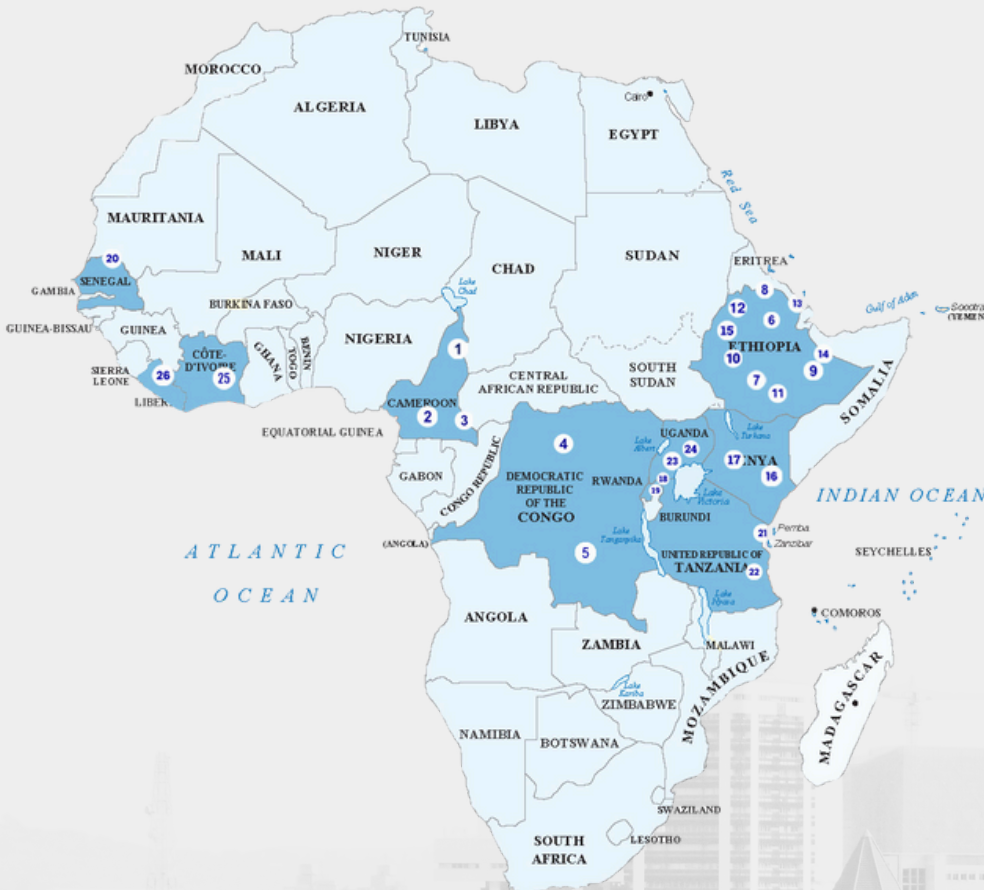


AFRICA ONE HEALTH UNIVERSITY NETWORK (AFROHUN) CAPABILITY STATEMENT

The Africa One Health University Network (AFROHUN) is a growing international network of schools of public health, medicine, veterinary sciences, environmental sciences and pathobiology dedicated to strengthening health systems through a One Health approach. AFROHUN focuses on workforce development, research, policy advocacy, risk communication and community engagement, and interdisciplinary collaboration to address global health challenges, including zoonotic diseases, antimicrobial resistance (AMR), and pandemic preparedness. AFROHUN operates across multiple African countries, including Uganda, Kenya, Tanzania, Cameroon, the Democratic Republic of Congo, Rwanda, Senegal, Ethiopia, Côte d'Ivoire, and Liberia. We collaborate with universities, government agencies, international organizations, and community stakeholders to develop a highly skilled One Health Workforce and drive sustainable public health solutions in Africa. <https://afrohun.org>.

📍 Current AFROHUN Reach:



CAMEROON

1. Université des Montagnes
2. University of Buea
3. University of Ngaoundéré

DR CONGO

4. University of Kinshasa
5. University of Lubumbashi

ETHIOPIA

6. Jimma University
7. University of Addis Ababa
8. Aksum University
9. Assosa University
10. Bule Hora University
11. Jigjiga University
12. Samara University
13. Wallo University
14. University of Gonder
15. Mekelle University

KENYA

16. University of Nairobi
17. Moi University

RWANDA

18. University of Rwanda
19. University of Global Health Equity

SENEGAL

20. Université Cheikh Anta Diop

TANZANIA

21. Muhimbili University of Health & Allied Sciences
22. Sokoine University of Agriculture

UGANDA

23. Mbarara University of Science & Technology
24. Makerere University

CÔTE-D'IVOIRE

25. Félix Houphouët-Boigny

LIBERIA

26. University of Liberia

Vision:

A global One Health leader championing sustainable health for humans, animals and environment

WHAT WE DO

AFROHUN's Approach to Workforce Capacity Building

MISSION

To drive transformational change for continuous improvement of health and well-being of humans, animals and environment through OH principles and approach to research, training and service to community



Pillar 1
EDUCATION AND CAPACITY BUILDING

Strategic Objectives

- Advance One Health concepts and principles to enhance the competencies and skills at pre-service and in-service level.
- Enhance One Health in practice through Mentored Experiential Learning and Training (MELT) for improved performance.



Pillar 2
RESEARCH INNOVATIONS AND COMMUNITY SERVICE

Strategic Objectives

- Strengthen capacity to undertake and support multidisciplinary research using a One Health approach.
- Undertake and support Public Health and One Health Innovations for service & evidence-based decisions and policy making.
- Promote research and innovations uptake and translation of knowledge for diverse consumers.
- Support transformation of the community through outreach and community engagement.



Pillar 3
RESOURCE MOBILISATION AND PARTNERSHIPS

Strategic Objectives

- Build and leverage strategic partnerships with governments, local, regional and international organizations, the private sector, communities and networks to drive Public Health and the One Health agenda.
- Mobilize and secure resources to sustain the Public Health and One Health Agenda.



Pillar 4
ORGANISATIONAL & NETWORK STRENGTHENING

Strategic Objectives

- Continuous improvement of organisational capacity.
- Strengthen leadership capacity.
- Support capacity of network institutions to deliver designed programmes, and innovations.



Participatory Action Research



KEY ACHIEVEMENTS

For 16 years now, with the support of USAID, we have used a One Health approach, to strengthen public health systems, improve infectious disease management, and foster multi sectoral collaborations to address emerging health threats. Key achievements include:

1) Enhanced Surveillance and Response Systems:

AAFROHUN supports disease surveillance, early detection, and rapid response through training and capacity-building initiatives. AFROHUN has developed vast training resources, designed unique One Health training programs, developed a continental capacity building platform, and built One Health human resource capacity across Africa. The vast training resources are available at the regional and country level and these include over 30 One Health modules, a One Health Competence Framework, problem-based case studies, different One Health curricula, training manuals for field experiential learning, among others. These resources have been used to integrate One Health core competencies into undergraduate and postgraduate programs at different Schools of Public Health (SPH), at Makerere University, University of Kinshasa, University of Rwanda, including registration of the Environmental Health Sciences Department as a CPD provider with the Rwanda Allied Health Professional Council (RAHPC).

AFROHUN has contributed to rabies elimination through digital surveillance tools like the Platform for Rabies Information Management in Ethiopia (PRIME) and COVID-19, and Rabies vaccination campaigns in Uganda, Ethiopia, Cote d'Ivoire, and Cameroon.

AFROHUN's collaborations with governments and international development agencies have strengthened Joint External Evaluation (JEE) scores and International Health Regulations (IHR) compliance.

2) Built a Skilled Workforce to Respond to Public Health Emergencies

Over 24,840 in-service and pre-service professionals have been trained through One Health programs. AFROHUN integrates One Health competencies into university curricula and offers professional development programs in biosafety, biosecurity, epidemiology, and health security. The network has established One Health Academies and professional certification programs to sustain workforce capacity.

The AFROHUN One Health Academy is a premier continental platform for One Health learning and capacity building, delivering unique high impact capacity building programs <https://academy.afrohun.org>. These programs are tailored to the African context to address local needs while delivering to Global Health Security Agenda aspirations and are open for access by the entire continent and beyond. Some of the unique programs accessed through the Academy include; Trans-boundary Risk Communication and Community Engagement (TDRCCCE); Pandemic Preparedness and Response using a One Health approach; Health Informatics; asynchronous on-line short courses running on the One Health Workforce Academies; and Communities of Practice to facilitate experience sharing and learning on topical issues.



30+ One Health Modules

24,840 Trained through New Programs

80,000 Trained through Revised One Health Curricula

24 Student One Health Innovation Clubs (SOHICs)

6,000 Students Engaged Annually

3) One Health Systems Strengthening, Research and Public Health Policy Discourse.

AFROHUN engages with national governments in assessing Human Resources capacity gaps, and building capacity of targeted workforce to address some of the public health emergencies. Particularly, AFROHUN has been supporting countries in achieving their International Health Regulations (IHR) goals by utilizing the World Health Organization's (WHO) frameworks and benchmarks. This involves developing targeted interventions to help countries create training programs that focus on key One Health competencies and public health skills. These initiatives also help countries track their progress toward meeting National Action Plan for Health Security (NAPHS) targets. Some of the key programs include: One Health Academy platforms for advanced learning in health security and interdisciplinary collaboration; empowerment and career development opportunities for professionals to enhance their technical and leadership skills; experiential learning to bridge knowledge gaps and build practical competencies; and policy engagement to support governments in integrating One Health approaches into national policies and action plans.

AFROHUN is also contributing to the improvement of the Joint External Evaluation (JEE) scores in Zoonotic Diseases, Risk Communication and Community Engagement, Workforce Development, and Anti- Microbial Resistance. Specifically, AFROHUN is building capacity in outbreak preparedness, prevention and response using a One Health Approach for Emergency Operation Centres in Uganda, and Territory Administrators in DRC. AFROHUN is also building capacity of Risk Communication and Community Engagement in 32 African countries. AFROHUN has also embarked on the process of standardization and enhancement of Infection Prevention and Control (IPC) protocols in Cote d'Ivoire. AFROHUN has strengthened COVID-19 SOPs in training institutions in Uganda. In partnership with Sandia National Labs, the network has built capacity of lab professionals in biosafety and biosecurity management in Uganda, Tanzania, Rwanda, Kenya, Ethiopia, DRC, and Cameroon.



Working group integrating One Health Competencies for systems strengthening

AFROHUN's other policy engagements entail interacting with local and national governments, regional bodies and international One Health players for advancing One Health goals of enhancing One Health policy formation, implementation, and capacity in the region. AFROHUN's contribution to policy outputs include advisory services on different national and regional One Health technical working groups, policy brief writing, dissemination of evidence-based information, and contribution to the public health debates as a means of helping shape the design of policies adapted to the local and regional context. A few examples include technical expertise in Joint Internal and External Evaluation Assessments; EAC One Health Strategic Plan; ECOWAS's regional One Health Agenda; Africa CDC's framework for One Health Practice in National Public Health Institutes; AU-IBAR's Animal Health Strategy for Africa; FAO-ECTAD's sustainable operationalization of One Health in the Africa Region and representation on the Africa One Health Network (AfoHNet) Steering Committee.



4) Promoted Interdisciplinary Collaboration:

AFROHUN has mastered the coordination of schools of public health, veterinary medicine, and environmental sciences in Africa to drive transformational change for continuous improvement of public health systems through multi-disciplinary research, training, and community service. AFROHUN continues to facilitate partnerships between human, animal, and environmental health sectors at different levels. Through its mentorship programs, AFROHUN facilitates pre-service and in-service professionals to collaborate with experienced mentors from academia, emergency response centers, and government bodies. In Uganda, the network has strengthened National and District Rabies Elimination Task Forces, enhancing intersectoral coordination.

5) Strengthened Laboratory Capacity

AFROHUN enhanced diagnostic capabilities by training laboratory professionals in biosafety and biosecurity in partnership with Sandia National Labs. The network supported laboratory system strengthening for zoonotic disease surveillance, including rabies testing facilities. It has played a key role in ensuring laboratory preparedness for pandemic response across multiple African countries



6) Empowered Local Communities

Through Risk Communication and Community Engagement (RCCE), AFROHUN has trained over 600 professionals in effective public health messaging. In addition, community outreach programs, led by Student One Health Innovation Clubs, have vaccinated over 1,500 pets, educated over 4,000 community members, and controlled stray animal populations. Community engagement programs focus on sustainable practices to reduce disease transmission, enhance biosecurity, and strengthen community resilience.



Community development officer and vaccinator facilitating gender transformative training under SheVax+

RELEVANT PAST PERFORMANCE

For the last fifteen years, AFROHUN has built capabilities in: One Health Leadership and Multisectoral Coordination; Human Resource Mapping and Planning Using a OneHealth Approach; One Health Human Resources Sustainability Mechanisms; AMR Stewardship using a One Health Approach; One Health Surveillance Innovation; Strategic Partnership Engagement and Collaboration for Targeted One Health Workforce Development; Mentored Experiential Learning and Training (MELT) in Risk Communication and Community Engagement (RCCE); Public Health Action Research and Co-creation of Interventions with Communities.

One Health Leadership and Multisectoral Coordination:

AFROHUN has for the last 15 years gained experience in One Health leadership and multisectoral coordination where the network, leading by example, has put in place a functional system for working across disciplines, sectors, countries, cultures and regions. AFROHUN has gone ahead to build OneHealth leadership and multisectoral coordination training programs to raise One Health leaders and champions across the continent. For example, in DRC, AFROHUN has trained Territorial Administrators in One Health Leadership and Multisectoral Coordination. DRC is a big country with 26 provinces, each subdivided into four entities: territories, sectors or chiefdoms, village agglomeration, and villages. DRC has a total of 145 Territorial Administrators assisted by 290 deputies. These oversee all sectors for territory development including health, security, and well-being of communities. In addition, DRC is a hotspot for zoonotic diseases and other complexities that require a One Health approach. AFROHUN has, for over a decade, been working and supporting DRC government sector, through the National One Health Platform and with active involvement of the Ministry of Interior to build capacity of these Territorial Administrators in One Health leadership and multisectoral coordination, and contingency plans developed in the process.

Evaluation results indicate satisfaction among the leadership of the Ministry of Interior on the work performance of the trained Territorial Administrators. For instance, as a result of the training, the Territorial Administrators were able to elaborate contingency plans of their territories during the 2020 COVID-19 pandemic. They are managing health emergencies using a One Health approach, as demonstrated during the Ebola outbreak in their respective territories and sectors. They have a high sense of responsibility and leadership during prevention, response, and management of health emergencies. The Territorial Administrators reporting has been enhanced. For instance reporting parameters have been broadened to include more data related to One Health issues. The functioning of territorial committees for the management of natural disasters, epidemics, and epizootics, among other has been improved.

Dr. Cecil Kutenalu, one of trained beneficiaries observed, “A few years after the training, I was part of a team from the Ministry of Health to head the National Ebola response.

The knowledge I had gained during the training came in handy in identifying gaps in the response structure. The training also equipped me with knowledge of how to bring together and manage multi-disciplinary teams and partners.” Related training has been conducted in Cameroon where AFROHUN strengthened One Health capacities of local administration/councils to foster their involvement and efficiency in COVID-19 and other diseases responses. AFROHUN continues to build One Health leadership and multisectoral coordination capacities at different levels across the network, including National One Health Platforms.



Territorial Administrators (TA) group discussion



A TA receiving a certificate after the training



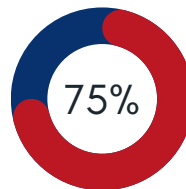
Human Resource Mapping and Planning Using a One Health Approach

AFROHUN has worked with national governments to map One Health Human Resource capacity gaps and collaboration opportunities across countries using the One Health Systems Mapping and Analysis Resource Toolkit (OH-SMART@). Some of the identified gaps have informed the design of intervention programs. In Cote d'Ivoire for example, AFROHUN has supported the national government to establish a working group for One Health human resources mapping, comprising line ministries from all key sectors relevant to One Health and Université Félix Houphouët-Boigny (UFHB). The working group was tasked to serve as an organ of the National One Health Platform (NOHP) to monitor and advise on One Health human resources. It conducted a national One Health human resources mapping from seven key ministries relevant to One Health, targeting staffing at different levels. Results indicated a workforce strength of 49,645 active government employees, 75% of whom were human health professionals, 1,690 trainers and 18,408 students in the various training structures. These results have been used to develop an interactive One Health human resource map for use by government and will inform development of a One Health Human Resource strategy. The working group is in the process of mapping One Health Human resource in the private sector to provide a complete outlook that is useful for informing the JEE Human Resource actions.

49,645

Active Government Employees

With



Human Health Professionals,

1,690 Trainers

And

18,408

Students in Various Training Structures



Mapping One Health human resource capacity gaps in Cote d'Ivoire



One Health Human Resources Sustainability Mechanisms:

Sustainability of One Health human resources is at the core of AFROHUN’s workforce development strategies and has taken two forms namely, engaging and strengthening existing structures and systems; and creating unique sustainability platforms. For example, in DRC, the sustainability of the capacity building process for Territorial Administrators in One Health leadership and multisectoral coordination entailed integrating this training program into the curriculum of the National School of Administration (NSA), which is a government training facility for this cadre of public administrators. Additionally, One Health competencies have been integrated into several curricula across the network for sustained One Health human resources capacity building for the pre-service level. For the in-service professionals, AFROHUN works with professional bodies to co-create One Health capacity building programs based on the workforce competence needs. However, these efforts are limited to national and sub-national levels.

In a bid to impact the wider continent and beyond amidst limited resources, AFROHUN developed a One Health Academy. Launched in 2020 and accredited initially in Uganda in 2023, <https://academy.afrohun.org>, the AFROHUN Academy is open to the co-creation and design of additional new unique One Health programs responsive to the ever changing human resource competence needs. It serves different clientele and customer segments: governments especially sectors relevant to One Health, in-service professionals from multiple disciplines, including frontline workers, laboratory technologists, technocrats, administrators, policy makers, and private sector players interested in building competencies to support multidisciplinary and multisectoral work environments.

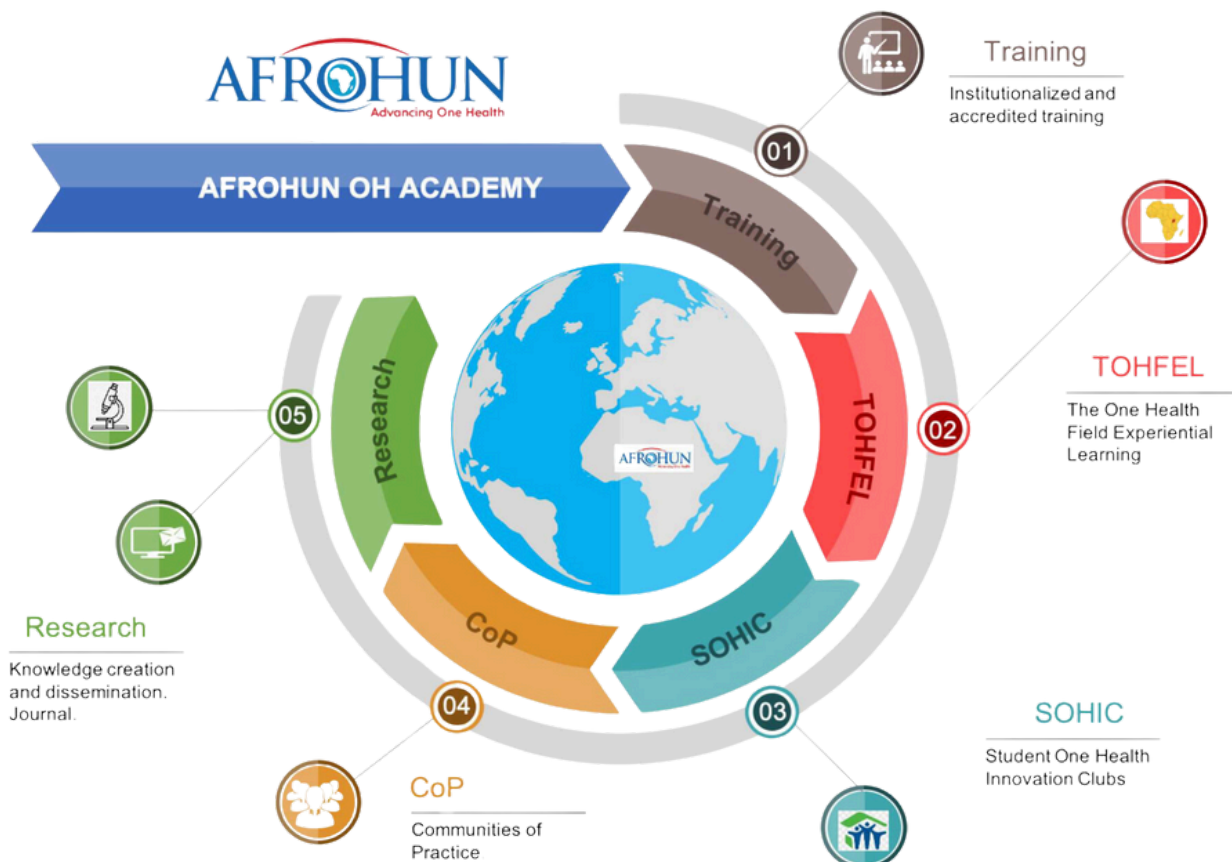


Figure 1: AFROHUN One Health Academy Operational Pillars



Antimicrobial Resistance Stewardship using a One Health Approach:

AMR stewardship is one of the critical complex health challenges that AFROHUN is tackling using a One Health approach. Different strategies have been deployed across the network in a bid to address AMR, including research, communities of practice and human resources capacity strengthening. For example, in 2017, AFROHUN Cameroon conducted a situation analysis on AMR through a highly consultative process where multisectoral stakeholders including human and animal health professionals, agronomists, environmental health professionals and decision makers were engaged. Findings indicated poor perceptions and practices for exacerbating AMR despite high levels of awareness of the problem across sectors. With different government actors at the center of shaping every step of the capacity building efforts, AFROHUN developed a capacity building program for AMR stewardship. This program was successfully implemented and has been appreciated for responding to country needs. The initial short course was later developed into a masters’ degree program approved and institutionalized at the University of Buea, and has been running since 2022 with two cohorts of 15 graduate students involved each year.

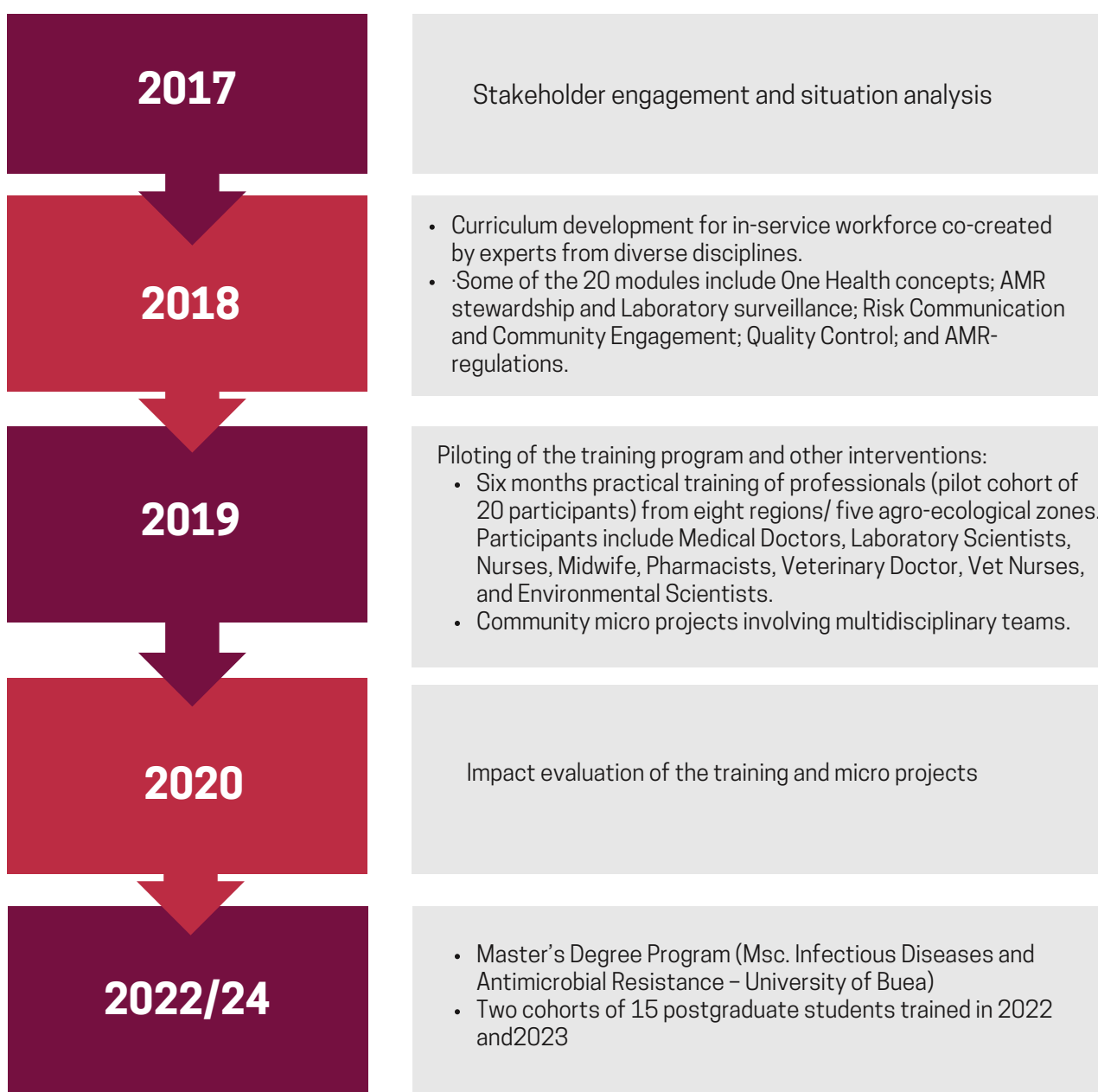


Figure 2: AMR Stewardship Trajectory



One Health Surveillance Innovations:

AFROHUN continues to develop innovative solutions to One Health challenges. One of the bottlenecks to One Health in practice in zoonotic disease prevention, control, and eradication is limited multisectoral surveillance, information sharing and collaboration across human, animal, and environmental sectors. To address this, AFROHUN in Ethiopia developed an innovative digital platform for intersectoral communication for rabies cases and their management in humans, domestic animals and wildlife, embracing a One Health approach to rabies prevention, control and eradication. This platform is called “PRIME - Platform for Rabies Information Management in Ethiopia”. In Ethiopia, Rabies kills 2700-2900 people annually. As such, rabies surveillance is vital in putting and maintaining the disease on the agenda of public and veterinary health authorities, as well as policy makers. AFROHUN working with government sectors and inter-governmental organizations embraced the use of digital technology for rabies data management and intersectoral collaboration between, human, animal and wildlife health professionals to enhance surveillance and collect critical information for controlling and managing rabies. This innovation is still under pilot but is already highly embraced by the key sectors in the country as a viable solution for the countries rabies elimination plans as well as by stakeholders from other AFROHUN countries, that expressed interest in the system once fully deployed. PRIME will make it possible to understand disease dynamics, track and monitor progress, forecast vaccine requirements and support advocacy among decision makers. However, this will require strengthening of laboratory systems.

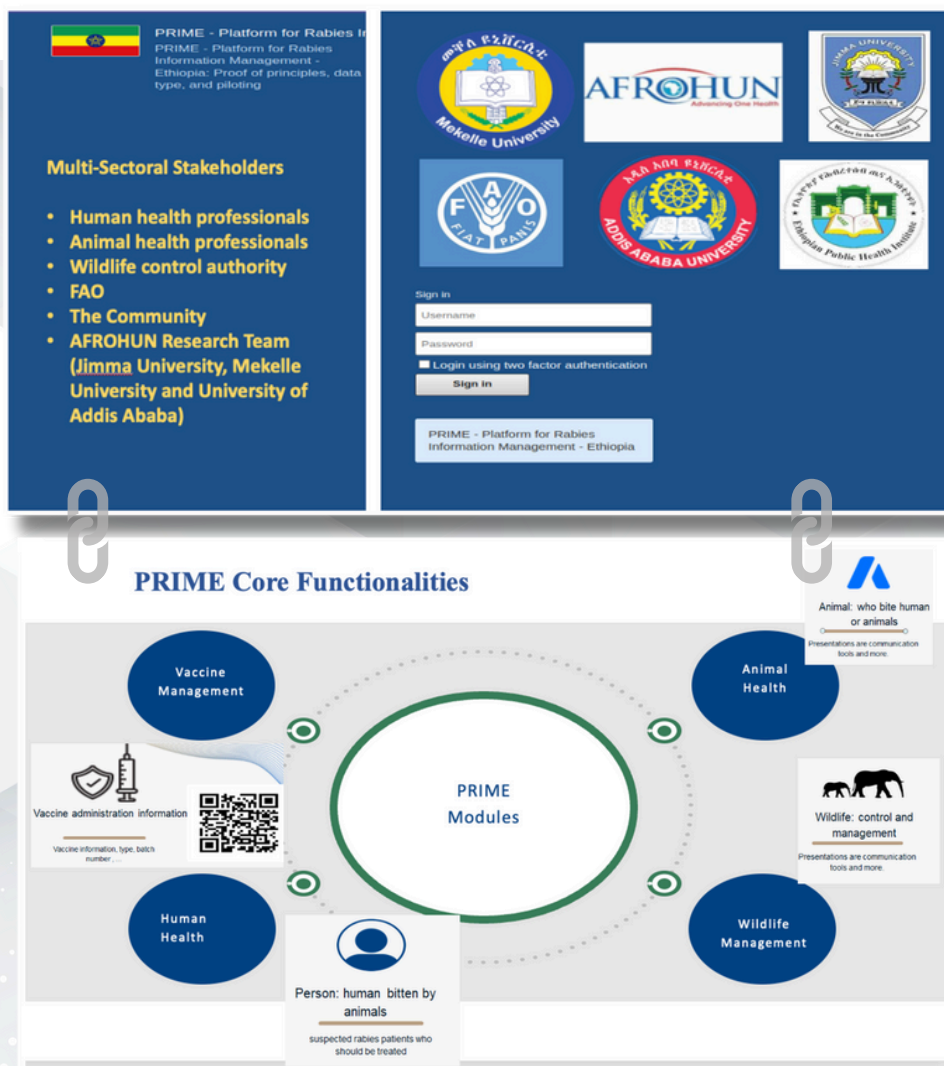


Figure 3: PRIME Surveillance Innovation System



Partnership Engagement and Collaboration for One Health Workforce Capacity Building:

AFROHUN has mastered strategic partnership engagements and collaboration to foster One Health workforce capacity building across the network. For example, in Kenya, AFROHUN working with the government builds frontline health workers in outbreak preparedness. This training has been accredited by the Kenya Veterinary Board, Environment Institute of Kenya, the Public Health Officers, and the Technicians Council for Continued Professional Development (CPD) delivery. A pilot training of 402 frontline workers was conducted. Results of the training evaluation have informed the ongoing rolling out of the self-paced online course. Similarly, AFROHUN in Tanzania has built capacity in One Health principles as a CPD course in collaboration with professional councils namely – Medical Council of Tanganyika (MCT), Pharmacy Council of Tanzania (PCT), Tanzania Nursing and Midwifery Council (TNMC), Environmental Health Practitioner’s Registration Council (EHPRC) and Veterinary Council of Tanzania (VCT). These parties actively engaged in the co-creation of the course which is now available for professionals from various disciplines. The course has both theoretical and practical sessions with credit points assigned by the different professional councils and is modelled to run as a fee-based course. To-date, two cohorts of 20 professionals each year have been trained.

On the other hand, AFROHUN in Uganda partners with communities, sub-national and national stakeholders to run a short course in Infectious Disease Management under the Uganda One Health Institute. This is a service-learning program, offering theoretical training and field placement within organizations that provide a One Health in practice learning environment including government agencies, NGOs, private sector and communities. The training entails a one-month didactic training on theoretical principles on different modules. Thereafter, in-service professionals engage in a three-month fellowship placement to apply the theoretical principles learned, while integrating One Health principles in the host organization to gain One Health competencies in practice. Over 1,000 multidisciplinary participants, including animal health professionals, agriculturalists, biomedical laboratory technicians, human health, social scientists among others have been trained since 2016.



Figure 4: Sample modules for the IDM course

Mentored Experiential Learning and Training (MELT) in Risk Communication and Community Engagement (RCCE):

AFROHUN is a catalyst of positive change in the prevention and control of pandemics and zoonotic diseases, by equipping Africa’s One Health workforce with effective Risk Communication and Community Engagement (RCCE) strategies. To this end, AFROHUN trained over 600 Africa’s OneHealth workforce in risk communication and community engagement for emerging pandemics, and zoonotic diseases using COVID-19 and rabies and M-Pox as case studies. We started by started with conducting evidence-based practices from a situation analysis carried out in seven African countries, and case studies from diverse African contexts. A multi-sectoral team of experts then designed a unique RCCE program, tailored to the African Context.



The program was then delivered through a Mentored Experiential Learning and Training (MELT) approach using a One Health approach. Multi-disciplinary participants (trainees) engaged the communities and interrogated cultural, gender and technical insights to understand what exacerbates risks for rabies, and drivers of non-compliance to COVID-19, and how this can best be communicated. They also had opportunities to share experiences, best practices learned, and practical skills developed to enhance their effectiveness in combating rabies. Over 600 participants were trained.

Situation Analysis on Regional Risk Communication and Community Engagement (RCCE) Curriculum on Rabies and Covid-19 for In-service Professionals (2023)



A report of the Findings 2024

Africa Regional Training Program for: Transboundary Disease Risk Communication and Community Engagement using a One Health Approach



A case of Rabies and Covid 19



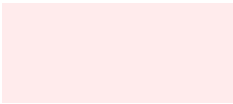
Mapping One Health human resource capacity gaps in Cote d'Ivoire



Students responding to a rabies outbreak



PLANS MOVING FORWARD:



Moving forward, AFROHUN intends to:

01

Enhancing WHO/IHR benchmarks and JEE indicators to improve health security and pandemic preparedness

02

Strengthen the sustainability of One Health workforce initiatives through expanded Academic offerings.

03

Expanding partnerships with governments, academic institutions, and international agencies to drive One Health adoption across Africa

04

Consolidate the OneHealth workforce sustainability through the AFROHUN One Health Academy.

Contact us :



<https://afrohun.org>



secretariat@afrohun.org or ayawe@afrohun.org



+256-200-912-673



Block 383, AFROHUN Ring Rd, Akright City, Bwebaja





Advancing One Health

The interconnectedness of humans animals and there environment calls for resilience and capacity to innovate in African universities to building a field ready One Health Workforce.