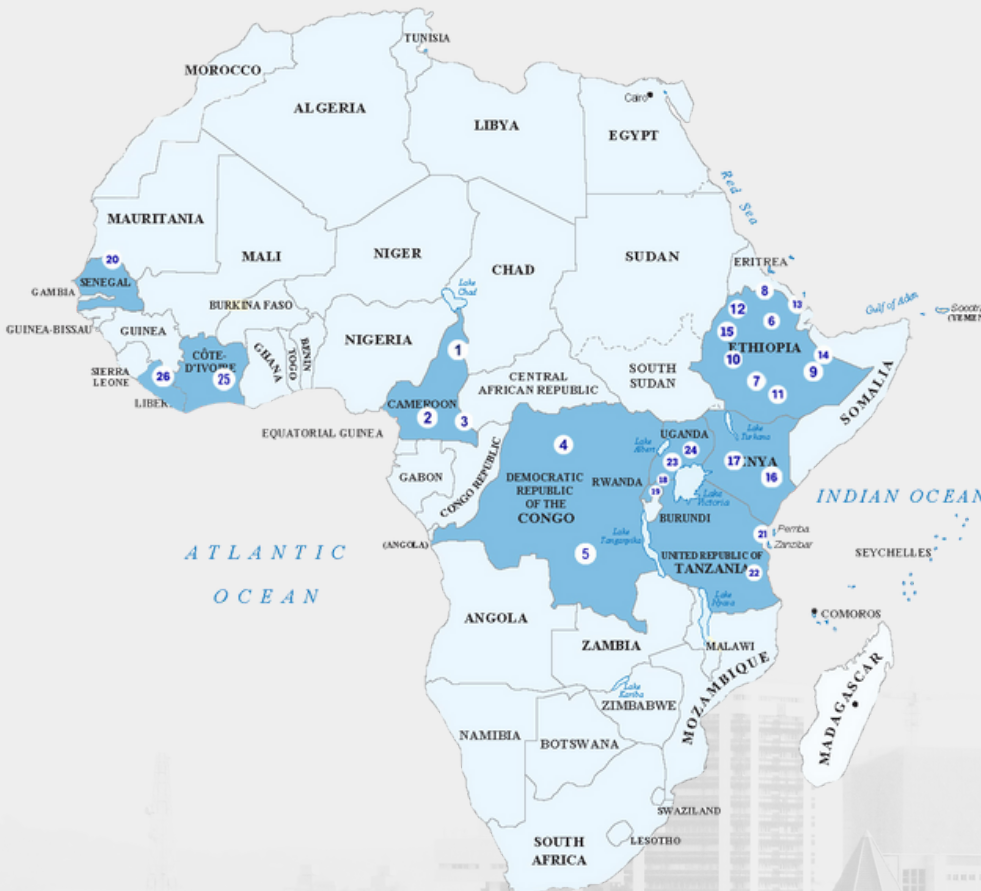


AFRICA ONE HEALTH UNIVERSITY NETWORK (AFROHUN) CAPABILITY STATEMENT

We are a growing international network of schools of public health, medicine, veterinary sciences, environmental sciences, and pathobiology, committed to improving the quality of the One Health Workforce 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 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 the One Health agenda.
- Mobilize and secure resources to sustain the One Health Agenda



Pillar 4
ORGANISATIONAL & NETWORK STRENGTHENING

Strategic Objectives

- Build organisational capacity
- Strengthen leadership capacity
- Support capacity of network institutions to deliver One Health programmes



Participatory Action Research



KEY ACHIEVEMENTS

One Health Training and Academic Offerings:

For the last fifteen years, 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 develop unique One Health training programs in different technical and cross-cutting areas including: Risk Communication and Community Engagement; Outbreak Preparedness and Response; Biosafety and Biosecurity Management; Antimicrobial Resistance; Infectious Diseases Management; Gender, Culture and One Health; One Health Leadership and Management; Ecosystem Health using a One Health Approach; Systems Thinking; Behavioral Change; Epidemiology; One Health Research; Policy and Advocacy. These programs have targeted in service workforce at different proficiency levels including frontline workers, mid and top managers (technical and administrative), as well as pre-service and community level.

A premier continental platform for One Health learning and capacity building, the AFROHUN One Health Academy <https://academy.afrohun.org> is delivering unique high impact capacity building programs. 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 (TD-RCCE); 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.

Altogether, AFROHUN has trained 24,840 in service and pre-service professionals directly through the above training programs, and over 80,000 using revised curricula where One Health competencies have been integrated. We have active student engagements in 9 countries organized under 24 Student One Health Innovation Clubs (SOHICs) with an average annual engagement of 6,000 students across the nine countries. The SOHICs deliver innovative outreach programs, One Health trainings and awareness raising sessions in communities under service learning. They have also worked with communities to develop innovations that address community challenges. In partnership with governments and inter-governmental agencies in different countries, SOHICs have played a key role in different activities including but not limited to AMR awareness, vaccination against different diseases, contract tracing during outbreaks and after-action reviews.



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



One Health Systems Strengthening and Policy Discourse.

AFROHUN engages with national governments in assessing One Health capacity gaps, and building capacity of targeted workforce to address some of these gaps. For example, AFROHUN is 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

In relation to policy engagement, AFROHUN interacts 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 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.





Multi-disciplinary and Gender Responsive Research and Innovation.

AFROHUN has a five-year research agenda which informs One Health research of the network whose focus areas include surveillance, early detection and response to zoonotic diseases, neglected tropical diseases, vector borne diseases and antimicrobial resistance. Over the years, we have built capacity and supported research projects of researchers (faculty and students) including One Health Action Research and innovations around the research priorities of the network in different countries. The outcomes have contributed towards addressing government and other partner needs. For instance, a digital Platform for Rabies Information Management in Ethiopia (PRIME) was developed to provide intersectoral communication for rabies cases and their management in humans, domestic and wildlife, embracing a One Health approach to Rabies prevention, control and eradication.

AFROHUN promotes an active and visible policy of mainstreaming a gender perspective, which includes disability and social inclusion dimensions, in all training programs and research. AFROHUN is employing a three-pronged gender, disability and social inclusion (GEDSI) integration strategy to guide effective gender mainstreaming and inclusivity as follows: (i) building capacity in gender and social analysis and integration, (ii) engendering the processes, methodologies and structures of programs including training and research; (iii) generating evidence-based GEDSI-responsive targeted initiatives for more impactful outcomes. AFROHUN has developed a gender policy, strategy, roadmap and tools that support the GEDSI mainstreaming work. Promising lessons on gender focused research are available from the SheVax Project “Hearing their voices: action research to support women’s agency and empowerment in livestock vaccine distribution, delivery and use in Kenya, Rwanda and Uganda”.



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 One Health 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.

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 One Health 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.



Territorial Administrators (TA) group discussion



A TA receiving a certificate after the training

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.



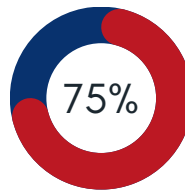
Human Resource Mapping and Planning Using a One Health Approach

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.

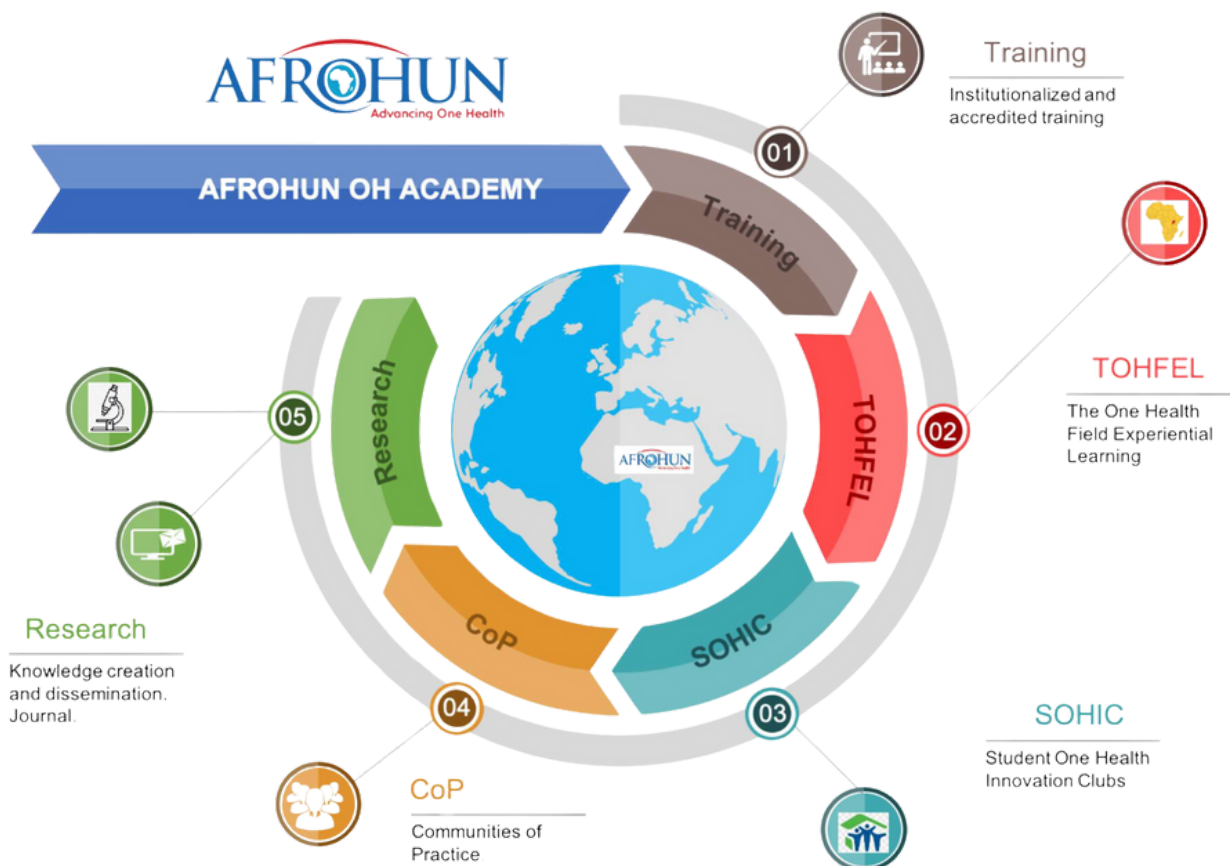


Figure 1: AFROHUN One Health Academy Operational Pillars



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.

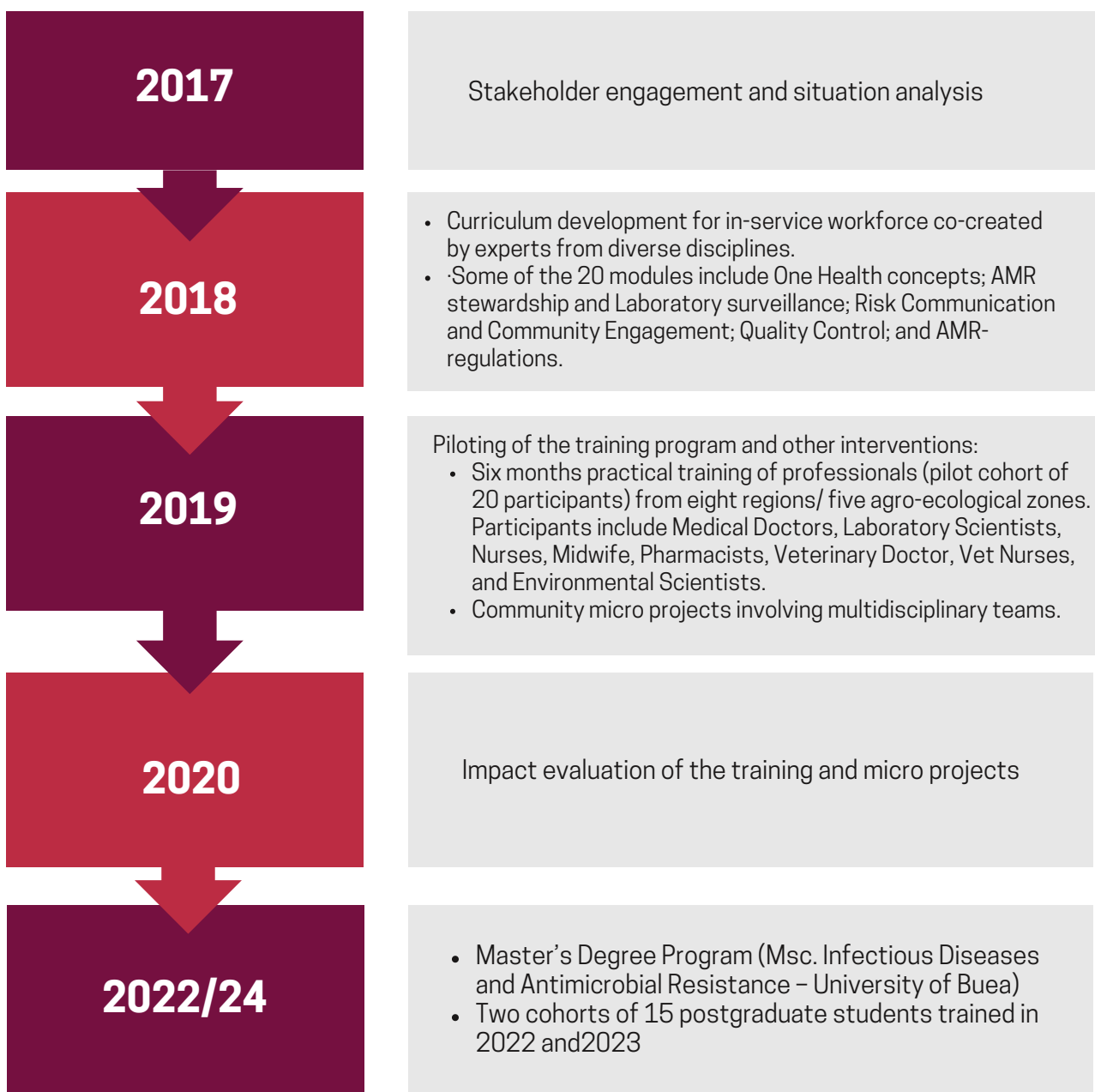


Figure 2: AMR Stewardship Trajectory



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.

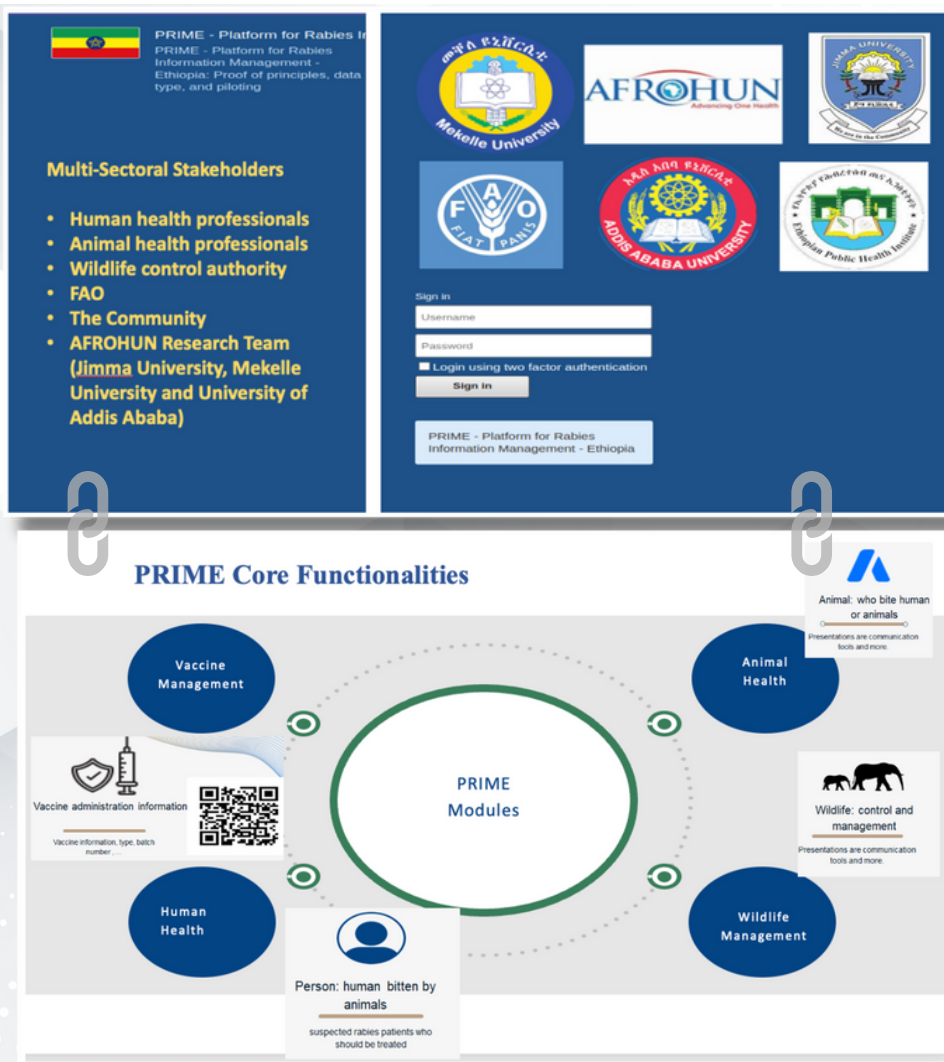


Figure 3: PRIME Surveillance Innovation System



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

