STEPRI) OF THE CSIR OF GHANA
ACCRA**

www.csir-stepri.org



Background

- Agenda 2030 for Sustainable Development reaffirmed **STI** as key means of implementation of the SDGs => TFM with its integral Annual Multi-stakeholder **STI Forum**.
- 2016 and 2017 underscored the importance of STI Roadmaps.
 - 1st STI Forum highlighted as priority "*flexible, participatory STI action plans and technology roadmaps*" at national and global levels to support SDG achievement.
 - 2nd STI Forum highlighted the need to create action plans and roadmaps that incorporate STI into national planning efforts addressing the SDGs.
 - 2nd STI Forum also emphasized STI capacity building in each country, including building human capacity and strengthening the science advisory ecosystem and the STI policy framework.
- Thus we need to be building on the outcomes of these fora and specifically address the issue of **STI Roadmaps for SDGs**.



The Rationale

- Both the STI Fora of 2016 and 2017 focused on SDG 1,2,3,5, 9, 14 (17 added in 2017). These are goals needing clear targets, benchmarks/ milestones.
- For the developing world, the SDGs are of the highest relevance.
- Take SDG1- *End poverty in all its forms everywhere*
- Global poverty at income less than \$1.90 is about 10.9%. But this masks the seriousness of poverty incidence in various regions as in 2018 (by World Bank estimates) e.g:
 - **Sub-Saharan Africa – 42.5%**
 - **South Asia – 15.1%**
 - Latin America & the Caribbean – 4.5%
 - East Asia and Pacific – 3.6
- Yet the world has the means and tools in STI for eliminating poverty from all human societies.



The Rationale

- SDG2 - *End hunger, achieve food security and nutrition and promote sustainable agriculture*
- According to WFP statistics, **815 million** people (one in nine) in the world do not get the **food** they need to live a healthy life. The key highlights:
 - Africa – one in four (**prevalence**) is hungry;
 - Asia – two thirds of the hungry.
 - Poor nutrition causes nearly half (45%) of deaths in children under five - 3.1 million children each year across the world.
 - One out of six children - roughly 100 million - in developing countries is underweight.
 - One in four of the world's children are stunted. In developing countries the proportion can rise to one in three.
- Yet, we are talking about something as ordinary as food! And the world has STI to more than address these challenges.



The Rationale

- The 3rd STI Forum aims to focus on SDG 6, 7, 11, 12, 15.
 - 6. Clean Water and Sanitation
 - 7. Affordable and Clean Energy
 - 11 Sustainable Cities and Communities
 - 12. Responsible Consumption and Production
 - 15. Life on Land
- These SDGs still present the practical challenges facing the world and what STI can do. Note current estimates by WHO/ UNICEF Joint Monitoring Program, 2017:
 - Water: 3 in 10 people worldwide, or 2.1 billion, lack access to safe, readily available water at home,
 - Sanitation: 6 in 10, or 4.5 billion, lack safely managed sanitation.
- Yet, there are diverse technologies and innovations to address the water and sanitation challenges facing the world. Why we are still plagued with these challenges is the reason we should discuss the STI Roadmaps for SDGs.



Why STI Roadmaps?

- ***Why do we care about STI Roadmaps for SDGs?***
- STI provides the tools to address the challenges to achieving SDGs. However, we need clearly detailed plans for doing this. It is like building a house and an architect has to draw specific plans for the building.
- At the 2015 Sustainable Development summit, the Prime Minister of Norway Erna Solberg said “A little less conversation, a little more action please” (quoting Elvis Presley, 1968)
- We can continue with “.....A little more bite and a little less bark” => STI Roadmap brings the action and the needed bite!



STI Roadmaps for SDGs

- ❑ ***What do STI Roadmaps for the SDGs look like?***
 - ❑ Generally STI Roadmaps need to highlight clearly the focus/ foci for action e.g. food and nutrition security, good health and well-being, water and sanitation, affordable and clean energy
 - ❑ We expect to how particular technologies (**conventional and emerging**) can be harnessed and applied to the achievement of the priority goals e.g. food and nutrition security – what are the key technologies? Improved seeds, fertilizers, pesticides, agricultural machinery, irrigation systems, storage facilities, agricultural information tools and services, quality assurance systems, market systems to assure access and profit.
 - ❑ What are their possible common elements? Priorities, targets and benchmarks; Institutional responsibilities; implementation strategies, M&E systems, governance structures, etc.
-



Challenges and Lessons

- ***What are challenges and lessons from formulating and implementing STI Roadmaps for the SDGs in line with national development plans, and possible recommendations to countries to maximize STI contribution to accelerate progress toward the SDGs?***
 - **Easy** part of formulating roadmaps – Extracting the priorities of the national development plans, breaking it down along the SDGs, specifying the STI actions to achieving objectives and targets. It is almost academic.
 - **Difficult** part – Strengthening the formulating process by ensuring a full stakeholders' participation and buy-in.
 - Beyond that, the **IMPLEMENTATION!** Challenges with resource allocation, institutional and individual responsibilities and adherence to schedule.
-



The Experience of Ghana

- No explicit STI Roadmap for SDGs yet. But we have:
 - - STI Policy
 - - Sector-specific policies and thematic policies (e.g. food and agric, health, industry, environment, education, etc.)
 - Revised the National STI Policy of 2010 and it is before Cabinet with 2 important considerations:
 - Bill for Presidential Advisory Council on Science, Technology and Innovation (**PACSTI**) – an independent advisory body, to be situated at the seat of Government, and mandated to advise the President on all matters of STI.
 - Bill for STI Fund to provide the needed resources for STI activities
 - Inter-ministerial Committee on SDGs (elaborated further)
 - Technical Committee on SDGs (elaborated further)
-



The Experience of Ghana

- The **Inter-Ministerial Committee on SDGs** – For inter-sector coordination and synergy. The Minister for Planning chairs and members include the Ministers for Trade and Industry; Foreign Affairs; Finance; Food and Agriculture; Attorney General; Environment, Science, Technology and Innovation; Education; Health; Sanitation and Water Resources; Local Government and Rural Development; Gender, Children and Social Protection; Employment and Labour Relations.
- **SDG Implementation Coordination Committee** - It provides technical support to the implementation and monitoring of the SDG agenda. The National Development Planning Commission (NDPC) chairs this multi-stakeholder committee with cross-government representation as well as members from Civil Society Organisations (CSOs), the private sector, and academia. Ghana Statistical Service (GSS) is a member of the Committee and acts as the data champion for the SDGs at the national level.



Conclusion and Recommendations

- We are only about to hold the 3rd STI Forum. But already we have the conviction that **STI Roadmaps** are critical to the achievement for the SDGs.
- At the national level, we need the STI Roadmaps to capture the context-specificity for action on the priority SDGs.
- The elaboration of the STI Roadmap will bring focus to national strategies for action, spell out institutional responsibilities and provide a framework for M&E.
- STI Roadmaps are blue-prints for prioritization of technologies for harnessing in the same way as they set priorities for resource allocation and disbursement.
- We need to develop a template for member countries to customize

□ We need to have a team of experts to provide assistance



End of slides....

□ **THANK YOU!**

