

SASDP-2 – 2023 Cohort of the Science Advice Skills Development Programme.

Science advice is a key area for science capacity development in Africa. It has the potential to create notable contributions to developing research and innovation in Africa. The scientific community in the African continent is engaged in a range of scientific research in different areas, specifically to address the continent's various challenges. The employment of relevant African scientific knowledge in decision making must be emphasized as this is important for society. There is an urgent need for effective communication to connect scientists and policymakers. There is also a responsibility for scientists to convey their knowledge and findings of their research to policy makers, and to the public.

INGSA-Africa, the Regional Chapter of the International Network for Government Science Advice, in its aim to build capacity of African Scientists across Africa for effective communication of science advice, developed a mentorship Program – Science Advice Skills Development Program (SASDP) the first cohort of which ran over a period of 3 months in 2022.

The objective of the SASDP is to support mid-career African scientists and researchers in strengthening their skills to communicate their research results and viewpoints as science advice to their identified audiences and to foster their overall development. The theme of the SASDP was Climate Change in Africa, focusing on areas of Health, Water, Energy and Food Security.

Following the success of the first cohort of the program, INGSA-Africa launched a 2nd Call for Mentees in June 2023. Fourteen mentees from 6 African countries and 18 mentor applications from within and without Africa (including some from the first cohort) were received by the deadline of 25 July 2023, from which all mentee applicants were paired with 14 mentors.

This 2nd cohort of the program was run over a period of 6 months, starting on the 25th of September 2023 with a virtual introductory workshop and ending on the 24th of March 2024, but with a closing workshop on the 4th of April 2024. As usual the virtual introductory workshop served as a mentee-mentor contact phase during which core topics - such as introduction to tools for transformative policy advice and experiences, balancing political realities and scientific advice and the role of science in addressing climate change in the African continent - were addressed by invited specialists in science advice. The closing workshop, which was also virtual, enabled 12 remaining mentees to share their findings and outputs, as well as dissemination and implementation plans.

Below are the affiliations and short bios of mentees and mentors and the final projects:

AFFILIATIONS AND SHORT BIOS OF MENTEES AND MENTORS AND SUMMARY OF PROJECTS

S/No.	Mentee/Affiliation	Mentor/Affiliation	Title of	Summary
			Presentation	
1	Dr Akeem Babatunde Dauda, Department of Fisheries and Aquaculture, Faculty of Agriculture and Technology Complex, Main Campus, Federal University, Nigeria. Dr Akeem Babatunde Dauda is a mid-career academic with Federal University Dutsin-Ma, Katsina State, Nigeria. He holds a Doctorate in Aquaculture from Universiti Putra Malaysia, certificates in aquaculture smallholder business development, and rural entrepreneurship from Wageningen University and Research, Netherlands. He is a recipient of several scholarships, travel and research grants. He is listed on the Stanford University's World Top 2% Scientists Rankings for 2023. He specializes in aquaculture production systems and water resources management, and he has worked on various aquaculture systems towards ensuring efficient water utilization and sustainable aquaculture development. He is a	Dr Kalule Okello David, Uganda National Agricultural Research Organization (NARO), Uganda Dr Kalule Okello David is a Senior Research Scientist with a background in Plant Genetics and Breeding employed by Uganda National Agricultural Research Organization (NARO). He is also a Fellow of Uganda National Academy of Science (UNAS).	Antibiotics use and residue in cultured fish in Nigeria: Implications for public health and way out	The study seeks to understand the use of antibiotics in fish farms in the North-western part of Nigeria and the farmer's understanding of the risk associated with the use and consumption of fish with antibiotics residue. The study is expected to provide information on the potential risks associated with consuming cultured fish and provide evidence-based policy guidance.
2	member of the Nigerian Young Academy. Dr Noah Pierre Marcel Anicet , Chargé de Cours à	Dr Nega Emiru, Monitoring, Evaluation and	Climate Change	The city of Bamenda, located in
	l'ENSET de l'Université de Douala, Cameroon	Learning Team, Ethiopian Agricultural Transformation Institute Addis Ababa, Ethiopia	and Its Effects on Human Population in Bamenda Region,	northwest Cameroon, is suffering from war and the ravages of climate change. This policy brief offers advice to local and national decision-makers on how to

	Dr Noah was born on June 1, 1981 in Ngomedzap, Cameroon. He is married with two children. Dr Noah holds a PhD in Engineering Sciences (Mechanics and Materials Option). He is a Senior Lecturer in materials science, mechanical engineering and engineering sciences at the Ecole Normale Supérieure d'Enseignement Technique (ENSET) of the University of Douala, Cameroon. Dr Noah's research focuses on the stabilization of polyolefin blends, fibers and composites. He has authored over thirty articles, book chapters and books and attended several national and international conferences.	Dr Nega Emiru, with more than 12 years of work experience and solid postgraduate training is passionate professional working at the crossroads of agriculture, natural resources management and climate change with geographic focus in Ethiopia and Africa region. He worked with various local, national and regional institutions spanning research, policy and practice. His thematic and functional areas of interest include climate change adaptation, sustainable land management, agricultural transformation and rural livelihoods, project cycle management, indigenous knowledge and institutions, knowledge and innovation management, science advice to policy, and research management in developing countries. Nega holds a PhD from the University of Tasmania, Australia with thesis research focus on adaptation to climate change in pastoral and		reduce the vulnerability of communities to flooding and landslides caused by heavy rains.
2	Du Carreral Manadaya Taatuyay Cabaal af Haalib	agropastoral systems in Southern Ethiopia.	Mitigation	Laigh magain a significant with its
3	Dr Samuel Mong'are , Lecturer, School of Health Science, Kisii University, Kenya.	Prof Lahcen El Youssfi is an Associate Professor and Researcher, National Higher School of Chemistry, IT University, Morocco. He specializes in Agro-environmental sciences. He is the founder and head of the	Mitigating Leishmaniasis Impact in Marigat, Kenya	Leishmaniasis, a significant public health concern in Marigat, Kenya, is exacerbated by climate change and socio-cultural factors. Proposed solutions include economic cost assessment,

	SPECIALTIES: Medical Parasitology, Entomology and epidemiology QUALIFICATIONS: Doctor of Philosophy in Medical Parasitology and entomology, Master of Science in Parasitology, Bachelor of Science in Biochemistry and Zoology; from Jomo Kenyatta University of Agriculture and Technology. RESEARCH INTERESTS: Control of infectious diseases including malaria, leishmaniasis, vector control, drug development, and epidemiology of parasitic diseases. Dr Mong'are, a lecturer at Kisii University's School of Health Science, specializes in neglected tropical diseases and infectious diseases. His expertise spans networking, training, research, and teaching. As a founding member of the Kenya National Young Academy of Sciences, he promotes scholarly applications of science for national development. His recent research includes schistosomiasis prevention training and COVID-19 dynamics. Currently, he's combating leishmaniasis with an insecticide targeting sand flies and developing a cost-effective vector control device. He's also engaged in vaccine pandemic preparedness research.	Research Laboratory of Science, Technology, and Societies. His extensive academic and research experience spans Land and Water Resources Management, Cropping Systems Management, and Irrigation Strategies. His research focuses on Soil-Plant-Atmosphere Continuum Management, crucial for sustainable agricultural practices.		climate change impact analysis, and community engagement assessment, aiming to develop evidence-based policies and reduce disease burden. Stakeholder engagement and a budget of \$49,990 are crucial for project success, targeting an 80% reduction in morbidity and mortality by 2025.
4	Dr Christelle Noelle Dzesse Tekouo, Senior Lecturer, School of Chemical Engineering and Mineral Industries, University of Ngaoundere, Cameroon.	Dr Mario Rivero Huguet, Head, Science, Policy and Innovation, AI and Digital Technologies Lead British High Commission, Ottawa, Canada	Bridging the gap: Addressing instrumentation challenges for researchers in Cameroon	Cameroon like many other developing countries face the problem of lack of instrumentation. Here, we address the pressing challenge of insufficient instrumentation in Cameroon, impacting scientists' ability to conduct vital research. The rationale behind

Christelle Noelle Dzesse Tekouo is a Senior Lecturer of Inorganic Chemistry at The University of Ngaoundere, Cameroon. She holds a PhD acquired between the University of Buea (Cameroon) and the University of Cape Town (South Africa), with a focus on the syntheses of



metal-organic frameworks (MOFs) and their diverse applications, including gas sorption/separation, as sensors. Her research has resulted in the publication of

numerous peer-reviewed articles in esteemed international journals. She is currently furthering her research as a postdoctoral fellow in the US through the Schlumberger Foundation with focus on MOFs as drug delivery systems.

Dr Mario Rivero Huguet is Head Science, Policy and Innovation, AI and Digital technologies lead at the British High Commission, Ottawa. He has more than 15 years of experience in government, commercial and international relations, science diplomacy and innovation. He is responsible for strengthening Quantum,



Digital ID, AI and Data Science collaborations. He also works on strategic programmes with the Global Partnership on AI (GPAI)

during COP26 and G7 UK presidencies and worked with G7 and G20 member states and OECD to strengthen collaboration and align AI policies. He has expertise in writing policy briefings.

this issue, its geographical context as well as the affected parties are highlighted.

Proposed solutions include policy recommendations to enhance funding and infrastructure. Key stakeholders include policymakers, academic and research institutions, and international organizations.

Dr Fridah Kanana Erastus, Senior Lecturer,
Department of Literature, Linguistics and Foreign
Languages, Kenyatta University, Kenya.

Fridah Kanana Erastus is a Senior Lecturer in the



Department of Literature, Linguistics and Foreign Languages, Kenyatta University, Kenya. She holds Bachelor of Education (Arts), Master of Arts degrees from

Kenyatta University, and a PhD in Linguistics from Johann Wolfgang Goethe-Universität Frankfurt am

Jean E. Saint-Vil, Canada

Mr. Saint-Vil has over 27 years of experience from the Natural Sciences and Engineering Research Council (NSERC), where he held various roles, including Associate Vice-President overseeing the Networks of Centres of Excellence (NCE) Secretariat in Ottawa. Since March 2019, he has served as Special Advisor, Strategic Projects at McGill University. His expertise includes initiating and managing

Science communication and outreach in building climate resilience communities in Rural Kenya I have developed a project on science communication and outreach, and its impact in building climate resilient rural communities. By breaking down/repackaging complex scientific jargon into consumable and practical application by rural communities, the project mitigates local community problems through the community itself, and later on it will be

	Main, Germany. She is a Global Young Academy (GYA) Alumna, a DAAD scholar, an inaugural fellow of the Africa Science Leadership Programme (ASLP), a beneficially of the InterAcademy Partnership (IAP) Fellowship on Science Advice for Policy, and the George Forster Research Fellowship for Experienced Researchers funded by the Alexander von Humboldt Foundation. She has also served as a consultant with the Commonwealth of Learning (COL), Canada.	partnerships across academia, industry, and government sectors, as well as enhancing international collaborations to benefit Canada's research landscape.		upscaled for a long term- impact to rural communities which bear the brunt of climate change.
6	Dr Devina Lobine, Royal Road, St Julien D'Hotman, Mauritius. devina.lobine@gmail.com	Prof Paul Berkman, Founder and President, Science Diplomacy Center™, USA; Senior Fellow, United Nations Institute for Training and Research (UNITAR), Switzerland; pab@scidiplo.org;	Harmonizing Voices: Cultivating Sustainable Growth at the	The inaugural edition of Global Indigenous Youth Summit on Climate Change showcased the power of youth voices in driving global discourse towards tangible
	Dr Devina Lobine is a biotechnologist specializing in ethno-pharmacology and non-communicable diseases. She is a prolific scholar, garnering multiple awards and grants. As an advocate for STEM, she holds key roles in prestigious organizations like the Global Young Academy, SANBio, and Next Einstein Forum. Devina also champions environmental causes. Currently, Devina holds positions at the Mauritius Institute of Biotechnology and as an Assistant Professor at JSS Academy of Higher Education and Research.	Professor Paul Arthur Berkman is a science diplomat, applying, training and refining informed decisionmaking to balance national interests and common interests for the benefit of all on Earth across generations. Prof. Berkman is the Founder and President of the Science Diplomacy Center™, serving also as a Faculty Associate with the Program on Negotiation (PON) at Harvard Law School and Associate Director of Science Diplomacy in the Harvard-MIT Public Disputes Program as well as an Associated Fellow with the United Nations Institute for Training and Research	Global Indigenous Youth Summit on Climate Change	action, gathering global recognition. Building on the legacy initiated last year, our vision is to cultivate GIYSCC into a sustainable network. This involves not only involving more indigenous youth leaders but also forging partnerships with prestigious organizations like Future Earth, Global Young Academy and Commonwealth Scholarship Commission. A distinctive feature of GIYSCC2024 is the inclusion of youth leaders from Small Island Developing States.

(UNITAR). Among his many awards, most

		recently the United States Department State and Norwegian Ministry of Fore Affairs awarded Prof. Berkman the Fulbright Arctic Chair 2021-2022		
7	Dr Alfred, Moses Oladele, Department of Chemical Sciences, Redeemer's University, Osun State, Nigeria. Moses O. Alfred is an early career scientist in environmental and materials chemistry. He holds a PhD in Industrial Chemistry and MSc, Environmental & Analytical Chemistry from Redeemer's University, Nigeria, and a BSc in Industrial Chemistry from Adekunle Ajasin University. His research specializes in water and air quality, purification, and pollution control through environmental survey and development of low-cost materials from wastes. He is committed to driving policy changes to safeguard public health and promote environmental sustainability and to provide scientific insights for informed decision-making. His passion is to make a lasting impact through research, peer review, and mentorship.	Dr Abdess Salem Saumtally, Chairman Higher Education Commission/ Presid Mauritius Academy of Sciences and Technology, Mauritius Dr Saumtally is the former Director, Mauritius Sugarcane Industry Research Institute (MSIRI) and is the Chairman Higher Education Commission Mauritius He is also the President, Mauritius Academy of Science Technology. Salem Saumtally a plant pathologist and an Emeritus Member of American Phytopathological Society (Member of MSIRI in 2012) managed two Research and Developm (R&D) plans before he retired. He form part of the Executive Committee of the International Society of Sugar Cane Technologists (ISSCT), an apex international body for sugarcane.	ent, Imperatives for Managing Pharmaceuticals and Personal Care Products PPCPs) in Water of the ius. s and f the APS). and nent ms e	Drug resistance is a global health threat exacerbated by PPCPs in water. The project evaluates government and stakeholder efforts to address PPCPs in water, aiming to provide scientific evidence for policy formulation. It produced a review article aimed at a policy document through a workshop scheduled for April 25-26 2024.
8	Dr Chukwu, Emelda Eberechukwu, Microbiology Department, Nigerian Institute of Medical Research/Adjunct Senior Lecturer, Department of Medical Laboratory Sciences, Trinity University, Sabo Yaba, Nigeria	Dr Gustave Mabiama, Senior Lectured Researcher Department of Social and Family Econ (ESF) Ecole Normale Supérieure d'Enseigne Technique (ENSET), Douala –Cameroo	and antimicrobial resistance: ment Understanding	Antimicrobial resistance (AMR) and Climate change poses a significant threat to public health and the achievement of SDGs. We systematically synthesized evidence to gain insight on the influence of climatic variations on

	Dr Chukwu is a Senior Research Scientist/ Head, Center for Infectious Diseases Research of the Nigerian Institute of Medical Research (NIMR) and a Senior Lecturer at the Department of Medical Laboratory Science, Trinity University, Lagos State. She has over a decades' experience conducting research on Infectious Diseases epidemiology and genetic basis of antimicrobial resistance (AMR). She is the Founder/Lead, AMR Research Network of NIMR where she	Head of Division of University Cooperation, University of Ebolowa (Cameroon)	bacteria pathogens	the rate of AMR across different hosts proposing evidence-based strategies to mitigate further emergence and transmission of AMR.
	has made substantial contributions to understanding microbial diversity, distribution, and transmission dynamics of AMR through a One-Health approach. She is currently exploring impact of Climate change as a potential driver of AMR.			
9	Dr Anita Asamoah, Senior Research Scientist, Ghana Atomic Energy Commission/ Senior Lecturer/Coordinator, Nuclear and Environmental Protection Program, School of Nuclear and Allied Sciences, University of Ghana, Legon. Anita works with the National Nuclear Research Institute of the Ghana Atomic Energy Commission and also works with the School of Nuclear and Allied Sciences, University of Ghana. Anita, is an Environmental Toxicologist. She uses nuclear and allied techniques in pollution studies. Her research interest includes monitoring of Persistent Organic Pollutants (POPs), emerging environmental contaminants, food safety, Environmentally Sound management of Toxic Chemicals among others.	Salah A. Rahman El-Sadi, Sheikh Redwan Ibu Iskander St., Gaza Strip, Palestine Founder and leader of Blue Filter Company for water treatment technology; Manager of the Chemistry laboratory at the Ministry of National Economy, served as a Circular and Blue Economy Expert, and consultant to UNICEF and the World Orthodox Organization in the field of green entrepreneurship. His expertise spans across green technology, entrepreneurship, and environmental sustainability, where he possesses a wealth of knowledge and experience in training and mentoring individuals and organizations.	Removal of heavy metals and pesticides residues from water and other environmental matrices	The mentorship was tailored in three sections; using natural and available raw materials in remediation, grantsmanship, career growth and development. Through the mentorship, pilot research in using local materials in heavy metal remediation has been initiated. Hopefully to upscale it to treat Polluted River water from illegal mining.

Anita has been engaging in outreach programs to educate and encourage young people, especially young girls and women on the several opportunities in studying and taken up careers in the Sciences. She has a PhD in Biotechnology Chemistry and Environmental Engineering, and an MPhil in Nuclear and Environmental Protection. Dr Anywar Godwin, Department of Plant Human African **Dr Chinwe Chukwudi**, Department of Veterinary HAT is an NTD targeted for 10 Pathology and Microbiology, Sciences, Microbiology & Biotechnology, **Trypanosomiasis** elimination in 2030. WHO records Faculty of Veterinary Medicine College of Natural Sciences, Makerere (HAT) in Nigeria: show only one case in Nigeria University of Nigeria, Nsukka University, Kampala, Uganda. Eliminated or from 2013. Our recent study Enugu State, Nigeria Undiagnosed? showed ~10% prevalence among Fellow of the Uganda National Academy of patients attending a primary Sciences (FUNAS); Dr Anywar Godwin is a healthcare facility located outside Dr Chinwe Chukwudi is an experienced researcher, academician and entrepreneur of previously known HAT foci. This Veterinarian and Molecular Pathologist specializing in molecular and genetic studies of and author. He completed his doctorate raises concerns about the true infectious diseases, especially NTDs and AMR. prevalence of HAT in Nigeria. from the prestigious Fraunhofer Institute With a PhD in Molecular Biology and Microbial for Cell Therapy & Immunology in Leipzig, Genetics (Royal Veterinary College, London) and a Germany, the Institute for Virology, Faculty postdoctoral training at the National Institute of of Medicine, University of Leipzig and Allergy and Infectious Diseases, NIH, USA, she Makerere University, Kampala on a split works on finding novel interventions (diagnostics site model, where he investigated the anti-HIV-1, immunomodulatory activity and and therapeutics) for endemic zoonotic diseases as a Senior Lecturer/Principal Researcher at the cytotoxicity of medicinal plants used by University of Nigeria Nsukka. She has received herbalists for treating people living with funding from the Commonwealth Scholarship HIV/AIDS in Uganda. He currently lectures Commission UK, Erasmus Mundus Scholarships, at the Department of Plant Sciences, National Institutes of Health, Bill and Melinda Microbiology & Biotechnology at Makerere Gates Foundation and African Academy of University. Sciences. She believes that it is time for Africans to rise up and solve African problems by themselves, as well as contribute their quota to global issues.

11	Dr Bolawa, Olatundun Eniola, Senior Lecturer/Environmental Toxicologist, Department of Biochemistry College of Medicine, University of Lagos, Lagos State, Nigeria Dr Bolawa is a specialist in Nutritional Health, Environmental Health and Environmental Science She holds a Doctorate degree in Biochemistry from the University of Lagos, Nigeria (January, 2016); an MSc. Biochemistry degree from the University of Lagos, Nigeria (1997) and a BSc. Biochemistry degree from the University of Lagos, Nigeria (1994). She also has the following Certificate qualifications through online courses: Introduction to Nutrition and Health (Stanford University) Chemicals and Health (John Hopkins University) Environmental Hazards and Global Public Health (University of Michigan)	Prof Benjamin Vallejo Jr is a Professor of Environmental Science, Institute of Environmental Science and Meteorology, National Science Complex, University of the Philippines. Trained by INGSA under Professor Sir Peter Gluckman in 2017, he specializes in providing science advice related to fisheries, aquaculture, and environmental impacts, particularly focusing on biological invasion and biosecurity. His doctoral work focused on the geographical ecology and biogeography of coral reef molluscs in the Indo-West Pacific. His research now centres on marine biological invasion and its implications for Manila Bay and the Port of Manila. He actively advises Philippine agencies such as the Philippine Coast Guard (PCG) and the Maritime Industry Authority (MARINA) on implementing policies under the International Maritime Organization (IMO), including the Ballast Water Management Convention and the Antifouling System Convention.	Nigeria Cosmetic Policy Reform: An Essential Need to Protect Communities from Exposure to Toxic Chemicals	This paper analyzes existing Federal legislations with a view to propose policy alternatives. The following criteria were used: consumer safety, political feasibility and implementability. This paper recommends a policy approach that will expand the Nigerian's Authorities involved in cosmetic regulation to include enforcement against counterfeit cosmetic products and community education.
	Dr Yussuf Motari Okari , Lecturer, Kisii University School of Business and Economics, Kenya	Dr Abdalhadi M. Alijla, is a senior research officer at the Department for Conflict Prevention and Peacebuilding. At FBA, he works with research promotion within FBA's areas of expertise. He has extensive experience of policyoriented research from the Middle East,	Disability and Climate Change driven emergency Response in ASAL Counties, Kenya	PLWD suffers higher rates of morbidity and mortality during climate related emergencies as response is not guided by sound policies and programs. The current project seeks to develop a profile of the cases which will be used to develop policies and

Dr Okari graduated with a Master's in Business	Europe and the Western Balkans. His	plans to improve emergence
Administration at Kisii University, in 2013 and PhD	research focuses on trust in public	response.
in Business Administration at Kisii in 2021.	institutions and between individuals in	
After completing their PhD, he has been working	divided societies and how armed non-	
as a lecturer at Kisii University, focusing on	governmental actors negotiate power and	
marketing and entrepreneurship. He has worked	legitimacy in society.	
on several consultancy projects,	Sundbyberg, Sweden.	
including one on civil society		
organizations' sustainability in Kenya		
with USAID, a gender and inclusivity		
study with Kisii Endelevu Trust Initiative, and an		
entrepreneurship training with Gusii Youth Bunge		
SACCO. He also participated in the Climate U		
project in Kenya, researching how universities can		
adapt to climate change.		