Experience of the Organization:

HEADA's lead team members have provided technical and oversight for the conduct of the following related programs over the past twenty-five years in Cameroon and in other central Africa countries:

a. **CDC-Global Health Security Agenda Program for Cameroon.**

   Over the last four years, the HEADA lead team members under Metabiota, provided technical oversight to support the Global Health Security Agenda activities in Cameroon through collaboration with the Ministry of Health, Ministry of Livestock and Ministry of Environment to aiming at Improving the country's International Health Regulations Indicators.

b. **Through funding support from 2001 to 2014 from the Naval Health Research Center's Grant** and the US Department of Defense HIV Prevention Program (DHAPP) to Johns Hopkins Cameroon Program and Metabiota, HEADA lead team members has provided technical oversight and management of HIV prevention and surveillance interventions in the militaries in central Africa countries (Gabon, Chad, Central African Republic, Democratic Republic of Congo, Republic of Congo, Cameroon, Equatorial Guinea and Sao Tome & Principe. From 2015 to 2019 the HEADA's lead team members under Metabiota with funding support from DHAPP - U.S President's Emergency Plan for AIDS Relief (PEPFAR), provided technical oversight to support the Cameroonian military to strengthen their capacity for HIV/AIDS prevention, diagnosis, linkage to care and treatment for military personnel, their families members and other civilian populations in military health facilities. This intervention program also reaches militaries in their barracks and units and neighboring communities. The team has provided technical assistance to the militaries health in the eight central Africa countries in conducting between 2002 and 2019, a total of 15 sessions of HIV seroprevalence and behavioral risk surveys (SABERS), assisted with testing capacity development and contributed through advocacy at the military high command and civilian stakeholders (MOH) to obtain commitment of the decision makers in support to the military HIV programs.

c. **USAID Emerging Pandemic Threat Program for Cameroon**

   Over the last ten years (2009-2019), the HEADA's lead team members under Metabiota, provided technical oversight to support activities in Cameroon for the Emerging Pandemic Threat Program-Zoonosis aiming at improving the countries' technical capacity in preparedness, detection and response to emerging and reemerging infections of zoonotic origin.

d. **USAID-Continuum of Prevention, Care and Treatment of HIV/AIDS with Most-at-risk populations in Cameroon**

Over the past five years (2014-2019), the HEADA's lead team members under Metabiota and in collaboration with Johns Hopkins University, provided technical oversight and led the implementation of the operational research component within the USAID funded HIV continuum of prevention, care and treatment of HIV/AIDS project among the key populations (MSM and sex workers) in Cameroon in a consortium led by CARE Cameroon.

e. **US Walter Reed Army Institute of Research-US Military HIV Research Program**

From 2004 to 2007 the HEADA's lead team members provided coordination and management of the study entitle "Prevalence, Incidence and Diversity of HIV-1 infection in the Armed Forces, Plantation, and Rural Villages in Cameroon" with primary objective to estimate after 4 years of follow up the HIV incidence in volunteer cohorts in different populations in Cameroon and to study feasibility of future vaccine trials. Funding for this study was from US Walter Reed Army Institute of Research and the study was monitored by US Military HIV Research Program and Johns Hopkins Bloomberg School of Public health in collaboration with the Ministry of Public Health.

f. **Merck Laboratories & Vaccine Research**

From 2002 to 2003 the HEADA's lead team members provided technical coordination of the Cameroon component of the Merck Laboratories multi sites study entitled "Observational Probe Study of In Vitro Immune Response Parameters to the Candidate HIV-1 Vaccine Antigens among Subjects from Brazil, Thailand, South Africa, Malawi, Botswana and Cameroon, with main objective to examine cross-reactivity of HIV strains prevalent in Cameroon with candidate HIV vaccines.

g. **US National Institute of Health**

From 2000 to 2004 HEADA's lead team members coordinated the implementation of the study entitle "Molecular Epidemiology of HIV-1 and Related Viruses in Rural Human Populations in African Rain Forest" with objective to investigate the distribution of viral genetic diversity of retroviruses and other viruses in relation to nonhuman primate exposure, travel and geography in Cameroon. The study was implemented in 17 rural villages and has led to the discovery of novel viruses. Scientific publications from this study include among others, key articles on HIV and the discovery of the first evidence of natural transmission of retroviruses from nonhuman primates to humans (SVF, HTLV3, and HTLV 4).

- *The Naturally acquired simian retrovirus infections in central African hunters. THE LANCET. Vol 363. March 20, 2004. www.thelancet.com (also see commentary: 363:911-912; and letters: 364:137-140).*
- *Naturally acquired Simian Foamy Virus (SFV) infection among Central African Hunters.* Eleventh International Conference on Human Retrovirology.

h. **Family Health International Clinical Research Studies**

The lead team members of HEADA has conducted under technical oversight of Family Health International, two phase III randomized controlled clinical studies aiming at controlling the transmission of sexually transmitted infections among female sex workers and women at high risk in Yaoundé and Douala – Cameroon between 1994 and 2000. The first study was aiming at assessing the effect of nonoxynol-9 film use on male-to-female transmission of HIV; The second study was aiming at assessing the effect of nonoxynol-9 gel (Conceptrol) use on male-to-female transmission of HIV.

- *Ronald Roddy, Zekeng L, Kelley Ryan, Tamoufe U, Kathryn Tweedy. Effect of nonoxynol-9 gel on urogenital gonorrhea and chlamydia infection. A randomized controlled trial. American Medical Association. March 6, 2002. Vol 287, No.9.*
- *Ryan KA, Roddy RE, Zekeng L, Tamoufe U, Weir SS, Wong EL. A randomized controlled trial of the effect of nonoxynol-9 film use on male-to-female transmission of STD. The New England Journal of Medicine, vol 339, Number 8, August 1998.*
- *Tamoufe U, Roddy RE, Ryan KA, Zekeng L. Prevalence of HIV infection among Sex workers in Cameroon. Poster presented at the XIth International Conference on AIDS, Vancouver, July 1996.*

Summary HEADA's capacity:

HEADA's lead team members have proven expertise acquired through many years of active involvement in several programs both in Cameroon and in other Central Africa countries, working with funding from international agencies such as: • US Department of Defense: HIV/AIDS Program (in Forces of Defense and civilian populations); • USAID (research on emerging and re-emerging infectious diseases, surveillance of infectious diseases such as human influenza, animal influenza (bird flu..), sexually transmitted infections, clinical studies, HIV and reproductive health including HIV/AIDS in key populations, One Health concept (preparation-detection-response to major public health events of biological origin or not); • UNDP / UNAIDS (HIV/AIDS in key populations); • CDC-Atlanta (HIV research, Global Health Security Agenda); • National Institute of Health-USA (research on emerging and re-emerging infectious diseases).

Over the past twenty-five years, key HEADA members have significantly contributed to establishing close working relationship with different ministerial departments in Cameroon and in other central Africa countries including the Ministries of Defense, Public Health, Livestock, Wildlife, Environment, Research and Higher Education.