



THE AFRICAN SCIENTIFIC, RESEARCH AND INNOVATION COUNCIL

**Africa's indigenous Knowledge to Preventing and Controlling
Emerging Infectious Diseases on the continent like COVID-19:
Utilizing an Afro-centric Response**

Working Group ToR

Introduction

The African Union's Executive Council Decision (EX.CL/Dec.747 (XXII)) established ASRIC as a specialized Technical Advisory Body to the African Union with African Union, Scientific, Technical and Research Commission (AU-STRC) as its Secretariat. The ASRIC 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 and 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.

The STISA-2024 is the first of the ten-year incremental phasing strategies to respond to the demand for science, technology and innovation from various impact sectors. The STISA-2024 is built upon four pillars, one of which is **building technical and professional competencies that** are anchored on six distinct priority areas that contribute to the overall development of Africa. One of the priorities is **Prevention and Control of Diseases**. 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 these challenges to this effect, several working groups and advisory boards been set in place.

Building upon the fact that our development in Africa should base on, and benefit from our **cultural, social, traditional determinants** thought processes, perspectives, and history of a continent that prides itself as the **cradle of civilization** in the world, the ASRIC is establishing a **working group** to develop and lead **Afro-centric response to the Covid-19** and other viral epidemics. Furtherance to building on research works done carried out in the last couple of years in developing an African approach models in response to curbing diseases.

For this purpose, this working group of ASRIC is to focus on the **Afro-centric response** building on the abundant **indigenous knowledge** that accumulated throughout Africa's history, by utilizing traditional and folklore medicine and practices.

Objective

The working group has the objective to develop and implement **Afro-centric response to Covid-19 and other infectious diseases** building on the Africa's abundant

indigenous knowledge rooted in **Africa's ethnographical and cultural characteristics without compromising global standards.**

Mandate of the Working Group

The working group is mandated to:

a. Traditional medicine intervention to Covid-19 pandemic, this is thorough the following actions:

1. Compile a compendium of plants through a systematic review of literature on published works on antiviral medicinal plants with view to selecting potent plants for large scale biopharmaceutical production **(Short term goal);**
2. Identify quinolines alkaloid analogues from local medicinal plants in Africa used in treating fever and flu indigenous to Africa, and test their efficacies against COVID 19, Ebola and Lassa fever (short term goal);
3. Identify already licensed African based herbal products for boosting the immune system and engage in clinical trials against COVID 19, Lassa fever and Ebola (by determining, establish and codify an Afro-standard for herbal extracts, products and derived supplements which meets or exceeds international standards) (Short term Goals)

b. Posting community prevention measures Covid-19 pandemic, this is thorough the following actions:

1. Identify selected antiseptic plants and locally source materials to produce disinfectants for hand sanitizers; standardization for manufacturers of hand sanitizers taking in to consideration production from locally available materials in Africa (from Africa's unique bio-cultural diversity) efficacy, safety, and availability (short term goals)
2. Produce standard operating procedures (SoPs) for the production, efficacy, safety and quality control for the use of hand sanitizers in Africa. Hand sanitizers production that have broad spectrum for DNA and RNA viruses (SOPs and usage and safety) (Long term Goals)
3. Propose a community strategic guideline **for** prevention of COVID 19 as well as Lassa and Ebola in rural and semi urban Africa (Short term goals)
4. Work out the production of simple face masks with the precise filter size with appropriate filter size for filtration of COVID 19 (Long term goals)

5. Screen the selected antiviral plants vis-a-vis standard controls against CoVID 19 using proxy models and run randomized control clinical trials on extracts and products found to be effective in vitro (Long Term Goals)
6. Develop unique afro centric policy brief and policy guideline for the integration model for integrated hospitals in Africa that combine Orthodox and Complementary medicine (Long term goals)

Deliverables

The working group is to work and deliver as per the actions identified in its mandate.

Duration

The period is for an initial two years with a possibility of extension for another three year based on the needs of the programme and attainment of the anticipated outcomes and outputs as well as availability of funds.

Modus Operandi

1. You will remain in your place of domicile
2. You are expected to work with colleagues virtually for now
3. You will be invited for meetings anywhere within the continent if the need to be.

Expected Outcome

1. Available effective hand sanitizers with standard operating procedures for use produced locally across Africa against Covid-19, Lassa fever and Ebola
2. Available identified and clinically tested herbal licensed products for immune boosting against Covid-19, Lassa fever and Ebola across Africa.
3. Available Active Pharmaceutical principle (API) identified from Antiviral plants from Africa for large scale drug manufacturing of antiviral drugs and potential for Exports to Europe, America, Asia
4. Setting of three regional labs with full capacities to identify and sequence virus and identify active plant molecules with less travel to Europe for such analyses
5. Policy brief available uniquely on an African prototype hospital
6. Workshops/seminars and publications and improved curriculum at university medical schools with African approach to addressing diseases.

Service Reward

- Members of the working group are participating voluntarily i.e. the participation in the working group will not attract any payment but should incase there are meetings that involves travels, the ASRIC will borne the cost of your travels and

daily subsistence allowance according to the UN rates.

- At the end of the programme, you will receive a recognition certificate from the ASRIC for your valuable contribution to the continent and ASRIC in this difficult time.