

### Strengthening the National Research and Innovation Funding Agencies in West Africa (SRIFA)

### REPORT ON VALIDATION, CO-DEVELOPMENT AND CO-DESIGN OF TRAINING PROGRAMME AND TECHNICAL SUPPORT WORKSHOP IN NIGERIA

Event Dates: 25-26 March 2024

Prepared by:

Prof. Nicholas Ozor Executive Director, African Technology Policy Studies Network (ATPS), and SRIFA Principal Investigator, Chancery Building, 8th Floor, Valley Road, P. O. Box 10081-00100, Nairobi, Kenya Email: <u>executivedirector@atpsnet.org</u>

Submitted to:

Dr. Matthew Wallace Senior Program Specialist, International Development Research Centre (IDRC) Ottawa, Ontario Canada. <u>mwallace@idrc.ca</u>



#### INTRODUCTION 1.1 Background and Justification

The Science Granting Councils Initiative (SGCI) in sub-Saharan Africa recognizes the critical role of national agencies in charge of funding of research and innovation referred to as Science Granting Councils (SGCs). The SGCs are responsible for driving research and innovation (R&I) for social and economic development. In West Africa, efforts are underway to strengthen existing SGCs where they exist as well as to establish new ones where they do not exist to bolster R&I capacities in the sub-region. With support from the SGCI, the African Technology Policy Studies Network (ATPS) in partnership with the African University of Science and Technology (AUST), is working to provide training and technical support to SGCs in Burkina Faso, Côte d'Ivoire, Ghana, Nigeria, Senegal, and Sierra Leone. Preliminary studies conducted through desk reviews, surveys, key informant interviews, and focus group discussions have informed the development of draft reports on each of the participating countries. With a 2-day validation and co-development workshop, the training needs and technical support is refined and finalized for subsequent delivery of tailored training and technical support to the Councils in the respective countries.

The landscape of R&I funding, policy, and practice is dynamic, requiring Councils or their equivalent in West Africa to continuously evolve and build their capacities. Despite their dedication to R&I, these Councils or their equivalents encounter challenges such as limited resources, policy inconsistencies, and knowledge gaps among staff. Existing training programmes often lack regional specificity and fail to address the unique needs of West Africa. Worse still is that some countries in the sub-region are vet to establish a research and innovation funding Council. Therefore, the proposed workshop aims to validate and refine training programme content by engaging the Council staff or its equivalent in the participating countries in reviewing and providing feedback on designed modules; prioritizing topics relevant to emerging R&I trends. Additionally, to build the capacity of the Councils and/or establish a new Council where it does not exist, the workshop seeks to co-develop and tailor technical support delivery approaches in collaboration with the relevant stakeholders; integrating innovative methods such as blended learning and peer-to-peer exchange. It aims to foster ownership and commitment among participants through active participation, open discussions, and shared decision-making, while developing strategies for long-term engagement and knowledge sharing. Furthermore, the workshop aims to strengthen regional collaboration and partnerships by facilitating networking and communication between Council representatives and identifying opportunities for joint research projects, policy initiatives, and resource mobilization within the sub-region.

### 1.2 Goal of the Validation and Co-Development of Training Programme Workshop

The goal of the workshop was to validate the preliminary results on policy and institutional landscape, comprehensive stakeholder mapping and analysis, and needs assessment of the research and innovation funding ecosystem in the participating countries and co-develop a tailor-made training and/or technical support programme for each of the Councils/funding agencies. Specifically, the Workshop seeks to:

- a) Validate the content and structure of the training programme designed to strengthen Science Granting Councils in West Africa.
- b) Facilitate collaborative refinement and prioritization of needs in order to develop the training programme through inputs from key stakeholders.
- c) Foster knowledge exchange and peer learning among participants to enhance the effectiveness of capacity-building efforts.

d) Generate actionable insights and recommendations to ensure the relevance and impact of the training programme.

### 1.3 Methodology for the Workshop

The workshop was held physically and virtually for the benefit of those unable to join physically in Abuja, Nigeria at the Tertiary Education Trust Fund (TETFund). The workshop involved two-day engagement sessions with relevant stakeholders including ministries and agencies in research and innovation funding. The first day involved presentation and the validation of results and prioritization of training needs and technical support while the second day involved the co-development of training and technical support programmes with the stakeholders This 2-day workshop employed highly interactive and collaborative approaches. The project team actively participated in the workshop led by the PI of the project Prof Nicholas Ozor, the Executive Director of the African Technology Policy Studies Network (ATPS), Nairobi, Co-PI of the project Prof. Peter Onwualu (President of AUST) supported by the Project Officer, Dr. Cynthia Nwobodo. Other project team members included Alfred Nyambane (Programme Manager, ATPS), Dr Joel Nwakaire (Team member, ATPS, Doreen Ongoro (Finance and Admin Officer, ATPS), Wentland Muhatia (Team member (ATPS), and Susan Mburu, (Communication and Outreach Officer), Dr Prisca Onuoha, (Partner, AUST), Chukwuemeka Uwanaka (Partner, AUST). The team reviewed and refined the reports through presentations, group discussions, and brainstorming sessions. The focus was on co-developing training delivery methods and tools tailored to the Council's preferred learning styles, national, and regional contexts. The workshop was expected to foster ownership and commitment by encouraging open dialogue, shared decision-making, and strategies for long-term engagement as well as gender equality and social inclusion. Additionally, the networking opportunities are expected to facilitate regional collaboration and knowledge exchange among SGCs and stakeholders, strengthening R&I ecosystems across West Africa.

### 1.4 Expected Outputs and Outcomes of the Workshop

- a) Validated and refined training programme tailored to the needs of Science Granting Councils in West Africa.
- b) Enhanced collaboration and mutual learning among stakeholders involved in research and innovation funding.
- c) Actionable recommendations for the effective implementation and sustainability of the training programme and technical support.

# DAY 1: UNDERSTANDING POLICY AND INSTITUTIONAL LANDSCAPE, COMPREHENSIVE STAKEHOLDER MAPPING OF THE RESEARCH AND INNOVATION FUNDING ECOSYSTEM

The presentation of the report on the preliminary studies was followed by an open interrogation of the content of the report with interactions and comments from the different stakeholders. These gave rise to identification of some very important policies and relevant institutions in the research and innovation funding landscape of Nigeria. Upon reviewing the policy instruments in the presented document, the stakeholders emphasized the following policies:

- National Science, Technology & Innovation Policy (NSTP) 2012, 2022
- National Science, Technology & Innovation Roadmap 2030 (2017)
- National Economic Empowerment & Development Strategy (NEEDS, 2004)
- Presidential Executive Order 005 (2018)

- National Policy on Public Private Partnerships (2018)
- National Agriculture Technology & Innovation Plan (2023-2025)
- The Revised National Science, Technology and Innovation Policy (NSTP, 2022)

Upon discussions, emphasis was made of a Bill for the establishment of a national research fund which was on the floor of the 9<sup>th</sup> Assembly and how to resuscitate it to ensure the establishment of the Council in Nigeria. It was noted that the existing funding structure was sector-based, with various Ministries, Departments & Agencies (MDAs) funding research through research institutes. The existing governance structure was established by NSTIP 2011, and it includes:

- National Research & Innovation Council (NRIC)
- Ministry of Science, Technology & Innovation (FMSTI)
- National Council on Science, Technology & Innovation (NCSTI)
- State Science, Technology & Innovation Council (SSTIC)
- Tertiary Education Trust Fund (TETFund)
- Central Bank of Nigeria (CBN)
- Petroleum Technology Development Fund (PTDF)
- Nigerian Content Development & Monitoring Board (NCDMB)

The stakeholders identified TETFund, FMSTI, and FMAFS as top influencers and drivers of research funding. They also identified the Ministry of Finance Incorporated (MOFI) which is the investment arm of the Ministry to be a major player in the research and innovation funding in Nigeria. Stakeholders emphasized the need to revive the bill proposing a national research foundation, previously stalled in the 9th Assembly. Including the private sector from the outset of discussions regarding the Council's establishment was deemed crucial. A clear and well-defined plan for funding sources is necessary to avoid conflicts of interest. The importance of intellectual property (IP) security and commercialization strategies were also highlighted.

After this general discussion, participants went into a brainstorming session in their two different groups to prioritize the training needs and technical support as presented. The Working Group One presented a prioritized training needs and technical support which was criticized and adopted by the general group as follows:

Priority Training Needs	Level of Priority	Justifications
Financial Management	1st	Important in evaluating project proposals effectively, assessing budgetary requirements accurately, and to allocate funds in a judicious manner.
Grant Management & Disbursement	2 <sup>nd</sup>	Provides knowledge and skills needed to administer grants effectively, including understanding grant requirements, setting appropriate milestones, and maintaining compliance with funding guidelines.

Financial Reporting	3 <sup>rd</sup>	Ensures transparency and accountability as well as compliance with regulations and standards.
Online Management of grant calls	4 <sup>th</sup>	Ensures efficient grant call management and provides for easier data management and control.
Research Management	5 <sup>th</sup>	To equips stakeholders with the knowledge and skills to critically assess the scientific merit, feasibility, and potential impact of proposed research projects.
Commercialization of Research Output	6 <sup>th</sup>	To enable staff to identify opportunities for translating research findings into commercially viable products or services, maximizing the return on investment and societal impact of funded projects.

The priority technical support and their justifications are presented in the table below:

Priority Technical Support	Level of Priority	Justifications
Development of Strategic STI Documents	1 <sup>st</sup>	Provide a framework for aligning research funding priorities with broader societal, and economic goals
High-Level Policy & Stakeholder Engagements	2 <sup>nd</sup>	Contribute to the decisions of policy makers and, for the development of evidence-based policies that foster a conducive environment for research and innovation
Advocacy for Increased R&I Funding	3 <sup>rd</sup>	To help raise awareness among policymakers, industry leaders, and the general public about the critical importance of investing in research and innovation.
Consultations with Parliamentarians	4 <sup>th</sup>	Effective consultations can influence legislative decisions that directly impact the operations, funding mechanisms, and the broader research and innovation ecosystem.
Breakfast Meetings/Workshops	5 <sup>th</sup>	To provide valuable opportunities for stakeholders to network, build relationships, and foster collaboration.
Preparation & Presentation of Seminal Papers	6 <sup>th</sup>	It positions the funding agency as an thought leaders in the research and innovation funding space. It also helps in facilitating the dissemination

	of cutting-edge research, insigh perspectives.	s, and
--	--	--------

# DAY 2: CO-DEVELOPING TAILOR-MADE TRAINING AND TECHNICAL SUPPORT PROGRAMMES

Based on the prioritized training needs and technical support, the two working groups were required to work on the co-development of tailor-made training programme and technical support under the five pre-identified areas namely: content, gender and social inclusion, challenges, solutions, and emerging issues. After a rigorous brainstorming session, the Working Group One presented the outcome of their task on the development of training programme which was interrogated and adopted by the general group as follows:

Priority	Content	Gender equality and inclusion strategies	Challenges	Solution	Emerging Issues
Financial Management	Training needs design should highlight collaboration between manufacturers/private sector, priority matrix, target setting, and adoptions of local content.	should adopt existing working groups, should display	Education/research output segmented into sectors: polytechnics, research institutes, this hinders equitable distribution; address the gap in adoption for technical schools and skills		Emerging issue: Focus on peculiarity in Nigeria to steer research interest, and use of AI.
Grant Management and Disbursement	Digital grant management	Gender cross cutting approaches should be adopted	Irregular Monitoring, evaluation, and learning; Inadequate record keeping systems; delay in report submissions	Resultbasedfinancing;adoptionofsystemforenhancingadherencetotimely monitoring,evaluationandlearning	practice; adequate and

Financial Reporting	Need for content digitization: development of an App.; Training should cut across all cadre of officers; bookkeeping techniques	cross cutting strategies	Lack of adherence to timely report submission; delay in implementation; poor bookkeeping; irregular bookkeeping	Digitalization	An innovative financial report mechanism should be adopted with adequate training.
Online Management of Draft Calls	Pre and post-call webinars	Gender cross cutting strategies should be adopted	Prone to hacks	Basic digital literacy	Transformative digital technology can pose a threat.
Research Management: Training and Capacity Building	Relevant training for operators and beneficiaries		Inadequate funding	Crowdfunding	Continuous training and bench marking
Commercialization of Research Output		inclusion should be	clear/detail research pathway,	be available for pathway to commercialization	

It was noted that from the outset research should be approached with commercialization, demand-driven and gender and social inclusion factored in. There should be training for the researchers and funders to drive the research and innovation funding agency. The training should focus on how to build linkages between researchers and the private sector and sustaining relationships. Stakeholders requested technical support in the following areas:

Priority	Content	Gender equality and inclusion strategies	Challenges	Solution	Emerging Issues
Development of Strategic	Assess, simply and address overzealous	Gender-sensitive policy; Promote	Infrastructural Deficit;	Provide funding; Advocacy;	Artificial Intelligence

STI Documents Such as Policies and Policy Implementati on Strategy.	policies by policy analysts, bring in professionals; Investment in R & D; Promote public awareness campaign	diversity/inclusion in leadership; Addressing Societal Norms and Cultural Barriers	Language barrier; Administrative bottlenecks /bureaucracy; Policy Fragmentation	Increase access for education for women; Development of innovation ecosystem/ infrastructure hub (Science Parks, Innovation Hubs)	(AI); Climate change; Disruptive technologies
High Level Policy and Stakeholder Engagements	5	Include the vulnerable and special needs group; Ensure diverse representation in executive leadership	Getting the stakeholders to be present; Obtaining government buy -in; Time frame for implementatio n; Policy somersault (change in management)	Sustainability strategies for policy regulation; Strict adherence of policy implementation	Role of technology in effective engagement of stakeholders; Spirit of collaboration and partnership
Support on advocacy for increased R&I funding	Having an audience, public awareness; Identification of R & I funding bodies (government, private sector, international collaborations; Headline Benefits of innovation; Development advocacy documents	Gender mainstreaming and social inclusiveness in mapping stakeholders.	Corruption; Lack of accountability by receiving bodies; Lack of success stories; Lack of deployment of research outcomes	Use of technology; Proper data management and reporting	Enhancing National and international collaboration s.
Consultations with selected parliamentari ans on R&I funding	selected Parliamentary committees	Gender mainstreaming and social inclusiveness in mapping stakeholders.	Accessing Funding committees	Strong lobbying personalities	New media and Influencers
Breakfast meetings/wor kshops to advocate for	stakeholder roles;	Gender mainstreaming and implementation of socially inclusive strategies in	Low active participants of critical stakeholders;	Strong political buy-in at the highest level; Strong stakeholder collaborations	

the development of mechanisms and institutional framework for establishing a council		mapping stakeholders	Prompt Implementatio n of the engagement outcomes		
Preparation and presentation of seminar papers	innovation funding		critical	(TETFund in collaboration with FMSTI, ARCN,	of AI

### 1. Conclusion

The stakeholders took an active time to review the report of the preliminary study, prioritized the training need and technical support areas and participated in the co-development and co-design of the training programme and technical support to the establishment of A research and innovation funding Council in Nigeria. Stakeholders suggested the need for more public awareness to create insight into the importance of establishing the Council. They emphasized the need for inclusivity, noting the need for women, and persons with disability or persons with special needs and the marginalized group to make up at least 5% of the trainees. The funding agencies should target and train persons who have practical knowledge but are not educated on how to access it. They suggested that the training should commence in May/June 2024.

In providing technical support, the participants agreed to visit South Africa and/or Uganda for the benchmarking/learning as they have a very good and functional National Research Fund (NRF). There is also the need for training and re-training, advocacy and sensitization, formation of a community of practice to help sustain the outcome of training and technical support. The training process should include the measurement of sustainability, each training should be measured in terms of success so that as the training progresses some best practices can be adopted. ATPS should send the reports and policy briefs emanating from the workshop to all the major stakeholders. It will also be on ATPS and AUST websites and newsletters.

Stakeholders noted the benefits of joining the SGC and pointed out the critical role of TETFund. The efforts of TETFunds in the establishment of a National Research Fund under the Federal Ministry of Innovation, Science and Technology (FMIST) were acknowledged. The Director of TETFund noted that it will relinquish all that is required for the new research and innovation funding Council in Nigeria. The need for TETFund to move faster to establish the Council or National Research Foundation was emphasized. The ATPS promised that in a few

months from now, there will be a high-level policy dialogue which is expected to be major concrete step that will foster establishment of the Council.



A Group photograph of participants during SRIFA validation workshop in Nigeria

## Workshop Programme

Day 1: Understa	nding the Research and Innovation Funding Landscape	25th March 2024			
Morning Session: Opening and Overview					
9:00 - 9:30	Registration	Susan Mburu			
9:30 - 9:40	Welcome Remarks.	Prof. Michael Madukwe			
9:40 - 9:45	Introduction of participants	ALL			
9:45 -10:00	Opening Remarks.	Dr Suleiman Zangina			
10:00-10:20	Introduction to Workshop Objectives and Expected Outcomes.	Prof. Nicholas Ozor			
10:20 - 10:30	Group photograph	ALL			
10:30 - 11:00	Tea Break				
	Session 1: Presentation of Preliminary Result	8			
11:00 - 11:45	Presentation of Nigeria report	Dr. Cynthia Nwobodo			
11:45 - 12:45	Interactive Q&A Session.	Alfred Nyambane			
12:45 - 2:00	Lunch Break				
	Afternoon Session: In-depth Stakeholder Engage	ment			
2:00 - 3:30	Breakout Sessions: Stakeholder Group Discussions on Prioritization of Training Needs and Technical Support.	Dr. Cynthia Nwobodo/Alfred Nyambane/Wentland			
3:30 - 4:00	Group Presentations on Identified Challenges and Opportunities.	- Muhatiah			
4:00 - 4:30	Plenary Discussion: Key Themes Emerging from Stakeholder Engagements.				
4.30 - 6.00	Networking Session				

Day 2: Co-Developing	<b>Tailor-Made Programs</b>
----------------------	-----------------------------

26<sup>th</sup> March 2024

	Morning Session: Recap and Objective Settin	g
9:00 - 9:30	Registration	Susan Mburu
9:30 - 9:45	Recap and review of Day 1.	Dr. Cynthia Nwobodo
9:45 -10:30	Introduction to Co-development Process.	Alfred Nyambane
10:30 - 11:00	Tea Break	
	Session 2: Co-Development Workshops	
11:00 – 11:40Workshop 1: Designing Tailor-Made Training Programs.		ALL
11:40 - 12:20	Workshop 2: Identifying Technical Support Needs.	ALL
12:20 - 1:00	Cross-Group Discussions and Insights Sharing.	ALL
1.00 - 2.00	Lunchbreak	
	Afternoon Session: Implementation Planning	, ,
2:00 -2:30	Presentation of Co-Developed Program.	Council Representative
2:30 - 3:30	Feedback and Iterative Refinement.	ALL
3:30 - 4:15	Roadmap for Implementation: Timelines and Responsibilities.	Dr. Cynthia Nwobodo
4:15 - 4:30	Closing Remarks and Next Steps.	Prof. Peter Onwualu

## List of Participant

S/N	Name	Sex	Name Of Institution & Address	Position/Designat ion	Email	Phone
1.	Arch Sonny Ochono	М	Tertiary Education Trust Fund (TETFund)	Executive Secretary (ES)	ochonosto@y ahoo.com	08033062641
2.	Dr. Girei Bakare	М	Tertiary Education Trust Fund (TETFund)	(Director Research)	sgbakari@ya hoo.co.uk	0809091089
3.	Hadiza Ismail	М	Tertiary Education Trust Fund (TETFund)	Deputy Director	hadiza71@g mail.com	08037874170
4.	Prof Garba Hamidu Sharubutu mni	М	Agricultural Research Council of Nigeria (ARCN)	Executive Secretary	<u>gsharubutu@</u> gmail.com	08036444451
5.	Dr Nnemeka Edith Ihegwuagu	F	Agricultural Research Council of Nigeria (ARCN)	Assistant Director/ Agrochemist, Country Focal Point for IFPRI-CORAF-A STI.	nneihegwuag u@gmail.co m, edithnnemeka @gmail.com	08036490205
6.	Dr Suleiman Zangina		Tertiary Education Trust Fund (TETFund)	Deputy Director	suleimanzang ina@gmail.co m	07086285822
7.	Mr. Agoro Olayiwola	М	Federal Ministry of Science, Technology and Innovation	Deputy Director	<u>layiagoro@h</u> otmail.com	08034526695
8.	Dr. Victor Fadipe,	М	Federal Ministry of Science, Technology and Innovation	Deputy Director	<u>vobfadipe@g</u> <u>mail.com</u>	09053351950

9.	Prof Deboral Odejimi	F	Dean, School of PG School, Igbenedion University Okada	Dean PG	drodejimi@g mail.com	08053311615
10.	Prof Magnus Chidi Onupha	М	WAGEDI		chidimagnus @gmail,com	
11.	Chukwuemeka Uwanaka	М	AUST			+2349031725 769
12.	Mrs. Hajara MYahaya Tanko	F	Raw Materials Research and Development Council (RMRDC)	Former Director	<u>htanko@gmai</u> <u>l.com</u>	08099329444
13.	Michael Mozie	М	AUST		mmozie@@a ust.edu.ng	08103827498
14.	Prof. (Mrs.) Ekanem Braide	F	Academy of Science University of Lagos	President, Nigeria Academy of Science (NAS) (Lagos)	<u>ekanembraide</u> @hotmail.co <u>m</u>	08033416842
15.	Solomon Ibrahim	М	AUST			08165400006
16.	Adetunde O	М	FCDO			08128108643
17.	Mrs. Cynthia Ene Ogbe	F	Eco Diversified Global Services Ltd	MD	<u>ecodiversifie</u> <u>d@gmail.co</u> <u>m</u>	08032442878
18.	Mr. Jude Adejuwon	М	CoCreation hUB	Team Lead Higher Education Practice		09017036316
19.	Grace Obidike	F	The Nations Newspaper, Plot 5, Nanka Complex, Wuse Zone 3, Abuja	Science and Technology Correspondence	granovia@ya hoo.co.uk	08068277828

		r	1			
20.	Prof Mosto Onuoha	М	Past President, Nigerian Academy of Science	University of Nigeria, Nsukka	<u>mosto.onuoha</u> @gmail.com	+2348037793 601
21.	Prof. Peter Onwualu	М	AUST		aonwualu@a ust.edu.ng	+2348037432 497
	Dr Prisca Onuoha	F	AUST			
	Mr. John Obekpa	М	RMRDC	Director: Industrial Research Coordination Department	johnobekpa@ gmail.com	+2348037413 492
24.	Mr. Orji Nnaemeka Chinalu	М	Deputy Director	National Office for Technology Acquisition and Promotion (NOTAP)	emkarj@gma il.com	+2340809800 1988
25.	Prof Michael Madukwe	М	National Coordinator ATPS Nigeria		<u>madukwemic</u> <u>hael@yahoo.</u> <u>com</u>	+2340803700 6968
26.	Prof Nicholas Ozor	М	Executive Director	ATPS	nozor@atpsn et.org	
27.	Alfred Nyambane	М	Programme Office	ATPS	anyambane@ atpsnet.org	
28.	Dr Cynthia Nwobodo	F	Project Office	ATPS	<u>cnwobodo@a</u> tpsnet.org	
29.	Dr Joel Nwakaire	М	Project Office	ATPS	jnwakaire@at psnet.org	
30.	Wentland Muhatia	М	Research Officer	ATPS	wmuhatiah@ atpsnet.org	
31.	Susan Mburu	F	Communication Office	ATPS	smburu@atps net.org	
32.	Doreen Ongoro	F	Finance and Admin Officer	ATPS	dongoro@atp snet.org	