



AFRICAN SCIENTIFIC, RESEARCH AND INNOVATION COUNCIL

The ASRIC Working Group Members to Study the Impact of COVID-19 on Africa's Food and Nutritional Security

Working Group Profile

Introduction

African Scientific Research and Innovation Council (ASRIC) is a specialized Technical Advisory Body on Science, Technology and Innovation (STI) to the African Union with African Union, Scientific, Technical and Research Commission (AU-STRC) as its Secretariat. The ASRIC was established through the African Union's Executive Council Decision (EX.CL/Dec.747 (XXII)) and it promotes scientific research and innovation in order to address the challenges of Africa's socio-economic development. It also mobilizes African research excellence and provides a platform for dialogue among African scientists and serves as a voice of the scientific community in building and sustaining continental research and innovation nexus.

Launching the ASRIC during its Congress in November 2018 was a land mark in the Science, Technology and Innovation impact on Africa's future and prosperity. The ASRIC Congress is composed of African scientists from all the African National Science Academies, National Research Councils, top Science, Technology and Innovations (STI) Institutes in Africa, Diaspora Scientists and Partners. The Congress decides on the implementation of key science and technology programme and projects in accordance with the Science, Technology and Innovation Strategy for Africa (STISA-2024) and the overarching continental framework AU Agenda 2063.

In light of the unprecedented emergence of the Corona Virus Disease Pandemic (COVID-19) ravaging the world

the onus lies on ASRIC to respond to the challenges. The preliminary analysis of the impact of the COVID-19 on the continent and the world is magnanimous and must be contained urgently. Given the disposition that the African Union Network of Sciences has over 16,000 professional and experts' database who are member of the ASRIC. As of that ASRIC called upon its members from National Academy of Sciences of the AU Member States and assemble a working group that will study the Impact of Covid-19 on Africa's Food and **Nutritional Security** with the view of proffering solution to the challenges and advice policy and decision makers. The objectives of working group is to develop a guided response that will minimize the impact of Covid-19 on Africa's Food and Nutrition Security in order to ensure the wellbeing of Africa's citizens.



Dr. Jean Gerard Mezui M'ella

Jean Gerard MEZUI M'ELLA is the Director of the Inter-African Phytosanitary Council of African Union (AU-IAPSC), the AU technical office in charge of plant protection under the Department of Rural Economy and Agriculture. He is also the Permanent Representative of the African Union in Cameroon.

He holds a doctorate degree in Agronomic Sciences and phytopathology obtained from the Faculty of Agronomic Sciences of Gembloux University in Belgium. He also holds a Diploma in Water and Forest Engineering, obtained from the National School of Water and Forests of Omar Bongo University in Gabon and another Diploma in Scientific Studies from the same University.

Before joining the African Union in 2008, he had worked as a Gabonese Civil Servant in various capacities such as: Member of the Central African Plums Producers Network, the Genetic Resources Bureau, Member of the Protection of Plant Varieties, amongst other professional affiliations. His administrative positions in Gabon included: Director of the National Rural Development School, Permanent Secretary General of the National Commission of FAO, Advisor to the Director General of Agriculture, Livestock and Rural Development, Director of the Inspection of the Phytosanitary Police, amongst other positions.

He also worked as a researcher and Head of Department of Arboriculture Fruitière at the Plant Propagation Multiplication Center of Ntoum in Gabon and as Director of the Inspection of the Phytosanitary Police Gabon. He was also the Focal Point of the International Convention for the Protection of Plants.



Prof Moses M. Nyangito (BSc. MSc. and PhD)

An expert in Animal Resource Ecology and Range Management, with 20 years of successful experience in training and research at university level. development work through action research and consultancy with rangeland communities to implement best practices in rangeland management, pasture and production, and scaling-up livestock innovative approaches in pasture-livestock value chains. Through consultancies in project impact assessment has provide advisory services to development actors to implement impacting programs in dryland livelihoods, food and resilience, and water, sanitation and security hvaiene.

Noteworthy research undertaken include: Evaluating viability and competitive interactions of grass seeds under different micro-catchments and economic returns from reseeding; Impact of grass reseeding technology on rehabilitation of degraded rangelands; Agri-small scale enterprises and linking agro/pastoralists to markets; Climate variability and

adaptive strategies in agro/pastoral systems; Impact of climate variability and land fragmentation on ecological vulnerability and adaptive strategies in agropastoral systems; Grazing patterns, energy extraction and livestock productivity in agro-pastoral systems; Influence of land use dynamics on plants functional diversity, species invasion and browse production in semi-arid savannas; Termite dynamics and control in pasture grasses in semi-arid areas: Ecological and socio-economics of dryland agroforestry systems; Land use change and dynamics of human-wildlife conflicts: Strengthening rangeland management and community resilience; and Recapturing generational exchanges of environmental traditions/knowledge pastoral in communities.



Prof. Jane Ambuko

Prof. Jane L. Ambuko is an Associate Professor and Head of Horticulture Unit at the Department of Plant Science and Crop Protection, University of Nairobi. She holds B.Sc. Agriculture, M.Sc. Horticulture from University of Nairobi (Kenya) and a PhD in Agricultural Sciences (Pomology and Postharvest Major) from Tsukuba University (Japan). Her area of specialization is Postharvest Science and Technology. Her research and outreach activities focus on adaptation, validation and promotion of postharvest technologies/innovations to preserve postharvest quality and reduce losses. She has supervised and mentored many students in various disciplines in Agricultural and Food Sciences. Together with her students and research partners, she has published widely on various aspects of food and agricultural sciences – from production to utilization and consumption.

Prof. Ambuko's notable outreach initiatives include 1) Adaptation and piloting of low-cost cold storage technologies in Kenya 2) Piloting smallholder aggregation & processing centers to demonstrate practical application of simple postharvest technologies to reduce food losses among smallholder horticultural farmers and 3) Conceptualizing and convening the All Africa Postharvest Congress & Exhibitions to showcase research and innovations in postharvest loss reduction. Prof. Ambuko is a champion of postharvest food loss and waste reduction and empowerment of smallholder farmers.



Prof. Olusegun Adedayo Yerokun

Olusegun Adedayo Yerokun is a Soil Scientist and Education Administrator. With over thirty years of experience in the agriculture sector, he has worked as: a commercial farm manager, Project Manager/Marketing Director of a rural development project, lecturer at University of Zambia, founding Dean of School of Agriculture and Natural Resource at Mulungushi University and Vice Chancellor of Zambian Open University.

Professor Yerokun is a Fellow of the Zambia Academy of Sciences where he serves as Chairperson of the Specialized Committee on Sciences, Chairperson Resource Mobilization Committee and Member COVID-19 Committee. His interest is in rural agricultural development, sustainable land management and commercialization of agriculture. He has published widely and provided consultancy on agriculture to local and international organizations. Olusegun is Member of the International Board of the African Network for Agriculture, Natural Resources and Forestry Education

(ANAFE). He is also a Member of the African Policy, Research & Advisory Group on STI.

Olusegun obtained a B.S. Biology from Benedict College (South Carolina), M.S. and PhD in Crop and Soil Sciences from Michigan State University.



Ms Luiza Munyua

Ms. Luiza Munyua is currently working at the African Union, Inter-African Phytosanitary Council (AU-IAPSC) as the Senior Scientific Officer, Phytopathology. AU-IAPSC is one of the Specialized Technical Offices within the Department of Rural Economy and Agriculture (DREA), of the African Union Commission. She joined AU-IAPSC in July 2019.

Ms. Luiza is passionate about all matters plant health, with a vision to contribute towards regional, continental and global plant health solutions that are practical, creative and sustainable. She has a rich background and wealth of knowledge and experience in plant pest and disease management within the wider scope of the Crop Protection discipline.

She has served in senior management positions in both the public and private sectors, within the very dynamic agricultural and horticultural sectors. She has also tutored and mentored students at the University level. Ms. Luiza holds a Master of Science Degree in Crop Protection and is currently pursuing her doctoral degree.



Professor Agatha Nguti Tanya

Professor Agatha Nguti Tanya, Born on 28/11/56 is an Associate Professor of Dietetics and Nutrition in the Department of Public Health, Faculty of Medicine and Biomedical Sciences, University of Yaoundé I. She attended the University of Wisconsin, U.S.A. and the University of Ibadan, Nigeria where she obtained a B.S. in Dietetics and an M.S. in Food Science and Nutrition and a PhD in Human Nutrition respectively. She teaches Nutrition and Dietetics in the Departments of Public Health of that Faculty. She came to the University of Yaoundé (2004) from the University of Ngaoundéré, Cameroon. In 2011, she became Vice-Dean of the Faculty of Heath Sciences of the University of Bamenda. Cameroon. Two years later, she was the Deputy Director of College of Technology and thereafter became the Director of the College. She continues to teach diet therapy, menu planning and human nutrition in the Universities of Yaoundé I and Bamenda in Cameroon. She is a member of the American Dietetic Association, the Cameroon Biosciences Society and the Cameroon Science and Nutrition Society. She received the MASHAV Award for the 4th International Course on Food Technology from the Hebrew University of Jerusalem and the Commonwealth Fellowship at King's College London, UK. She has supervised hundreds of students and published widely in the area of nutrition, food science and technology.



Dr. Chewe Nkonde (Ph.D)

Dr. Nkonde is a member of the Zambia Academy of Sciences where he is part of the social science specialized committee. He has been a faculty member of the University of Zambia since 2008. Prior to joining the university, he worked for the Conservation Farming Unit as Regional Coordinator overseeing conservation agriculture promotion activities in central Zambia. He later worked for the Zambia National Farmers' Union as Marketing Officer responsible for the union's market and trade facilitation activities. At the university, he teaches both undergraduate and postgraduate theory and applied economics courses, coordinates online distance learning, supervises student research projects and serves on Master's thesis examiners' boards.

His research focus areas include agribusiness and entrepreneurship, agricultural markets and prices, and issues at the nexus of food and nutrition security. His research collaborators include both local and international partners in academia, research and civil society and he has published several papers in peer-

reviewed journals. Dr. Nkonde is also an associate editor for the Zambia Social Science Journal; a high impact academic journal in Zambia and Southern Africa.



Prof. Jeanne Yonkeu Ngogang

Jeanne Yonkeu was born on September 17, 1948 in Bangou, West region of Cameroon, Jeanne Yonkeu married to Ngogang and holds a Doctorate in Health and Life Sciences from the François Rabelais University in Tours (France). Recruited at the University of Yaoundé 1 in 1975, she became Full Professor of Biochemistry in 2000. She will assume the function of Head of Department of Physiological and Biochemical Sciences as well as that of Head of Department of Biochemistry at the University and Hospital Center (CHU) from Yaoundé from 2000 to 2013.

She is a member of numerous national and international learned societies and assumes leadership functions in numerous pan-African networks. She has taught Biochemistry in Cameroon, Chad, Senegal and Benin. She has supervised 158 dissertations and theses and has 101 scientific publications to her credit in national and international peer-reviewed journals. She is the author of 03 popular science books used in Cameroon and in some African countries. She was for 6

years Vice President in charge of Teaching, Research and Internships at the University of the Mountains (UdM); she is Dean OHCEA (One Health Central and Eastern Africa) UdM and 1st Vice President of the Cameroon Academy of Sciences. She received the Palmes d'Or of the Cams and she is Knight of the Order of the Value of Cameroon.



Dr. Egeru Anthony

Egeru Anthony (PhD) is as Programme Manager, Training and Community Development at the RUFORUM Secretariat and Senior Lecturer at Makerere University. He previously served as Acting Deputy Executive Secretary-Programme Development and Implementation, Regional Programme Coordinator and Assistant Grants Manager at RUFORUM Secretariat. He started his career as a secondary school teacher at Merryland High School, Entebbe. Anthony is a dynamic and distinguished emerging researcher and a 2020-2024 African Academy of Sciences (AAS) affiliate.

Anthony has multi-faceted experience in research including in Systems Ecology and agrifood systems with a focus on management of dryland ecosystems, early warning system, rangeland health monitoring, land use planning, pastoral livelihoods, agro-forestry systems, climate change, adaptation and resilience programming and analysis, development processes-especially participatory analysis and curriculum design and development. Anthony's current engagement is

facilitating the transformation of African agricultural universities centered at the promotion of teaching, learning and research through innovative approaches including community action research, community engagement and agribusiness and entrepreneurship approached from a problem based learning perspective.

Anthony is passionate about strengthening the educational value chain in particular creating a greater linkage between universities and TVET institutions for skills enhancement as a mechanism to responding to Africa's youth unemployment challenge but most importantly responding to the rising educational inequalities and exclusionism in an environment where education is recoganised as a strong enabler of economic growth and out of poverty escape mechanism.



Dr. Abdulrazak Ibrahim (PhD)

Abdulrazak Ibrahim is an agricultural biotechnologist with experience in Africa's Agricultural Research for Development (AR4D), plant biotechnology stewardship, biosafety, knowledge management, innovation systems, foresight, capacity development, resource mobilization, partnerships & agribusiness. He holds a doctorate degree in Molecular Biology from Universidade de Brasilia (UnB) having worked at the EMBRAPA Center for Genetic Resources. He had worked as a Research Officer in Jigawa State Agricultural Research Institute (JRI) Nigeria, setting up its biotechnology program before joining the Department of Biochemistry of Ahmadu Bello University (ABU).

He has taught several courses in biology, biochemistry, plant science, agricultural biotechnology, genetic engineering and biosafety at various levels. He is a capacity development specialist at the Forum for Agricultural Research in Africa (FARA) and contributes to strengthening Africa's capacity for STI in food and nutrition security in the contexts of STISA-2024 and

CAADP. He is the Editor-in-chief of the Nigerian Journal of Biotechnology and is a published author of papers in journals. He is a member of National Standing Committee on Research & Development of the Tertiary Education Trust Fund (TETFUND) Nigeria, and Advisory Board Member on Agriculture and Livelihood to the Foundation for a Smoke-Free World (FSFW), in the USA.



Dr. Alice Mutiti Mweetwa

Alice Mutiti Mweetwa is the current Deputy Executive Secretary for Programme Development and Implementation at the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) Secretariat in Kampala, Uganda. She is the immediate past Deputy Director for Research and Post Graduate Studies of the University of Zambia (UNZA), a position she held 2017-2019 and a past Deputy Dean for Post Graduate Programmes of the School of Agricultural Sciences (2013-2017).

She served on several University boards and committees for quality assurance, policy formulation, income generation, Senate, journals publication, to mention a few. Dr Mweetwa is a Senior Lecturer of soil microbiology and general soil fertility in the Department of Soil Science. She has a bachelor's degree in Agricultural Sciences (Crop Science Major) from UNZA, a master's degree in Agronomy also from UNZA, a master's degree in Environmental Science from Miami of Ohio, and a Doctoral degree from Virginia

Polytechnic Institute and State University. Since joining the University of Zambia in 2010, she has mentored many undergraduate and post graduate students with whom she has published in several international peer-reviewed journals. She has been a recipient of several fellowships, scholarships and awards at the national, continental and international levels.

She is an awardee of the 2017 Young African Researcher, 2016 National Science and Technology Merit Award and the Norman E. Borlaug International Agricultural Science and Technology Fellowship Program 2012. Dr Mweetwa is currently involved with several funded projects in collaboration with other institutions and has participated in mobilizing through competitive grants and other funding from the USAID, World Bank, European Union Commission, African Union Commission, USDA and other sources.



Prof. Henrietta Ene-Obong, FNSN, FAS

Henrietta Ene-Obong, Professor of Human Nutrition and coordinator, Human Nutrition and Dietetics programme, Department of Biochemistry, Faculty of Basic Medical Sciences, University of Calabar, Nigeria.

She is the current coordinator of the *African Network of Food Data Systems* (AFROFOODS) and the Immediate Past Co-Chair of the *International Union of Nutritional Sciences' (IUNS) INFOODS* (International Network of Food Data Systems) Task Force and one-time Editor-in-Chief of the Nigerian Journal of Nutritional Sciences. She presently serves as a member of Technical Advisory Committee (TAC) and Co-Principal Investigator for the proposed National Food Consumption and Micronutrient Survey and member of TAC for Setting Menu Standards for the National Home-Grown School Feeding (HGSF) programme in Nigeria. Henrietta Ene-Obong is also a member of the Technical Advisory Group (TAG) of the Tertiary Education Trust Fund (TETFund), Nigeria on Book Development Programme.

Her research interests are in the areas of Food Consumption and Composition, Dietary Assessment as well as Traditional/indigenous People's Food Systems. She has over a hundred (100) publications to her credit in various reputable journals and is a Fellow of the Nutrition Society of Nigeria (NSN) and Fellow of the Nigerian Academy of Science.



Prof Oyebiodun Grace Longe

Oyebiodun Grace Longe, a Professor of Nutritional Biochemistry, is a teacher and researcher in the Faculty of Agriculture, University of Ibadan, Nigeria.

She holds a B.Sc. Degree in Agriculture from the University of Ibadan with specialisation in Agricultural Biochemistry and Nutrition and received a PhD in Applied Biochemistry and Nutrition from the University of Nottingham, England, United Kingdom.

She has taught for many years at both undergraduate and postgraduate levels in the area of carbohydrate and energy metabolism but currently engaged in the supervision of PhD students. Some of her research publications include the nutrient composition and biological quality of cereals, tubers and legumes valuable as foods in Nigeria as well as characterization of polysaccharides of non-leafy vegetables and phytoactive compounds in some.

Prof Longe, a recipient of many awards and a Fellow of the Nigerian Academy of Science, at various times participated in workshops/conferences on agriculture, nutrition and biotechnology to include "Agriculture for Improved Nutrition of Women and Children" in Nigeria held 2010. She was a member of the steering Committee that prepared the NASAC report on Food and Nutrition Security and Agriculture and attended the meeting on same held in Halle, Germany April, 2017.