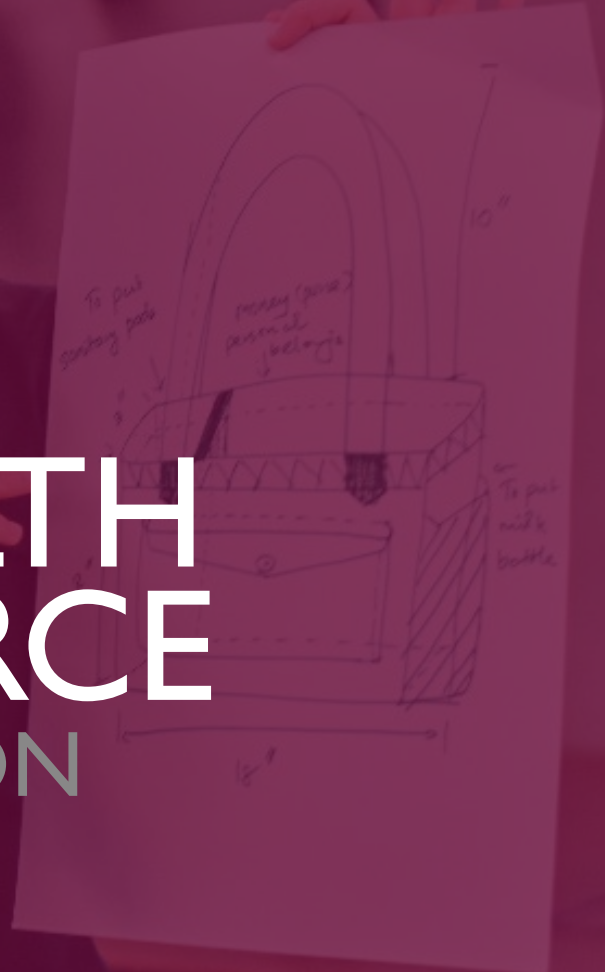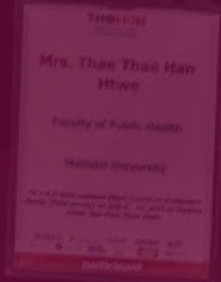# ONE HEALTH WORKFORCE
NEXT GENERATION

YEAR 1 ANNUAL REPORT
2019-2020

ONE HEALTH WORKORCE
NEXT GENERATION

YEAR 1 ANNUAL REPORT
2019-2020

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PHOTO: EDOUARD TAMBA

In particular, we would like to extend special thanks to the two regional One Health University Networks:

AFROHUN (AFRICA ONE HEALTH UNIVERSITY NETWORK)
- AFROHUN Cameroon
- AFROHUN Côte d'Ivoire
- AFROHUN DRC
- AFROHUN Ethiopia
- AFROHUN Kenya
- AFROHUN Rwanda
- AFROHUN Senegal
- AFROHUN Tanzania
- AFROHUN Uganda

SEAOHUN (SOUTHEAST ASIA ONE HEALTH UNIVERSITY NETWORK)
- Cambodia One Health University Network
- Laos One Health University Network
- Indonesia One Health University Network
- Malaysia One Health University Network
- Myanmar One Health University Network
- Philippines One Health University Network
- Thailand One Health University Network
- Viet Nam One Health University Network

LAYOUT & DESIGN
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UC Davis, OHI

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TABLE OF CONTENTS

ACRONYMS & ABBREVIATIONS

Africa One Health University Network	AFROHUN (AFR)
AFROHUN Cameroon	CRN
AFROHUN Côte d'Ivoire	CDI
AFROHUN Democratic Republic of the Congo	DRC
AFROHUN Ethiopia	ET
AFROHUN Kenya	KY
AFROHUN Rwanda	RW
AFROHUN Senegal	SN
AFROHUN Tanzania	TZ
AFROHUN Uganda	UG
Agreement Officer's Representative	AOR
Antimicrobial Resistance	AMR
Association of Southeast Asian Nations	ASEAN
Biological Threat Reduction Program	BTRP
Calibrated, Lifelong, Adaptive, Scalable, and Sustainable	CLASS
Cambodia One Health University Network	CAMBOHUN
Centers for Disease Control and Prevention	CDC
College of Veterinary Medicine, Animal Resources and Biosecurity	COVAB
Communities of Practice	CoP
Community Based Training for Medical Students	COBERS
Continuing Professional Development	CPD
Coronavirus Disease 2019	COVID-19
Crisis Preparedness Response Centre	CPRC
Defense Threat Reduction Agency	DTRA
Department of Animal Health	DAH
Ecole Inter-Etats des Sciences et Medicine Veterinaires	EISMV
Emergency Centre for Transboundary Animal Diseases	ECTAD
Emerging Pandemic Threats	EPT
Extension for Community Healthcare Outcomes	ECHO
Field Epidemiology Education and Training Program	FEETP
Field Epidemiology Training Program	FETP
Field Epidemiology Training Program for Veterinarians	FETPV
Food and Agricultural Organization of the United Nations	FAO
Gender Action Plan	GAP
General Department of Preventative Medicine	GDPM
Geographic Information Systems	GIS
Global Health Security Agenda	GHSA
Global Level	GL
Hanoi Medical University	HMU
Highly Pathogenic Avian Influenza	HPAI
Hue University of Agriculture and Forestry	HUAF

Indonesia One Health University Network	INDOHUN (IN)
Infection Prevention and Control	IPC
Infectious Disease Management	IDM
Information, Education, and Communication	IEC
Institut Pasteur Dakar	IPD
Institute of Environmental Sciences	ISE
Institute of Health and Development	ISED
International Federation of Red Cross and Red Crescent	IFRC
International Islamic University Malaysia	IIUM
International Livestock Research Institute	ILRI
International Standard Book Number	ISBN
International Union for the Conservation of Nature	IUCN
Joint External Evaluation	JEE
Kinsasha School of Public Heath	KSPH
Knowledge Management	KM
Knowledge Management System	KMS
Laos One Health University Network	LAOHUN
Makerere University	Mak
Malaysia One Health University Network	MyOHUN (MY)
Massive Open Online Courses	MOOC
Masters of Public Health	MPH
Masters of Science	MSc
Mbarara University of Science and Technology	MUST
Medicines, Technologies, and Pharmaceutical Services Program	MTaPS
Ministry of Health	MoH
Ministry of Public Health	MoPH
Monitoring and Evaluation	M&E
Monitoring, Evaluation, and Learning	MEL
Movement Control Order	MCO
Myanmar One Health University Network	MMOHUN
National Coordination Office	NCO
National Council of Nurses and Midwives of Rwanda	NCNM
National Institute of Public Health	NIPH
National Pharmacy Council	NPC
National University of Laos	NUOL
Nong Lam University at Ho Chi Minh city	HCM NLU
Non-Governmental Organization	NGO
Non-US Organization Pre-Award Survey	NUPAS
One Health	OH
One Health Central and Eastern Africa Network	OHCEA
One Health Collaborating Center	OHCC
One Health Institute	OHI
One Health Student Club	OHSC
One Health University Network	OHUN

One Health Workforce	OHW
One Health Workforce – Next Generation	OHW-NG
One Health Workforce Academy	OHWA
Organizational Capacity Assessment	OCA
Personal Protective Equipment	PPE
Philippines One Health University Network	PhilOHUN
Prek Leap National College of Agriculture	PNCA
Institut Pasteur Dakar	IPD
Prime Minister's Office	PMO
Problem-based Learning	PBL
Public Health and Social Measures	PHSM
Regional Development Mission for Asia	RDMA
Request for Proposals	RFP
Risk Communication and Community Engagement	RCCE
Royal College of Surgeons in Ireland	RCSI
Royal University of Agriculture	RUA
Rwanda Association of Midwives	RAM
Rwanda Council of Veterinary Doctors	RCVD
Rwanda Medical and Dental Council	RMDC
Rwanda Nurses and Midwives Union	RNMI
Rwanda Allied Health Professions Council	RAHP
Severe Acute Respiratory Syndrome Coronavirus 2	SARS-CoV-2
Southeast Asia One Health University Network	SEAOHUN (SEA)
Standard Operating Procedures	SOP
Strengths, Weaknesses, Opportunities, and Threats	SWOT
Student One Health Club	SOHC
Student One Health Innovation Club	SOHIC
Tanzania Public Health Association	TPHA
Technical Counterpart Agency	TCA
Terms of Reference	TOR
Thailand One Health University Network	THOHUN (TH)
Training of Trainers	ToT
United States Agency for International Development	USAID
Université Cheikh Anta Diop	UCAD
Université des Montagnes	UdM
Universiti Kebangsaan Malaysia	UKM
Universiti Malaya	UM
Universiti Malaysia Kelantan	UMK
Universiti Malaysia Sabah	UMS
Universiti Malaysia Sarawak	UNIMAS
Universiti Malaysia Terengganu	UMT
Universiti Putra Malaysia	UPM
Universiti Sains Islam Malaysia	USIM
Universiti Sains Malaysia	USM

Universiti Sulatan Zainal Abidin	UniSZA
Universiti Teknologi MARA Shah Alam	UiTM
University College Dublin	UCD
University of Buea, Cameroon	UB
University of California	UC
University of Health Sciences	UHS
University of Kinshasa, Congo	UNIKIN
University of Lubumbashi	UNILU
University of Medicine and Pharmacy at Ho Chi Minh city	HCM UMP
Viet Nam National University of Agriculture	VNUA
Viet Nam One Health University Network	VOHUN (VN)
Virtual Communities of Practice	vCoP
Water, Sanitation and Hygiene	WASH
World Health Organization	WHO
World One Health Congress	WOHC
World Organization for Animal Health	OIE
International Standards Organization	ISO

USAID One Health Workforce – Next Generation Project

PREFACE

OHW-NG Goal

Empower One Health university networks to sustainably develop and deliver world-leading model programs for equipping professionals with transdisciplinary skills to address complex global health issues.

The Year 2020 has been one for the history books. With a pandemic overlaying a startup year for the USAID One Health Workforce – Next Generation (OHW-NG) Project, there were many challenges to be overcome and also many successes to be noted. We are proud to report that in fall 2019, the USAID OHW-NG Project launched successfully with kickoff meetings in Bangkok, Thailand and Kampala, Uganda. The Southeast Asia One Health University Network (SEAOHUN) and the Africa One Health University Network (AFROHUN, formerly the One Health Central and East African University Network or OHCEA) have admirably and effectively brought together representatives from many country teams to engage with global team partners from the University of California (UC) Davis, UC Berkeley, UC Irvine, Columbia University ICAP Program, EcoHealth Alliance, University of New Mexico ECHO Institute, and Ata Health Strategies to work on regionally-focused and globally-engaged activities both physically and virtually for a successful first year.

Of course, in early 2020, the COVID-19 pandemic hit. Tragedy unfurled as people and pathogens moved throughout the Southeast Asia region and then to the United States and Africa – to every corner of the earth. What had likely originated as a zoonotic viral spillover of a novel coronavirus from wildlife to humans was amplified rapidly through human-human transmission pathways, and we are still in the midst of battling this global health threat that is changing life as we know it. In this context, we have established a new normal of working primarily online for conducting training activities and project management meetings involving personnel based around the world. We are committed to getting through this crisis together and are emerging with partnerships even stronger than could have been originally imagined. The need for One Health University Networks and the well-trained workforce that can materialize is starkly apparent in the face of COVID-19 and is more important than ever as a source of knowledge sharing, innovation, and global collegiality. In fact, AFROHUN and SEAOHUN, in partnership with the Global Team, provided enormous support to our academic community and beyond – providing everything from technical engagements and trainings to direct aid to the response effort.

As we conclude the first year of the OHW-NG Project, SEAOHUN and AFROHUN and participating faculties have shown leadership and passion for protecting human health during the COVID-19 crisis and have successfully shifted their work routines to utilize remote and online options that are consistent with the local movement restrictions and best practices. Last but not at all least, it is significant to note that both AFROHUN and SEAOHUN Secretariats have diligently navigated project startup with the new global partners in order to enable country teams using best practices for local and global public health. Taken altogether, it is inspiring to witness the enthusiasm and commitment for implementing the One Health approach, and it instills hope for what can be achieved.

One Health Workforce – Next Generation Directors
October 2020

OHW-NG GLOBAL CONSORTIUM

The OHW-NG Global Consortium consists of world-renowned partners based across North America, Africa, and Southeast Asia. Regional training is implemented using a hub and spokes model in which AFROHUN Secretariat links out to Country Chapters and the SEAOHUN Secretariat links out to Country One Health University Networks (OHUNs). The regional One Health University Networks are supported by the OHW-NG Global Team that is a highly collaborative group of US-based organizations with complementary missions and extensive experience working in the current AFROHUN and SEAOHUN countries, as well as in countries proposed for Network expansion over time.

THIS YEAR IN NUMBERS

46
MENTORED STUDENT
ONE HEALTH CLUBS

9
AFROHUN COUNTRY
CHAPTERS

8
SEAOHUN COUNTRY
NETWORKS (OHUNs)

51
ACTIVITIES INCREASING
CAPACITY TO RESPOND
TO COVID-19

2
SECRETARIATS

7
GLOBAL TEAM
PARTNERS

22,569
INDIVIDUALS
TRAINED

3
GLOBAL
OBJECTIVES

12
STRATEGIES

TRAINING & EMPOWERMENT

Objective 1 focuses on increasing proficiency in One Health competencies for pre-service and in-service professionals, establishing a well-trained and technically proficient workforce pipeline, and engaging One Health University Networks that can be activated during health emergencies.

STRATEGIES
1.1 One Health Training Content Curation and Development
1.2 One Health Academy
1.3 One Health Empowerment and Career Development
1.4 One Health Experiential Learning
1.5 One Health Policy Engagement

TARGETED OUTCOMES/IMPACT
- Increased proficiency in One Health (OH) competencies for pre-service and in-service professionals
- Well-trained and technically proficient workforce pipeline
- Active and engaged One Health networks that can be activated during health emergencies

MAJOR ACTIVITIES

- **GL Activity 1.1.1** Curate and update existing One Health competencies, learning objectives, evaluation tools, and training materials. Learn more in Impact Article: **One Health Training Content Development & Curation** on page 19.

- **GL Activity 1.2.1** Establish an open One Health Academy online structure to house existing and new One Health curricula. Learn more in Impact Article: **One Health Workforce Academies** on page 22.

- **GL Activity 1.2.2** Launch first regional ECHO Virtual Community of Practice (vCoP) for One Health Faculty and In-service Professionals. Learn more in Impact Article: **Establishing Virtual Communities of Practice (vCoP) to Address Urgent One Health Issues** on page 20.

HIGHLIGHTS

The Global Team worked with the regional Secretariats and Country Chapters/One Heath University Networks (OHUNs) to develop new prioritized One Health curricula content. Virtual formats were used to engage teams and follow COVID-19 health regulations. Products and materials developed address emergent One Health competency needs and fill gaps in existing training module collections.

- Provided technical support for development of plans for a series of workshops on grant writing and e-Learning hosted by AFROHUN Cameroon.

- Provided a comprehensive review and roadmap for the integration of One Health concepts and training activities into the Master of Public Health degree curriculum at Kinshasa School of Public Health, DRC, where 20 scholarships will be awarded to incoming trainees in 2021.

- Planned a faculty development workshop series for the SEAOHUN region on Risk Communication. This multi-part interactive workshop is expected to enhance the development of new competency-based training activities in One Health and faculty-led responses to communication on the COVID-19 pandemic at their respective universities.

IMPACT

ONE HEALTH TRAINING CONTENT DEVELOPMENT & CURATION

The Southeast Asia One Health University Network (SEAOHUN) and the Africa One Health University Network (AFROHUN, formerly OHCEA), have been working over the past decade to build teams and training content that incorporate a One Health approach to problem solving and capacity building. To ensure that One Health training is competency-based and aligned with national priorities, and also to engage potential employers and policy makers so they are confident in the skills of AFROHUN and SEAOHUN trainees, it is important to revise and update a core set of One Health competencies with identifiable and measurable attributes, as well as verifiable quality.

The One Health Workforce – Next Generation Project implemented several activities this year to help ensure that the existing One Health training materials are competency-based and have strong accompanying evaluation strategies to facilitate the accomplishment of technical objectives with inclusion of a diverse range of disciplines, regions, and talent, from novice to expert levels. In order to stay at the forefront of One Health Training and Empowerment, the OHW-NG Global Team continues to work in close partnership with the AFROHUN and SEAOHUN Networks to curate existing learning modules, competencies, sub-competencies, and learning objectives; to map variations in content, delivery modes, and evaluation tools; and to identify opportunities to develop new modules with specific learning objectives that fill gaps in training that may otherwise compromise the ability of trainees to meet One Health challenges, including gender barriers. We refer to this overarching strategy and activity as One Health **CLASS** (**C**alibrated, **L**ifelong, **A**daptive, **S**calable, and **S**ustainable) Proficiency.

Notable Achievements
- Curricula survey instruments were developed with 13 categories of One Health training activities and 26 variables (338 item matrix). A glossary of 33 One Health training-related terms and phrases was produced.

- An instructional video was produced to frame the curation project and to motivate data collection. Global Consortium partners implemented virtual working sessions with Network partners to aid in the curation exercise.
- A table of training activities that capture 18 One Health competency domains was produced and distributed to Country Managers and National Coordinators to record specific exemplar training activities in specific academic units.
- A survey questionnaire was developed for self-assessment of progress toward institutionalization of One Health training activities at the national and regional levels, according to the CLASS (Calibrated, Life-long, Adaptable, Scalable, and Sustainable) schematic scores.

All tools were completed and data compiled at the national level, representing One Heath training activities apparent at the university levels for each country. Reports were produced for each country partner and were meant to inform 2020-2021 workplan development. The database will be updated periodically to stay current.

A major success of USAID investments supporting development of a One Health-oriented workforce over the past decade is the creation and implementation of training modules that align with academic and professional consensuses on competencies required to prepare an effective workforce to address global and regional infectious disease challenges. Through ongoing content curation utilizing the CLASS schematic, the Networks will be in position to provide employers across the public, private, and non-governmental sectors with a more reliable and competent workforce ready to tackle the ever-growing health-related challenges (food security, emerging diseases, and environmental challenges to name a few).

*STRATEGY 1.1 One Health Training Content Curation & Development

FOCUS ON GENDER

A critical piece to empowering the next generation of the One Health workforce is to address the gaps in gender equity and competency. Mainstreaming gender competencies throughout the Networks will be critical to their success in building a transdisciplinary workforce that can integrate efforts across sectors with the knowledge, perspective, respect, and skills required to rapidly respond to emerging health security threats. The Global Team engaged in activities, such as gender workshops and trainings to increase the number of individuals within the Networks with relevant knowledge and skills related to key gender competencies.

IMPACT

PHOTO: OHW-NG CONSORTIUM

ESTABLISHING VIRTUAL COMMUNITIES OF PRACTICE (vCoP) TO ADDRESS URGENT ONE HEALTH ISSUES

Addressing COVID-19 through the launch of the first OHW-NG regional One Health virtual Community of Practice

As a component of the One Health Workforce Academy (OHWA), the OHW-NG Global Team had planned to launch a regional ECHO virtual Community of Practice (vCoP) for One Health faculty and in-service professionals. Once established, these vCoPs will create opportunities for One Health professionals and faculty to engage and collaborate on specific and timely topics in a synchronous manner from around the world. Originally proposed to focus on topics such as Antimicrobial Resistance (AMR), the OHW-NG Global Team, in collaboration with AFROHUN and SEAOHUN, pivoted to address the COVID-19 pandemic as it was unfurling across the globe.

In the first year of the OHW-NG Project (2019-2020), we organized and launched this vCoP focusing on COVID-19 using a One Health approach. Following the initial events in March 2020 (one launch session for each Network) that were so successful, we implemented six more ECHO sessions with the AFROHUN and SEAOHUN Networks over the following few months to stimulate the virtual Communities of Practice and explore the multiple dimensions of the pandemic using a

panel format. The six individual 1.5 hour "One Health Update" events featured presentations and discussions from international and regional experts on pandemic emergencies in the context of a One Health framework.

These bi-weekly ECHO-COVID-19 sessions aligned with competency-based One Health curricula. The six sessions focused on:

1. What's Working, and What's Not for COVID-19 Response Strategies Around the World
2. Perspectives on Gender and Psychosocial Aspects in Outbreaks
3. Community Surveillance
4. Immunity Issues and Interventions for COVID-19
5. Diagnostic Testing Approaches for COVID-19
6. One Health Approaches to Investigating Spillover

These ECHO events were open for enrollment internationally and thus the vCoP was comprised of individuals from both Network countries and partners and as well as non-member countries and institutions. The sessions had 2,701 participants total from 93 countries. All sessions were interactive and featured opportunities for questions and to engage in breakout discussions. Continuing Education Credits (e.g. Continuing Medical Education; CME) were offered to all participants who fully attended each event.

IMPACT

ECHO Immersion Trainings for SEAOHUN & AFROHUN

While the initial launch of the ECHO COVID-19-focused vCoP was a collaborative effort by the OHW-NG Global Team and the Secretariats, part of the goal of the OHW-NG Project is to facilitate the Networks to build capacity to host and run these Communities of Practice independently. To build capacities regionally, both Secretariats and in some cases Country Team members participated in an ECHO-organized Immersion Training events. These trainings were held virtually over multiple days and covered essential topics needed to start and run an ECHO vCoP program. These ECHO Immersion Trainings were open to other interested stakeholder participants in addition to the Networks. In total, 64 OHW-NG affiliated individuals attended the AFROHUN ECHO Immersion Training and 7 participated in the SEAOHUN ECHO Immersion Training event.

The goal of the ECHO Immersion Trainings was to offer the Secretariats and Country Teams/OHUNs a better understanding of how to use the ECHO model of case-based learning and sharing of best practices to create virtual Communities of Practice supporting and building upon critical One Health competencies. Furthermore, once AFROHUN and SEAOHUN are empowered to create these vCoPs as an innovative way of learning and engaging with Network members, the Secretariats may become trainers themselves in the ECHO model for other regional partners, helping to raise their visibility and sustainability contributing to increasing capacity for self-reliance, as well as fostering One Health competencies.

As a result of both the ECHO COVID-19 sessions and the Immersion Training, AFROHUN Senegal and Kenya chapters have been inspired to created their own ECHO learning networks to support their OHW-NG educational activities in Year 2. The AFROHUN Secretariat also plans to develop ECHO programs supporting their One Health priorities related to e-learning and collaborative research training. All of these activities will build off the ECHO Immersion Trainings to create their own One Health education programs supporting local One Health networks.

*STRATEGY 1.2 One Health Academy

> *Let us make this a useful platform for all One Health...we realized we can use it for innovations and engineering. This is the way to go - sharing innovations from different Universities. We can start an innovation that responds to a problem at the community level. Many have come, they have a desire to learn. People are more excited. Zoom has become the order of the day - this platform is a game changer.*
>
> –Professor William Bazeyo, AFROHUN CEO

> *This was an awesome experience. Building this platform/space for AFROHUN will take us to another level. We have so much to do that this platform will support.*
>
> –AFROHUN Immersion Training Participant

IMPACT

ONE HEALTH WORKFORCE ACADEMIES

To create a sustainable pipeline of capable trainees to feed into a One Health-oriented workforce, the OHW-NG Consortium is establishing a web-based platform that provides a recognizable portal for One Health training materials, competency standards, partner visibility, access to experts in academia and industry, employment opportunities, and an alumni network. This year, we began to establish the OHW-NG One Health Workforce Academies (OHWA) websites that support the SEAOHUN and AFROHUN OHWA.

The OHWA websites provide for three branches of the One Health Workforce Academies, including the Global Consortium OHWA, AFROHUN OHWA, and SEAOHUN OHWA. To broaden collaboration on One Health training and resources, the Global Consortium engaged in discussions with related global and international academies, including the WHO Academy, FAO, African Society for Laboratory Medicine, American Society for Microbiology, and Smithsonian Institution, among many relevant groups who are welcome to participate.

SEAOHUN One Health Workforce Academy

The steering committee was convened for the SEAOHUN OHWA this year. A web-based questionnaire survey of stakeholders in the SEAOHUN region was also implemented to assess competency priorities for the workforce and prospects for a Certificate in One Health, including opportunities planned for the One Health Workforce Academy. Results were shared with the steering committee, as well as presented during the SEAOHUN 2020 virtual annual showcase event.

AFROHUN One Health Workforce Academy

In the Africa region, this year the Technical Advisory Committee for the AFROHUN One Health Workforce Academy was launched, focusing on five pillars including: Pillar 1: Institutionalized and accredited trainings for preservice, in-service and faculty, using certified trainers; Pillar 2: The One Health Experiential Learning Models; Pillar 3: Student Health Innovation Clubs; Pillar 4: Communities of Practice; and Pillar 5: Research. As part of the AFROHUN OHWA initiatives, the Global Team reviewed and provided feedback on a draft publications manual, a guide for Student One Health Innovation clubs (SOHIC), and a field experience training guide.

*STRATEGY 1.2 One Health Academy

AFROHUN
Advancing One Health

AFROHUN OH ACADEMY

Training — 01 — Institutionalized and accredited training

TOHFEL — 02 — The One Health Field Experiential Learning

SOHIC — 03 — Student One Health Innovation Clubs

CoP — 04 — Communities of Practice.

Research — 05 — Knowledge creation and dissemination. Journal.
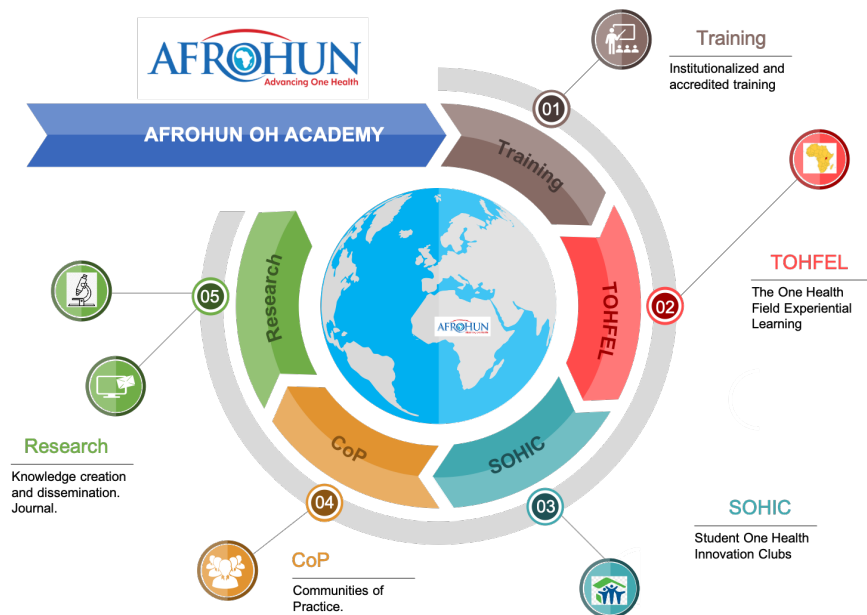
IMPACT

STUDENT ONE HEALTH CLUBS - OPPORTUNITIES TO INCREASE RISK AWARENESS DURING A PANDEMIC

PHOTO: MyOHUN

The Global Team in partnership with the AFROHUN and SEAOHUN Secretariats, sponsored a student competition on Digital Communication incorporating the One Health concept targeting the COVID-19 pandemic. The competition provided opportunities for students to reinforce One Health competencies and skills acquired through classroom and field training. Overall, 38 entries were received from AFROHUN participants, and 116 entries were received from SEAOHUN participants, ranging from flyers and posters to videos. Judges included Network faculty and Global Consortium subject matter experts. Winners in the categories of videos and posters were recognized with awards and their entries were exhibited at the Network annual showcase events as well as on AFROHUN and SEAOHUN websites.

*STRATEGY 1.2 One Health Academy

Scan with your iPhone camera or other code reader to access our SPECIAL FEATURE on Students Engaging in Creative Risk Awareness Activities or visit **http://bit.ly/OHWNG-success-creative-risk-awareness** or turn to page 126.

ONE HEALTH WORKFORCE ASSESSMENT & TRACKING

Establish systems, policies, and procedures to assess and track multisectoral workforce placement, performance, and impact.

STRATEGIES
2.1 Establish a regional Knowledge Management System
2.2 Develop a standardized One Health competency assessment toolkit
2.3 Engage One Health coordinating bodies to support workforce assessment and tracking, including inclusion of One Health competencies in Continuing Professional Development certification requirements using a capability maturity model

TARGETED OUTCOMES/IMPACT

- Improved quality and increased use of workforce and assessment data for decision making

- Increased placement of One Health graduates in targeted sectors

- Improved multi-sectoral workforce strategies within participating countries

-

MAJOR ACTIVITIES

- **GL Activity 2.1.1** Conduct a Knowledge Management System (KMS) needs assessment, evaluate existing OHUN websites, review existing KMS, and develop recommendations for design and development of a regional KMS for each network inclusive of its member countries.

- **GL Activity 2.1.2** Develop and pilot a regional KMS prototype.

    Learn more about the above activities in our Impact Article: **"Smart" Steps Towards Regional Knowledge Management Systems** on page 27.

- **GL Activity 2.2.1** Conduct an in-depth review of existing competencies, learning objectives and assessment tools; identify gaps and/or inconsistencies; add/develop learning objectives where they are missing; and match existing evaluation strategies to each learning objective.

- **GL Activity 2.2.2** Building on the in-depth review in GL Activity 2.2.1, design evaluations strategies and tools where gaps exist and develop an evaluation toolkit for One Health trainees at the basic, proficient, and advanced levels.

    Learn more about these activities in our Impact Article: **One Health Competency Framework to Define Performance** on page 28.

- **GL Activity 2.3.1** Review existing data and fill gaps to map national and regional One Health coordinating bodies, with a special focus on: mapping coordination of One Health workforce activities; identifying countries/regions with the strongest multisectoral partnerships for One Health workforce planning and management and distilling best practices; and identifying countries/regions with opportunities to enhance One Health workforce coordination.

HIGHLIGHTS

- Implemented a 3-stage Knowledge Management Needs Assessment Strategy with AFROHUN.

- Developed a One Health workforce competency framework using a Capability Maturity Model to define workforce performance along a novice to expert-level continuum.

- Began process of characterizing the landscape of existing national and regional One Health coordinating and implementation bodies and the extent of partnerships with Network member Universities.

IMPACT

"SMART" STEPS TOWARDS REGIONAL KNOWLEDGE MANAGEMENT SYSTEMS

"Knowledge management is the process of capturing, sharing, and effectively using knowledge."

–Tom Davenport

Knowledge Management Empowers & Boosts an Organization's Decision-Making Ability

The Africa One Health University Network (AFROHUN) and Southeast Asia One Health University Network (SEAOHUN) are learning networks, whose *raison d'être* is to develop and share information and resources that enhance the ability of member Universities to equip the workforce with transdisciplinary skills to manage biological risks and achieve health security using a One Health approach. These multi-stakeholder, multi-national Networks need to collect, validate, analyze, use, and disseminate programmatic information and workforce performance data. Knowledge management (KM) is essential for improving their efficiency, enabling more rapid and informed decision making, building organizational knowledge, and fostering collaboration.

STEP 1: 3-Stage Needs Assessment

To evaluate existing Country Chapter/One Health University Network (OHUN) websites, review existing KM systems, and develop recommendations for design and development of a regional KM strategy for each Network inclusive of its member countries.

Following initial orientation, engagement and planning calls with the Secretariats, the OHW-NG Global Team developed a collaborative three-stage KM needs assessment strategy including a rapid Secretariat self-assessment, key informant interviews along with focus group discussions with Secretariat staff, and key informant interviews with country-level stakeholders. The AFROHUN Secretariat

completed the needs assessment and after reviewing the results, determined that their priority was a KM *strategy* rather than a single KM *system*. Key strategic decisions made by AFROHUN Secretariat included 1) Identifying a KM lead on the Secretariat staff and the need for a short-term KM Advisor, 2) Developing a KM strategy, and 3) Designing a KM toolkit. Following on this success with AFROHUN, the SEAOHUN Secretariat will complete the KM needs assessment in 2020-2021, and is benefiting from insights gleaned during the needs assessment that AFROHUN has completed.

STEP 2: A "Smart Library" for Knowledge Management

As the AFROHUN Network grows in breadth and depth, the Secretariat identified a "smart library" as an initial priority, recognizing the need to better archive, retrieve, and use reports, success stories, and other written information and data. The OHW-NG Global Team worked closely with the Secretariat to identify the requirements for a "smart library" platform/database to serve as a central repository. Building into 2021, we will select and customize a platform in collaboration with the Secretariat that meets the needs of the Secretariat's KM and monitoring, evaluation, and learning (MEL) teams.

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*STRATEGY 2.1 Establish Regional Knowledge Management Strategies (KMS)

IMPACT

ONE HEALTH COMPETENCY FRAMEWORK TO DEFINE WORKFORCE PERFORMANCE

Through a decade of investment in One Health workforce development, a diverse portfolio of One Health training curricula, courses, and training modules were produced at levels from basic to advanced. This year, the OHW-NG Global Team completed a curricula curation exercise to better understand the breadth and depth of One Health curricula developed and used by the regional Networks. To complement this effort, an intensive systematic scan of existing One Health competencies, learning objectives and competency-based evaluation strategies was performed. Relevant documents were compiled into a resource library, and the resources were categorized and searchable by domain, competency category, region, country, and other variables. The resource library, which now consists of over 200 learning assets, provides an organized platform for searching, sharing, and accessing diverse resources for developing One Health workforce competency and assessment tools.

Using these resources, a One Health workforce competency framework was developed using a Capability Maturity Model to define workforce performance along a novice to expert-level continuum. Four levels of proficiency were defined for each competency: beginner, intermediate, advanced, and expert. The framework consists of One Health competencies and sub-competencies organized across the 15 identified domains of One Health workforce training and practices for each level of proficiency (see example below). In addition, a 92-page manual was compiled that describes the resource library, along with the detailed approach and process used to develop the competency framework and assessment toolkit.

FOCUS ON GENDER

Initial assessments and discussions revealed that although knowledge about gender mainstreaming is limited there is a huge amount of interest in integrating gender into One Health policies and programs. To this effect, the Global Team used gender as one of the first domains to develop the competency evaluation toolkit. Not only does this establish a metric for the One Health workforce to measure competency as it relates to gender, but it also increases the visibility of gender as a critical topic to building a sustainable Network and One Health workforce.

BEGINNER	INTERMEDIATE	ADVANCED	EXPERT
Domain: Gender and Infectious Disease Management			
Competency 1 Gender Awareness: Demonstrate awareness of gender dynamics in emerging pandemic threats (EPT)			
Understand gender definitions and concepts including gender concepts related to sex, gender norms, gender roles, equity, equality and life cycle in relation to EPT	Understand the relationships between gender inequality, gender norms, and health and wellbeing	Understand gender transformative approaches to address gender equity in response to EPT	Advocate and promote gender equality and equity in response to EPT
Domain: Outbreak Investigation and Response			
Competency 1: Competency 1 Outbreak Investigation: Apply steps in conducting outbreak investigation			
Identify what constitutes an unusual occurrence of a disease and a potential outbreak	Utilize data from collected information to develop hypothesis on cause of outbreak	Test hypothesis on the cause of outbreak to determine the cause and develop descriptive features of the outbreak	Evaluate the hypothesis testing and determine a cause and descriptive features the outbreak

One Health Competency Framework - Competencies and Sub-Competencies with capability staging of Proficiency for the Gender and Infectious Disease Management Domain

Following development of the One Health competency framework, a competency evaluation toolkit was created for two domains – gender and outbreak response. The toolkit consists of methods and tools for evaluating One Health workforce training and practices at four levels including reaction to training, learning outcomes, behavior and performance, and results at the organizational and institutional level.

In the next year, the assessment toolkit will be piloted and tested to assess whether the tools can be used at Network member Universities with minimal instruction, as intended. Based on the pilot implementation of these tools, the toolkit will be further expanded to include additional One Health competency domains. The tools will be finalized in partnership with the Global Team, Secretariats, OHUN/Country Chapter leadership, and subject matter experts using an iterative and consultative approach. The competency framework with staging system and assessment toolkit can also be adapted at the country level as needed, in consultation with national One Health coordinating bodies, policy makers, professional associations, and/or licensing agencies.

*STRATEGY 2.2 Develop a Standardized One Health Competency Assessment Toolkit Using a Capability Maturity Model

IMPACT

NATIONAL & REGIONAL ONE HEALTH PLATFORMS LINKING TO UNIVERSITY PARTNERSHIPS

National One Health coordinating mechanisms reinforced by regional coordinating bodies are key pathways for One Health workforce coordination. At the country level, these bodies are critical to the identification of national and subnational One Health skills and needs, as well as the assessment of health workforce gaps. Engagement with the universities that provide One Health education and training will enhance the analysis of training pipelines, the identification of demands for specific skills and competencies, and the prioritization of specific domains for pre-service education and in-service training/continuing professional development (CPD). As a step towards promoting further engagement of Network Universities with One Health coordinating bodies, characterizing the landscape of existing national and regional One Health coordinating and implementation bodies, and the extent of partnerships with Network member Universities was a priority.

This year (2019-2020), the OHW-NG Project focused on an initial review of published material, including governance manuals, evaluations, One Health Assessment of Planning and Performance, peer-reviewed articles, and regional reports. A standardized data collection tool was developed and updated based on input from members of the AFROHUN and SEAOHUN Secretariats. Published literature was scanned to assess the current platforms and multi-sectoral partnerships in partner countries. The search strategy for the scan included a formal literature review (e.g. Web of Science, PubMed), international health reports from the World Health Organization (WHO), Food and Agriculture Organization of the United Nations (FAO), World Organization for Animal Health (OIE), Centers for Disease Control and Prevention (CDC) (e.g. Joint external evaluations- JEE's, national action plans for health security), and gray literature (e.g. web searches for country One Health platforms). The ongoing validation and verification process are designed to be iterative to give a voice to the views of countries as well as external sources. Going forward, a collection of case studies from the platform data scans will exemplify major findings regarding One Health platforms and partnerships. The identification of successful engagement, enablers, and barriers with national and regional One Health coordination platforms will facilitate growth. Platform data can be also used as an advocacy tool to target where to focus growth and partnership efforts between regional and international platforms.
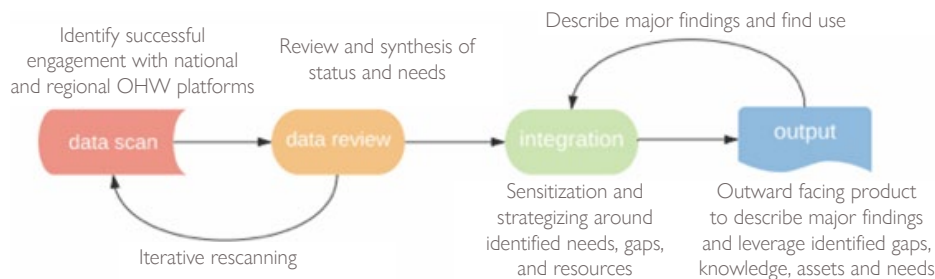
Process Model for Strategy 2.3* - From Data Scan to Final Product

Based on the initial review and analysis of the results of the data scans, a next step was to identify opportunities, challenges, strengths, and gaps across the One Health platforms. The aim of this iterative review was to provide an informed synthesis of data scan results and country-level support One Health workforce policy and planning. These ongoing activities will be guided by the results of the document review and stakeholder survey.

Concurrently, partnerships and collaborations with intergovernmental partners (e.g. World Bank, FAO, West African Health Organization) are being strengthened to promote programmatic synergies.

*STRATEGY 2.3 Engage One Health coordinating bodies to support workforce assessment and tracking, including inclusion of One Health competencies in national Continuing Professional Development certification requirements

OBJECTIVE
3

ORGANIZATIONAL SUSTAINABILITY

Strengthen the functional and organizational capacities of the regional One Health University Networks to ensure they are capable of acquiring and managing direct donor funding.

STRATEGIES

3.1 Assessment, benchmarking, and strategic planning
3.2 Build network organizational capacities
3.3 Develop new and diversified partnerships with a five year vision

TARGETED OUTCOMES/IMPACT

- Direct recipient of external donor funding

- New and diverse funding partners and enhanced ability to identify and develop partnerships

- Model identified for creating ongoing Network revenue for self-reliance

PHOTO: TIM MOSSHOLDER

MAJOR ACTIVITIES

- **GL Activity 3.1.1** Evaluate existing assessments, audit performance, and develop strategic plans to benchmark the previous status and the process for meeting NUPAS criteria.

- **GL Activity 3.1.2** Conduct workshops and activities to establish new benchmarks and update existing business plans with a five-year vision.

  Learn more about the above activities in Impact Article: **Establishing New Benchmarks for Organizational Sustainability & Developing Secretariat Business Plans with a Five-year Vision** on page 33.

- **GL Activity 3.2.1** Create an organizational sustainability community of practice to share best practices, discuss challenges, and build competencies across the University Networks. Learn more in Impact Article: **Increasing Organizational Sustainability Through Benchmarking & Business Planning Workshops** on page 35.

- **GL Activity 3.2.2** Conduct onsite and virtual technical assistance to advance organizational capability of AFROHUN and SEAOHUN Secretariat across the NUPAS domains. Learn more in Impact Article: **Advancing the Organizational Capability of AFROHUN & SEAOHUN Secretariat Across the NUPAS and OCA Domains** on page 36.

- **GL Activity 3.3.1** Identify and secure new public and private partners that can work closely with the University Networks to train and foster One Health workforce opportunities. Learn more in Impact Article: **Steps Towards Identifying & Securing New Public & Private Partners** on page 37.

HIGHLIGHTS

- Produced twelve assessments to benchmark the organizational capacity of AFROHUN and SEAOHUN and guide business planning and capacity-building efforts over the subsequent four years of the initiative. These included: the NUPAS baseline, the OCA baseline, SWOT analysis, Review of Network Audits, Sustainability Case Studies, and Board Governance Review.

- Facilitated 8 benchmarking and action planning workshops for Year 1 (2019-2020), and 12 workshops for business planning and partnership development for Years 2 onward. Approximately 30 staff from each Network participated in each of these workshops.

- Strengthened capacity among the Networks to conduct organizational capacity assessments as well as business planning and partnership development strategy formulation.

- Developed an action plan (which kicked off technical support for the 2019-2020 year), Year 2 capacity building plans, business plans, and partnership development strategies for each Network.

IMPACT

ESTABLISHING NEW BENCHMARKS FOR ORGANIZATIONAL SUSTAINABILITY & DEVELOPING SECRETARIAT BUSINESS PLANS WITH A FIVE-YEAR VISION
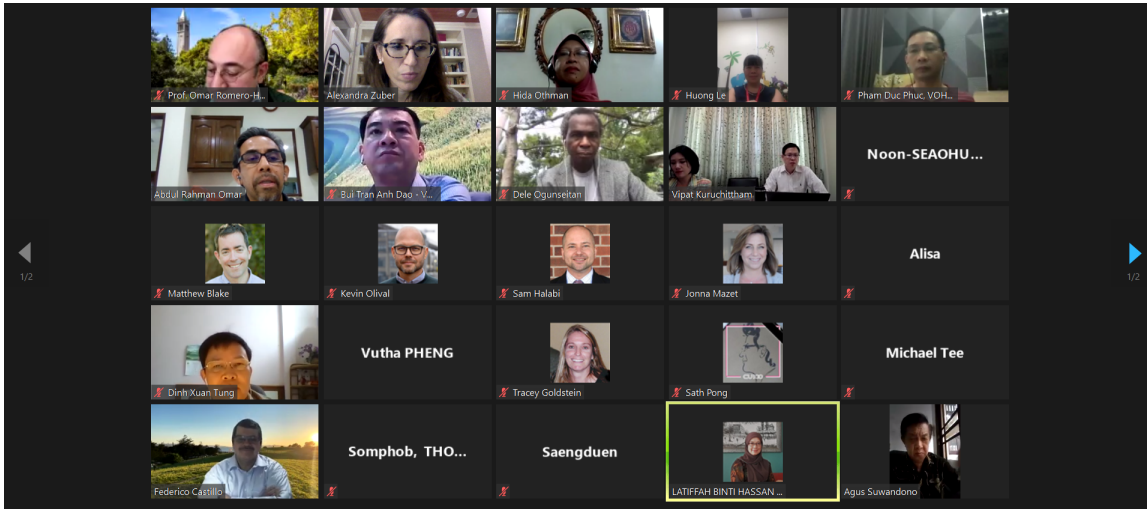
PHOTO: OHW-NG CONSORTIUM

This year, the Global Team conducted a number of benchmarking assessments of each Network to determine priorities and guide upcoming activities. Due to the ongoing COVID-19 pandemic, the majority of activities were conducted virtually with the goal to assist the Networks to benchmark their organizational capacity, prioritize areas for improvement, and develop capacity-building plans.

Successfully conducted a NUPAS assessment of AFROHUN and SEAOHUN, to determine any important impediments to passing the NUPAS assessment in Year 3 for Direct USAID funding eligibility

The assessment included an extensive desk review of organizational documents and "virtual site visits" with key Secretariat staff in the form of 1-2 hour videoconference calls. The findings of these assessments were presented, and priorities for strengthening business systems in the first year of the project (2019-2020) were identified in a 2.5-hour "virtual NUPAS workshop" with the technical team of each Secretariat, select Objective 3 staff from the Global Team, Consortium leadership, and USAID headquarters attending. This activity resulted in a validated baseline score for NUPAS criteria and

a shared understanding of the priority areas for improvement moving forward.

Reviewed the independent audits conducted for each secretariat and determined that a repeat international audit would not be immediately necessary, given the existing audits covered the same objectives and found no deficiencies

It was agreed that SEAOHUN would ensure the audit conducted at the end of Year 1 (2019-2020) would be performed by an internationally-recognized firm. AFROHUN already contracts Ernst & Young for its annual audits which was deemed to be sufficient for the purposes of this exercise.

Facilitated each secretariat's self-assessment on the USAID organizational capacity assessment (OCA) tool, which assesses a more robust set of capacities than the NUPAS alone

During a 2.5 hour "virtual OCA workshop", each Secretariat led the presentation of their results and the prioritization of capacity-building areas. This process also established a baseline set of scores against which progress will be measured over the five-year project.

IMPACT

Successfully accomplished two phases of an assessment of Strengths, Weaknesses, Opportunities, and Threats (SWOT) facing the two Networks' organizational sustainability

The first phase was comprised of Zoom-based interviews with 36 Secretariat staff and Board members, as well as Zoom-based focus group discussions with Country Chapters and OHUNs. Findings were analyzed and presented in "virtual SWOT workshops" with each Network, which led to rich discussion between country representatives, board members, Secretariat staff, Global Team members, and USAID staff on key opportunities moving forward. AFROHUN felt the analysis was critical to their organizational sustainability and requested a second phase, to include additional USAID staff and Deans. The Global Team then conducted over 20 more interviews with USAID staff and external partners of both Networks and provided the additional findings in business planning workshops detailed in a later section of this report.

Sustainability Case Studies – an investigation of the business models and sustainability approaches of similar regional training organization in human or animal health in the Africa and Asia regions

The team completed a desk review of 26 regional organizations, documenting their funding or revenue models, their membership structure, and their organizational history. Three of these organizations were identified for closer investigation, based on their representing some degree of success with blended resource mobilization strategies, including diversified grant funding, research funding, membership fees, and cost-sharing among members. Interviews were conducted with the two senior-most staff from each organization, and a short report was completed, which documented common success factors, challenges, and implications for AFROHUN and SEAOHUN. The Appendix included a table that summarized each organization reviewed, documenting their mission, key activities, resource mobilization strategy, membership structure, and key take-aways from the review. Highlights were presented at the business planning workshops discussed later in this report.

Board Governance Review – a deeper analysis of the key issues facing AFROHUN's Dean's Summit and Executive Board and SEAOHUN's Executive Board and Foundation Board

Through a review of the NUPAS findings, SWOT interviews with Board members, and review of Board minutes and other official Board documents, strengths and challenges facing the Networks and their Boards were identified, and recommendations for optimal organizational governance were developed.

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*STRATEGY 3.1 Assessment, benchmarking, and strategic planning

OHCEA to AFROHUN

AFROHUN identified an urgent technical support need in helping to plan for their name and brand change from OHCEA to AFROHUN. This was an area prioritized to strengthen the competency area of *Communications* in the OCA tool. The Global Team conducted several meetings with AFROHUN staff, reviewed their branding roadmap, and made recommendations on how to improve branding moving forward. The Global Team – through Objective 2 activities – also supported the development of the new AFROHUN website that helped launch the branding change in advance of the Year 1 Showcase event.

IMPACT

INCREASING ORGANIZATIONAL SUSTAINABILITY THROUGH BENCHMARKING & BUSINESS PLANNING WORKSHOPS

For the first year of the project, the Global Team planned to hold a 3 day, in-person "business planning retreat" with each Secretariat, to finalize the organizational capacity benchmarking assessments and begin formulating the business plans for each Network. However, due to COVID-19 health restrictions, these in-person sessions had to be adapted to a virtual format. The Global Team thus created two sets of virtual workshops: 1) Benchmarking workshops and 2) Business planning workshops. Global Team leads from Objective 1 and 2 were invited to both, to help ensure synergy across activities.

Benchmarking Workshops

The Global Team facilitated four "benchmarking" workshops with each Secretariat (and selected country representatives), during which the findings of the completed NUPAS, OCA, and SWOT were presented and discussed. Thereafter, findings were consolidated and a final "action planning" workshop was held with each Secretariat. These final workshops focused on priority actions for the reremainder of the first and second years of the project. The deliverable was Excel based action plans for each Secretariat, which identified key actions, responsible parties, and timelines.

Business Planning Workshops

The Global Team successfully orchestrated four business planning workshops with each Secretariat. Two key tools were created for these workshops: 1) a Canvas website at the University of California, Berkeley, where all course materials and videos were stored and 2) a business planning model that consolidated two

tools: the business model canvas and the mission model canvas. Before the first workshop, the Global Team recorded short tutorial videos introducing the business model canvas, which served as the key framework for the resulting business plan drafts for the Networks; other existing videos were also made available. The first workshop included an overview of the business model canvas, while subsequent workshops comprised interactive discussions to populate each major domain of the modified AFROHUN and SEAHOUN model canvases. The final deliverable of these workshops was a full draft of each of the Networks' business plans, submitted to USAID at the at the end of the first project year and included in the Appendix to this OHW-NG Annual Report.

The Global Team also facilitated two additional virtual "Capacity building planning workshops" (one for each Secretariat), which outlined the specific goals and tactics the Networks and Global Team will undertake to implement the business plans in Year 2.

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*STRATEGY 3.1 Assessment, benchmarking, and strategic planning

IMPACT

ADVANCING THE ORGANIZATIONAL CAPABILITY OF AFROHUN & SEAOHUN SECRETARIATS ACROSS THE NUPAS AND OCA DOMAINS

FOCUS ON GENDER

Each Network identified priority gender activities and synchronized them with outcomes from the strategic planning workshops held with the Global Team. Incorporating gender-specific activities into the Networks' strategic and business plans helps ensure that gender equity and inclusion is embraced and modeled by the leadership of each organization, a key factor in its success and sustainability. As well, the Global Team in coordination with the Secretarists, are examinig policies, work culture, and leadership approaches to gender empowerment and inclusion, women's leadership development, and other key areas. We will work hand-in-hand with Secretariat leadership to design strategies that are appropariate for their specific organizational and cultural contexts.

The OHW-NG Project has a very clear objective to "strengthen the functional and organizational capacities of the regional One Health University Networks to ensure they are capable of acquiring and managing direct donor funding regardless of source." In order to accomplish this milestone, the collective OHW-NG Consortium must invest in building the organizational capabilities of both Networks. Despite the delays in the business planning due to COVID-19, SEAOHUN and AFROHUN made measurable progress across 12 organizational capacity domains in the NUPAS and OCA tools, moving a full stage in development on five domains.

SEAOHUN advanced one stage along two NUPAS Criteria: 1) NUPAS Criteria 2.1 (Banking Relationships and Accounts), by establishing a US dollar bank account, and 2) NUPAS Criteria 3.3 (Procurement and Sub-awards), by drafting a strong and detailed outline to guide development of a full text sub-award management policy and by establishing and managing sub-awards to support the country OHUNs. SEAOHUN also made progress along other NUPAS and OCA domains by completing a QuickBooks training for all staff, appointing all members of its SEAOHUN Board Management Committee, and recruiting and onboarding a program manager, who has helped SEAONHUN provide program oversight of OHUNs for both technical and financial tracking and reporting.

Likewise, AFROHUN advanced one stage along three OCA domains: 1) Human Resources (Volunteers and Interns), by developing a volunteers and intern policy that was passed by its leadership bodies and has been used to onboard one intern in Year 1; 2) Program management (Culture and Gender), by developing an AFROHUN gender policy and gender strategy and developing a roadmap for implementation of gender actions; and 3) Organizational management (Strategic Planning), by developing a finance strategy and business plan that was developed with key stakeholders and aligns with the 10-year strategic framework.

AFROHUN strengthened its financial management and procurement systems by installing cloud-based QuickBooks to improve functionality and tracking of country-level spending and training Secretariat financial staff to use the upgraded online platform. Additionally, AFROHUN developed an outline to guide the drafting of their sub-award management policy, which will be utilized in DRC when AFROHUN establishes its first subaward to support the Kinshasa School of Public Health Master's program.

Responding specifically to the NUPAS Criteria 3 pertaining to procurement systems and sub-awards, the Global Team provided critical technical support to both Secretariats to facilitate establishment of official subawards. SEAOHUN was successfully able to establish new subawards with all four OHUNs, which had not been done previously for MYOHUN, INDOHUN, and VOHUN. This process was intensive and involved: the Secretariat working directly with the Global Team and OHUNs to develop and finalize detailed budgets and budget narratives, completing documents and risk assessments required to obtain formal approval from USAID, and drafting subawards that included required flow-down provisions and reporting requirements. The Global Team shared tools and templates with the Secretariats to enable development of subaward management policies and procedures, and both Secretariats submitted draft policy outlines for review. With feedback provided by the Global Team, the Secretariats initiated development of their full-text subaward management policies. Additionally, assistance was provided to the Secretariats on a day-to-day basis on a variety of topics, including but not limited to: allowable and unallowable costs, budget revisions, prior approval requirements, acceptable supporting documentation for expenditures, etc.

*STRATEGY 3.2 Build Network organizational capacities

IMPACT

STEPS TOWARDS IDENTIFYING & SECURING NEW PUBLIC & PRIVATE PARTNERS

The OHW-NG Project has identified the importance of not only the advancement of Network capabilities to receive direct USAID funding, but also the ability of both Networks to identify and secure diverse funding sources. Achieving a diversity of funding is a core criterion in organizational sustainability, as well as one of the NUPAS criteria. To this end, the OHW-NG has focused on the identification and development of new partnerships — both technical and funding — within the five year OHW-NG Project. Additionally, the capacity-building of both Networks is a priority to enhance their abilities to independently design and execute partnership and business development strategies.

To this end, the Global Team was able to: map donor or funding sources and potential partners, document requirements and overlap of goals with private sector companies, prioritize opportunities for funding, and plan to assist the Secretariats in conducting outreach and follow-up with priority targets.

The successful *stakeholder mapping* process with each Network used the USAID Stakeholder Analysis Tool. Originally envisioned as work focused at the Secretariat level, AFROHUN and

SEAOHUN both felt it important to invite the participation of Country Chapters/OHUNs, resulting in a stakeholder map that included both national, regional, and global partners. The Global Team then held a virtual "Partnership development workshop" with each Secretariat and key country representatives, during which participants reviewed the stakeholder maps, plotted stakeholders on a graph representing "interest" and influence" in each Network, prioritized stakeholders for Year 2 outreach using polling, and discussed key steps and principles for engagement moving forward. The Global Team then assembled the product of these interactive discussions into the first draft of a *Partnership Engagement Strategy* for each Network, which describes principles of partnership, types of partnerships, stakeholder maps, steps to partnership engagement, and targets for annual funding and partnership outreach. This Partnership Engagement Strategy is included as an appendix in the AFROHUN and SEAOHUN Business Plans. These strategies will be enhanced with specific implementation tactics for Year 2.

*STRATEGY 3.3 Develop new and diversified partnerships with a five year vision

AFROHUN Stakeholder Mapping: Power & Interest Matrix (Potential Funders)

Stakeholder Power and Interest Matrix – Potential Funders (Secretariat)

- 1 Africa CDC
- 2 African Academy of Sciences
- 6 Assoc. of Public Health Laboratories
- 7 Bill & Melinda Gates Found.
- 9 CDC
- 11 CGIAR
- 14 CRDF Global
- 15 Defense Threat Reduction Agency
- 16 Deutsche Gesellschaft für Internationale Zusammenarbeit
- 17 EAC Regional OH Platform & GIZ Panprep Proj.
- 18 ECOWAS & WAHO
- 19 Embassy of Sweden / Sw. Devel. Cooperation Agency
- 20 European Commission
- 21 FAO
- 24 International Development Research Centre
- 25 MacArthur Foundation
- 27 OH Regional Network for the HORN of Africa
- 29 Rockefeller Foundation
- 32 Swiss TPH
- 35 The Wellcome Trust
- 36 UK Aid
- 38 WHO
- 39 World Bank
- 41 World Organisation for Animal Health
- 42 Zoetis

TESTING ORGANIZATIONAL SUSTAINABILITY & RESILIENCE IN A PANDEMIC

The pandemic reality hit like a thunderbolt. Our One Health Workforce Project – Next Generation Global Team, charged with organizational stability, was in the middle of planning in-person, 3-day retreats in March 2020 with the AFROHUN and SEAOHUN Secretariats to complete benchmarking of Secretariats' organizational capacity and to formulate their business plans. The COVID-19 made international travel dangerous and travel bans soon followed.

What to do?

Get creative…so we did.

The OHW-NG Global Team and Secretariat leaders decided not to delay our original goals but rather to find creative ways to complete the work as planned. With all hands-on deck, we worked with Secretariat leaders and pivoted to reinvent the retreats in virtual mode. We created a family of interactive workshops to benchmark capacity, plan capacity-building activities, and formulate business plans. These included:

- Three benchmarking workshops (Non-U.S. organization pre-award survey, NUPAS; Strengths, weaknesses, opportunities and threats analysis, SWOT; and Organizational Capacity Assessment, OCA)
- Two Year 1 (2019-2020) capacity-building activity planning workshops
- Four Business Plan workshops
- Two Year 2 (2021-2022) capacity-building planning workshops
- Two workshops to develop partnership strategies

We used Zoom as our platform as the simple videoconferencing technology has low bandwidth requirement, a native recording capability, and allows the use external applications (apps) that enhance its functionality. Our objective was to pioneer virtual workshops that resulted in improved information flow, meaningful participant engagement, priority-setting, and agreement on executable actions. Using Zoom features such as chat rooms and polls, and compatible apps such as Mentimeter, we were able to obtain participant input in real-time and display it through word clouds, charts, and graphs. We then used this feedback to move the discussion forward toward priority-setting and action steps.

Organizers of the workshops were concerned that, with the passage of time, the number of participants and their interest in the topics would decline. This was not the case. The majority of those invited participated fully and maintained high engagement, as exemplified in the high volume of comments in breakout rooms, polls, and chat boxes.

Completion of the workshops resulted in concrete products for each Secretariat, specifically:

- Completed baseline NUPAS and OCA assessments
- Completed SWOT analysis
- Business plan
- Joint capacity building action plans with the global team (2020-2022)
- Partnership development plan (2021-2022)

Despite the challenges imposed by COVID-19, the workshops enabled us to complete this year's goals and served as a template for how virtual workshops can be used by our Consortium in the future.

GLOBAL LESSONS LEARNED & NEXT STEPS

ONE HEALTH TRAINING & EMPOWERMENT

LESSONS LEARNED

In the first year of the USAID One Health Workforce – Next Generation (OHW-NG) Project (2019-2020), gaps in implementation of training activities were identified that had impeded comprehensiveness and sustainability of competency-based training. These gaps were reflected in country reports along with recommendations for addressing and overcoming them. Country teams have started to incorporate additional 'Best Practices' for training, including use of online training platforms.

To facilitate global engagement virtually in the face of the COVID-19 pandemic emerging, the ECHO One Health virtual Community of Practice (vCoP) platform brought together larger numbers of participants and partners for quick dissemination of information. However, follow-up with individual participants over time proved challenging. With an eye to improving longitudinal engagement, we piloted an attestation app (SOCION) to enhance participant experience and to support follow-up activities, though further development on this front will be needed.

The One Health Workforce Academy (OHWA) concept was well received as a forum to regionally and globally engage around training needs and offerings. During implementation discussions, several structural models were considered, and the result was a regionally-focused and globally-enhanced website for AFROHUN and for SEAOHUN. The lesson learned was that maintaining regional independence was a priority, while still fostering global collaboration.

NEXT STEPS

For the training curation activity, moving to an online database structure for managing the knowledge was a priority and is being pursued. The goal is to facilitate data input and retrieval by country managers, national coordinators, and Secretariat staff over time. The platform will enhance the process of annual reviews and will be linked to training resources on the One Health Workforce Academies website, as well as utilizing knowledge management strategies that are in development as part of Objective 2.

To build out and foster independence in using the vCoP model inspired by the ECHO team successes, additional training of Secretariat and country staff will take place as part of launching the Year 2 ECHO One Health vCoP. Topics of interest include e-learning, antimicrobial resistance and stewardship, and collaborative One Health research best practices. We plan to build on the this first year of virtual immersion trainings of regional Network Secretariat staff, enabling them to host and implement ECHO vCoP platform events. The AFROHUN Secretariat, as well as the Kenya and Senegal Country Teams, are planning to create their own One Health vCoPs to support their local One Health networks and needs.

As part of the AFROHUN One Health Academy initiatives, we expect to finalize and publish a publications manual that may serving as a guide for faculty and Student One Health Innovation Clubs (SOHICs), as well as finalizing a field experience training guide. Efforts are being made to coordinate SOHIC activities and faculty mentorship as well.

Additionally, the Global Team engaged AFROHUN and SEAOHUN in initial assessments and discussions related to the Gender Action Plans (GAP). These assessments revealed that although knowledge about gender mainstreaming is limited there is a huge amount of interest in integrating gender into One Health policies and programs. Priorities are being determined with each Secretariat related to the GAP and best ways to integrate gender into policies and increase knowledge about gender equity in general.

ONE HEALTH WORKFORCE ASSESSMENT & TRACKING

LESSONS LEARNED

Through a three-stage needs assessment, the AFROHUN Secretariat determined that a Knowledge Management (KM) strategy was preferable to a single knowledge management system. The SEAOHUN Secretariat is following next in the needs assessment, and is interested to benefit from the AFROHUN insights, best practices, and lessons learned.

A strong interest in alumni tracking and engagement was apparent at both the Secretariat and country levels, and so the Global Team worked with them to ascertain that understanding interest at each member University level, including willingness to share alumni data, will be important to create an implementation strategy.

Through a systematic scan of One Health competencies, gaps in competency assessment tools were confirmed and are a factor which needs further exploration, but preliminarily it is clear that there is room for collaborative work in this domain involving global, regional, and country teams.

NEXT STEPS

In OHW-NG Year 2, AFROHUN will be engaged to develop and implement a KM strategy and toolkit, and to develop a "smart library" for project reports, best practices, case studies and other assets. This will enable more efficient tagging, retrieval, and use of both historic and new information. We will support capacity building and change management interventions to ensure that AFROHUN and country teams actively use the new smart library and will collaboratively prioritize the development of additional KM tools as needed. SEAOHUN will likely follow closely and may

benefit from efficiencies if they want to pursue similar strategies.

In partnership with SEAOHUN and AFROHUN, the OHW-NG Global Team will continue to develop a Standardized One Health Competency Assessment Toolkit using a Capability Maturity Model and will focus on finalizing the One Health Competency Framework. We will expand competency evaluation resources and implement the toolkit in alignment with the One Health Workforce Academies and One Health Certificate development activities.

To identify and manage data on successful One Health models for national and international engagement, we will conduct a baseline needs assessment/SWOT analysis on the landscape from the regional perspective, and will provide ongoing technical support for country scans to identify successful engagement with national and regional One Health workforce platforms. With an eye towards a regional review of results and a synthesis of status and needs, we also plan to describe major findings and engagement models that will facilitate discussion and programmatic guidance for the OHW-NG Project.

ORGANIZATIONAL SUSTAINABILITY

LESSONS LEARNED

Despite many challenges from the COVID-19 pandemic, we advanced benchmarking, priority-setting, and capacity-building using a virtual workshop approach, which will serve to improve our long-term virtual connectivity with the Networks moving forward. We pilot tested and became proficient in interactive features, such as chat boxes, break-out rooms, and polling, techniques that we will continue to refine together in future years.

Marking and branding in the first year of the OHW-NG Project provided an opportunity for lessons to be learned on how to best represent the funding and implementing organizations amidst a complex activity landscape. AFROHUN made the official name change from OHCEA to launch their new brand that reflects a portfolio expanding beyond the founding Central and East Africa countries, which was successful. Also the OHW-NG Project disseminated a branding and marking guide on how to represent USAID, the OHW-NG Project, the Secretariats, and the Country Team.

While the Networks are very different in their history and scope, they share many important organizational capacity needs, value propositions, and business needs. Thus, there is a great opportunity to facilitate peer-learning on many dimensions moving forward.

NEXT STEPS

Guided by the Capacity Building Plan for each Network developed in Year 1, we will focus on providing technical support and peer learning to build organizational capability in each Network, related to achievement of the NUPAS assessment for transition to USAID direct funding around Year 3. Focus areas include: board governance and legal registration, human resources, financial management and procurement, adaptive capacity, project management, and culture/gender.

We will also work to advance financial sustainability (also a NUPAS criteria) for each Network by supporting implementation of network partnership development strategies and to identify and pilot a Network-specific revenue generating model. Additionally, we will continue to work on refining guidance and best practices for marking and branding to best represent the project and partners.

Due to the emergence of COVID-19 during the first year of the OHW-NG Project, we had redirected the ECHO vCoP on Organizational Leadership and Sustainability to instead support a vCoP on topics related to the pandemic. We are now re-envisioning the best approaches for facilitating the Networks to share best practices, discuss challenges, and otherwise engage in peer learning during this upcoming Year 2.

REGIONAL & COUNTRY REPORTS

AFROHUN

AFRICA ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

18
MEMBER
UNIVERSITIES

16
STUDENT ONE
HEALTH CLUBS

9
COUNTRIES

1,043
INDIVIDUALS
REACHED VIA RCCE
ACTIVITIES RELATED
TO COVID-19

HIGHLIGHTS

- Completed a 5-year business plan with clear articulation of the Network's strategic direction, capacity strengthening plan, and partnership development strategy.

- AFROHUN was able to expand their funding portfolio as a member of the consortium of institutions awarded the new USAID STOP Spillover Project.

- Produced a variety of strategic communication materials engaging AFROHUN members, partners, and stakeholders in updates on the Network's new direction and impact of its activities.

- Expanded the Network with two new institutions, including one in Côte d'Ivoire, a new member country.

- Hired Country Managers to lead coordination of activities in each country and to serve as liaisons among the country teams, Secretariat, and OHW-NG Global Team.

ACTIVITIES

OBJECTIVE 1

Training and empowering the AFROHUN Network

The Secretariat supported country teams in curating and evaluating the use of existing One Health training materials and tools (AFR Activity 1.1.3) across member Universities.

As part of empowering the Network, eight AFROHUN Secretariat staff participated in a training workshop in which participants gained experience and skills related to Geographic Information Systems (GIS) (AFR Activity 1.2.6) and use of GIS software.

With support from the OHW-NG Global Team, we reviewed the Student One Health Innovation Club (SOHIC) guide developed during the One Health Workforce Project, piloted it in Kenya and Cameroon, and then rolled it out to member institutions across the Network (AFR Activity 1.2.5). The SOHIC guide provides practical information to institutions (faculty and students) on establishing and managing a SOHIC (establishment of club, recruitment and orientation of students, leadership, etc.).

Working collaboratively with the OHW-NG Global Team, we hosted a series of ECHO (Extension for Community Healthcare Outcomes) One Health Update webinars on COVID-19 building a virtual Community of Practice (vCoP). 1,043 participants joined from the AFROHUN Network and other interested stakeholders, including CDC, WHO, government ministries, and health care institutions. The OHW-NG Global Team also supported AFROHUN in conducting an ECHO Immersion Training for the AFROHUN Secretariat and Country Team staff. The training was aimed at building the capacity of AFROHUN to design and implement a regional ECHO program as a vCoP.

Read more about the development of the virtual Communities of Practice and ECHO Immersion Trainings in the Global Objective 1 Impact Article:

Establishing virtual Communities of Practice (vCoP) to address urgent One Health issues

OBJECTIVE 2

The AFROHUN Knowledge Management Strategy

In collaboration with the OHW-NG Global Team, AFROHUN conducted a Knowledge Management (KM) needs assessment (GL Activity 2.1.1). The assessment identified priority areas that the Network will focus on for development of a KM strategy. Key among short term actions are development of a smart library as an initial KM tool and recruitment of a KM advisor who will, among other tasks, develop a KM framework and implementation strategy. Read more about the OHW-NG Project contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Article: **Knowledge management empowers and boosts an organization's decision-making ability**

We also upgraded AFROHUN's online M&E and financial management system to conform with the OHW-NG Project MEL and reporting needs (AFR Activity 3.2.4). Both Secretariat and Country Team staff were oriented on this system which is now being used for M&E, financial management, and reporting.

OBJECTIVE 3

Building a Sustainable Network

The AFROHUN Secretariat made good strides towards organizational sustainability in Year 1 (2019-2020). Before countries began implementing activities, we organized virtual kick-off meetings for each country which were helpful in aligning teams on AFROHUN's strategic direction and in the development of activity implementation schedules. In a similar manner, the Secretariat supported all countries

in development of their Year 2 OHW-NG work plans and budgets (AFR Activity 3.2.5). The country and Secretariat plans underwent a series of reviews by the Board, Summit, and the OHW-NG Global Team before eventually receiving approval by USAID.

The AFROHUN Secretariat organized two Board of Directors' meetings attended by Board members, the OHW-NG Global Team, and the USAID OHW-NG Agreement Officer's Representative (AOR). In addition, we also organized a virtual Leadership Summit that brought together Deans from the various AFROHUN institutions. These leadership meetings were important in guiding the Network on its policy and strategic direction. Arising from decisions of the leadership meetings, two new institutions were admitted to the Network (University of Ngaoundéré, School of Veterinary Medicine and Sciences – Cameroon; and Université Félix Houphouët-Boigny, Faculty of Medical Sciences – Côte d'Ivoire). Côte d'Ivoire is a new member country for AFROHUN, further expanding the Network into the West Africa region.

As part of the strategy to build organizational sustainability through diversified funding and expanding partnerships, we participated in the development and writing of two grant proposals that were submitted to funders. One of these, the USAID funded STOP Spillover Project, was awarded to the Tufts University-led Consortium that includes the AFROHUN Network.

We strengthened the capacity of finance staff through re-orienting AFROHUN Country Administrators on the templates being used for financial reporting. In addition, Secretariat finance staff were trained on online QuickBooks – the accounting software package used by the Network.

In line with the Network name change from OHCEA to AFROHUN and the drive to reposition, we developed a rebranding roadmap that spelled out several aspects of the rebranding process (AFR Activity 3.3.9). These included consultations that were made with the Network membership, developing a repositioning statement to communicate the Network's new direction and growth aspirations, designing a new logo and strapline, internal consultations with staff and Network leadership, engagement of external stakeholders, and designing a re-touched/refreshed website. We designed visibility and promotional materials for the countries using new branding requirements which were distributed to the Network member institutions.
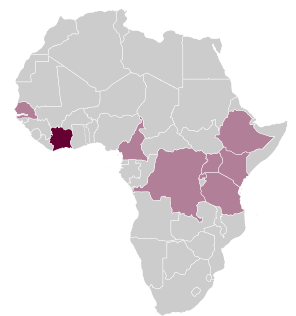
AFROHUN Côte d'Ivoire: A New Country Chapter

EMPOWERING STUDENTS TO INCREASE ONE HEALTH CORE COMPETENCIES

To address the ongoing COVID-19 pandemic and the role of the AFROHUN Network in increasing capacity to respond to associated needs, we produced five editions of an AFROHUN COVID-19 briefing (afrohun.org). Additionally, the AFROHUN newsletter (AFR Activity 3.3.8) has been renamed 'The One Health Digest', and we produced two editions of the newsletter and covered content related to experiences of the AFROHUN teams during the COVID-19 lockdown, as well as detail on some of the non-COVID activities that were implemented. Content highlighting innovations and creative thinking was given prominence. Approximately 1,000 copies of each edition were printed, and these will be used when countries resume in-person engagements.

We produced a newspaper article in Uganda's The New Vision newspaper focusing on 'Building Back Better' highlighting opportunities to build capacity during the COVID-19 pandemic. With the Network encouraging Country Teams, students, and Secretariat staff to take advantage of the benefits of social media, AFROHUN developed social media guidelines to provide a framework within which this use can be actualized. The guidelines were shared with the country teams.

SPECIAL FOCUS

BUILDING THE ORGANIZATIONAL SUSTAINABILITY OF AFROHUN

We completed a 5-year business plan which articulates the Network's strategic direction with components of the capacity building plan and partnership development strategy that provide actions to be implemented for institutional sustainability (AFR Activity 3.3.3). With support from OHW-NG Global Team through virtual review sessions held over a period of five months (AFR Activity 3.1.3), and complemented by internal review sessions, we conducted the Non-U.S. Organization Pre-Award Survey (NUPAS) assessments as well as the Organizational Capacity Assessment (OCA) self-assessments, and developed benchmarks under the seven NUPAS and OCA domains. Benchmarking enabled us to identify areas of strengths and weaknesses for overall institutional strengthening. From this activity, we developed a Year 1 action plan from which improvements have been implemented in priority areas including policy reviews and systems strengthening. Additionally, we developed an institutional capacity development plan that informed the Year 2 workplan for human resource and systems strengthening.

Through a highly participatory process involving various AFROHUN stakeholders (Secretariat staff, Network leadership, faculty,

OHW-NG Global Team, USAID, and external partners), we held virtual strategic planning workshops (AFR Activity 3.3.2) and developed a 5-year business plan using a business canvas model. The 5-year plan will inform AFROHUN's fundraising and partnership development efforts and is a firm foundation upon which institutional sustainability efforts are going to be based in the coming four years. We developed a draft capacity building strategy through a virtual workshop facilitated by the OHW-NG Global Team. This plan will guide the Network's capacity building over the coming years.

Through the strategic planning and partnership development process with the Global Team, capacity building opportunities and specific training and mentorship for staff were identified and will be delivered in Year 2 and beyond. As well, leveraging virtual capacity building opportunities, one Secretariat staff member and one Country Manager attended a resource mobilization training session organized by the Kenya Association of Fundraising Professionals (AFR Activity 3.3.6).

LESSONS LEARNED

The highly consultative process undertaken during the NUPAS and OCA assessments involved a diverse set of AFROHUN members, including staff at various levels (governance bodies, all regional secretariat staff, Country Managers, Country Administrators, and former focal persons) and stakeholders. This generated a rich set of information on the strengths and weaknesses of the Network as well as areas for improvement and innovative ideas to build sustainability.

This approach enabled buy-in and support of key stakeholders, including AFROHUN leadership at the beginning of the strategic planning process. This early buy-in and support will facilitate implementation of all components of the developed AFROHUN Business Plan including the capacity building plan and strategic partnership strategy.

In particular, we appreciated the utility of the assessment and benchmarking of sustainable organizations similar to AFROHUN as an example of strategic directions that could be taken.

Information generated is expected to be used by the Network for its sustainability actions. The benchmarking approach itself will also continue to be used when necessary.

NEXT STEPS

With the firm foundation of the business plan, the capacity building plan, and partnership development strategy, the Network is planning to use these documents to inform its sustainability actions in Year 2 and beyond.

Standardization of SOHIC operations will contribute towards the development of SOHICs as part of the AFROHUN One Health Workforce Academy. In this regard, AFROHUN will organize a virtual engagement with the country teams to roll out the SOHIC Guide and agree on support mechanisms for its implementation.

In Year 2, we shall organize virtual sessions to train the Country Administrators on how to use online QuickBooks and how to capture financial transactions into the system. Use of online QuickBooks will contribute towards strengthening the Network's financial management system overall.

CAMEROON

ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

3
MEMBER
UNIVERSITIES

3
STUDENT ONE
HEALTH CLUBS

HIGHLIGHTS

- In partnership with the Cameroon government, AFROHUN Cameroon is strengthening capacity in Risk Communication and Community Engagement (RCCE) and training using e-learning systems in 17 universities across the country.

- Developed a One Health oriented Pharmacy Doctorate curriculum by integrating One Health modules into the existing national PharmD Program. This curriculm addresses an important need to train a new generation of pharmacists with an expanded set of competencies to address complex multidisciplinary issues, such as antimicrobial resistance.

- Designed a Student One Health Innovation Club (SOHIC) virtual Community of Practice (vCoP) platform that brings together students from 20 universities across the country to share their knowledge and experiences and promote One Health approaches in Cameroon.

- AFROHUN Cameroon provided logistical and technical support to set up a USAID partners platform to coordinate and inform partners on the various COVID-19 RCCE activities in Cameroon.

ACTIVITIES

OBJECTIVE 1

Improving One Health Core Competencies

In coordination with the Global Team, AFROHUN Cameroon compiled information on One Health training modules and courses that have been implemented among AFROHUN Cameroon member institutions (University of Buea & Université des Montagnes) (GL Activity 1.1.1). This activity identified gaps in One Health core competencies, informing on emergent needs for training programs in the country. To learn more about this activity, read the Global Objective 1 Impact Article: **One Health Training Content and Curation** on page 19.

We also supported the University of Buea in developing a One Health oriented curriculum for the national Pharmacy Doctorate Program through the introduction of three One Health modules: Introduction to One Health, Antimicrobial Resistance (AMR): Integrated approach to control and prevention, and

One Health in action: Multidisciplinary and multisectoral approaches to research and interventions. In addition, two existing modules were revised, improving the One Health core competencies covered through the training.

AFROHUN Cameroon started expanding the reach of the SOHICs beyond AFROHUN member institutions by creating an online communication platform (WhatsApp) bringing together a network of professionals from 17 institutions across Cameroon to share their knowledge and experience on One Health related topics (CRN Activity 1.2.4). We also held a series of webinars engaging SOHIC student leaders and mentors (68 participants) across 13 universities. The first webinar focused on strengthening capacities of participants in application of the One Health approach, while the second webinar focused on SOHIC interventions, future directions, and establishing student mentorship plans.

E-learning project launch in Cameroon
PHOTO: AFROHUN CAMEROON

OBJECTIVE 2

Piloting a One Health Evaluation Toolkit

Working with the Global Team, AFROHUN Cameroon piloted elements of the One Health evaluation toolkit (GL Activity 2.2.1/ CRN Activity 2.2.3). We engaged 21 in-service professionals trained in AMR Stewardship during the One Health Workforce Project in this evaluation. During the One Health Workforce project, 21 in-service human, animal, and environmental health professionals were provided training in AMR through workshops and field interventions. At the end of the training, the participants designed and implemented projects that included sensitization campaigns and other outreach activities, thus increasing AMR awareness in women living in rural areas, training and sensitizing farmers on the use of antimicrobials, and providing instruction on best practices for drug prescriptions for nurses and vets. Preliminary results from the evaluation toolkit have revealed that the training program was beneficial for trainees with positive impacts extending to their target communities.

Learn about the OHW-NG Project contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Article: **Knowledge management empowers and boosts an organization's decision-making ability** on page 27.

OBJECTIVE 3

Organizational Sustainability

In order to contribute to the organizational sustainability, and as part of the vision for strategic partnership engagement, AFROHUN Cameroon participated in meetings with stakeholders and partners of the Network (CRN Activity 3.1.4). Read more about how the Network is building organizational sustainability in the **AFROHUN Secretariat section** on page 49.

LESSONS LEARNED

Expanding the reach of the AFROHUN Cameroon Network

The COVID-19 pandemic had a major impact on the country's university calendar, resulting in delays to implementation of our activities. University closures inspired us, through COVID-19 Tranche 3 supplemental funding, to support university communities in their efforts to strengthen capacities in e-learning and RCCE in the context of COVID-19. In addition to increasing RCCE capacity within the country, we extended the Network's reach beyond the member institutions to provide training to faculty in 17 universities. We realized that many of the Network's activities could be implemented virtually and reach greater numbers of individuals through the online platform.

As well, AFROHUN Cameroon extended its reach beyond the member institutions to support 15 non-members in promoting the One Health concept and its implementation through SOHICs. Valuable information was collected about the SOHICs across Cameroon, awareness of the One Health concept was raised, and One Health approaches were implemented among student clubs in major universities in Cameroon. We created a communication platform (via WhatsApp) that promotes networking among SOHIC members and faculty in Cameroon. The communication platform provides a unique forum for information sharing and mentorship on SOHIC activities and One Health issues in Cameroon.

NEXT STEPS

AFROHUN Cameroon will build on the partnerships created with the Cameroon government and USAID partners through this years activities. Early in Year 2 and in collaboration with the Global Team, we will conduct a Training of Trainers (ToT) workshop series to strengthen capacities on COVID-19 RCCE as part of the AFROHUN Cameroon project: "Strengthen Capacities of Universities in Risk Communication and Community Engagement (RCCE) and Training Using E-learning Systems". The ToT webinar series, designed to be interactive and to promote collaboration between local and international experts, will bring together subject matter experts and participants from Cameroon representing various disciplines, including public health, medicine, veterinary medicine, environmental and biological sciences, and social sciences.

Participants will be trained on COVID-19 epidemiology, One Health approaches to disease outbreak investigation and response, as well as risk communication and community engagment strategies. Through online virtual Community of Practice sessions, the faculty and subject matter experts will share knowledge, experiences, and tools for increasing awareness on COVID-19 risk reduction measures in the university setting. As part of the the workshop, faculty will develop tools for training peers and students in their institutions. The tools will include digital platforms, such as social media and YouTube videos, and more classic communication tools such as informational flyers and slogans for radio and TV. This RCCE ToT workshop, developed by AFROHUN Cameroon, will be used as a model for the e-learning ToT workshop series focused on strengthening capacities for virtual instruction across universities in Cameroon.

Following the completion of the RCCE ToT, AFROHUN Cameroon is working on launching the e-learning ToT workshops to strengthen the capacity of faculty in the design and implementation of online courses. The team will also continue to promote the One Health concept among member Universities and facilitate institutionalization and effective implementation of One Health curricula in the Universities' degree programs. AFROHUN Cameroon will also strengthen capacities among university faculty in grant writing through a hands-on workshop that will bring together 30 scientists from Cameroon, other African countries, and the Global Team to develop collaborative research grant proposals. The scientists will work in teams grouped together based on expertise and research interests to develop a propsal for submission to an active Request for Proposals (RFP). This workshop series will be conducted in collaboration with representatives from the Ministry of Health, Ministry of Livestock & Fisheries, Ministry of Environment, and the One Health Platform in Cameroon.

DENIS ZOFOU

Country Manager, AFROHUN Cameroon, University of Buea

"One Health is like the Blue, Green and Red colors coming together into the more powerful White color, in order to successfully illuminate a challenging dark path. It is just the way in addressing increasingly challenging emerging and re-emerging health threats. I foresee a very bright future for One Health in Cameroon, considering the existing structures put in place by the Government (a well structure National One Health Platform), the Government leadership in terms of One Health Policy, and the very sustainable projects implemented or ongoing in the different sectors. Universities are moving toward multidisciplinary pre-service, while health interventions are getting more and more multi-sectoral."

DEMOCRATIC REPUBLIC OF THE CONGO

ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

2
MEMBER
UNIVERSITIES

2
STUDENT ONE
HEALTH CLUBS

1,640
HOUSEHOLDS
REACHED VIA
COVID-19 RCCE
ACTIVITIES

111
INDIVIDUALS
TRAINED IN
COVID-19 RCCE

HIGHLIGHTS

- Trained 60 Student One Health Innovation Club (SOHIC) alumni on COVID-19 Risk Communication and Community Engagement (RCCE).

- Trained 45 territory administrators and their staff on One Health disease outbreak management and RCCE.

- Engaged with 6 MSc students, trained under the One Health Workforce internship, to support the National COVID-19 task force at the health zone level.

ACTIVITIES

OBJECTIVE 1

Increasing the Outbreak Response Capacity of DRC's One Health Workforce

At the beginning of the pandemic, we critically analyzed the COVID-19 response efforts in the country and identified the following challenges:

- Communication was mostly through mass media
- Community members were resistant to response efforts
- There was a high incidence of fake news resulting in poor compliance among communities with regard to the government's COVID-19 risk reduction measures.

AFROHUN DRC trained and empowered both pre-service and in-service professionals by implementing three activities, all of which addressed the identified needs of the national COVID-19 pandemic response efforts.

AFROHUN DRC collaborated with the DRC COVID-19 National Response Taskforce and trained 45 personnel on COVID-19 risk communication and community engagement (RCCE) (CD Activity COVID19-2). Participants were from Kwango Central and Kwango provinces and included territory administrators, health district officers, Red Cross volunteers, and provincial Ministries of Kwango staff. It is worth noting that during the USAID funded Emerging Pandemic Threats-2 (EPT-2) program,

the territorial administrators and their staff were trained in One Health leadership and prevention, detection, and response to disease outbreaks. AFROHUN DRC also improved COVID-19 risk communication skills in SOHIC alumni through trainings on RCCE. The 60 trained SOHIC alumni were paired with community health workers from six health zones (three from Kinshasa and three from Lubumbashi) to conduct COVID-19 risk communication campaigns benefitting approximately 1,640 households.

AFROHUN DRC also supported the training of six MSc students from the University of Lubumbashi School of Veterinary Medicine through an internship program where they participated in Ministry of Health organized COVID-19 outbreak response activities at the health zone level (CD Activity COVID19-3). These students, who come from multidisciplinary backgrounds, participated in COVID-19 response efforts, including contact tracing, surveillance, data collection and analysis, and community engagement within their respective health zones. This internship support offered students an opportunity to fulfill their academic requirements as well as to attain the necessary competencies to respond to outbreaks such as COVID-19.

AFROHUN DRC provided critical support to the COVID-19 response while offering valuable training opportunities focusing on practical skills in disease outbreak response.

PHOTO: OHW-NG CONSORTIUM

OBJECTIVE 2

One Health Workforce Assessment & Tracking

Learn about the OHW-NG Project contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Article: **Knowledge management empowers and boosts an organization's decision-making ability** on page 27.

OBJECTIVE 3

Organizational Sustainability

Please read more about how the Network is building organizational sustainability in the **AFROHUN Secretariat section** on page 49.

LESSONS LEARNED

AFROHUN DRC joined the OHW-NG Project at a time when the COVID-19 pandemic was ravaging the country and thus we experienced immediate challenges implementing planned activities. We were able to quickly pivot planned activities to address the urgent needs of the country and directly increase capacity of the health workforce to respond to the ongoing pandemic.

NEXT STEPS

AFROHUN DRC will support institutionalization of One Health into the Masters of Public Health (MPH) curricula of the Kinshasa School of Public Health (KSPH). Using funding support for the master's scholarship program from the USAID Mission in DRC, we will work closely with KSPH to support integration of the One Health modules into the curricula to ensure that all KSPH MPH students are trained on One Health approaches. We are working with KSPH and the USAID Mission to increase the accessibility of the program to women and individuals from rural areas.

Drawing from lessons learned during our recent training for territorial administrators, we will include a risk communication module in future trainings for this cadre of professionals. This will help territorial administrators follow a participatory approach in decision making during preparedness and response to health emergencies. AFROHUN DRC will also work with the Ministry of Interior to integrate the risk communication module in the curricula for territorial administrators at the national school of territory administrators.

OBJECTIVE 1
OBJECTIVE 2
OBJECTIVE 3

ONE HEALTH STUDENTS ON THE FRONTLINES OF PANDEMIC RESPONSE IN DRC

Since 2018, the Lubumbashi School of Veterinary Medicine has received support from AFROHUN and USAID for a Master of Science program in One Health epidemiology and wildlife veterinary medicine. This four-semester program was organized between DRC (two semesters) and Tanzania (two semesters). As part of this unique program, all students are required to participate in at least two outbreak responses to achieve academic requirements,. The students' first opportunity to put skills in practice occurred during the Ebola outbreak in Goma (2018-2019, eastern DRC). Building on that experience, this year (2020), AFROHUN-DRC provided another intership opportunity for the students to join the national COVID-19 response efforts under the Ministry of Public Health. All six MSc students (from Veterinary Medicine, Public Health and Human Medicine) interned at the provincial level in Lubumbashi (2), Kinshasa, (3) and Goma (1). Over the course of two months, students worked closely with ministry staff and other partners on COVID-19 surveillance, case investigation, and contact tracing. This internship offered the students a unique opportunity to apply knowledge acquired during classroom training and to appreciate how One Health skills can be put in practice during a rapidly escalating pandemic.

Personal protective equipment, distancing, and group size standards in this photo were consistent with local public health guidance and COVID-19 status in the specific country and time it was taken. This may not reflect best practices for all locations where COVID-19 is still spreading.

"

This internship helped me see how human and animal health are important to consider for the response to a pandemic such as COVID-19. The National Veterinary Laboratory has been conducting COVID-19 testing to support response activities."

—Dr. Chancard Lufiaulusu

"

This internship allowed us to learn and bring our expertise to the Kinshasa zoo. We helped implement barrier measures and sampling and testing different animals for COVID-19."

—Dr. Paulin Mungongo

"

As an epidemiologist and wildlife veterinary professional, this training gave me a good insight in early detection and response to infectious disease outbreak following a One Health approach. This helped me improve disease surveillance at the human-animal interface."

—Dr. Jean-Marie Ompey

"

Going to the field with a One Health team for case investigation or contact tracing was the more exciting moment during this training. I took advantage of this internship to participate in other trainings provided by partners such as the WHO to improve my skills in contact tracing, outbreak investigation, and use of digital tools for COVID-19 surveillance."

—Christelle Kapopo

"

Contact tracing is really challenging when conducted in remote areas where access is very difficult. We had to take motorcycles to reach those areas and collect information on contacts."

—Christelle Kapopo

ETHIOPIA

ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

3
MEMBER
UNIVERSITIES

2
STUDENT ONE
HEALTH CLUBS

2.15
MILLION
INDIVIDUALS
REACHED VIA
COVID-19 RCCE
ACTIVITIES

63
INDIVIDUALS
TRAINED IN
COVID-19 RCCE

HIGHLIGHTS

- Trained nurses, clinicians, and laboratory technicians in Tigray and Oromia regions on COVID-19 related topics.

- Conducted COVID-19 public mobilization and awareness campaigns benefitting approximately 2,150,000 people in Mekelle, Jimma, and Addis Ababa.

- Developed Facebook and Telegram social media outlets to share One Health related information.

- Trained 47 faculty from the 3 AFROHUN member Universities on grant writing and manuscript preparation.

- Ministry of Heath requested technical assistance with the COVID-19 response from AFROHUN Ethiopia.

ACTIVITIES

OBJECTIVE 1

One Health Training & Empowerment

In collaboration with the Global Team (GL Activity 1.1.1), AFROHUN Ethiopia reviewed and curated training materials for inclusion of One Health competencies spanning three years of the One Health Workforce (OHW) Project. To learn more about this activity, read our Impact Article in Objective 1: **One Health Training Content and Curation** on page 19.

AFROHUN Ethiopia pivots activities to address urgent public health needs.

Due to the COVID-19 pandemic, resources and activities were pivoted to address critical response needs in the country. These activities included conducting public mobilization and awareness creation campaigns on COVID-19 in Addis Ababa, Jimma, and Mekelle. Aimed at engaging and empowering communities to be agents of change in the fight against the pandemic (ET Activity COVID19-1), multiple media channels were used to reach the targeted audience including loudspeakers mounted on cars, information leaflets, and banners. Approximately 1,000,000 individuals in Addis Ababa, 650,000 in Jimma, and 500,000 in Mekelle benefitted from this campaign. Under another COVID-19 activity (ET Activity COVID19-2), we conducted training for 63 nurses, clinicians, and laboratory technicians working in health facilities in Jimma and Mekelle. Participants worked in high-risk settings, screening and treating suspect cases of COVID-19. The training focused on standard and transmission-based precautions, occupational health, injection safety, healthcare waste management during COVID-19, environmental decontamination, and water and food safety.

OBJECTIVE 2

One Health Workforce Assessment & Tracking

Learn about the OHW-NG Project contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Article: **Knowledge management empowers and boosts an organization's decision-making ability** on page 27.

PHOTO: AFROHUN ETHIOPIA

OBJECTIVE 3

Organizational Sustainability

Working towards organizational sustainability, we developed social media channels (Twitter, Facebook, Telegram and WhatsApp) to increase the visibility of the AFROHUN Ethiopia Network and share One Health related information (ET Activity 3.3.2). With the 9,056 active followers on these social media platforms, 4,046 One Health related articles were distributed, 77 videos and 1,099 news items were shared, and 397 sessions/meetings were held virtually.

We trained 47 faculty from three AFROHUN member Universities on grant writing (ET Activity 3.4.1). Participants developed five concept notes that they plan to develop into fundable proposals.

AFROHUN Ethiopia participated in several partnership meetings held within the country, including the GHSA partners meetings where we shared information on planned activities, helping minimize duplication of efforts. We also attended weekly virtual meetings with the USAID Mission in Ethiopia to discuss implementation of activities and challenges encountered. Notably, we participated in the Tigray Regional State Health partners meeting which is a forum where partners share who they are, what they are doing, the scope and capacity they have, and their role in enhancing the health system of the regional state community and government.

Read more about how the Network is building organizational sustainability in the **AFROHUN Secretariat section** on page 49.

LESSONS LEARNED

AFROHUN Ethiopia has been fully recognized by governmental and non-governmental institutions working on One Health related issues in the country. In planning this year's activities, we worked closely with these institutions which was valuable during the implementation phase of activities. Our reprogrammed COVID-19 related activities received full support which was critical to our ability to be able to work with stakeholders at all levels – national, regional, and local. The government and other partners view AFROHUN Ethiopia as leaders in the fight against COVID-19, continuing the legacy of the Network often being called upon to support government efforts.

Working collaboratively with all One Health stakeholders in country has allowed AFROHUN Ethiopia to build strong partnerships which will be leveraged to deliver our mandate to increase capacity in One Health core competencies through training and empowerment as well as organizational sustainability.

NEXT STEPS

AFROHUN Ethiopia is planning to strengthen national Student One Health Innovation Clubs (SOHICs). The clubs will be engaged in emerging One Health issues in addition to experiential learning opportunities.

Engaging multidisciplinary students from different universities will increase the capacity of the Ethiopian workforce in One Health core competencies building skills necessary for addressing priority zoonotic diseases.

SOCIAL MEDIA

9,056 followers

4,046 One Health articles distributed

1,099 news items shared

397 online trainings and meetings

ONE HEALTH CHAMPION

YIMESGEN TAREKGEN ABEKA

DVM Student, Chairperson of the AFROHUN-Ethiopia Student One Health Innovative Club, Jimma University College of Agriculture and Veterinary Medicine

> " *One Health is all about bringing better human, animal and environmental health. It is an approach that brings together professionals from different disciplines for a common goal. I think that One Health is the best approach we have on this planet to respond to all health challenges in humans, animals, and the environment. For my profession, One Health is an opportunity to learn and act with my colleagues coming from different academic disciplines and it is an opportunity for me to share how becoming a veterinarian could have impact in the advancement of the One Health approach globally. One Health makes me always look towards a better world with better health for all species.* "

REACHING MILLIONS IN ETHIOPIA THROUGH AN URBAN COVID-19 PREVENTION & CONTROL CAMPAIGN

In response to the COVID-19 pandemic, AFROHUN Ethiopia designed and conducted a unique urban public mobilization, risk communication, and awareness raising campaign on COVID-19 control and prevention in Jimma, Mekelle and Addis Ababa cities and surrounding areas. Over 10 days, the team worked in each city and distributed 7,000 leaflets/stickers and 100 banners and posters. In each city, the team also shared risk reduction messages over loudspeakers in main streets and during social gatherings, and engaged with mainstream television and radio programs and social media. Message content was informed by guidelines from WHO, CDC and Ministry of Health, and revolved around the basic biology of the SARS-CoV-2 virus, how it is transmitted, and state of the science for disease prevention and control. All campaign materials were translated into local languages (i.e. Tigrigna in Mekelle, Oromifa in Jimma and Amharic in Addis Ababa). Our team reached **>2,000,000** people across the three cities during the campaign. As a result, we received widespread recognition and multiple requests for collaboration from community stakeholders, as well as governmental and non-governmental organizations.

PHOTOS: AFROHUN ETHIOPIA

KENYA

ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

2
MEMBER
UNIVERSITIES

3
STUDENT ONE
HEALTH CLUBS

73
INDIVIDUALS
TRAINED IN
COVID-19 RCCE

HIGHLIGHTS

- Conducted a training needs assessment for COVID-19 frontline workers and trained 73 Public Health Officers on COVID-19 response focusing on areas related to Risk Communication and Community Engagement (RCCE), surveillance, and Infection Prevention and Control (IPC).

- Held a joint University of Nairobi and Moi University faculty sensitization workshop on the MSc of Infectious Disease and Global Health course curriculum, in which 26 faculty board members resolved to have the curriculum go through the formal approval process at the two Universities.

- Reviewed the antimicrobial resistance (AMR) short course curricula availed from AFROHUN Cameroon and customized it to the local context in Kenya. The AMR curriculum will be presented to relevant professional bodies for Continuing Professinoal Development (CPD) accreditation.

- Hosted innovative training opportunities for students, including a "hackathon" style competition to develop a One Health app as well as a One Health case competition in which six student teams representing 12 academic disciplines from five universities worked together to identify strategies for responding to COVID-19.

- Conducted a desktop review of relevant One Health policy documents and publications. The review informs on the development of a comprehensive One Health policy in Kenya.

ACTIVITIES

OBJECTIVE 1

One Health Training & Empowerment

AFROHUN Kenya implemented eight activities that contributed to the training and empowerment of OHW-NG beneficiaries. In coordination with the Global Team (GL Activity 1.1.1), we compiled information on One Health training modules and courses that have been implemented among AFROHUN Kenya member institutions. This activity identified gaps in One Health core competencies, informing on emergent needs for training programs in the country. To learn more about this activity, read the Global Objective 1 Impact Article: **One Health Training Content and Curation** on page 19.

We coordinated a one-day joint University of Nairobi and Moi University faculty sensitization workshop, where the MSc Infectious Disease and Global Health course curriculum developed during the One Health Workforce project was presented to deans and faculty board members (KY Activity 1.1.3). The curriculum will now undergo the formal approval process for institutionalization at both universities. We also customized the AMR curriculum from AFROHUN Cameroon to the local Kenyan context (KY Activity 1.1.4). This curriculum will be used to train in-service professionals in AMR and will also be included in the courses that AFROHUN Kenya plans to offer as CPD courses. A pilot training based on the customized curriculum will be performed in Year 2.

EMPOWERING STUDENTS TO INCREASE ONE HEALTH CORE COMPETENCIES

Driven by the desire to have the different institutional Student One Health Innovation Clubs (SOHICs) working collaboratively at the local, national and global stage, we initiated the process of integrating the institutional One Health Clubs in Kenya into one national club (KY Activity 1.2.3). AFROHUN Kenya held two meetings attended by Deans, faculty, and SOHIC members, which led to a draft national SOHIC constitution. The constitution will be finalized in Year 2. As part of experiential learning, we held institutional level and national level One Health case competitions (KY Activity 1.2.4 & KY Activity 1.2.5) in which 35 and 23 students participated, respectively. In addition to participants from AFROHUN member Universities, these activities also attracted individuals from Egerton University, Maasai Mara University and Jomo Kenyatta University. Furthermore, we conducted an assessment of the impact of the One Health demonstration site activities at the Loitokitok and MPALA research centres and identified new potential sites for future events (KY Activity 1.4.2).

We engaged a team of three postgraduate students to conduct a desktop review of One Health policy documents and publications in Kenya and evaluate the capacity of the current framework for addressing health challenges using a One Health approach (KY Activity 1.5.1). The review highlighted the need to revise existing policies for a more efficient and effective One Health approach. The review also informs on the development of a comprehensive One Health policy in Kenya.

Addressing critical needs in the COVID-19 response

As part of our contribution to building One Health workforce capacity, we trained 73 non-clinical frontline health workers on COVID-19 response (KY Actiity COVID 19-1). These workers are involved in surveillance, contact tracing, WASH activities, RCCE, IPC at the health facility and community level, and waste management. Kenya's Public Health Officers and Technicians Council agreed to grant participants 15 CPD points and a 15% waiver on professional license renewal fees for 2021.

OBJECTIVE 2

One Health Workforce Assessment & Tracking

AFROHUN Kenya conducted a One Health training needs assessment for Frontline Workers (KY Activity 2.2.3). Through this activity, we identified gaps in training for frontline workers in Kenya that are not addressed by existing programs.

We held a one-day meeting with representatives of the professional regulatory and licensing bodies in Kenya to seek accreditation approval of the courses developed by AFROHUN (KY Activity 2.3.3). With representatives from Kenya Nutritionists and Dieticians Board, Public Health Officers and Technicians Council, Kenya Veterinary Board, and the Kenya Wildlife Service, participants agreed that AFROHUN Kenya should apply to be recognized as an accredited CPD service provider.

Learn about the OHW-NG Project contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Article: **Knowledge management empowers and boosts an organization's decision-making ability** on page 27.

OBJECTIVE 3

Organizational Sustainability

Working collaboratively over a period of six weeks with various partners, we increased the capacity of 62 multidisciplinary students from eight universities to develop One Health apps for use by frontline workers (KY Activity 3.2.6). In a hackathon style event, students developed prototypes of apps for addressing One Health problems. Once developed, the apps were presented to a panel of judges drawn from the AFROHUN Secretariat, private sector, and academia. This hackathon was supported by The Medicines, Technologies, and Pharmaceutical Services Program (MTaPS), International Federation of Red Cross and Red Crescen (IFRC), CORE Group, and Child Development Foundation (UK).

As part of the vision to build organizational sustainability, we mapped strategic One Health partners in Kenya involved in One Health and disease prevention, detection and control (KY Activity 3.3.2). We intend to use the information generated for strategic engagement with stakeholders in future activities. For proper program planning, implementation, and assessment, we held a series of country-level meetings (KY Activity 3.3.3). The meetings included orientation of Activity Leads, an annual kick-off meeting, and monthly progress meetings with Deans.

LESSONS LEARNED

Utilization of technology and online collaborative tools enabled our teams to achieve desired project and activity outcomes. The COVID-19 pandemic and related preventive measures created an opportunity for AFROHUN Kenya to explore innovative ideas around coordinating and implementing activities online. Leveraging this technology ensured that activities were implemented without compromising the safety of the participants. Continued adoption of communication technology will be critical in complementing and/or supporting the delivery of the AFROHUN mandate.

Partnership engagement contributes to one of AFROHUN's pillars, and promotes the journey towards sustainability. Through implementation of activities, AFROHUN Kenya engaged with public and private sector partners within the government and the Global Health Security Agenda (GHSA). This augmented existing synergies, contributed to the completion of Year 1 activities, and set the foundation for future working relationships for the duration of the OHW-NG Project.

NEXT STEPS

Next steps will build on the progress achieved this project year, which will lead to institutionalization of activities, strategic engagement with stakeholders, and capacity building of both pre-service and in-service personnel. AFROHUN Kenya is dedicated to leveraging exisiting innovations and information technology to support activities, which allow us to continue programming despite challenges presented by COVID-19. Expanding our reach gives us an opportunity to be nimble and resourceful even after the pandemic restrictions are reduced. Futhermore, we will continue to seek avenues and complementary funding resources to enhance program sustainability.

ONE HEALTH
CHAMPION

SAMANTHA MUKONJIA

5th Year Medicine & Surgery Student, SOHIC Student Leader, UoN CHS, University of Nairobi, College of Health Sciences

"*As a student, the One Health approach has been key in shaping my perspective on health, health education, research, and policy. Through structured clubs and organizations including Student One Health Innovation Club (SOHIC), ISOHA, and AFROHUN, I have been able to engage with individuals from multiple disciplines and learn from experts to appreciate the value of inter and transdisciplinary collaboration. During the 2017 OHCEA OH-Demosite training, I experienced first-hand the One Health approach being used to develop sustainable, cost-friendly solutions. This exposure has had an impact on refining my desired career trajectory. I am now keener on utilizing a systems approach cognizant of the interrelationships at the human-animal-environmental interface. I am confident that opportunities exist to develop solutions, innovations, and processes that utilize the One-Health approach.*"

ONE HEALTH CHAMPION

SIMON PETER OTEBA

4th Year Environmental Health Student. SOHIC Student Leader, Moi University, Moi University, School of Public Health

"
There is no better approach than One Health for addressing wicked global health concerns our communities face now and in the future. Maybe there is, but not on planet earth! I can never figure out my career in environmental health without attaching it to One Health. It is the supplementary compliment that I truly needed to explore my interest in global health, outbreaks/infectious diseases, research and innovations among others. Through my field experience with AFROHUN since 2015, my interest in One Health has grown beyond passion to obsession. I cannot think of a solution to any societal health challenge without factoring in multidisciplinary, interdisciplinary, and transdisciplinary collaboration and partnerships, crucial for holistic, innovative, and sustainable solutions. To me, One Health means breaking the inter-professional barriers and realizing that nearly every discipline - within and outside human, animal and environmental health, including engineering, IT, sociology etc. - is equally important in working towards attaining optimal health outcomes for humans, animals, and the environment."

RWANDA

ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

2
MEMBER
UNIVERSITIES

1
STUDENT ONE
HEALTH CLUB

17,440
INDIVIDUALS
REACHED VIA RCCE
ACTIVITIES RELATED
TO COVID-19

35
INDIVIDUALS
TRAINED IN
COVID-19 RCCE

HIGHLIGHTS

- Trained 35 students from the Student One Health Innovation Club (SOHIC) on COVID-19 public health prevention measures.

- Carried out COVID-19 citizen awareness campaigns in five districts reaching approximately 2,440 people through in-person events and an estimated 15,000 individuals via community radio.

- Conducted a 3-day workshop with 22 participants from Continous Professional Development (CPD) providers and Professional Regulatory Councils to facilitate incorporation of One Health competencies into their training curricula.

- Conducted a pre-field deployment orientation for 30 students to prepare them for field activities at the One Health demonstration site. These students were then deployed to the site for two weeks, enabling them to gain hands-on skills in identifying and addressing real One Health challenges in target communities.

ACTIVITIES

OBJECTIVE 1

One Health Training & Empowerment

In coordination with the Global Team to contribute towards training and empowerment of the One Health workforce, we compiled information on One Health training modules and courses that have been implemented among AFROHUN Rwanda member institutions (GL Activity 1.1.1). This activity identified gaps in One Health core competencies, informing on emergent needs for training programs in the country. To learn more about this activity, read the Global Objective 1 Impact Article: **One Health Training Content and Curation** on page 19.

Increasing core One Health competencies in the future One Health workforce

To prepare students for deployment to the One Health demonstration field site, we provided training to 30 students (RW Activity 1.4.3) on best practices for community entry and engagement, data analysis (qualitative and quantitative), collaborative team work, ethical conduct, and reporting. During the two week deployment to the One Health demonstration site at Akagera National Park (RW Activity 1.4.4), students used a multidisiplinary approach

to identify health challenges at the interface of animals, humans, and the environment; prioritize the challenges to address together with community members; develop interventions using local resources; and implement interventions to address the priority issues.

Human-animal - environment interface
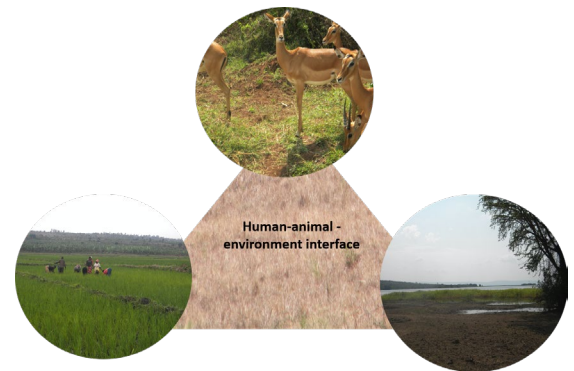
Through this field-based experiential learning activity, students learned to effectively communicate with people of different backgrounds about health challenges in their communities, inform local governments of the issues, and advocate for resources to address the challenges.

PHOTO: AFROHUN RWANDA

Working with the COVID-19 National Task force, we trained 35 students on COVID-19 Risk Communication and Community Engagement (RCCE). These students worked with local leaders and faculty to implement a series of community outreach activities, which were conducted twice weekly in five districts benefitting approximately 2,440 people through in-person events and an estimated 15,000 people via messages delivered through community radios.

OBJECTIVE 2

One Health Workforce Assessment & Tracking

AFROHUN Rwanda organized a workshop for seven professional regulatory councils to promote incorporating One Health competencies into their Continous Professional Development (CPD) course curricula (RW Activity 2.3.2). The health professional councils included the Rwanda Nurses and Midwives Union (RNMU), Rwanda Allied Health Professions Council (RAHPC), Rwanda Association of Midwives (RAM), National Council of Nurses and Midwives of Rwanda (NCNM), National Pharmacy Council (NPC), Rwanda Medical and Dental Council (RMDC), and Rwanda Council of Veterinary Doctors (RCVD). Representatives from each participating professional council presented the One Health competencies to be incorporated in their CPD courses and linked to the existing modules to achieve certification.

Learn about the OHW-NG Project contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Article: **Knowledge management empowers and boosts an organization's decision-making ability** on page 27.

OBJECTIVE 3

Organizational Sustainability

Please read more about how the Network is building organizational sustainability in the **AFROHUN Secretariat section** on page 49.

PHOTO: AFROHUN RWANDA

LESSONS LEARNED

It was with pride that our Network was able to contribute to a cause that was not only urgent to the nation, but also to the international community at large.

Addressing urgent public health needs due to the impact of the COVID-19 pandemic, AFROHUN Rwanda supported students in raising awareness about COVID-19 within communities, and in building strong partnerships with district and community leaders. This also allowed us the opportunity to increase AFROHUN's visibility. These activities gave students a chance to learn about community issues, their coping mechanisms, and resilience. They also provided an opportunity to build strong partnerships with district authorities, which are key for current and future interventions.

Expanding AFROHUN Rwanda partnerships to build organizational sustanbility.

A relationship was established between Professional Regulatory Councils and CPD providers positioning the Network as a credible partner for future capacity building opportunities and other One Health related interactions. Following up on the training provided, one CPD provider organized an additional training for its members and invited our Activity Lead as a facilitator, which indicates the beginning of a strong and long-lasting partnership with AFROHUN.

NEXT STEPS

Our next steps align with the goals of the Network: to build capacity and empower professionals through training and to promote organizational sustainability through strategic partnerships.

- AFROHUN Rwanda will build on partnerships established with the government by actively participating in the on-going response to COVID-19.

- Professional Regulatory Councils and CPD providers have requested expert training in One Health competencies and we will jointly develop mechanisms and modalities for collaboration on integration of One Health modules into their curricula.

- AFROHUN Rwanda will also build on this year's achievements in pre-service training for the future One Health workforce and in capacity strenghtening for in-service personnel.

ONE HEALTH
CHAMPION

KABASINGA INNOCENTE

Student, SOHIC Coordinator, University of Rwanda

> " *Rwanda is adopting a new strategic plan envisioning to promote and strengthen interdisciplinary collaboration and partnerships in a One Health approach and strengthen surveillance, early detection, rapid response, prevention and control of zoonoses, antimicrobial resistance and other public health threats. Furthermore, the One Health Strategic plan will build capacity and promote applied research at the human-animal-ecosystem interface.* "

DISPELLING COVID-19 MYTHS THROUGH STUDENT-LED RISK COMMUNICATION CAMPAIGNS IN RWANDA

In rural areas across Rwanda, there was very limited awareness around the COVID-19 pandemic, despite the government´s stringent measures to curb the spread of the disease, including implementing lockdowns. In five districts across Rwanda, 40 students worked in multidisciplinary One Health teams to raise awareness about the pandemic and to safely share effective and locally appropriate risk reduction measures among communities.

Our goal, as AFROHUN Rwanda, was to contribute to national workforce strengthening for effective outbreak response. In this innovative student-led intervention, our students connected with local leaders and faculty and employed a variety of outreach methods, visiting with households and targeting local markets. Key insights revealed that COVID-19 awareness was higher in urban areas, especially in Kigali, where the caseload was high and community spread was a challenge. The student's efforts targeting risk communication and community engagement in rural areas were valued by government partners, as their teams were stretched thin with the national COVID-19 response. Our focus on student participation was particularly effective with community youth, who had a misconception that COVID-19 was a disease of older people. As a result of the awareness campaign, this perception seemed to change over time, though further sensitization efforts are recommended to sustain this impact.

IN FOCUS

- **>2,440** individuals across five rural districts reached by student-led One Health risk communication teams

- An additional **15,000** individuals engaged via community radio broadcasts

- Student-led risk communication efforts were particularly effective with youth, especially for dispelling myths and rumors about the pandemic

SENEGAL
ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

1
MEMBER
UNIVERSITY

1
STUDENT ONE
HEALTH CLUB

68
INDIVIDUALS TRAINED
IN AND REACHED VIA
RCCE ACTIVITIES

HIGHLIGHTS

- Awarded four small grants to 17 students and early career researchers.

- Trained 68 faculty and students on epidemiology, immunopathology, the COVID-19 response strategy in Senegal, phytotherapy, and Risk Communication and Community Engagement (RCCE).

- Trained 14 health workers on IPC, the role of laboratories in COVID-19, and the management of COVID-19 patients.

- Supported Dakar Inter-State School of Veterinary Sciences and Medicine (EISMV) in the development of a sustainability plan for the Wildlife Management and Health Surveillance Masters program.

- Elaboration of the Student One Health Innovation Club (SOHIC)-Senegal rules and guidelines to support activities building One Health core competencies.

ACTIVITIES

OBJECTIVE 1

Training and Empowering Senegal's One Health Workforce

In collaboration with the Global Team, AFROHUN Senegal completed the content curation exercise to document all materials developed during the One Health Workforce Project phase (GL Activity 1.1.1). This activity identified gaps in One Health core competencies, informing on emergent needs for training programs in the country. To learn more about this activity, read our Impact Article in the Global Objective 1 section: **One Health Training Content and Curation** on page 19.

AFROHUN Senegal developed a sustainability plan for the MSc Wildlife Management and Health Surveillance program based the Dakar Inter-State School of Veterinary Sciences and Medicine (EISMV) (SN Activity 1.3.1 a). A meeting to validate the plan was attended by representatives from key stakeholders from the Food and Agriculture Organization's Emergency Centre for Transboundary Animal Diseases (FAO-ECTAD), the International Union for Conservation of Nature (IUCN), Pasteur Institute of Dakar (IPD), and government ministries.

AFROHUN has been working to empower students and promote student-led activities. Currently, the team in Senegal is working with the relevant authorities to obtain the legal recognition of Student One Health Innovation Clubs (SOHICs). Moreover, small research grants were awarded to four groups of students and early career researchers (SN Activity 1.2.3). The teams are working on One Health related topics, such as antimicrobial resistance (AMR), COVID-19, and zoonotic bacteria and priority zoonoses in Senegal.

In order to address gaps in competency within Senegal's health workforce, we adapted our workplan to incorporate activities related to the ongoing COVID-19 pandemic. With technical assistance from the OHW-NG Global Team, we held an Extension for Community Healthcare Outcomes (ECHO) session on COVID-19 for 68 students and faculty. During this session, participants were exposed to topics that included COVID-19 epidemiology, community response, immunopathology, and RCCE. We organized a second ECHO session that benefitted 14 health workers and covered infection prevention and control, COVID-19 diagnostics, and management of COVID-19 patients.

OBJECTIVE 2

One Health Workforce Assessment & Tracking

Learn about the OHW-NG Project contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Article: **Knowledge management empowers and boosts an organization's decision-making ability** on page 27.

OBJECTIVE 3

Organizational Sustainability

Strategic partnerships are critical and can amplify the impact of Network activities, and in this regard, AFROHUN Senegal forged new partnerships in planning and implementation of activities.

AFROHUN Senegal participated in partners' activities at the national level (SN Activity 3.3.3). These meetings included the USAID implementing partners meeting with Breakthrough Action and National One Health platform representatives. Engaging in these meetings increases AFROHUN's visibility and expands potential partnerships with national and international stakeholders.

Read more about how the Network is building organizational sustainability in the **AFROHUN Secretariat section** on page 49.

LESSONS LEARNED

AFROHUN Senegal launched a small grants program to support young researchers in their career development. This activity was an opportunity for students and young researchers to develop their skills in grant writing, research, and multidisciplinary team working. The skills gained are critical to increasing the competency of Senegal's One Health workforce. Given the challenges with COVID-19 restrictions, we plan to allow more time for students to implement their research activities.

NEXT STEPS

AFROHUN Senegal intends to develop a set of criteria that will guide the Network's national extension. This will help to promote One Health workforce training at the national level and in developing future partnerships. AFROHUN Senegal will work on setting priorities and expanding training to effectively contribute towards meeting gaps identified by the Joint External Evaluation (JEE) and OH-SMART workforce development process.

In addition, AFROHUN Senegal is dedicated to improving the SOHICs' visibility at the national level by continuing to involve them in activities and through developing their One Health core competencies.

ONE HEALTH CHAMPION

RIANATOU BADA ALAMBEDJI

Professor of Microbiology and Immunology, École inter-États des Sciences et Médecine Vétérinaires de Dakar (EISMV)

" *One Health is an integrated approach to health that focuses on the interactions between animals, humans and their diverse environments. It encourages collaborations, synergies and cross-improvmentamong all sectorsand actors whose activities can have an impact on health. As a teacher-researcher, I believe that the One Health approach must be integrated into the application of the three types of knowledge (Knowing, Knowing How and Know How to Be) that we take intoaccount in the development of our curricula.* "

GOING DIGITAL IN SENEGAL

INNOVATIVE VIRTUAL TECHNOLOGIES TO STRENGTHEN NATIONAL COVID-19 RESPONSE CAPACITY IN SENEGAL

AFROHUN Senegal organized two Extension for Community Healthcare Outcomes (ECHO) sessions focusing on COVID-19 for faculty, students, and heath care workers. Project ECHO is a partner of the One Health Workforce – Next Generation (OHW-NG) Global Consortium and has been actively helping connect experts around the globe with scientists, healthcare workers, faculty, and students on COVID-19 related topics. The two AFROHUN Senegal ECHO sessions featured experts and researchers from Senegalese universities and government organizations involved in COVID-19 response efforts. These sessions engaged >100 participants (faculty, students, and frontline health workers) who interacted with specialists and enhanced their knowledge on COVID-19 and related topics.

The first session "Capacity building on epidemiological aspects and management of COVID-19 in Senegal", held in July 2020, focused on strengthening communication around the pandemic and sharing knowledge among university networks. This session covered COVID-19 epidemiology, immuno-pathology, COVID-19 response strategies implemented in Senegal, along with risk communication and community engagement. The second session, held in August 2020, focused on strengthening Senegalese health workers capacity for case management and infection, prevention, and control (IPC) measures during treatment. Participants learned COVID-19 IPC best practices, approaches to COVID-19 detection in the laboratory, and patient care.

By sharing current research findings and expert knowledge, along with experiences and strategies from various Senegalese experts, these sessions were an enriching way to network and increase COVID-19 pandemic response capacity, despite the challenges presented by the pandemic with regard to remote work and social distancing. Building on this success, AFROHUN Senegal is planning future digital workshops focused on additional health topics that are national priorities.

The COVID-19 pandemic has highlighted the importance and value of the virtual community of practice. By bringing together healthcare workers around the globe, those on the frontlines responding to emerging health threats (both present and future), we move forward together as a united global community to create a healthier world.

> " *I think that these two webinars have highlighted the complementary nature of the approach adopted in the response. These sessions can be the starting point for future sessions that could focus on other public health issues but in more depth.* "
>
> –Sara Danièle Dieng
> AFROHUN Senegal Country Manager

TANZANIA

ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

2
MEMBER
UNIVERSITIES

2
STUDENT ONE
HEALTH CLUBS

5,860
INDIVIDUALS
REACHED VIA
COVID-19 RCCE
ACTIVITIES

131
INDIVIDUALS
TRAINED IN
COVID-19 RCCE

HIGHLIGHTS

- Trained 86 in-service personnel on COVID-19 prevention and control using a One Health approach. The trained personnel conducted COVID-19 Risk Communication and Community Education (RCCE) activities benefitting 4,000 community members from 7 regions of Tanzania.

- 45 Student One Health Innovation Club (SOHIC) members conducted community awareness campaigns on environmental sanitation and COVID-19 prevention and control in Morogoro and Dar es Salaam. The campaigns reached approximately 970 and 890 community members and 890 students, in total.

- Identified gaps in One Health competencies and licensure and re-certification requirements for various Continuing Professional Development (CPD) programs.

- Refined diploma and certificate level curricula in which One Health modules had been previously integrated for institutionalizing on a national level.

- Worked with government partners on efforts to strengthen the One Health workforce in Tanzania.

- Secured new public and private partners for University Networks to foster opportunities to strengthen the One Health workforce.

ACTIVITIES

OBJECTIVE 1
One Health Training & Empowerment

In order to increase capacity within the health workforce, we incorporated One Health modules into the diploma and certificate curricula for the Pharmacy, Laboratory, and Agriculture training colleges (TZ Activity 1.3.1). Members of the training colleges and the National Council for Technical Education participated in the workshop to review and refine the curricula.

The team also sensitized 52 government and regulatory body officials of sector ministries on the goals of AFROHUN and USAID's Global Health Security Agenda, priority zoonotic diseases and antimicrobial resistance, and how a One Health approach can be used to address these complex health challenges (TZ Activity 1.5.1). AFROHUN Tanzania enhanced awareness of how the Network could work with government and other partners on efforts to strengthen the One Health workforce in Tanzania.

Improving awareness and mitigating the spread of COVID-19

As part of the project's goal of providing experiential learning opportunities to students (TZ Activity 1.4.3), a multisiciplinary team of 45 students, supported by six faculty, delivered public presentations on the importance of environmental sanitation and hand hygiene to mitigate the spread of COVID-19. These student-led campaigns conducted in Morogoro and Dar es Salaam reached approximately 970 community members and 890 students.

In collaboration with the Tanzania Public Health Association (TPHA) and the Prime Minister's Office, we trained 86 in-service professionals on COVID-19 and the One Health approach to outbreak response across seven regions of Tanzania. The trainees applied this knowledge to improve awareness of COVID-19 and risk reduction measures among more than 4,000 community members.

PHOTO: AFROHUN TANZANIA

OBJECTIVE 2

One Health Workforce Assessment & Tracking

AFROHUN Tanzania engaged five professional councils, including Environmental Health, Nursing and Midwifery, Medical, Pharmacy, and the Veterinary Medicine councils, to identify gaps in One Health competencies in their CPD short courses (TZ Activity 2.3.3). Subsequently we will work with these professional bodies to develop and/or integrate One Health modules into their curricula.

Learn about the OHW-NG Project contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Article: **Knowledge management empowers and boosts an organization's decision-making ability** on page 27.

OBJECTIVE 3

Organizational Sustainability

In line with promoting organizational sustainability, AFROHUN Tanzania held a virtual workshop for 53 Deans, faculty, and representatives of universities and diploma

colleges across Tanzania (TZ Activity 3.3.2) to forge new partnerships and expand the Networks' One Health workforce training opportunities. The workshop sensitized participants on the mission of AFROHUN, the One Health concept, and the opportunity to integrate One Health into their curricula through the AFROHUN One Health modules. AFROHUN Tanzania will continue to engage these potential partners through regular communications with representatives from each participating institution to plan joint activities and involve them in efforts to incorporate One Health modules in university curricula across the country.

Read more about how the Network is building organizational sustainability in the **AFROHUN Secretariat section** on page 49.

LESSONS LEARNED

National-level stakeholder buy-in critical to successful activity implementation.

AFROHUN Tanzania has been fully recognized by the Prime Minister's Office (PMO) which houses the One Health Coordination Desk under the Department of Disaster Management. To address critical gaps in pandemic preparedness and response, we pivoted and implemented two COVID-19 related activities which were supported by the PMO. The PMO took a lead role in coordination of the activities, including inviting participants from all seven regions. Involvement of the PMO was critical for obtaining quick buy-in from the different government ministries and regional administration authorities participating. Capacity strengthening of in-service personnel was achieved in all seven regions with 86 national staff trained. Over 4,000 community members benefited from this activity through risk communication and community education campaigns. A total of 45 students from Sokoine University of Agriculture and Muhimbili University of Allied Sciences gained skills in leadership, risk communication, and community engagement reaching approximately 970 community members and 890 students in Dar es Salaam and Morogoro.

NEXT STEPS

Training of diploma and certificate level students in One Health approaches to addressing complex health problems will improve students' skills and competencies and lead to strengthening of the One Health workforce.

AFROHUN Tanzania is planning to engage the Student One Health Innovations Clubs (SOHICs) in experiential learning exercises in which students will learn about control of priority zoonotic diseases in Tanzania (e.g., rabies) while conducting canine rabies vaccination campaigns in local communities. These exercises improve students' knowledge and skills in applying One Health approaches to zoonotic disease prevention and control.

Another critical next step is to develop the capacity of faculty/staff to deliver One Health integrated curricula for diploma and certificate level programs in Tanzania. This activity will expand the One Health workforce to include grassroots-level personnel (tutors and their students) who will serve as the first responders for health emergencies at the community level.

TAKING COVID-19 RISK REDUCTION MESSAGES TO THE UNDERSERVED IN TANZANIA

AFROHUN TANZANIA EXTENDS OUTREACH THROUGH MINIATURE PUBLIC ADDRESS SYSTEMS

In the wake of the COVID-19 pandemic, AFROHUN Tanzania assisted with delivering health education messages to the public through a miniature public address system loaded with messages developed by the Ministry of Health (MoH). The first phase of this activity involved a training of trainers at the national level. Working collaboratively with the Tanzania Public Health Association (TPHA), MoH, and the Prime Minister's Office, we deployed multidisciplinary teams of national trainers to seven regions of Tanzania.

National trainers then engaged and trained 86 in-service personnel from the public health, animal health, and environmental health sectors in techniques for delivering COVID-19 risk reduction messages in hard to reach communities, and especially busy hubs such as markets and bus terminals. The risk reduction messages were combined with other educational messages on prevention of communicable diseases and were interspersed with popular music to draw attention. Use of a portable public address system enabled the trainees to reach over 4,000 community members. These populations are underserved and hard to reach utilizing traditional outreach methods. This innovative approach was greatly appreciated by regional leadership in Tanzania, who promised to mobilize resources and continue engaging multidisciplinary teams for the community education campaigns.

PHOTO: AFROHUN TANZANIA

IN FOCUS

- **86** in-service personnel trained in **7** regions.

- > **4,000** people directly reached in the risk reduction campaign.

- Increased visibility for AFROHUN and TPHA with the national One Health Coordination Desk and general population.

- Critical contribution from the Prime Ministers officers in the success and implementation of the campaign.

AFROHUN
Advancing One Health

UGANDA

ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

2
MEMBER
UNIVERSITIES

2
STUDENT ONE
HEALTH CLUBS

3,000
INDIVIDUALS
REACHED VIA
COVID-19 RCCE
ACTIVITIES*

92
INDIVIDUALS
TRAINED IN
COVID-19 RCCE

HIGHLIGHTS

To improve understanding of the awareness and perceptions of communities on COVID-19 and public health and social measures, AFROHUN Uganda partnered with the Ministry of Health and local government officials to survey 300 individuals on promoters/barriers to COVID-19 public health and social measures (PHSM) in select districts in Uganda. Survey members were sensitized on COVID-19. The team gained important information about the communities' awareness of COVID-19 and common barriers to PHSM, including a lack of resources to buy masks, hand soap, and other necessary items. These findings were shared with the national One Health platform to inform on community outreach. In addition, the team interviewed over 1,000 community members in 12 districts of Uganda to assess perceptions on the use of face masks in response to the COVID-19 pandemic.

- 40 health facilities were assessed on their capacity to perform Risk Communication and Community Engagement (RCCE) activities. Information Education and Communication (IEC) materials were distributed to 400 households and 40 health facilities in the Kampala, Wakiso, Amuru, and Kyotera districts.

- Under the Students One Health Innovations Club (SOHIC) umbrella, 20 Mbarara University of Science and Technology (MUST) students sensitized approximately 1,000 people on COVID-19 and risk reduction measures in Mbarara TASO Village, Mbarara Central Market, and Rwebikona Market.

- 82 faculty from Makerere University (Mak) and MUST received training in pedagogy and online teaching, strengthening the institutions' capacity for e-learning. Additionally, 315 students at Mak and MUST benefitted from online instruction on infectious diseases and prevention and control measures.

- 52 undergraduate students implemented One Health related projects benefitting communities in 12 districts across Eastern, Central, and Western Uganda.

- Through the AFROHUN Uganda fellowship program, five graduate students improved their skills in outbreak investigation and response, communication, and leadership through working with COVID-19 response teams at Amref Health Africa, Infectious Disease Institute, Ministry of Health – Epidemiology and Surveillance Division, and FAO.

*A total of 1,300 individuals, 400 households, and 40 health facilities were reached. The estimated total number of people reached is approximately 3,000 when extrapolating the 400 households (3 people per household) and 40 health facilities (15 people per facility).

ACTIVITIES

OBJECTIVE 1

One Health Training & Empowerment

This year, AFROHUN Uganda engaged the community through student-led activities. Through the Student One Health Innovation Club (SOHIC) activities (UG Activity 1.2.3), Makerere University (Mak) and Mbarara University of Science and Technology (MUST) students acquired hands-on skills while delivering services to the community and to their peers. This included 10 students from the Mak SOHIC who participated in rabies awareness campaigns and vaccination of dogs ahead of the Rabies Day celebration in Kyengera, Wakiso district.

Through SOHIC-led webinars, students from Uganda and other countries around the world shared their experiences on COVID-19 prevention and control using a One Health approach in their communities. In addition, MUST students filmed a documentary, "The Power of their Story", conveying experiences of different community members in the context of the COVID-19 pandemic. Our One Health champions from Mak (52 undergraduate students) implemented 52 One Health projects in 12 districts (representing three regions) in three regions of Uganda. These projects benefited communities by improving water drainage in neighborhoods in Kampala, reusing plastic to make ropes and repurposing plastic for use in urban gardening, and sensitizing the community on preventive strategies for COVID-19 control. Twenty student members of the Mak SOHIC conducted a 5-day observational study in Makerere University to assess compliance with COVID-19 SOPs among the university community and gaps in implementation of safety guidelines. Students shared the findings with university leadership who put additional safeguards in place to address these gaps (no-touch hand washing facilities, display of COVID-19 risk communication materials, messaging on the importance of wearing a mask, and security personnel stationed at the college entry to track and limit numbers of individuals entering the building).

The AFROHUN Uganda fellowship program provided an opportunity for five graduate students to improve their skills in outbreak response, communication, and leadership. This year, fellows supported COVID-19 response teams in FAO, Amref Health Africa, Infectious Disease Institute, and the Ministry of Health – Epidemiology and Surveillance Division. For more information on this activity, please see the AFROHUN Uganda Success Story: **Engaging Students in COVID-19 Prevention and Response, One Health Graduate Fellowship Program** on page 114.

PHOTO: AFROHUN UGANDA

Virtual trainings increase One Health core competencies

AFROHUN Uganda transformed the One Health Institute Infectious Disease Management (IDM) course into a virtual format and used the opportunity to strengthen the capacity of 20 Mak faculty in pedagogy and online teaching. The IDM course consists of six modules (including leadership in infectious disease management, gender in risk management, outbreak investigation, and antimicrobial resistance). Over 300 students from Animal Health and Human Health Sciences, Business Economics, Food & Nutrition, Education, Environmental Studies, Agriculture, Social Sciences, Anthropology degree programs, benefited from the online training.

AFROHUN Uganda successfully institutionalized One Health in the MUST School of Medicine by integrating One Health competencies into the Community Based Training for Medical Students (COBERS) course. COBERS is a community-based training undertaken by students from Medicine, Nursing, Medical Laboratory, and Pharmaceutical Sciences. Sixty faculty of MUST participated in this training, which was facilitated by four Mak faculty. The One Health COBERS course was also transformed into an online format, which will enable more students to benefit from the training in the future.

OBJECTIVE 2

One Health Workforce Assessment & Tracking

AFROHUN Uganda conducted a tracer study to track alumni who have undergone various OHCEA/AFROHUN Uganda One Health trainings such as the One Health Institute Theoretical Principles in Infectious Disease Management course, One Health field attachments, graduate fellowships,

undergraduate innovations and SOHICs, curriculum review (lecturers), One Health resident training, and MSc. scholarship programs. A total of 182 AFROHUN Uganda alumni participated in the study, which informs on their employment status and the extent to which One Health competences have been integrated into their current organizations.

Learn about the OHW-NG Project contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Article: **Knowledge management empowers and boosts an organization's decision-making ability** on page 27.

OBJECTIVE 3

Organizational Sustainability

AFROHUN Uganda promoted visibility of the Network and the OHW-NG Project by producing the AFROHUN Uganda newsletter (UG Activity 3.2.3). Over 500 printed copies were shared with various stakeholders within the country. In addition, soft copies were sent via email and were published on the AFROHUN website.

Two poster presentations were delivered during the virtual 6th World One Health Congress. The posters were titled "One Health competency building under the AFROHUN University Network" and "Contribution of the AFROHUN Network and the USAID One Health Workforce project in mitigation of re-emerging zoonotic disease outbreaks in collaboration with the government and the national One Health platform".

Read more about how the Network is building organizational sustainability in the **AFROHUN Secretariat section** on page 49.

LESSONS LEARNED

Strengthening the capacity of faculty in e-learning promotes continuity of One Health training when in-person activities are not feasible and extends opportunities to larger numbers of students. In this regard, AFROHUN Uganda has identified the importance of strengthening faculty training to further improve their capacity for online teaching. In Year 2, refresher trainings on e-learning will be conducted for Mak and MUST faculty.

NEXT STEPS

Tailoring trainings to ensure that One Health professionals have the knowledge and skills desired by employers.

AFROHUN Uganda is planning to work with relevant stakeholders to support the formulation of a strategy to define a "One Health Worker" in Uganda. The overall goal is to ensure that we streamline One Health trainings in the country to meet the needs of the labor market. This activity will forge new partnerships and strengthen collaborations with FAO and other key organizations employing One Health graduates.

ONE HEALTH CHAMPION

ALEX
KYABARONGO

Veterinary Student, President of the Makerere University Students One Health Innovations Club (MAK-SOHIC)

Alex is a student at Makerere University in Kampala, Uganda studying veterinary medicine. He is passionate about bringing the One Health approach out of academia and integrating it into communities, and has led several efforts to mobilize his peers for community engagement activities. Alex has also represented Makerere students at the international level and on global One Health platforms.

> *"One Health is not just a concept to me: it is a lived experience and a path towards a better and healthier environment for us all. I believe everyone should be aware that we have a role to play in improving animal, human and environmental health. AFROHUN has been very supportive of our One Health student-led initiatives, and has provided financial support as well as mentorship from leaders in the global health arena. They also offered an opportunity for an online course on One Health Principles, for which students received a certificate of completion."*

ONE HEALTH
CHAMPION

MUGANZI DAVID JOLLY

Medical Student, Founder / Advisory board member One Health students against COVID-19 (OHSAC) and President of the Mbarara University of Science & Technology One Health Innovations Club (MUST-SOHIC)

Muganzi is a student at Mbarara University of Science & Technology (MUST) where he studies medicine. Specifically, Muganzi is interested in using the One Health approach to destigmatize issues around mental illness in Africa and spread awareness about the impact of COVID-19 on mental health, especially for medical students and health professionals.

> "*One Health has been at the core of my extracurricular university experiences and has enabled me to learn beyond the boundaries of textbook knowledge. I believe this will make me a well-rounded doctor who can innovatively solve health problems in collaboration with other disciplines.*"

ENGAGING STUDENTS IN COVID-19 PREVENTION AND RESPONSE

ONE HEALTH GRADUATE FELLOWSHIP PROGRAM

Since 2016, AFROHUN Uganda has been conducting a didactic course in Infectious Disease Management with graduate students from Makerere University and Mbarara University of Science and Technology. Approximately 45 graduate students from public health, epidemiology, law, economics, agriculture, veterinary and preventive medicine, wildlife and social sciences have benefited from the course. Following completion of the course, graduate students are provided the opportunity to join a One Health fellowship program that features placements in organizations working to improve health for communities in Uganda.

This year, five graduate students from the Wildlife Health and Management, Health Sciences in Bioethics, Public Health, Rural Development, and Livestock Development Planning and Management programs at Makerere University participated in the fellowship program.

Following training in infectious disease management using MUELLE (the Makerere University online learning platform), fellows were placed at the Infectious Disease Institute (IDI), Amref Health Africa, Ministry of Health-Epidemiology and Surveillance Division (MoH-ESD), and at the Food and Agriculture Organization (FAO) of the United Nations. Fellows received mentorship from Makerere University faculty and fellowship host mentors.

These fellows gained valuable opportunities to put knowledge and skills in practice. At the IDI, our One Health fellows supported COVID-19 field response teams coordinated by the Public Health Emergency Operations Centre. For example, by collecting data on truck drivers as a means of assessing usability of the Regional Electronic Cargo and Truck Drivers tracking system, a system which was put in place to track drivers coming from East African countries, the IDI fellows gained valuable experience with data collection, movement, and innovative technologies for potential contact tracing. Our fellows based at the MoH-ESD also supported COVID-19 contact tracing and surveillance, working directly with national surveillance teams in multiple districts.

> *AFROHUN Uganda has presented a great opportunity for us; My attachment at IDI has presented a great opportunity to learn. Ask me anything about the Regional Electronic Cargo and Truck Drivers tracking system (RECTDs).*

—Martha Mwebaza Nalweyiso
One Health Fellow, Supporting the Emergency Operations Centre)

> *During my fellowship placement at IDI, I supported the Emergency Operations Centre (EOC) with coordination of day-to-day activities (field activities and meetings). As I exhausted my duties, I really appreciated how different stakeholders and partners work together in the One Health spirit. I was able to conduct a situational analysis entitled 'Infection Prevention and Control Mentorships for Health Workers in Uganda by the Infectious Disease Institute Makerere (IDI) Global Health Security Program'. This was in addition to the One Health project 'Determining modified response strategies and rolling out NTIF guidelines and Prioritization Algorithm for COVID-19 evacuations in Northern Uganda border districts' which I successfully completed with support from AFROHUN Uganda.*

—Doreen Nyakato
One Health Fellow

> *At Amref Health Africa I was greatly welcomed. I was taken through the various activities at the station. My supervisor supported my situational analysis which looked at AMREF Africa Uganda's Health Services and Education Community Engagement Using One Health Approach. As a social scientist majoring in rural development, I managed to put to use a number of competencies gained as I implemented numerous activities related to COVIID-19 in Kyotera district.*

—Simeo Ochieng
One Health Fellow

One Health fellows were place in organizations that are at the forefront of preventing and controlling the spread of COVID-19 and are lacking adqueate human resources. Our fellows played a critical role in the response and in return benefited from hands-ontraining and opportunities to put knowledge and skills in practice during a health emergency.

AFROHUN UGANDA CONTINUES TO INCREASE CORE COMPETENCIES AMONG THE ONE HEALTH WORKFORCE DESPITE THE ONGOING COVID-19 PANDEMIC

PROMOTING INFECTIOUS DISEASE MANAGEMENT THROUGH ONLINE TRAININGS

With the COVID-19 restrictions limiting in-person activities in Uganda, Makerere University decided to take action and revise the university's teaching approach, moving to digital platforms. Both undergraduate and graduate students were able to acquire new skills critically needed during this pandemic, on Infectious Disease Management (IDM) while being confined at home.

A One Health team made up of faculty from Makerere University (College of Humanities and Social Sciences, School of Public Health and College of Veterinary Medicine, Animal Resources and Biosecurity) virtually converted six modules of the IDM course into an online format. These faculty were facilitated by a team of experts from the College of Education and External Studies together with the Institute of Open and Distance Learning. The modules focus on the concepts of leadership in infectious disease management, gender in risk management, the One Health concept & community health, bio-risk management, outbreak investigation and antimicrobial resistance. This course is currently available on the Makerere University e-learning platform (MUELE) which is hosted by the School of Public Health. A total of 362 students from Makerere University (62) and Mbarara University (300) attended the online training. Previously, this course was delivered to students in person with limitations on training size. Not only does this pivot in approach increase capacity in core One Health competencies, but the university is able to reach a much wider group of trainees, essentially creating a stronger, more competent One Health workforce within the country that is able to respond to current and future health security threats.

ONE HEALTH COMPETENCIES INTEGRATED IN AN INSTITUTIONALIZED COURSE (COBERS) AT MBARARA UNIVERSITY

Mbarara University of Science and Technology (MUST), at its inception in 1989, embraced community-based education as a philosophy for educating health professionals within the Faculty of Medicine. More than 500 students enrolled in medical courses undergo a 7-day training ahead of their 6-week community placement as part of this Community Based Education Research and Service (COBERS) program. Despite the ongoing COVID-19 pandemic, AFROHUN Uganda through the USAID funded One Heath Workforce-Next Generation project, supported the integration of One Health core competencies in MUST's community-based training program. Faculty from Makerere University provided technical support to integrate four core modules in the program, including One Health concepts; outbreak investigation and emergency response; partnership and collaboration; and community entry and engagement. Increasing the competency of in-service professionals is critical for ensuring that there is a One Health workforce ready to respond to national health security threats. Currently, the newly integrated course is being transformed into an online format and will be available on MUST's e-learning platform when completed.

SEAOHUN

SOUTHEAST ASIA ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

87
MEMBER
UNIVERSITIES

28
ONE HEALTH
STUDENT CLUBS*

8
COUNTRIES

200
INDIVIDUALS
REACHED VIA
COVID-19 RCCE
ACTIVITIES

HIGHLIGHTS

- Successfully set up eight subawards and approved workplans and budgets, paving the way for launch of activities with existing (INDOHUN, MyOHUN, THOHUN, and VOHUN) and new member country Networks (PhilOHUN, LAOHUN, CAMBOHUN, and MMOHUN).

- Facilitated confirmation of members and Chairperson (2020-2021) by all the member Networks.

- Presented a poster, entitled "Developing a resilient and competent One Health workforce through university networks in Southeast Asia", at the World One Health Congress (WOHC).

- Invited to represent the One Health University Networks in international symposiums/ conferences in China and Bangladesh and at regional meetings of the Association of Southeast Asian Nations (ASEAN) Health Cluster 2 and the Greater Mekong Subregion working group on health cooperation.

- Served as a member on the Global Health Security Agenda (GHSA) Ministerial Meeting Planning Team.

*INDOHUN - 5, MyOHUN - 8, VOHUN - 15
** Original founding members: INDOHUN, MyOHUN, THOHUN, and VOHUN

ACTIVITIES

OBJECTIVE 1

One Health Training & Empowerment

Our new small grants program increases innovation in advancing One Health while promoting cross-disciplinary and cross-country cooperation. This innovative program also increases SEAOHUN's visibility in the One Health arena.

We launched a new competitive Small Grants Program for faculty of member Universities of our Network. This program funds faculty research and training endeavors, as well as other innovative ideas (SEA Activity 1.2.3), and over the past year we received over 90 applications addressing One Health challenges from Cambodia, Indonesia, Malaysia, Myanmar, Thailand, the Philippines, and Viet Nam. Eight projects were awarded from seven countries: two training grants, four focusing on research, and two using innovative approaches to improve policy regulations and build a community of practice. If successful, all eight projects have the potential to be scaled up across the region.

In response to the COVID-19 pandemic, our regional One Health activities helped students strengthen skills in risk communication and raise awareness of

interrelations between the pandemic and One Health.

Adapting to stay-at-home orders issued in response to the COVID-19 pandemic caused by SARS-CoV-2, the Secretariat in coordination with the OHW-NG Global Team organized the first regional student engagement activity, a virtual COVID-19 risk communication contest (SEA Activity 1.2.3). Students were asked to create materials to inform their communities on COVID-19 risks and safety measures. The contest attracted 116 teams (comprised of 200 individuals) from Cambodia, Malaysia, Indonesia, Thailand, the Philippines, and Viet Nam. The post-competition survey revealed that students appreciated the contest and felt engaged in meaningful action by gaining opportunities to put knowledge and skills in practice. The award-winning posters and videos, along with additional information on the contest and students, can be accessed through the SEAOHUN website: **www.seaohun. org/student-activities**. Read more about this activity in the SEAOHUN Success Story: **COVID-19 Digital Awareness** on page 126.

Placed one recipient of our fellowship program with the International Livestock Research Institute (ILRI) in Hanoi, Viet Nam.

In 2019, we co-organized the launch of the Laos One Health University Network and celebrated their One Health Day.

PHOTO: MyOHUN

PHOTO: MyOHUN

Despite challenges brought by the pandemic, the SEAOHUN Secretariat contributed to the professional advancement of early and mid-career One Health professionals.

Over the past year, we offered six scholarships to health professionals in pursuit of master's degrees incorporating One Health (SEA Activity 1.3.1) and provided an internship opportunity to a One Health fellow (SEA Activity 1.5.1). This support contributed to One Health career development in four countries (Cambodia, Indonesia, Myanmar, and Viet Nam).

We promoted future workforce preparedness and assisted faculty in incorporating One Health into their training teaching curricula.

The Secretariat raised awareness about One Health among 140 faculty members and students from the University of Health Sciences (UHS) and National University of Laos (NUOL) in three knowledge sectors: human heath, animal health, and environmental health (SEA Activity 1.2.4).

OBJECTIVE 2

One Health Workforce Assessment & Tracking

Read about the SEAOHUN Network contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Articles **One Health Competency Framework to Define Workforce Performance** on page 28 and **National and Regional One Health Platforms Linking to University Partnerships** on page 29.

OBJECTIVE 3

Organizational Sustainability

The Secretariat organized a series of meetings that promoted a stronger engagement of the SEAOHUN Executive Board, one of the key prerequisites of the Network's sustainability.

We organized an annual meeting of the SEAOHUN Foundation Board (SEA Activity 3.2.4) and conducted three meetings of the SEAOHUN Executive Board (SEA Activity 3.2.5), which were held virtually due to COVID-19 travel restrictions. Despite the digital format, we achieved aims and selected a Chairperson, identified OHW-NG Year 2 priorities, and discussed Network sustainability issues.

Moving forward with our private sector partner engagement strategy, we held discussions with Pfizer regarding their potential sponsorship of a corporate communications training for SEAOHUN and all OHUNS and explored possible areas of collaboration with Chevron.

SPECIAL FOCUS

BUILDING SUSTAINABILITY FOR THE NEWLY ESTABLISHED COUNTRY NETWORKS IN CAMBODIA & LAO PDR

The Laos One Health University Network (LAOHUN) expanded its Network from two to five universities located in both the capital and provincial areas.

The SEAOHUN Secretariat supported LAOHUN in conducting their board meeting and in engagement with three universities located outside Vientiane. We also helped raise awareness of One Health within the new Network (SEA Activity 3.2.9). Twenty-five beneficiaries attended the meeting, including the vice presidents of the three new universities: Souphanouvong, Champasack, and Savannakhet. As a result, all three universities joined the Network.

We strengthened the Cambodia One Health University Network (CAMBOHUN) via development and clarification of their vision and mission, as well as the development of a five-year strategic plan. In addition, we strengthened the partnerships' network in Cambodia by engaging key national and international organizations.

The Secretariat also supported CAMBOHUN in the development of a five-year strategic plan through a series of meetings in which representatives of three key universities participated: Prek Leap National College of Agriculture (PNIA), Royal University of Agriculture (RUA), and the University of Health Sciences (UHS). The final meeting included external partners such as the Ministry of Education, the National institute

of Public Health (NIPH), the General Directorate of Animal Health and Production, the United Nations Food and Agricultural Organization (FAO), and the US Embassy in Cambodia. As a result, CAMBOHUN's vision, mission, goal, objectives, and a strategic plan for the years 2021-2025 were developed (SEA Activity 3.1.3). Activities to address both pre-service and in-service training gaps were also discussed.

The Secretariat engaged in capacity building activities that will increase the visibility of CAMBOHUN and LAOHUN and enhance their audience engagement.

The Secretariat built capacities of CAMBOHUN and LAOHUN in digital communication by conducting an in-house digital media training benefiting six individuals, three from each OHUN (SEA Activity 3.2.8). Originally planned to be conducted in-person, this activity pivoted to an on-line training delivered through key messages that supported LAOHUN and CAMBOHUN in establishing social media hubs on Facebook (**www.facebook.com/laohun.lao** and **www.facebook.com/infocambohun**), and official web sites (**www.laohun.org** and **www.cambohun.org**).

LESSONS LEARNED

Despite limitations due to the COVID-19 pandemic, the Secretariat adapted and engaged in virtual activities promoting One Health and organizational sustainability, including board meetings and student competitions.

The fellowship and scholarship programs, which are regular annual activities for the SEAOHUN Secretariat, endured numerous constraints this year due to the COVID-19 pandemic. Out of six fellowship positions initially planned in six different hosting agencies, only one fellow was able to conduct their fellowship program in the International Livestock Research Institute (ILRI) in Viet Nam. Eleven applicants retained their applications for the next year, when it is expected that hosting institutions will be less occupied with urgent COVID-19 response activities and international travel restrictions will be eased. For the scholarship program, six students were supported to pursue master's degrees in four universities in Thailand, Indonesia, and Viet Nam.

New education, training, and supervision modalities via on-line platforms are yet to be explored by the Secretariat, and while master's degree programs administered by universities adapted quickly to the new normal realities, the SEAOHUN fellowship program might further explore the potential of virtual mentorship and on-line coaching approaches.

Due to COVID-19 travel restrictions, we were not able to physically engage in organizing activities in the newly mobilized countries. Despite these limitations, seed funds through subawards helped to advance Network activities in all new countries.

NEXT STEPS

Increasing research and other innovative contributions from the Network will ensure that the SEAOHUN workforce products are respected worldwide, raising awareness of and garnering support for the Network, as well as One Health approaches. In addition, utilizing evidence-based approaches in support of One Health are critical for ensuring buy-in among key stakeholders and advocating for necessary policy developments. **We plan to conduct another round of the small grants program for university faculty members with the objective of enabling member Universities to develop innovative ideas and implement pilot projects that advance training and education of One Health core competencies and technical skills.**

Supporting students' engagement activities is critical for developing a One Health workforce. Regional-level activities provide innovative opportunities for pre-service training and engagement, developing students' skills, and enabling a cadre of future professionals that will work in animal and human health sectors. These activities also foster friendships between students from different regions, enabling future collaborations for solving transboundary health issues when today's students become tomorrow's leaders in their countries. **The Secretariat will organize another regional-level activity for students, with the aim of increasing engagement from One Health-related disciplines, promoting One Health concepts, and increasing their technical and soft skills including those related to outbreak response.**

Supporting long-term capacity building is at the core of developing a sustainable One Health workforce. SEAOHUN's scholarship program increases the numbers of trainees who are prepared to work in teams to engage in One Health discussions, while also strengthening universities' One Health master's degree courses by promoting them among larger numbers of potential students region-wide. **We will continue to support pre-service and in-service health professionals to pursue a master's degree which incorporates One Health training for infectious diseases. In Year 2 of this project, SEAOHUN will take steps to co-brand the program with ASEAN**.

Support for mid-level professionals advances their One Health knowledge and experience through placement in leading agencies. It provides them with hands-on learning opportunities and practical skills for implementing the One Health approach in their future professional assignments. In addition, every fellow is expected to deliver at least one output that is specific to the SEAOHUN mandate. This output or product will contribute to improving One Health workforce competencies, enable informed decision-making, and promote One Health policy advocacy and engagement. **The Secretariat will continue one of its flagship programs supporting One Health fellows for internships with government and international policy-making organizations. We will make necessary adjustments to this program depending on the development of the COVID-19 pandemic and its response policies**.

The findings of the OHW-NG Global Team's assessment of sustainability case studies have shown that in other organizations similar to SEAOHUN, active participation of the board of directors has played an important role in fundraising, diversification of funding sources, and ultimately, in increased sustainability of the organization. Thus, more active engagement of the executive board will enable SEAOHUN to achieve long-term sustainability. **In this regard, we plan to further facilitate increased engagement of the SEAOHUN executive board with organizational development and sustainability efforts. This will be conducted via biannual meetings to review regional collaboration, regional activities, implementation of activities by SEAOHUN/ OHUNs, governance and operations, and strategic directions**.

We plan to continue to increase the organizational capacity of the Network partners, moving us further towards the goal of self-reliance. **The Secretariat plans to strengthen coordination and collaboration between country Networks by organizing a coordination meeting among National Coordinating Offices (NCOs) to discuss lessons learned, challenges of working together towards sustainability, and ways to overcome these challenges**.

EXPANDING SEAOHUN'S REACH

LAOHUN
Laos One Health University Network

Expanded from two to five member Universities.

Engaged 640 faculty members and students from two member Universities and raised awareness on One Health.

MMOHUN
Myanmar One Health University Network

SEAOHUN Secretariat assisted in organizing COVID-19 Risk Communication and Community Engagement training among faculty.

PhilOHUN
Philippines One Health University Network

7th country to officially join the SEAOHUN Network.

Trained 496 individuals on COVID-19 topics via webinars.

CAMBOHUN
Cambodia One Health University Network

SEAOHUN Secretariat supported CAMBOHUN to develop their five-year strategic plan.

Also assisted in organizing COVID-19 Risk Communication and Community Engagement training among faculty.

Scholarships

Recipients from Myanmar and Cambodia were awarded scholarships for Master's degree programs in One Health related fields.

SEAOHUN Secretariat small grants program

- Myanmar: antimicrobial resistance in Yangon Region wastewater
- Cambodia: rabies awareness training for community health volunteers
- The Philippines: development of One Health courses

Digital communication training

The SEAOHUN Secretariat provided strategic communications training to six LAOHUN and CAMBOHUN staff members, culminating in the launch of new websites and social media accounts.

SEAOHUN COVID-19 Digital Awareness Challenge

SEAOHUN launched a competition for students within the Network to raise awareness on COVID-19 in their communities and to draw connections between COVID-19 and One Health.

COVID-19 WILL NOT STOP CREATIVITY

ONE HEALTH STUDENTS TAKING ADVANTAGE OF LOCKDOWN TO HELP RAISE VIRTUAL AWARENESS OF THE EFFECTS OF COVID-19 IN THEIR COMMUNITIES

"This pandemic has pushed us to become agents of change,"

said Maria Angelica, a 4th year veterinary student from Universitas Gadjah Mada in Indonesia. She is one of four students whose team (team *Estungkara*) won first-prize in the **OHW-NG SEAOHUN COVID-19 Digital Awareness Challenge**, supported by the USAID One Health Workforce Next Generation (OHW-NG) Project. Despite this year's unusual circumstances due to COVID-19 health regulations limiting in-person activities, the Southeast Asia One Health University Network (SEAOHUN) has been committed to offer guidance and opportunities for the future One Health Leaders in the region to learn to respond to pandemics incorporating a One Health approach.

Despite the limitations due to the COVID-19 pandemic, the SEAOHUN team dynamically adapted and began engaging students to virtually raise awareness on the effects the pandemic has had among their communities. Similarly to Team "*Estungkara*", which translates into ability to solve problems in Sanskrit, over 200 students across six Asian countries (Cambodia, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam) submitted 110 creative posters, flyers, and videos they developed to raise awareness of COVID-19 in their communities believing that students can bring positive changes even with the COVID-19 restrictions. One Health students took the challenge to heart and were able to look at the problem from different angles.

A team of judges representing all participating countries and the OHW-NG Global Consortium expressed difficulty picking the winners from the 13 finalists as the submission content was original, creative and informative. In the end, the judges made a tough call to select four winners:

> It was fun, though not easy to convert the content from scientific journals into laymen's language. I enjoyed developing infographics rather than just putting words. Thanks to SEAOHUN, OHW-NG and USAID for this opportunity to spend time wisely while being in confinement. "
>
> –COVID-19 Digital Awareness Challenge, One Health Student Competitor

> I was amazed, speechless, and beyond happy when I heard about the result. It was unexpected and still feels unbelievable to me. Who could ever think that a girl from a small urban area in Malaysia would win the first prize in an international contest? "
>
> –Ainaa, COVID-19 Digital Awareness Challenge, One Health Student Competitor, Universiti Sultan Zainal Abidin, currently in her 4th year of Bachelor of Animal Production & Health

1st PRIZE (VIDEO):
Team "Estungkara," Indonesia (Rayhan Naufal, Maria Angelica Maryatmo, Jasmine Rizal Saphire, Michelle Virginia Ongko)

1st PRIZE (POSTER):
Ms. Ainaa Sabihah bt Mohamed Anuar, Malaysia

2nd PRIZE (VIDEO):
Team "Wismaya," Indonesia (Savana Annisa Rahmah, Fitria Yuliana, Faisal Amathistka, Lutfi Aditya Nugraha, Muhammad Naufal Prayitno Putra)

2nd PRIZE (POSTER):
Team "Fahra," Indonesia (Elfahra Casanza Amalda, Farah Alhamidah)

1st prize-winning poster (Ainaa Sabihah bt Mohamed Anuar)

2nd prize-winning poster (Team Fahra)

Team Estungkara shared their insights on what made this SEAOHUN Student Competition unique: "First, it helped us to see a bigger picture of the world. Secondly, unlike most international contests, it was done online and without registration fees, which is important for students like us. And third, it was not limited to just veterinary students. Our friends from other departments could participate. SEAOHUN's competition promoted the spirit of inclusiveness and removed boundaries."

Opinions of over 130 respondents to a post-competition survey echoed the viewpoints of the winners. The participants said that through this competition they learned a great deal about COVID-19, improved their communication skills, and felt they did something meaningful for their communities. SEAOHUN and the OHW-NG Global Consortium continue to adapt to the realities of COVID-19 utilizing technology and the human spirit to raise the capacity of the next generation of One Health workforce to respond to emerging health threats. This is the first Global OHW-NG One Health student activity with future ones to come building upon the excitement generated from the Digital Competition.

SPECIAL FEATURE

SEAOHUN NETWORK STEPS IN TO HELP ADDRESS CRITICAL GAPS IN COVID-19 PANDEMIC RESPONSE

The COVID-19 pandemic has left no country or community untouched by its effects. Governments, Universities and international programs (among others) have been forced to think critically about how to move forward amidst health regulations and limitations, with in-person meetings, activities and trainings forced to be delayed or even cancelled. The USAID One Health Workforce Next Generation (OHW-NG) Project was in the midst of first year start up with the majority of activities planned to be held in-person, when the COVID-19 pandemic threw all plans into flux. The Southeast Asia One Health University Network (SEAOHUN) Network dynamically adapted activity plans and seized the opportunity to identify how best to address critical gaps in the One Health workforce related to COVID-19 response efforts in Network countries.

The SEAOHUN Secretariat in collaboration with the OHW-NG Global Consortium and eight One Health University Networks (OHUNs) in Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, and Vietnam, identified opportunities to enhance the capacity of faculty members and in-service and pre-service health professionals to respond to the COVID-19 pandemic. This was made possible with USAID emergency COVID-19 response funding.

Using emergency funding, the SEAOHUN/ OHUNs, in partnership with the OHW-NG Global Consortium worked with local Governments and stakeholders to identify the best ways to support ongoing COVID-19 national response efforts. Activities were built upon the resources and technical skills available through the Networks and aim to not only reduce the spread of COVID-19 but also strengthen the capacity of human resources for health to prevent, detect, and respond to future pandemics. The three primary areas of activities fall under the categories of infection prevention and control, diagnostic testing and surveillance, and risk communication and community engagement (RCCE).

As an example of these activities, the Philippines One Health University Network (PhilOHUN) began a webinar series titled "Ensuring quality of Public Health communication, diagnostics, and infection prevention and control on humans and animals in response to COVID-19". The goal of this activity is to inform members of the academic community, healthcare units, and local government on the risks presented by the ongoing COVID-19 pandemic. The first webinar in the series, conducted on September 9th, 2020, attracted 144 participants. Eight sessions are planned for every other week through December 16th, 2020.

In total, 26 new activities in all 8 OHUNs were proposed and funded to support COVID-19 response efforts through December 2020, a monumental achievement considering the limitations posed by the ongoing pandemic. The ability to adapt workplans to a changing environment and target needed gaps in pandemic response activities highlights the importance of the Networks to build the capacity of the region to respond to emerging health threats.

These COVID-19 activities were later extended from December 2020 to March/May 2021.

INDOHUN

INDONESIA ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

20
MEMBER
UNIVERSITIES

5
ONE HEALTH
STUDENT CLUBS

HIGHLIGHTS

- Four new One Health Student Clubs were established, and 331 students were engaged from universities and faculties across Indonesia. In these student clubs, activities, such as a webinar series were organized around One Health competencies and values, building One Health leadership capacity.

- Thirteen young professionals participated in an internship program designed to support the Indonesian government in its pandemic response.

- The One Health Collaborating Centers (OHCCs) held multiple activities to increase One Health competency and awareness. 134 people joined educational improvement activities, 659 people participated in community outreach activities, and 4,170 individuals participated in a webinar series.

- A One Health Student Club module developed by OHCC, Udayana, received certification from the International Standard Book Number (ISBN) and became recognized education material for higher education.

- In order to streamline and maximize collaboration and One Health values, we moved forward with aligning INDOHUN's Field Epidemiology Education and Training Program (FEETP) with two existing programs identified as teaching One Health competencies: CDC Indonesia's Field Epidemiology Training Program (FETP) and FAO Indonesia's Field Epidemiology Training Program for Veterinarians (FETPV).

    o We also worked together with CDC Indonesia to include One Health curricula into the FETP intermediate program and FETP advanced program in five universities.

    o In turn, INDOHUN's FEETP program has begun to develop and provide training modules to support the activities of CDC Indonesia's FETP Program in order to support the improvement of field epidemiology.

ACTIVITIES

OBJECTIVE 1

One Health Training & Empowerment

We offered technical support to the Ciloto Health Training Center to develop an epidemiology webinar series focusing on adopting a One Health approach to prevent, detect, and respond to diseases of pandemic potential (IN Activity 1.1.3). Furthermore, we supported the implementation of One Health programs in five large regional areas across Indonesia, through various OHCC academic programs including academic research, webinars, training programs (including AMR topics), and university mappings (IN Activity 1.3.4).

We conducted a tabletop simulation exercise for local health officers using One Health scenarios, training, research, and educational offerings. These activities were specifically designed for professional health officers, with the intention of demonstrating how a One Health framework can be used in pandemic management. The focused competency for this activity was management (IN Activity 1.4.2). We also supported One Health Fellows in their internships with government and international policy-making organizations. These ongoing internships provided 13 young professionals with experiences in public communication, media management, PPE, medical coordination, and pandemic prevention and response (IN Activity 1.5.1).

During the first year of the OHW-NG Project (2019-2020), we supported the implementation of One Health values and curricula through several activities. We worked to align the FEETP concept with the existing programs of FETP and FETPV held by CDC and FAO. We also worked with Indonesia CDC to implement One Health curricula in FETP intermediate and advanced programs in five universities (IN Activity 1.3.3). Additionally, we developed several drafts of the FETP module recommendations (IN Activity 1.5.2).

> We promoted the One Health concept through pre-service and in-service activities, such as establishing One Health Student Clubs (OHSC) and implementing programs that introduce One Health core competencies and values to students. This OHSC work has promoted collaboration, communication, and coordination across diverse disciplines and institutions (IN Activity 1.2.3).

OBJECTIVE 2

One Health Workforce Assessment & Tracking

Please read about the SEAOHUN Network contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Articles **One Health Competency Framework to Define Workforce Performance** on page 28 and **National and Regional One Health Platforms Linking to University Partnerships** on page 29.

OBJECTIVE 3

Organizational Sustainability

INDOHUN built and expanded partnerships and disseminated One Health trainings through digital, social, and broadcast media outlets. As a part of our plan to empower OHCCs, two trainings were conducted to increase organizational sustainability, including trainings on financial management and Monitoring and Evaluation (M&E) (IN Activity 3.3.2). These trainings aimed to increase sustainability through the sharing of best practices, building organizational and management competencies, contributing to IN Activity 3.2.3.

Learn more about how SEAOHUN is strengthening organizational sustainability in the **SEAOHUN Secretariat section** on page 119.

Personal protective equipment, distancing, and group size standards in this photo were consistent with local public health guidance and COVID-19 status in the specific country and time it was taken. This may not reflect best practices for all locations where COVID-19 is still spreading.
PHOTO: INDOHUN

LESSONS LEARNED

Improving internal coordination and administration, including the role of the INDOHUN board, will have a significant positive impact on our program.

This first year provided challenges due to the COVID-19 pandemic and programmatic start-up delays associated with changes in governmental partners. This process instilled in us an appreciation for the role of the Technical Counterpart Agency (TCA), which, for INDOHUN, is the Ministry of Education and Culture. The TCA is critical for smooth project implementation, and while changes to the government structure delayed program implementation, strengthening coordination with our government partners is critical for INDOHUN to address national targets and priorities. Maintaining open channels of communication and positive relations with the Government of Indonesia counterparts and other related stakeholders is also key to the effectiveness of our program.

NEXT STEPS

Increased INDOHUN engagement and involvement will expand One Health values and core competencies to other universities, communities, and stakeholders.

In the next year of the project, INDOHUN plans to solicit greater involvement from each OHCC, the INDOHUN University members, and the Board. In addition, we will seek increased engagement regarding One Health Student Club program implementation. We are also planning to improve coordination and communication with our TCA and related stakeholders to facilitate collaboration within One Health projects under the Global Health Security program in Indonesia. Better communication and coordination with the TCA will ensure our programs and the priorities of Government of Indonesia align. Additionally, we plan to discuss with the Human Resource Development Bureau of Indonesia Ministry of Health (MoH), the idea of inserting One Health in existing intermediate and advanced FETP trainings, so that core One Health values can spread widely in ongoing curricular offerings and be implemented by health officers on a daily basis in Indonesia.

ONE HEALTH
CHAMPION

NIKEN SALINDRI

One Health Collaborating Center (OHCC) Empowerment Manager

Niken Salindri is a graduate of the University of Indonesia where she studied nutrition. Within the One Health Workforce – Next Generation project, Niken is focused on global health diplomacy and educating young professionals that aspire to work in the global health arena. Niken's personal motivation is to advance health equity throughout Indonesia, and she believes the One Health approach represents a path forward towards that goal.

When asked what the future of One Health looks like for Indonesia, Niken says:

> " *I wish the near future of One Health is not only a theory or a program, but that it will become a culture for my beloved Indonesia.* "

EMPOWERING THE ONE HEALTH WORKFORCE IN INDONESIA

BUILDING COLLABORATION, COMMUNICATION, & ACTIVE COORDINATION WITH THE INDONESIAN GOVERNMENT & LOCAL UNIVERSITIES

PHOTO: INODHUN

ESTABLISHING ONE HEALTH COORDINATING CENTERS & STUDENT CLUBS FOR LOCAL COMMUNITY IMPACT

The Indonesia One Health University Network (INDOHUN) collaborated with the Centers for Disease Control and Prevention Indonesia (CDC) to incorporate the One Health curriculum into intermediate and advanced programs within the Field Epidemiology Training Program (FETP) at five universities in Indonesia.

In addition, INDOHUN helped establish and develop One Health Student Clubs (OHSC) within four One Health Collaborating Center (OHCCs). As a result, each OHCC now has their own OHSC. Through these OHCCs, INDOHUN is able to implement more activities at the local community level. Working together, INDOHUN and the OHCCs can reach more people, especially students, so they have a quality understanding of One Health and its application.

The COVID-19 pandemic did not dampen the enthusiasm of the academic community. Instead, Network members continued gaining knowledge and skills through several virtual seminar programs. Presently, the OHCCs and OHSCs have successfully held various webinar series, reaching 4,170 people (students and public participants). In addition, 659 people participated in community outreach activities and 134 people joined in educational improvement activities held by all the OHCCs under the INDOHUN coordination network.

TRAINING INDONESIA'S WORKFORCE IN ONE HEALTH & PANDEMIC RESPONSE

Upon request from the Indonesian Government, namely BBPK Ciloto, INDOHUN offered technical consultation to prepare a webinar focusing on the application of One Health in epidemiology.

INDOHUN also supported internships at several government institutions, successfully supported the government, and made contributions to COVID-19 response efforts, particularly in the fields of public communication, media involvement, PPE procurement, and medical coordination.

MyOHUN

MALAYSIA ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

17
MEMBER
UNIVERSITIES

8
ONE HEALTH
STUDENT CLUBS

10,629
INDIVIDUALS
REACHED VIA
COVID-19 RCCE
ACTIVITIES

199
INDIVIDUALS TRAINED
IN COVID-19 RELATED
TOPICS

HIGHLIGHTS

- Trained 59 students to provide One Health education to over 300 indigenous Orang Asli children using an experiential learning approach. This activity has reached over 1000 Orang Asli children over the past three years.

- Developed an autonomous platform robot as a contactless alternative to regular deliveries for medicine and food in senior citizens' institutional living spaces.

- Educated over 250 community members in rural areas of the Perak State on health issues related to malaria.

- Developed an educational module: In-Situ One Health Problem-Based Learning for Human and Animal health.

- Trained 10 government officials through a simulation exercise for the management of Highly Pathogenic Avian Influenza (HPAI).

- Launched One Health Massive Open Online Courses (MOOC) and won the Gold Award for the Best MOOC in the National e-Content Development Competition 2020.

- Created a music video to promote COVID-19 safety measures that will be broadcast on social media/mainstream platforms.

ACTIVITIES

OBJECTIVE 1

One Health Training & Empowerment

MyOHUN developed the module on In-Situ One Health Problem-Based Learning (PBL) for Human and Animal Health (MY Activity 1.4.4) through a workshop with faculty experts and other expert contributors. The module comprises a collection of PBL case studies used during in-situ PBL activities, with an application of One Health core competencies.

In addition, we organized an Avian Influenza simulation tabletop exercise (MY Activity 1.4.5) in collaboration with the Ministry of Health (MoH) to create hypothetical zoonotic outbreak situations for 10 selected in-service workforce officers from the Ministries and relevant government agencies. The exercise assessed their level of preparedness and strengthened response for future outbreaks.

MyOHUN empowered university students and indigenous Orang Asli school children using experiential learning (MY Activity 1.4.6). Fifty-nine students learned to implement a One Health approach through participatory learning, and 348 children were educated on One Health, ecosystems, wildlife, and zoonotic infections.

During a similar community education activity, 44 students were empowered through experiential learning to develop and organize a health promotion and education program on the prevention of malaria (MY Activity 1.4.15).

MyOHUN increases knowledge and awareness of COVID-19

Online education was extensively utilized to increase knowledge, awareness, and practice related to One Health. This was done through the development of Massive Open Online Courses (MOOC) (MY Activity 1.4.7) and online education for youth (MY Activity 1.4.16). As a creative way of educating the youth and the community, we developed a music video for promoting COVID-19 prevention which will be published on social and mainstream media platforms.

MyOHUN also steered impactful practical activities addressing COVID-19. These involved training 24 participants in the use of robots to provide contactless food and medicine delivery in senior citizen institutional living spaces. We developed comprehensive guidelines and instructional materials for platform robot operators (MY Activity 1.4.11). Additionally, robotic platforms were used as a way to disinfect closed room environments, with the aim of preventing the spread of coronavirus and other pathogens in hospitals (MY Activity 1.4.12). Hands-on training was also conducted for 133 participants involved with university emergency response teams on preparedness for COVID-19-related hazards (MY Activity 1.4.14).

PHOTO: MyOHUN

Due to COVID-19, webinars were extensively used as a training platform from which 1,452 participants benefitted. Future and current One Health workforce were trained on One Health, AMR, COVID-19, zoonotic diseases (MY Activity 1.4.7), and PPE waste recycling (MY Activity 1.4.13). Additionally, 113 participants were trained on critical topics surrounding tuberculosis in animals and humans (MY Activity 1.4.10).

Lastly, by the request of the Government, we assisted the Ministry of Health Malaysia, Crisis Preparedness Response Centre (CPRC) to respond to the COVID-19 pandemic outbreak by recruiting volunteers among MyOHUN members with a medical background or health-related training. More than 1000 volunteers registered within seven days via National Coordinating Office (NCO) in March 2020 during the first Movement Control Order (MCO). The volunteers worked in Public Health Facilities and Hospitals under the MoH.

PHOTO: MyOHUN

OBJECTIVE 2

One Health Workforce Assessment & Tracking

Please read about the SEAOHUN Network contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Articles **One Health Competency Framework to Define Workforce Performance** on page 28 and **National and Regional One Health Platforms Linking to University Partnerships** on page 29.

OBJECTIVE 3

Organizational Sustainability

MyOHUN conducted the National MyOHUN Executive Board Meeting I (MY Activity 3.1.3), the MyOHUN Strategic Planning Meeting (MY Activity 3.1.4), the MyOHUN Annual Meeting

(MY Activity 3.1.5), and the NCO's Internal and External Audits (MY Activity 3.1.6). These activities strengthened the University Network by developing its future directions in promoting One Health and organization sustainability. The ISO audits will provide international recognition for the NCO to help promote future sustainability, secure financial aid for MyOHUN, and strengthen network management through accredited standard practices.

Learn more about how SEAOHUN is strengthening organizational sustainability in the **SEAOHUN Secretariat section** on page 119.

PHOTO: MyOHUN

LESSONS LEARNED

Challenges faced by COVID-19 increased the MyOHUN National Coordinating Office (NCO)'s management skills, and enhanced the capacity to use online platforms for communication and training in the future.

We faced multiple challenges in organizing and implementing Year 1 activities as originally planned due to the movement control order issued as a result of COVID-19. Online platforms became the new way of communicating and disseminating One Health knowledge and information. As a result, NCO and MyOHUN members developed new technical and creative skills to enable organization and successful implementation of contactless MyOHUN activities, and to ensure that these activities were interesting and engaging. Online webinars also managed to reach audiences that cannot normally be reached through in-person activities. For example, with the use of virtual platforms for MY Activity 1.4.7, MY Activity 1.4.10, and MY Activity 1.4.13, we trained both the current and future One Health workforce, reaching out to students in higher education institutions, secondary school children (13–15 years old), and a global audience, exceeding our expectations.

When the movement control order was lifted, restricted in-person activities were allowed with strict Standard Operating Procedures (SOPs) designed by the Ministry of Health, Malaysia. To comply with the SOPs and adapt to the changes, safety measures were put in place, e.g. providing hand sanitizers, compulsory mask-wearing, strict social distancing, limiting the number of participants, hand washing, and social distancing reminders throughout the activity. We also adapted or changed the scope of our activities to comply with new heath regulations. For example, MY Activity 1.4.4, which was originally planned for students in an outdoor setting, was changed to production of a module by experienced academicians.

NEXT STEPS

We are planning to develop a OHW-NG strategic plan and develop regulatory guidelines such as By-Laws and Terms of Reference for the MyOHUN Executive Board members and MyOHUN members. This will require revisiting the Terms of Reference (TOR) for MyOHUN membership and One Health Student Clubs to standardize membership and members' roles in the Network.

ONE HEALTH
CHAMPION

PROFESSOR DATO' Dr. ABDUL RASHID KHAN

Head of the Department of Public Health Medicine at the RCSI (Royal College of Surgeons in Ireland) and UCD (UC Dublin) – Malaysia Campus in George Town.

'Prof. Dato' Dr. Rashid's research focuses on marginalized populations, especially Malaysian Indigenous peoples. His role in One Health Workforce – Next Generation is as a Project Lead, where he collaborates with other health professionals on innovative approaches to improving the health and wellbeing of the Indigenous people in peninsular Malaysia.

> " *I was content working alone with Indigenous people in Malaysia before becoming involved in the Malaysian One Health chapter -- since I started working within the One Health Workforce – Next Generation group, I have now realised how much more rewarding it is working with a group of people with different professional backgrounds. It is rewarding not only for my personal development but also to the Indigenous people we work with. I have benefited so much from this experience and now I take every opportunity to remind others how rewarding it is and how much easier it is to accomplish goals when you work in a multidisciplinary One Health team.* "

Dr. ROZITA HOD

Lecturer in Department of Community Health, Department of Community Health, Faculty of Medicine, Universiti Kebangsaan Malaysia

Project Leader for Table-Top Exercise and a member of a group of professionals that is involved with and committed to improve health awareness in Malaysia.

> "*One Health is the precise approach to ensure the sustainability and health of the ecosystem, preserving our planet's biodiversity, and the survival of humankind.*"

REACHING INDIGENOUS CHILDREN IN MALAYSIA THROUGH ONE HEALTH PROGRAMS

In Peninsular Malaysia, the Orang Asli are indigenous people and a marginalized community that are deprived of mainstream education and access to health care. Most of the Orang Asli live in forests and are hunters and gatherers. Due to their proximity to wildlife, limited access to protective resources, and poverty, they are also a community living in a high-risk setting for potential zoonotic disease spillover.

Professor Dato' Dr. Abdul Rashid of the Royal College of Surgeons in Ireland and University College Dublin (RCSI & UCD) Malaysia Campus, and his interdisciplinary colleagues from universities throughout Malaysia, are committed to empowering Orang Asli school children with awareness and knowledge concerning zoonotic diseases. Professor Rashid's program also mobilizes students from different courses and universities and gives them the opportunity for experiential hands-on learning of One Health core and technical competencies. These students are sometimes reluctant and even seem lost at the beginning of the program. However, by the end, they transform into a cohesive One Health team. Feedback and reflections have shown that students in the program network and bond with one another, which we hope will last a lifetime as they grow into the future One Health workforce.

The Orang Asli villages are located in remote and not easily accessible areas, and the MyOHUN teams of students and and their faculty supervisors face multiple challenges accessing and engaging these communities. Staying on a houseboat, using speed boats and off-road vehicles, and hiking to remote forest locations are all part of the educational journey. Because of varying educational levels among the indigenous children, the health promotion materials were custom-made to feature widely accessible graphics. The children are very eager to learn, absorb the information well, and participate in the activities enthusiastically. When the program ends, disappointment is apparent and the children inquire about when the teachers will return.

Our program continues to show that when provided resources and opportunities, youth are the promise of a brighter and healthier future. By reaching and educating these school-aged children, we believe the impact is manifold, as they share this information with parents, siblings, and friends.

> "Although the preparations for these programs were tedious and challenging, the team's feedback from the hundreds of university students and the Orang Asli children made all this hard work worthwhile. It has been an enjoyable and poignant journey for the team as well. The friendship and network formed between the team members have resulted in many One Health projects outside the realms of Malaysia One Health University Network. We hope to continue and expand the program in years to come and involve more Orang Asli children from different parts of the country with the help of MyOHUN."
>
> —Prof. Dato' Dr. Abdul Rashid

THOHUN

THAILAND ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

10
MEMBER
UNIVERSITIES

176
INDIVIDUALS
TRAINED

HIGHLIGHTS

- Trained 25 students and three governmental personnel from the human, animal, and environmental health sectors from six countries on One Health application and innovations for community intervention in the International Short Course on Ecosystem Health.

- Pre-service workforce development:

  o Trained 31 One Health leaders from six universities (including current members of THOHUN) ten new member Universities, three ministries, as well as the National Coordinating Office (NCO). These participants reinforced their One Health knowledge utilizing the SEAOHUN One Health Short Course modules and adopted their teaching strategies and techniques to fit with educational and training requirements during the COVID-19 outbreak.

  o Trained 71 students in Songkhla Province, which is in the Southern region and endemic for rabies. The students were educated on rabies Risk Communication and Community Engagement. The activity used the One Health platform that is transformable for use with the Thai One Health Students Clubs (OHSC).

- As a key product of the student One Health Camp, module content have been developed for peer to peer learning and training platforms, emphasizing rabies outbreak prevention and control practices.

- New vision, mission, strategies, and roadmaps to tangible results were developed for the years 2021-2025. The implementation of these is expected to lead to THOHUN's sustainability.

- Two scholarships were awarded to THOHUN University members to participate in the virtual One Health Congress (held in October 2020).

ACTIVITIES

OBJECTIVE 1

One Health Training & Empowerment

This year, THOHUN prioritized the advancement of One Health core competencies of the next generation of One Health workforce. We trained and empowered 99 students and health personnel through two activities (TH Activities 1.2.3 and 1.4.2). Seventy-one students from the south of Thailand practiced their One Health core competency skills including risk communication and community engagement through the One Health camp for rabies control (TH Activity 1.2.3). Holistic and advanced One Health workforce development was done at the One Health village in Khon Kaen province where 28 multi-disciplinary international participants received trainings on core One Health concepts. The community's social innovations were developed as the One Health village targeted solutions for further improvement in health services and infrastructure (TH Activity 1.4.2). Additionally, 24 THOHUN trainers and One Health leaders reinforced their One Health core competency skills and developed new ideas for delivery of training and teaching. This activity was also aimed to prepare new trainers to increase reach and maximize the availability of trained professionals (TH Activity 1.3.1). Finally, we supported one student and one teaching staff to participate in the One Health Congress, scheduled October 2020 (TH Activity 1.3.2).

OBJECTIVE 2

One Health Workforce Asessment & Tracking

Please read about the SEAOHUN Network contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Articles **One Health Competency Framework to Define Workforce Performance** on page 28 and **National and Regional One Health Platforms Linking to University Partnerships** on page 29.

OBJECTIVE 3

Organizational Sustainability

THOHUN successfully developed a five-year strategy and revised the Network's vision and mission. These revisions were based on stakeholder needs, global trends, and the contribution of thirty-eight stakeholders from key agencies including THOHUN's University members, governmental partners, the private sector, SEAOHUN, RDMA-USAID, and THOHUN alumni (activity TH Activity 3.1.3). This two-day meeting provided a forum for stakeholders to exchange their experiences and interact with THOHUN members to strengthen and plan for implementing and improving One Health workforce development and management by THOHUN (TH Activity 3.3.2).

Learn more about how SEAOHUN is strengthening organizational sustainability in the **SEAOHUN Secretariat section** on page 119.
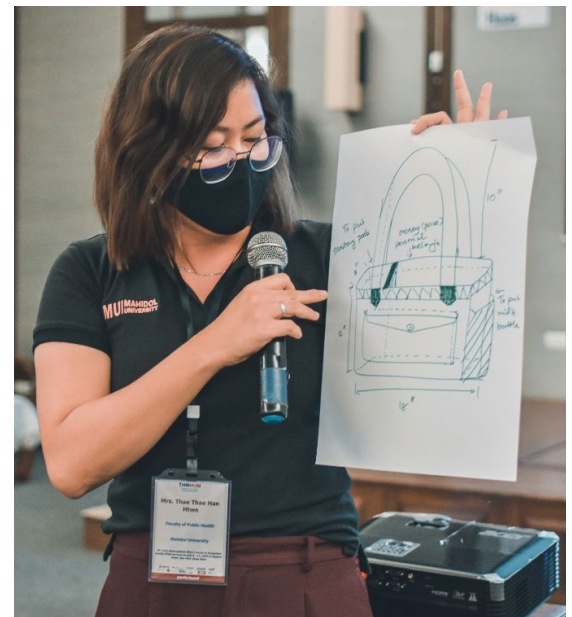
Personal protective equipment, distancing, and group size standards in this photo were consistent with local public health guidance and COVID-19 status in the specific country and time it was taken. This may not reflect best practices for all locations where COVID-19 is still spreading.
PHOTO: THOHUN

LESSONS LEARNED

Prompt adaptation to remote collaboration and project implementation ensured the efficiency and efficacy of OHW-NG activities while maintaining safety standards during the COVID-19 pandemic.

During the COVID-19 pandemic, it was initially a challenge to implement activities as planned. Fortunately, THOHUN quickly found solutions and alternatives to both continue project activities and address the needs of the COVID-19 pandemic. THOHUN began implementing activities in July 2020, and by September, completed all six planned activities as scheduled. All activities were performed while adhering to the principles of COVID-19 safety under national and WHO guidelines. Meetings and working groups, such as the OHW-NG Gender Action Plan, SEAOHUN COVID-19 ECHO One Health Updates, the Gender Working Group, the Alumni Tracking & Engagement group, and other planning meetings were conducted virtually. This virtual platform maintained effective communication and operations including business planning. The participants of these working groups were able to coordinate the overall vision, goals, and direction of all planned project activities.

NEXT STEPS

THOHUN continuously coordinated with the OHW-NG Global Team and SEAOHUN Secretariat to plan and adopt activities that aligned with the vision of the OHW-NG Project, were suitable for implementation during the COVID-19 outbreak, and contribute to the country's public health response. THOHUN members will continue to implement projects approved under the emergency COVID-19 Tranche 4 Supplemental Funding. As well, we will continue to foster collaboration and partnership with University members, governmental and private sectors, and other professional societies and NGOs.

Establishing a One Health Student Club in Thailand is crucial for developing a national One Health workforce. Building on previous years' activities, THOHUN will enable students to develop and strengthen their motivation to engage with One Health, promote interdisciplinary cooperation, as well as build and reinforce critical core competencies via hands-on engagement opportunities provided by the students' clubs.

THOHUN created the Student One Health Camp training platform and tools for One Health student advocacy, which used rabies as a disease model. Through this platform, we trained One Health Ambassadors (students) with leadership skills and capabilities for student peer-to-peer training. In Year 2, THOHUN plans to support four Thai Student One Health Camps from established member Universities, which will be led by these One Health Ambassadors. Under the supervision of THOHUN trainers, we plant to continue to mobilize the One Health Ambassadors to support One Health related activities as leaders in their universities and communities. This preparation will ensure that Thai Student One Health Camps will be truly beneficial for students and young people to develop One Health knowledge and skills to deal with problems related to human, animal, and environmental health.

CHAMPION

Dr. SAENGDUEN MOONSOM

Teaching staff, Faculty of Tropical Medicine, Mahidol University; Coordinator of THOHUN and THOHUN National Coordinating Office, THOHUN trainer, and a member of One Health Coordinating Unit of Thai One Health network; Deputy Chair of the national committee for strategic driving for disease prevention and control in academic institutes

Prof./Dr. Seangduen's expertise lies in molecular biology and immunology and her research is focused on improving diagnostic capabilities for pathogens, especially bacteria and protozoa (Leptospirosis, Malaria). She is a member of Department of Protozoology at Mahidol University, where she is passionate about One Health scholarship, teaching the next generation of One Health professionals, and fostering collaborations among academic and governmental institutions as well as local communities.

"*As a leader, trainer, implementator, and national coordinator for the One Health Workforce – Next Generation project and its predecessor, I have worked on 1) multi-sector and policy engagement, including human, animal, and environmental health-related ministries, communities, and the general public; 2) platform development for education and training of future and current One Health workforce; and 3) THOHUN network management. In 2020, the One Health concept and OHCCs were finally recognized as crucial elements for Thailand's growing workforce, especially within academic and governmental institutions. Working across disciplines and transdisciplinary collaboration have become a regular practice of Thailand. I believe the next step for Thailand's One Health Network is to unite this multi-disciplinary and multi-sectoral effort with that of the community, creating a holistic effort to attain healthier humans, animals, and ecosystems for our whole society.*"

HOLISTIC ONE HEALTH WORKFORCE DEVELOPMENT IN THAILAND

TRANSFORMING FIELD-BASED LEARNING TO COMMUNITY INTERVENTIONS & INNOVATION

Infectious diseases have become the highest public health concern since the emergence of COVID-19. Through the support of the Emerging Pandemic Threats (EPT-2) program and the United States Agency for International Development (USAID) One Health Workforce Project – Next Generation (OHW-NG) Project, the Thailand One Health University Network (THOHUN) organized the Ecosystem Health Short Course (THOHUN-TELI). This course, which has been implemented annually for the last five years was inspired by the Annual Tufts Environmental Literacy Institute (TELI) course-organized by Tufts Institute for the Environment.

The course aims to prepare graduate students and current One Health workforces through field and community based learning at "One Health villages", villages prioritized as field implementation sites because health problems arise from the interconnection of people, wildlife and domestic animals, and environmental factors. This course serves multi-disciplinary students and health workers from animal, human and environmental sectors to integrate their discipline-based knowledge and skills, practice One Health core competencies, collaboratively design innovative interventions, and engage with the community to solve their health and environmental problems.

Personal protective equipment, distancing, and group size standards in this photo were consistent with local public health guidance and COVID-19 status in the specific country and time it was taken. This may not reflect best practices for all locations where COVID-19 is still spreading.

PHOTO: THOHUN

IN FOCUS

- This course reached 145 multi-disciplinary learners from >10 disciplines.

- Individuals from eight countries were trained as One Health experts in their respective organizations.

- This program successfully established a holistic learning platform for 28 learners to apply discipline-based knowledge and skills and strengthen One Health core competencies to cope with the complex- social, human and animal, and environmental health issues.

- Alumni were recruited to share their experiences and perspective with new approaches to learning and bridge the age gap between junior learners and expert facilitators.

- Fifteen (15) social innovations/solutions (learning outputs) were successfully communicated and delivered to the communities to address or solve One Health problems such as vector-borne diseases, food- and water-borne and zoonotic diseases, human and wild elephant conflict, water and waste management.

- During the portion of the course targeted at rabies, 71 multi-disciplinary students from at least 15 schools/universities were trained as One Health Ambassadors or peer leaders.

The THOHUN training team developed course content suitable for educating and training young people (Gen Z) for rabies prevention and control. The platform allows students to strengthen their planning & management, team collaboration, and systems thinking through interactive activities, a Knowledge-Attitude and Practice survey, and field-based learning.
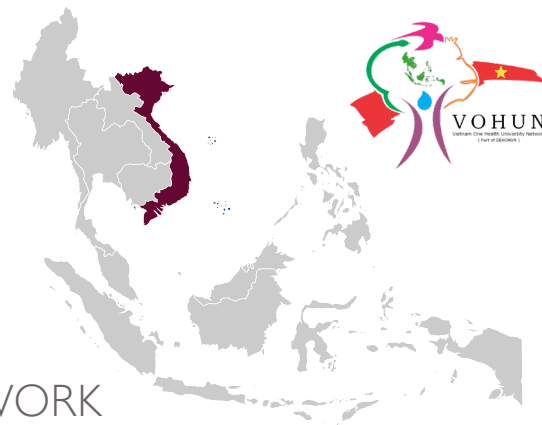
VOHUN

VIET NAM ONE HEALTH UNIVERSITY NETWORK

OUR NETWORK

20
MEMBER
UNIVERSITIES

15
ONE HEALTH
STUDENT CLUBS

>4,000
INDIVIDUALS REACHED
VIA COVID-19 RCCE
ACTIVITIES

HIGHLIGHTS

- Raised awareness of the COVID-19 pandemic by educating 922 primary school students in Duc Thang ward, Bac Tu Liem district, Hanoi.

- Encouraged students and faculty to develop posters and videos that provided education on COVID-19 risk communication and infection prevention control (IPC) measures as part of a pandemic digital awareness challenge, which reached thousands of students and social media followers.

- Trained 15,176 students in One Health and One Health core competencies via modules that were either compulsory, elective, or integrated into curriculum.

- Our One Health Student Clubs (OHSCs) organized 16 activities and engaged 673 students on a range of topics including COVID-19 awareness, prevention, and response; rabies; avian influenza; helminths, One Health; zoonoses; and diphtheria.

- Supported students in the development of 15 videos aimed at raising awareness on COVID-19 for a rhetoric contest.

- Engaged with 400 households in Mang Thit district, Vinh Long province to provide education on prevention and control of parasitic helminths that commonly infect dogs and cats.

ACTIVITIES

OBJECTIVE 1

Innovations to empower students, put One Health knowledge and skills in practice, and strengthen the health workforce

We provided technical and financial support to 15 One Health Student Clubs (OHSCs), which implemented 16 activities, each focused on a different One Health topic such as COVID-19 or other zoonotic diseases (VN Activity 1.2.3). Over 2,000 students, 400 villagers, and thousands of social media followers directly benefited from the student club's activities, especially in regard to COVID-19 risk communication and community engagement (RCCE) and infection prevention and control (IPC).

Additionally, we successfully organized a One Health camp for students focusing on rabies risk communication in Nghe An province (VN Activity 1.2.4). From a competitive applicant pool of nearly 400 students, 50 were selected by the VOHUN (National Coordinating Office) NCO to participate and were tasked with preparing rabies risk communication plans, which ultimately reached 532 local community members and 600 secondary school students from five villages in Cong Thanh commune. This camp provided an excellent learning opportunity for the students and was strongly supported by the local government, as 38 officers were in attendance. Read more about this activity in our success story: **One Health Camp on Rabies Risk Communication** on page 164.

In addition, we supported another successful student-focused activity, which involved veterinary students from the Viet Nam National University of Agriculture (VNUA). The students participated in a four day field trip to Thanh Mien district, Hai Duong (VN Activity 1.4.5) where they received hands-on instruction from lecturers and veterinarians about the importance of incorporating One Health into veterinary practices. A similar One Health field site in Hai Phong City was also established where 30 local health and veterinary staff received One Health training in the One Health approach and associated topics.

Finally, to ensure the continued training of health care workers, veterinary staff, and students, the VOHUN NCO hosted a workshop to develop a virtual training program (VN Activity 1.3.1). This 8-course training program aims to assist health workers and veterinary staff in developing and implementing zoonotic disease prevention plans within a One Health framework. A total of 51 faculty helped develop the training content which focuses on zoonotic disease prevention and the application of One Health core competencies. Three hundred ninety individuals from VOHUN member universities and Viet Nam governmental departments participated in interviews to assess the need for further training on laboratory biosafety and biosecurity.

Personal protective equipment, distancing, and group size standards in this photo were consistent with local public health guidance and COVID-19 status in the specific country and time it was taken. This may not reflect best practices for all locations where COVID-19 is still spreading.
PHOTO: VOHUN

OBJECTIVE 2

One Health Workforce Assessment & Tracking

Read about the SEAOHUN Network contributions to One Health Workforce Assessment and Tracking in the Global Objective 2 Impact Articles **One Health Competency Framework to Define Workforce Performance** on page 28 and **National and Regional One Health Platforms Linking to University Partnerships** on page 29.

OBJECTIVE 3

Expanding partnerships and working towards Network sustainability

Sustainable organizational development is one of the top priorities of the VOHUN Network. This year, we held two meetings to build toward this goal: a VOHUN Year 2 (2020-2021) activity planning meeting (VN Activity 3.1.3) and an annual meeting of VOHUN member Universities (VN Activity 3.2.3). These highly collaborative meetings involved representatives from all 20 VOHUN member Universities and highlighted this year's successes while focusing on advancing the Network's sustainability, particularly via securing independent VOHUN legal status.

We were also successful in expanding VOHUN's recognition by collaborating with other international and national organizations. In an effort to strengthen core capacities in preventing, detecting, controlling, and containing biological threats, VOHUN collaborated with the US Defense Threat Reduction Agency's (DTRA) Biological Threat Reduction Program (BTRP), Sandia National Laboratory, General Department of Preventive Medicine (GDPM), and the Department of Animal Health (DAH) to implement two globally-attended virtual workshop sessions. These sessions highlight Viet Nam's leadership in the field of biological risk management and VOHUN's ability to collaborate nationally and internationally on critical biological threat reduction objectives.

Learn more about how SEAOHUN is strengthening organizational sustainability in the **SEAOHUN Secretariat section** on page 119.

LESSONS LEARNED

Adaptative management during the pandemic

In response to the COVID-19 pandemic, VOHUN shifted plans and activity implementation from in-person to virtual and hybrid formats (when appropriate) to ensure social distancing and adherence to other recommended health guidelines. Virtual engagement provided an opportunity for greater internal and external participation as well as partnership development. For example, representatives from Libya, Malaysia, and Thailand were able to join the VOHUN workshop where teaching materials and training courses were developed for the benefit of health care workers and veterinary staff. These collaborations are leading to long-lasting, scalable, and transformative partnerships.

Empowering students as One Health leaders

VOHUN member universities encouraged and empowered numerous One Health Student Clubs (OHSCs) as they implemented Risk Communication and Community Engagement (RCCE) activities for COVID-19 and other zoonoses.

These student-led activities necessitated creativity to be successful. The development and execution of these activities instilled a culture of innovation in these students, an important skill that can be used to build sustainability of the OHSCs that positively impact the community. Most importantly, this creativity and innovation will make these students successful members of the future One Health workforce.

NEXT STEPS

VOHUN plans to equip students with One Health knowledge by providing them with diverse engagement opportunities such as university trainings, fieldwork, and community outreach.

We realize that the OHSCs form the backbone of our Network and that students are critical to the ability to address emerging health threats in Viet Nam. Therefore, we aim to continue to diversify forms of education and training which will help students develop the necessary skills and key One Health core competencies to be successful leaders in the future health workforce.

ONE HEALTH CHAMPION

DANG BICH THUY

Lecturer and OHSC mentor at Thai Binh University of Medicine and Pharmacy (TBUMP)

" *Since its establishment, the Vietnam One Health University Network has helped our staff, faculty, and university as a whole to develop One Health training programs for undergraduate students and support the student-led One Health club. When guiding students to solve a health problem, especially health issues related to zoonoses, I always try to teach them to have a multidimensional perspective and encourage them to coordinate their efforts between human health, animal health, and environmental health, to fully utilize the One Health core competencies. While teaching the One Health module, there is a connection between classroom theoretical learning and practical hands-on experience at the 'One Health field sites' supported by VOHUN, which greatly benefits participants and enforces One Health core competencies.* "

ONE HEALTH CHAMPION

Dr. LE THANH HIEN

Head of Department of Infectious Diseases & Veterinary Public Health; Vice-Dean of Faculty of Animal Science and Veterinary Medicine, Nong Lam University, Ho Chi Minh CIty

Within the One Health Workforce – Next Generation project, Dr. Le Thanh Hien is developing One Health training programs and core lectures for in-service training courses.

"*As a veterinary epidemiologist, at the beginning of the project, I thought animal disease control was an important practice only for livestock production. However, when I started working closely in the One Health network, I gradually realized the importance of working across disciplines for better control of zoonotic diseases in animals and the need for solving problems through a One Health perspective. This project gave me a chance to meet many colleagues all over the world that I can learn from and collaborate with. The way I look at health issues has changed to become more broad – I now consider the contributions of my colleagues across different fields of expertise and professional backgrounds. From these experiences, my teaching has become more interesting and lively for students, and my research focuses on health issues that impact both humans and animals, especially zoonoses.*"

PLANTING "SEEDS" TO GROW ONE HEALTH IN VIET NAM

ONE HEALTH CAMP ON RABIES RISK COMMUNICATION

With support from the United States Agency for International Development (USAID) One Health Workforce Project – Next Generation (OHW-NG) Project, the Viet Nam One Health University Network (VOHUN) successfully organized a "One Health Camp – Rabies Risk Communication", which ran from July 24-26, 2020 in Cong Thanh commune, Yen Thanh district, Nghe An province, a community at high-risk for rabies. The camp's objective was to provide an opportunity for students to: (1) understand the importance of implementing a One Health approach to disease prevention; (2) apply One Health core competencies in disease prevention activities; and (3) conduct a community engagement activity to raise awareness of and help prevent rabies in the community.

The camp application process was competitive, and applicants were required to complete a 10-question, multiple choice exam and submit an essay detailing their perceptions of and lessons learned from the COVID-19 pandemic. Three hundred seventy four (374) applicants applied to the camp and 50 students were selected to participate. A rabies-focused virtual training course was conducted at the beginning of the camp and students were assisted with development of rabies risk communication plans. Wanting to mimic the collaborative, multi-sectoral nature of One Health, students worked together in online groups to develop their risk communication plans all with the support of VOHUN faculty members.

As a direct result of the camp activities, five rabies communication plans were presented to 532 community members within five villages of Cong Thanh commune. Each group developed a unique approach to educate and communicate with the local communities about rabies, answering questions such as "what is rabies?", "how is rabies contracted?", "how should one respond if bitten by a rabid dog or cat?". One particularly effective mode of delivery for attracting local community members to the event was live performances. Plays and short dramas that the students created about rabies were engaging and comical, but more importantly, they were educational and memorable for the audience members. One student group even re-wrote the lyrics to a popular folk song giving it a rabies-prevention theme and performed it live, which was a huge success. To solidify and help apply the messages, community members were given hands-on instruction instruction on proper washing techniques, especially for bite wounds.

The district health center, commune health station, and village leaders were supportive of the students' efforts and were impressed by quality and presentation of the communication plans. The camp and subsequent events were highly successful, as they were attended by community members and local officials. Rabies awareness rose after the event and with further engagement could continue to grow if messages are reinforced and community members pass their knowledge onto friends and family.

Many students expressed that this camp was their favorite event to-date in their academic careers, as it gave them a valuable opportunity to learn and share their knowledge and skills in a culturally relevant framework. Additionally, the amount of creativity and work required to make a communication plan successful was valuable experience that students will use as they advance into the One Health workforce.

> *My experience can be summarized in one word: SEED. "SEED" stands for Solidarity, Encouraged, Effective, and Developed — these words encompass the valuable experience I gained during this memorable time. At that moment, I dreamed that our mission is the "great seed" of VOHUN's future and I hope to accompany the Network in continued training of the next generation of SEEDS.*
>
> —Thao, Nguyen Thi Mai, Leader of Student Group 4

OHW-NG
PERFORMANCE DATA

OHW-NG MEL FRAMEWORK

GOAL Empower One Health university networks to sustainably develop and deliver world-leading model programs for equipping professionals with transdisciplinary skills to address complex global health issues.

Long-term Impact →

OBJECTIVE 1 Training & Empowerment	OBJECTIVE 2 Assessment & Tracking	OBJECTIVE 3 Organizational Sustainability
• Increased proficiency in One Health competencies for pre-service & in-service professionals • A well-trained & technically proficient One Health workforce pipeline • Active & engaged One health networks that can be activated during health emergencies	• Improved quality & increased use of workforce & assessment data for decision-making • Increased placement of One Health graduates in targeted sectors • Improved multisectoral workforce strategies within participating countries	• Direct recipient of external donor funding • New & diverse funding partners & enhanced ability to identify & develop partnerships • Model identified for creating ongoing network revenue for self-reliance

PO 1: Evidence of increased progress toward institutionalization of competency-based training in One Health
PO 2: Evidence of placement of One Health graduates in targeted sectors (qualitative)
PO 3: Utilization of KMS data to inform decision-making (qualitative)
PO 4: # of direct funding awards received by the Networks and/or participating institutions related to One Health workforce strengthening

Output-Level Indicators →

1.1: Total # of existing and new One Health training content and delivery modes, curated, updated, and implemented **1.2**: Total # of individuals trained **1.3**: Total # of SOHICs established and continuing **1.4**: Total # of evidence-based informational resources and products developed	**2.1**: % of Universities using toolkit to strategically integrate One Health competency assessments into activities **2.2**: # of countries in which OHUN universities participate in national-level One Health workforce processes *ES.2-1*: # of host country higher education institutions receiving capacity*	**3.1**: Evidence of measurable improvement of key capacities for organizational sustainability **3.2**: # of new and diverse partnerships established for the networks

G1: # of gender policies developed and available
G2: # of activities that included a gender component and/or for which gender was prioritized (prioritization workshops, activities, trainings implemented and includes qualitative examples)
G3: Evidence of changes made improving sex balance and impact of sex balance (quantitative and qualitative examples)
G4: # of identified active gender champions and gender experts

*OHW-NG contributes to this USAID Standard Higher Education Indicator

PERFORMANCE DATA

Progress Toward Institutionalization of Competency-Based Training in One Health

Network	Baseline CLASS Score**
AFROHUN Secretariat	41
Cameroon	61
DRC	53
Ethiopia	57
Kenya	63.3
Rwanda	64.5
Senegal	36
Tanzania	64
Uganda	66
SEAOHUN Secretariat	42
CAMBOHUN	Not Yet Completed
INDOHUN	80.5
LAOHUN	Not Yet Completed
MyOHUN	72
MMOHUN	Not Yet Completed
PhilOHUN	Not Yet Completed
THOHUN	95
VOHUN	50

*Indicator PO1: Evidence of increased progress toward institutionalization of competency-based training in One Health

** The AFROHUN and SEAOHUN Networks are implementing training and empowerment activities through a Learning Plan based on an approach that incorporates the Calibrated, Lifelong, Adaptive, Scalable, and Sustainable (One Health CLASS) score. One Health CLASS is characterized by progressive learning activities designed for trainees at various stages of academic and professional development. Learn more about CLASS Scores in the Impact Article One Health Training Content Development & Curation on page 19.

Number of Updated and Newly Developed Materials and Content

Network	Updated	New
AFROHUN Secretariat		
Cameroon		
DRC		1
Ethiopia		
Kenya		2
Rwanda		
Senegal		2
Tanzania		
Uganda	4	10
SEAOHUN Secretariat		
CAMBOHUN		
INDOHUN	1	7
LAOHUN		
MyOHUN	1	4
MMOHUN		
PhilOHUN		
THOHUN		3
VOHUN	16	
Global Team		
AFROHUN Total	4	15
SEAOHUN Total	18	14
Global Consortium Total	22	29

*Indicator 1.1: Total # of existing and new One Health training content and delivery modes curated, updated, and implemented

Number of Individuals Trained														
Network	Total	Gender			Participant Type									
		Female	Male	Unknown	Professional (Govt)	Professional (Private Sector Firms)	Faculty	Student (undergraduate)	Student (graduate)	Student (other)	NGO	Community Member	Other	
AFROHUN Secretariat	46	19	27		2		21	1					22	
Cameroon	68	29	39				55	13						
DRC	111	36	75		45			60	6					
Ethiopia	110	8	39	63	63		47							
Kenya	99	34	46	19			25		1				73	
Rwanda	102	44	58		28		10	64						
Senegal	97	26	64	7	1	35	12		42				7	
Tanzania	131	54	77		86			45						
Uganda	489	198	291				82	402	5					
SEAOHUN Secretariat	3	2	1										3	
CAMBOHUN	3	1	2											
INDOHUN	128	51	77		101						10			
LAOHUN	143	75	68		2		16	122						
MyOHUN	2,574	1,531	1,043		428	85	352	811	354	264	26	27	227	
MMOHUN														
PhilOHUN	640			640			640							
THOHUN	176	110	66		14	5	54	60	24	16	3			
VOHUN	17,641	4,851	4,978	7,812	85			16,831	72	121		532		
Global Team	8	4	4			1	4		1				2	
AFROHUN Total	1,253	448	716	89	225	35	252	585	54	0	0	0	102	
SEAOHUN Total	21,308	6,621	6,235	8,452	630	90	1,062	17,824	450	401	39	559	230	
Global Consortium Total	22,569	7,073	6,955	8,541	855	126	1,318	18,409	505	401	39	559	334	

*Indicator 1.2: Total # of individuals trained

**Unique challenges to collecting participant information when utilizing virtual training formats therefore disaggregates are not available for all individuals

5 AFROHUN
112 SEAOHUN

PLACEMENT OF ONE HEALTH GRADUATES INTO TARGETED SECTORS

3 AFROHUN
5 SEAOHUN

FUNDING AWARDS RECEIVED RELATED TO ONE HEALTH WORKFORCE STRENGTHENING

25 AFROHUN
56 SEAOHUN
18 GLOBAL TEAM

INFORMATIONAL RESOURCES & PRODUCTS DEVELOPED

2/19 TARGET NUPAS CRITERA CHANGED* (SEAOHUN)
3/36 PRIORITY OCA SUB-DOMAINS CHANGED* (AFROHUN)

MEASURABLE IMPROVEMENT OF KEY CAPACITIES FOR ORGANIZATIONAL SUSTAINABILITY

17 AFROHUN
3 SEAOHUN

NEW & DIVERSE PARTNERSHIPS ESTABLISHED

INDICATOR PO2: Evidence of Placement of One Health Graduates in Targeted Sectors
INDICATOR PO4: # of Direct Funding Awards Received by the Networks and/or Participating Institutions Related to One Health Workforce Strengthening

INDICATOR 1.4: Total # of Evidence-Based Informational Resources & Products Developed
INDICATOR 3.1: Evidence of Measurable Improvement of Key Capacities for Organizational Sustainability
INDICATOR 3.2: # of New & Diverse Partnerships Established for the Networks

*Criteria and sub-domains with scores of 3 or less

PERFORMANCE DATA

Number of Mentored Student One Health Innovation Clubs (SOHICs)						
Network	SOHICs	SOHIC Faculty Mentors	SOHIC Participants	Participant Gender		
				Female	Male	Unknown
Cameroon	3	8	536	305	231	
DRC	2	6	460	200	260	
Ethiopia	2	8	229	117	112	
Kenya	3	3	1,000			1,000
Rwanda	1	6	662	321	341	
Senegal	1	3	300	195	105	
Tanzania	2	7	456	146	310	
Uganda	2	10	1,000	556	444	
CAMBOHUN						
INDOHUN	5	19	209	135	74	
LAOHUN						
MyOHUN	8	10	92	60	32	
MMOHUN						
PhilOHUN						
THOHUN						
VOHUN	15	31	973	690	283	
AFROHUN Total	16	51	4,643	1,840	1,803	1,000
SEAOHUN Total	28	60	1,274	885	389	0
Global Consortium Total	44	111	5,917	2,725	2,192	1,000

*Indicator 1.3: Total # of Student One Health Innovation Clubs (SOHICs) established and continuing

GENDER

14 AFROHUN **0** SEAOHUN ACTIVITIES WITH A GENDER COMPONENT	**17** AFROHUN **13** SEAOHUN # OF GENDER CHAMPIONS & GENDER EXPERTS	**0** AFROHUN **2** SEAOHUN # OF TRAINED ON GENDER ANALYSIS	**2** AFROHUN **0** SEAOHUN # OF INDIVIDUALS ABLE TO IDENTIFY GENDER GAPS

9 AFROHUN **52** SEAOHUN WOMEN IN LEADERSHIP POSITIONS	**10** AFROHUN **42** SEAOHUN WOMEN IN DECISION-MAKING POSITIONS	**0** AFROHUN **2** SEAOHUN # OF GENDER POLICIES

INDICATOR G1: # of Gender Policies developed and available

INDICATOR G2: # of Activities that Included a Gender Component

INDICATOR G3: Evidence of Changes Made Improving Sex Balance & Impact of Sex Balance

INDICATOR G4: # of Identified Active Gender Champions & Gender Experts

COVID-19 Related Training
(Individuals Trained)

RCCE   Surveillance/Response   IPC

ETHIOPIA
63   63   2,150,000

UGANDA
92   1,300   40   400

SENEGAL
68   14   14   68

KENYA
73   73   73

DRC
111   1,640

RWANDA
35   17,440

TANZANIA
131   5,860
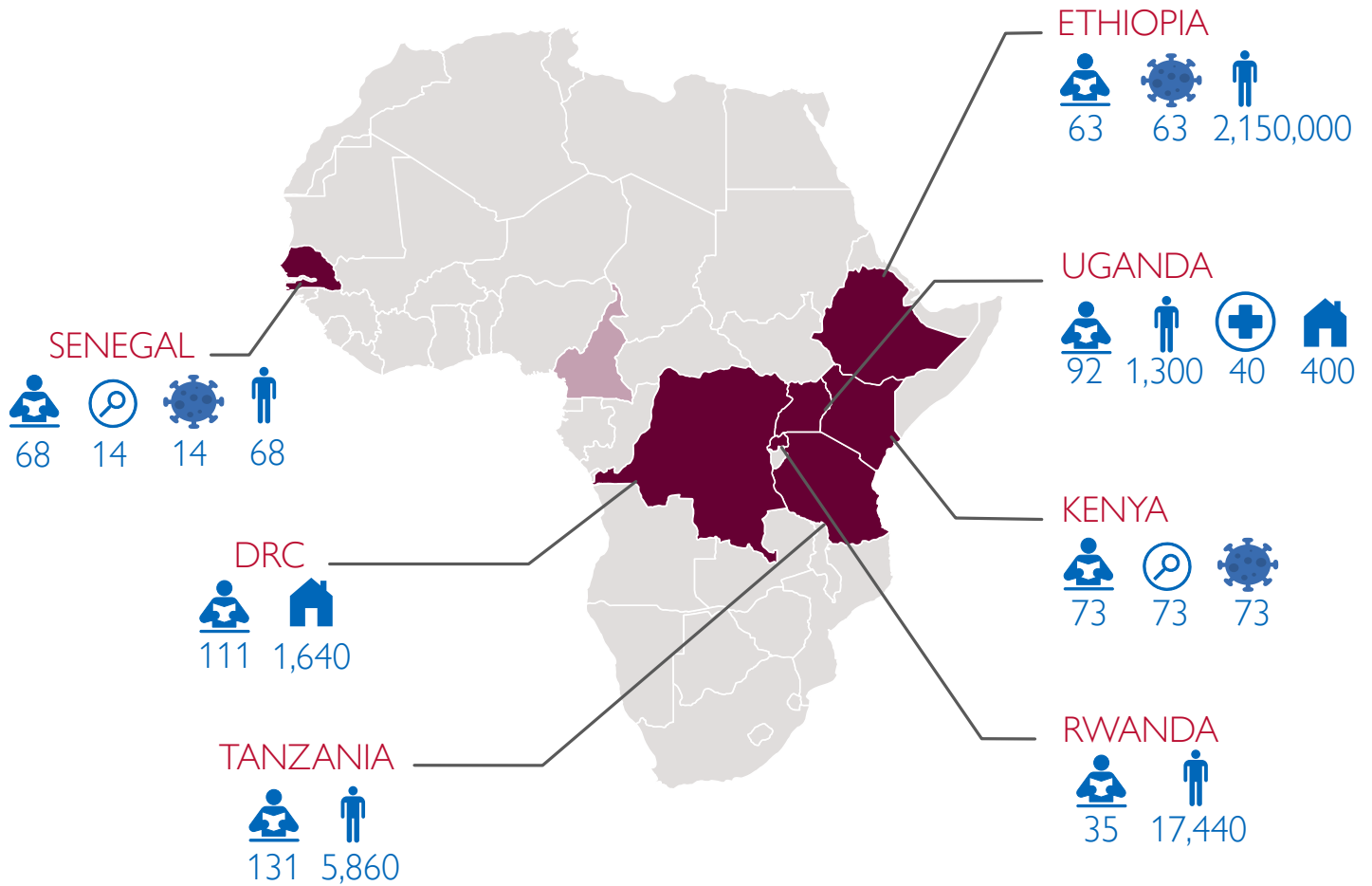
AFROHUN Secretariat
1,043

COVID-19 Risk Communication and Community Engagement (RCCE)

Individuals reached

Health facilities reached

Households reached

VIET NAM
3,995

PHILIPPINES
640   640

MALAYSIA
199   133   167   10,629
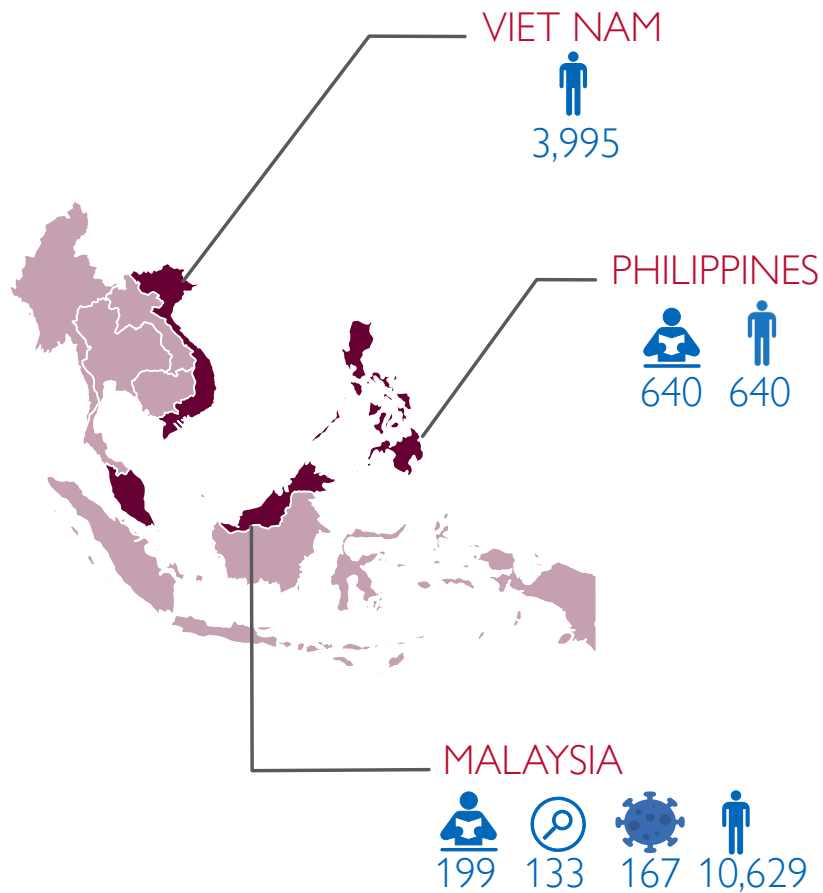
SEAOHUN Secretariat
200

APPENDICES

PHOTO: KISHOR AU

KNOWLEDGE MANAGEMENT & LEARNING (KML) PLAN UPDATE

Successful OHW-NG Knowledge Management (KM) will enhance effective multi-sectoral planning, foster the One Health workforce pipeline and ensure that countries have the needed One Health skill mix and distribution – the right people, with the right skills, in the right place, at the right time. Given the breadth, depth and diversity of relevant data, the AFROHUN and SEAOHUN Secretariats require a Knowledge Management Plan that incorporates strategies and tools in order to collect, generate and disseminate information of high interest to University Network members, stakeholders, donors, and the wider universe of One Health partners. Knowledge Management strategies will enable each Secretariat to prioritize KM goals and objectives, clarify staff roles and responsibilities related to KM, and select KM systems that best advance the agenda of 1) improving the quality and increasing the use of workforce and assessment data for decision-making; 2) building a coalition of sustainable

Knowledge Management champions; and 3) improving multi-sectoral workforce strategies.

In addition to the KM plan, the AFROHUN and SEAOHUN Networks are implementing training and empowerment activities through a Learning Plan based on an approach that incorporates the Calibrated, Lifelong, Adaptive, Scalable, and Sustainable (One Health CLASS) score. One Health CLASS is characterized by progressive learning activities designed for trainees at various stages of academic and professional development. The Learning Plan details a tiered scale of proficiencies by defining sets of training activities that characterize a "Novice" at the beginning of the workforce pipeline to a professional "Expert/Team Leader" ready to deploy acquired skills to solve One Health-related challenges. The system also accommodates and values ongoing professional development through advanced training activities such as field experiences.

HIGHLIGHTS

- After preliminary discussions with the AFROHUN Secretariat, a KM assessment was identified as the necessary first step to establish a KM baseline for AFROHUN and their key stakeholders. The SEAOHUN Secretariat deferred KM activities to Year 2.

- The Global Team supported the AFROHUN Secretariat staff to conduct a KM self-assessment, rating their organizational KM maturity in five key domains: Strategy, Leadership Behaviors, Networking, Learning Before, During, and After, and Capturing Knowledge.

- As part of the KM needs assessment, key informant interviews (KII) and focus group discussions (FGD) were conducted with 25 participants from the AFROHUN Secretariat, Country Managers, and Country Administrators.

- KM Assessment data, including the baseline self-assessment, KII, and FGD results were compiled into findings and recommendations for the AFROHUN Secretariat. During the dissemination workshop, stakeholders agreed that rather than selecting a single KM system, a more holistic and useful approach to KM would be to focus on

identifying a KM Advisor, developing a KM strategy and creating a suite of KM tools. This represents a shift from a single KM system to a "KM toolkit." AFROHUN prioritized the development and implementation of a "Smart Library" database as the initial tool.

- The KM toolkit will allow the Secretariat to address various KM gaps and challenges including capacity building, managing knowledge, and developing a focused roadmap to address key KM benchmarks into the future.

- In addition to the AFROHUN and SEAOHUN site visits early in the first year of the project (2019), the Global Team performed a review of published documents and previous One Health Workforce work plans, curated and mapped all previously implemented training activities.

- As a capstone, we conducted a systematic self-assessment utilizing the CLASS scoring system. Using ten different components, CLASS scores were determined for each Network country, mapping areas of strengths and identifying opportunities to redouble efforts toward institutionalization and accreditation of competency-based One Health training at the university, national, and regional levels.

Chart Title

● AFROHUN ● SEAOHUN

Is the secretariat convening a regular forum for reviewing and standardizing One Health training modules?

Does the secretariat convene review forum and publish best practices for operating student clubs?

TOTAL CLASS SCORE

Is the secretariat disseminating best practices, for example, for pedagogical techniques, research opportunities and practices, field experiential learning?

Is the secretariat coordinating internship opportunities for trainees in public and private agencies?

80%
70%
60%
50%
40%
30%
20%
10%
0%

Has the secretariat established meaningful interactions with professional organizations that accredit certificates, degree programs, and continuing professional development activities?

Does the secretariat engage in sensitization events for government agencies, and international organizations such as FAO, OIE, UNEP, WHO, ASEAN, and ECOWAS?

Does the secretariat have the capacity to coordinate an international virtual community of practice?

Does the secretariat provide scholarships and small grants for trainees and faculty members?

Does the secretariat maintain a database of One Health faculty expertise committed to teaching and research across the regional network with access to other One Health Workforce international…

Does the secretariat maintain a database of potential employers of One Health trainees?

Does the university host a mentored One Health Student Club?

Total CLASS Score (0 – 100%)

Is at least one "One Health Competency-Based Training Module" delivered regularly (i.e. at least once a year)?

Are faculty members and students engaged in One Health research indicated by grants and awards programs and publications in peer-reviewed journals?

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

Is there a One Health curriculum defined by a set of courses delivered continuously and presented to trainees in a formal document (e.g. university catalogue)?

Is there a formal Continuing Professional Development education program available for in-service trainees that is accredited by a professional accrediting organization?

Is there a One Health Certificate, Emphasis Area, or Concentration, as a stand-alone curriculum or integrated into formal degree programs (e.g. M.P.H., Dr.P.H., D.V.M., M.Sc., M.D., M.S.N.)?

Is there a forum for faculty members teaching One Health modules to share best pedagogical practices, update content and delivery, identify gaps in competency modules, and develop new courses?

Does the university host and operate an experiential training field site?

Is there an institutional agreement with a One Health coordinating organization in your country – for example a national One Health technical working group, platform, Secretariat that could provide accreditation of a training curriculum or credential, such

Has the university implemented internship programs for trainees in government agencies or public or private organizations?

LESSONS LEARNED

The assumption entering the KM Assessment was that a single Knowledge Management System would be the appropriate solution to address AFROHUN's KM challenges. The participatory demand-driven needs assessment identified a different priority – a Knowledge Management Strategy that included KM capacity building and change management in order to adopt the organizational behavior change needed to make KM systems effective and sustainable. The KM Assessment helped the AFROHUN Secretariat identify a multi-pronged approach focused on three areas (strategy, capacity building, and development of an initial tool – the "Smart Library" database) for Year 2 that will lead to more accessible and intentional Knowledge Management.

A component of the CLASS scoring process is self-reflection on actions and initiatives that would increase the score annually until institutionalization and accreditation of One Health training activities are accomplished nationally and with sustainable regional infrastructure to provide ongoing support. The action items proposed in the OHW-NG workplan did not always align with the action items identified during the CLASS score process. This could be a limitation of funding and staff support, and it is important to annually update the CLASS score self-assessment in the context of the workplan process.

Overall, the CLASS score has had considerable impact on self-assessment and self-reflection regarding institutionalization. It provides a roadmap for accomplishing the long-term implementation of One Health training activities that have not been previously organized in a manner to systematically advance towards the goal of producing a tangible credential such as the One Health Certificate that will be recognized by employers and accreditation agencies.

NEXT STEPS

- AFROHUN:
  - o Advertise and hire a short-term (one year) Knowledge Management consultant to assist the Secretariat with a series of KM Strategy development participatory workshops
  - o Identify short-term and long-term Knowledge Management priorities that will advance learning and collaboration across the AFROHUN Network.
  - o Identify and pilot a tool that allows for the curation of a "Smart Library" designed to address current knowledge accessibility challenges.
- SEAOHUN:
  - o Conduct a baseline KM assessment in Year 2.
- The CLASS Score self-assessment process will be updated in Year 2.
- To supplement the numeric scoring process, the Global Team will meet with each Country Manager, National Coordinator, and activity leads to discuss progress and action plans to improve the score in each category by 10% annually. Doing so will contribute to the project goal of ensuring that pre-service and in-service trainees always have access to competency-based One Health training activities, and that the collection of training activities leads to a recognizable credential for One Health suitable for career advancement and continuing professional development.

TRANSITION PLAN UPDATE

The Transition Plan outlines the activities and milestones involved in the AFROHUN and SEAOHUN Networks: 1) entering into direct awards with USAID around project Year 3, and 2) taking on increasing funding and activities in project Year 3 and onward, in support of the goal of organizational sustainability enshrined in Objective 3 of the OHW-NG cooperative agreement.
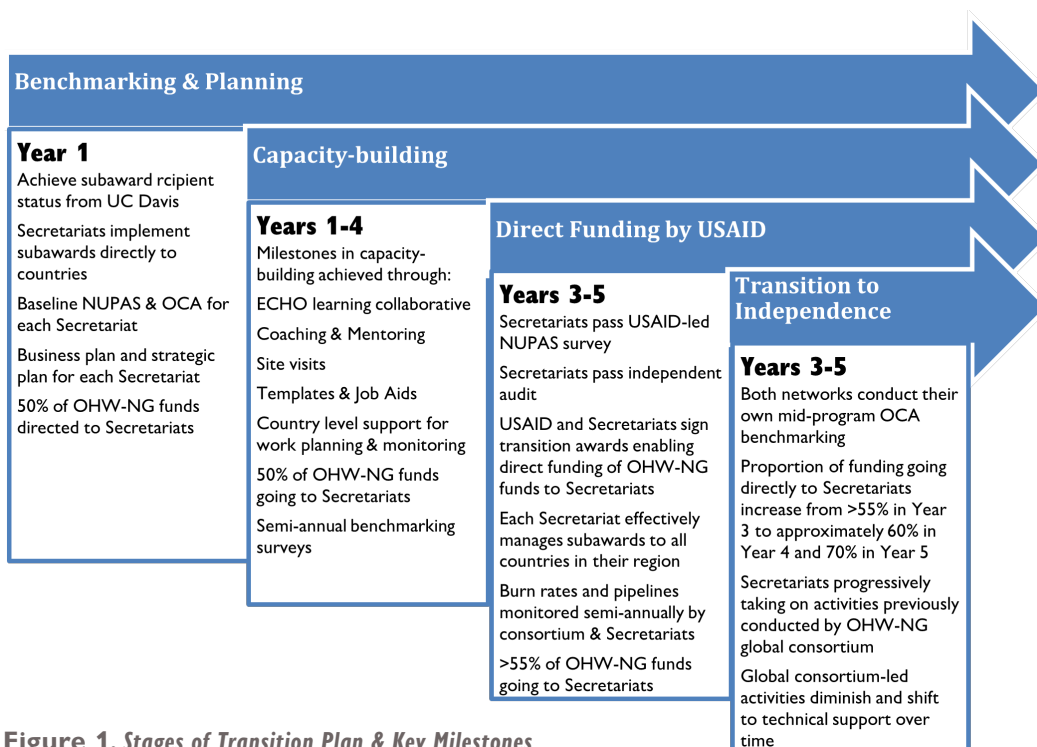
Benchmarking & Planning

Year 1
Achieve subaward rcipient status from UC Davis

Secretariats implement subawards directly to countries

Baseline NUPAS & OCA for each Secretariat

Business plan and strategic plan for each Secretariat

50% of OHW-NG funds directed to Secretariats

Capacity-building

Years 1-4
Milestones in capacity-building achieved through:

ECHO learning collaborative

Coaching & Mentoring

Site visits

Templates & Job Aids

Country level support for work planning & monitoring

50% of OHW-NG funds going to Secretariats

Semi-annual benchmarking surveys

Direct Funding by USAID

Years 3-5
Secretariats pass USAID-led NUPAS survey

Secretariats pass independent audit

USAID and Secretariats sign transition awards enabling direct funding of OHW-NG funds to Secretariats

Each Secretariat effectively manages subawards to all countries in their region

Burn rates and pipelines monitored semi-annually by consortium & Secretariats

>55% of OHW-NG funds going to Secretariats

Transition to Independence

Years 3-5
Both networks conduct their own mid-program OCA benchmarking

Proportion of funding going directly to Secretariats increase from >55% in Year 3 to approximately 60% in Year 4 and 70% in Year 5

Secretariats progressively taking on activities previously conducted by OHW-NG global consortium

Global consortium-led activities diminish and shift to technical support over time

Figure 1. *Stages of Transition Plan & Key Milestones*

HIGHLIGHTS

STAGE 1: SUBAWARDS; BENCHMARKING & PLANNING

This year, we focused on the first stage of the Transition Plan which comprised of building sub-award capability, Network benchmarking of organizational capacity, and business planning. All milestones proposed for this first stage were met.

MILESTONE 1: Achieve subaward recipient status from UC Davis

Both Networks achieved subaward recipient status from UC Davis as planned. This step establishes a foundational capability to ensure internal controls, appropriate budgeting and cost allocation principles, and project reporting for use of U.S. federal funds.

MILESTONE 2: Secretariats implement subawards directly to countries

This year, 46% of funds received for Africa were directed to AFROHUN and 49% of funds received for Asia were directed to SEAOHUN.

Managing sub-awards to country members is a key part of the value proposition of each Network, and is thus a fundamental capability for sustainability. Before OHW-NG, neither Network had executed sub-awards except in the case of one SEAOHUN sub-award to THOHUN. By end of the first year of the project, SEAOHUN had successfully established

and managed sub-awards to 4 member countries. This process was intensive and involved the SEAOHUN Secretariat working directly with the Global Team and OHUNs to develop and finalize detailed budgets and budget narratives, completing documents and risk assessments required to obtain formal approval from USAID, and drafting sub-awards that included required flow down provisions and reporting requirements.

The Global Team shared tools and templates with both Secretariats to enable development of sub-award management policies and procedures, and both Secretariats submitted draft policy outlines for review. With feedback provided by the Global Team, the Secretariats initiated development of their full-text sub-award management policies, and SEAOHUN is completing a full draft policy.

MILESTONE 3: Baseline NUPAS & OCA for each Secretariat

In the first year of the project (2019-2020), both the NUPAS and OCA tools were successfully completed for each Secretariat. The Global Team conducted the NUPAS as a baseline assessment of key competencies that will be required of each Secretariat to be eligible for direct USAID transition awards. The Global Team conducted a desk review of Network program budgets, audits, board

minutes, strategic plans, operations and human resources manuals and other key programmatic materials, conducted follow-up interviews with Secretariat staff, and held a workshop with each Secretariat to review findings and scores. Each Secretariat was invited to self-assess their capacity on the OCA tool, and hold a workshop with the Global Team to discuss findings and jointly prioritize capacity gaps across the OCA and NUPAS tools.

MILESTONE 4: Completed business plan and strategic plan for each Secretariat

By the end of this year, the Global Team submitted draft AFROHUN and SEAOHUN Business and Strategic Plans, which were created across six interactive workshops with each Secretariat. The plans included a summary of an adapted Business Model Canvas for each Network, as well as a strategic plan, made-up of a capacity action plan, partnership development strategy, and outline for revenue-generation models to be explored in Year 2. These plans are being reviewed and refined for submission to each Network's Board in December, 2020, for completion in Year 2. These business pans are designed to be "living documents" which will be updated as needed throughout the year, and updated formally once per year for submission to USAID.

LESSONS LEARNED

By using the NUPAS and OCA tools as a benchmark of capacity early in this first project year, the Networks were able to make organizational advancements independently of Global Team support. The tools allowed them to be aware of the ingredients that comprised the next sequential stage of capacity building and they had prioritized those improvements. This resulted in specific organizational strengthening that can be measured on the NUPAS and OCA tools, and will contribute to their achieving the requisite scores on the NUPAS assessment in project Year 3. We will continue to use these tools to help guide improvements and to benchmark progress.

Due to the ongoing COVID-19 pandemic, the Global Team in coordination with the Networks learned how to advance organizational strengthening in a virtual-only environment. Despite initial delays, through the use of interactive workshops, assessment tools, and one-on-one mentoring, the Global Consortium achieved its milestones for the first project year (2019-2020) of the transition plan, and is well positioned to accelerate progress in capacity-building in Year 2.

NEXT STEPS

Year 2 is focused entirely on Stage 2 of the transition plan, which is capacity building. Guided by the business plans and capacity plans for each Network, the Global Team will focus Year 2 capacity building on the areas below, aligned with the four strategy areas of Objective 3:

1. **Assessment and Planning**: The Global Consortium will monitor the business plan and transition plan through quarterly meetings, and conduct a benchmarking of the NUPAS and OCA at the end of Year 2 at in-person Global Consortium meetings;

1. **Stepwise capacity building**: The Global Consortium will work on priority areas of organizational capacity identified in the NUPAS and OCA tools, which include: governance and legal registration, financial management and procurement, human resources, project management, adaptive capacity, gender and culture, and partnership development. The Global Team will offer trainings and workshops, peer-collaboration between SEAOHUN and AFROHUN, and one-on-one mentorship. The team will meet biweekly with each Network to monitor progress and troubleshoot. The goal is for each Network to achieve adequate scores on the NUPAS to be eligible for direct USAID funding by end of the projects second year.

1. **Partnership Development**: The Global Team will work with each Network to achieve the targets set for partnership development in their business plans, by supporting partnership development training, biweekly mentorship on partner engagement and retention, and by supporting peer learning between SEAOHUN and AFROHUN. 4) Revenue Generation: The Global Team will help the Networks to select one revenue generation model from the list they identified in their business plans, conduct a feasibility assessment and/or market analysis, and implement the pilot.

Another key activity in Year 2 is to articulate the transition strategy for Years 3-5 that will serve as the basis of the USAID transition awards. This will involve identifying the major activities of the Global Team that will transition to direct implementation by the Networks. We will outline the resources needed to support this shift, and provide support to the Networks to accomplish this increase in activity and manage the direct awards successfully.

BUSINESS PLAN UPDATE

Starting in October 2019, USAID and the One Health Workforce – Next Generation (OHW-NG) Global Team, composed of the University of California at Davis One Health Institute, Ata Health Strategies, EcoHealth Alliance, ICAP, Project Echo, University of California at Berkeley and University of California at Irvine, worked closely with the AFROHUN and SEAOHUN Secretariats to support the creation of a business plan. The objective of the business plan is to establish a roadmap towards financial and organizational sustainability that includes, but is not limited to, assessing organizational capacity, creating a stakeholder map, identifying revenue sources, identifying gaps, and setting priorities among others.

The AFROHUN and SEAOHUN Business Plans are living documents that will be reviewed and updated periodically (at a minimum annually). They will allow AFROHUN and SEAOHUN to adapt their operations and activities as they progress in achieving their objectives and/or in adjusting their business models as necessary to the external conditions.

BUSINESS PLAN DEVELOPMENT PROCESS

This year, in preparation for the development of an AFROHUN and SEAOHUN Business Plan, a highly participatory and inclusive process was deployed involving all key actors within each Secretariat (leadership summit, board,

regional Secretariat team members, Country Teams/OHUNS, faculty), OHW-NG Global Team, USAID DC and representatives from USAID country missions. The process included benchmarking, workshopping gap analysis and the development of the full business plans. Collaborative input from stakeholders has been crucial at all stages of the development, and the resulting business plans represent not only a cohesive vision of how the organizations are being run, but also a roadmap to achieve the objectives they have set for the medium/long term and the necessary means and actions that will allow them to reach their desired goals.

The mission and vision of AFROHUN and SEAOHUN are indicative of the overarching idea that the Networks can realize their potential as regional and global leaders in One Health. To plan for the Networks operationalization of their mission and vision, business plan workshops, and subsequent thematic workshops were held on capacity building and partnership engagement. It is important to note that the missions and visions also provide the guiding principles that frame the five- and ten-year visions of each Network, specifically discussed during the capacity building workshops.

In conjunction with the Networks, a total of six workshops were planned. Key input from members of the Secretariats, country representatives, board members, USAID and the OHW-NG Global Team was incorporated in the

resulting business models. Due to COVID-19, the workshops were organized remotely, using the Zoom online platform. Workshops were dynamic in nature, with breakout rooms, polls, open discussions, and other interactive tools to ensure a broad elicitation of ideas from participants.

The business plans were developed based on a hybrid model which incorporates components of two different frameworks – the Mission Model Canvas and the Business Model Canvas – and were tailored to the needs of the Networks as mission-driven organizations committed to financial sustainability. Each Secretariat business plan was organized in one single document encompassing a strategic plan with three main objectives: i) capacity-building, ii) partnership strategy and iii) revenue generating models (which will begin to be developed in Year 2).

The first four workshops focused on exploring and completing the different segments of the AFROHUN/SEAOHUN model canvas - the foundation of the business plans. The following two workshops focused on designing the capacity building and partnership strategies, both also part of the business plans. In the capacity building session, the teams discussed the strategies and tactics required to address the critical needs of both organizations identified through the benchmarking activities. In the partnership development workshop, participants shared their ideas as to how to engage new partners and strengthen existing partnerships.

SUCCESS DESPITE THE CHALLENGES OF COVID-19

Even though the activities had to be carried out remotely due to COVID-19, the planned activities were successfully developed and implemented utilizing highly participatory (virtual) workshops targeting an extended audience. It would not have been possible without the commitment of AFROHUN's and SEAOHUN's teams and representatives, who were key in the development of the activities scheduled for the year. The strong coordination among the various teams and countries, and the strong commitment demonstrated by the workshop participants were crucial for the smooth development of the business and strategic plans.

NEXT STEPS

In Year 2, the implementation of the actions described in the AFROHUN and SEAOHUN Business Plans related to capacity building activities will begin. The partnership strategies will be developed directly with the Networks. These strategies will contribute to a stronger organizational and financial future of AFROHUN and SEAOHUN.

As part of the objective of financial sustainability, revenue generating models will begin to be analyzed and piloted with the Networks. This specific strategy is also part of the strategic and Business Plan of each Network.

MONITORING EVALUATION & LEARNING PLAN UPDATE

The goal of OHW-NG is to empower One Health university networks to sustainably develop and deliver world-leading model programs for equipping professionals with transdisciplinary skills to address complex global health issues. To help measure progress towards achieving this goal, we developed the Monitoring Evaluation and Learning (MEL) framework and plan. MEL indicators capture consistent metrics that tell the collective "story" of the OHW-NG Project, capture partner impact, and illustrate the project's contributions and achievements over time.

Our MEL plan is designed for performance monitoring and to support decision making. The plan was also designed to support the AFROHUN and SEAOHUN Network partners to develop methods for assessing the overall impact of OHW-NG investments on national and global health security and workforce performance, and for measuring improvements in workforce capabilities for disease prevention, detection, and response.

HIGHLIGHTS

- A MEL working group was formally developed and convened to discuss the framework, indicators, and data collection and review process. Our cross-partner MEL working group is led by MEL specialists with experience developing and implementing performance monitoring plans for USAID and the GHSA communities. It includes membership from AFROHUN and SEAOHUN, each OHW-NG Objective Team, and the regional working groups. Members of the MEL working group participate on the project's Management Team and Executive Board, and coordinate with each objective team.

- The 21 MEL framework and indicators submitted in this year's workplan were used to collect data for the semi-annual report. Based on feedback during this process and the data collected, the MEL working group convened and revised indicators and targets to better reflect the goals and impact of the project. The Performance Indicator Reference Sheets (PIRS) were revised as well, and were finalized and submitted to USAID.

- The revised framework and indicators were submitted to USAID and used to collect baseline data in coordination with this Year 1 annual report. This data is presented in the MEL section of the Annual Report. Figure – Revised MEL framework and indicators

- To further align with USAID priorities and goals, we also identified specific actions from the WHO Benchmarks for IHR Capacities Tool that the OHW-NG Project contributes to in terms of assisting a country in moving from one Joint External Evaluation (JEE) capacity level to another. These actions have been linked to the revised MEL framework as well as workplan activities.

- To address the ongoing COVID-19 pandemic, OHW-NG activities were pivoted to address critical gaps in response capacity in Network member countries. To align with USAID reporting requirements, we identified 10 global COVID-19 indicators to report on in the Result Areas of Risk Communication & Community Engagement, Surveillance, Case Finding, Rapid Response Teams, Case Investigation, Contact Tracing Teams, Laboratory Systems, and Infection, Prevention and Control. This data is also presented in the MEL section of this annual report.

LESSONS LEARNED

Through the data collection process initiated during this year's semi-annual report, we discovered that our indicators and targets needed to be refined to better measure project impact. We also identified a need to further sensitize Network partners on the framework and indicators, particularly how to effectively collect quality data to tell the project's collective story and showcase impact.

With a large proportion of activities moving from in-person to virtual due to the COVID-19 pandemic, we encountered unique challenges with regards to collecting participant information. OHW-NG participant information that is collected for all activities includes contact information, gender, institution, position/job title, type of participant, age range, and discipline. Collecting all of these disaggregates in a virtual format is difficult and often requires complex registration set-up. In addition, multiple individuals could attend events using one registration link, making identification of training numbers and de-duplicative numbers difficult to determine. As a result, improving the approach for virtual activity registration and data collection will be a goal in project Year 2.

NEXT STEPS

- The MEL framework and indicators will be continuously reviewed based on the baseline data collection and ongoing OHW-NG Global Consortium and MEL working group discussions. They will be updated dynamically to retain compatibility with project, funder, and global health community needs.

- The MEL working group will continue to meet quarterly to review data and targets.

- We will develop a plan to sensitize the Networks on the PIRS to improve the MEL data collection process - a critical piece of the "learning" component of the MEL plan.

GENDER ACTION PLAN UPDATE

A successful and sustainable One Health Network will have the capacity to address gender norms, gender-related barriers/constraints, gender roles, and gender relations, and will embed gender mainstreaming, gender equity, and fair treatment for all genders throughout its systems, operations and institutional structures. Given the centrality of gender to One Health, AFROHUN and SEAOHUN must be able to expertly integrate gender considerations at every level, including planning, policy development, program implementation, and program evaluation. Mainstreaming gender competencies throughout the Networks will be critical to their success in building a transdisciplinary workforce that can integrate efforts across sectors with the knowledge, perspective, respect, and skills required to rapidly respond to emerging events (the "unexpected crises") and effectively collaborate in order to sustainably manage health systems (and their "expected crises"). To this end, we developed a Gender Action Plan (GAP) to support explicit project, Network and activity-level institutional commitments to gender integration as a core competency.

HIGHLIGHTS

- The GAP and Gender specific MEL indicators were reviewed, discussed and finalized with each of the Networks.

AFROHUN and SEAOHUN identified priority GAP activities and synchronized them with outcomes from the strategic planning workshops held with the Global Team. *Incorporating gender-specific activities into the Networks strategic and business plans helps ensure that gender equity and inclusion is embraced and modeled by the leadership of each organization, a key factor in its success and sustainability.*

- As part of the 6-part ECHO COVID-19 One Health Update series, we included a session on Perspectives on Gender & Psychosocial Aspects in Outbreaks, holding a session for each Network which was attended by 245 individuals across the two Networks. *By incorporating a gender component within the first OHW-NG ECHO Virtual Community of Practice, we supported the Networks institutional capacities related to gender and facilitated equitable access to One Health Gender specific education in the ECHO series.*

- A workshop on Gender terms and definitions was carried out for SEAOHUN. This activity was essential for increasing the number of individuals within the Networks with relevant knowledge and skills related to key gender competencies.

- AFROHUN's gender tracer study was designed and a Gender policy and associated operationalization plan is under development with assistance from a dedicated Gender Consultant. *As part of this gender policy and plan, the Global Team in coordination with the Secretariats are examining policies, work culture, and leadership approaches to gender empowerment and inclusion, sexual harassment, gender equity in pay, flexible work arrangements for working mothers, women's leadership development and other key areas. We will provide best practices from non-profit organizations around the world and work hand-in-hand with Secretariat leadership to design strategies that are appropriate for their specific organizational and cultural contexts.*

LESSONS LEARNED

In the first year of the project, our focus was on engaging and generating enthusiasm and support for the Gender Action Plan within the Networks. Initial assessments and discussions revealed that although knowledge about gender mainstreaming is limited there is a huge amount of interest in integrating gender into One Health policies and programs. We plan to build on this momentum and work with each Network on their identified needs and priorities related to the GAP in Years 2-5.

NEXT STEPS

- Conduct gender sensitization and awareness training targeting SEAOHUN and AFROHUN core implementing teams through organizing workshops and introducing the concept of gender to as many people in Networks as possible.

- Complete the AFROHUN tracer study targeting gender equity among trainees.

- Support the Networks to continue the process of developing a gender strategy and policies and assist AFROHUN to finalize their Gender policy.

- Promote and raise awareness of the importance of including a gender perspective in the preparation of and while conducting activities.

- Continue to develop gender sensitive processes, tools, and trainings for use by different stakeholder organizations/institutes when tracking performance and impact of its One Health professionals. These tools and variables (including assessment tools) should be specific to gender-related competencies and incorporated into the competency evaluation toolkit as well as the Knowledge Management Strategies that are being developed for the Networks.

ONE HEALTH UNIVERSITY NETWORK MEMBERS

CAMBOHUN

Prek Leap National College of Agriculture (PNCA)
Royal University of Agriculture (RUA)
University of Health Sciences, Cambodia (UHS-Cambodia)

INDOHUN

Airlangga University
Andalas University
Bogor Agriculture University
Brawijaya University
Cendrawasih University
Diponegoro University
Gadjah Mada University
Hasanuddin University
Mataram University
Muhammadiyah Hamka University
Mulawarman University
Nusa Cendana University
Padjajaran University
Sam Ratulangi University
Sriwijaya University
Syiah Kuala University
Udayana University
University of Indonesia
University of North Sumatra
University of West Nusa Tenggara

LAOHUN

Champasack University
National University of Laos (NUOL)
Savannakhet University
Souphanouvong University
University of Health Sciences, Lao PDR (UHS-Laos)

MMOHUN

University of Medicine 1, Yangon
University of Public Health, Yangon
University of Veterinary Science, Yezin

MyOHUN

Cyberjaya University College of Medical Sciences
International Islamic University Malaysia (IIUM)
International Medical University
Management and Science University
Royal College of Surgeons in Ireland (RCSI)
& University College Dublin (UCD) Malaysia Campus
Universiti Kebangsaan Malaysia (UKM)
Universiti Malaya (UM)
Universiti Malaysia Kelantan (UMK)
Universiti Malaysia Sabah (UMS)
Universiti Malaysia Sarawak (UNIMAS)
Universiti Malaysia Terengganu (UMT)
Universiti Putra Malaysia (UPM)
Universiti Sains Islam Malaysia (USIM)
Universiti Sains Malaysia (USM)
Universiti Sultan Zainal Abidin (UniSZA)
Universiti Teknologi MARA (UiTM)
Universiti Tunku Abdul Rahman

PhilOHUN

Benguet State University
Cavite State University
Central Luzon State University
Central Mindanao University
Pampanga State Agricultural University
University of Eastern Philippines
University of the Philippines Los Baños
University of the Philippines Manila
Visayas State University

THOHUN

Chiang Mai University
Chulabhorn Royal Academy
Chulalongkorn University
Kasetsart University
Khon Kaen University
Mahasarakham University
Mahidol University
Prince of Songkla University
Thammasat University
Walailak University

VOHUN

Bac Giang University of Agriculture and Forestry
Buon Ma Thuot University
Can Tho University
Can Tho University of Medicine and Pharmacy
Hai Phong University of Medicine and Pharmacy
Hanoi Medical University (HMU)
Hanoi University of Public Health
Hue University of Agriculture and Forestry (HUAF)
Hue University of Medicine and Pharmacy
Nam Dinh University of Nursing
Nong Lam University at Ho Chi Minh city (HCM NLU)
University of Medicine and Pharmacy at Ho Chi Minh city (HCM UMP)
Tay Nguyen University
Thai Binh University of Medicine and Pharmacy
Thai Nguyen University of Agriculture and Forestry
Thai Nguyen University of Medicine and Pharmacy
Tra Vinh University
Viet Nam National University of Agriculture (VNUA)
Vinh Long University of Technology and Education
Vinh Medical University

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UNIVERSITIES

ONE HEALTH UNIVERSITY NETWORK MEMBERS

AFROHUN Cameroon

Université des Montagnes (UdM)

University of Buea (UB)
- Faculty of Agriculture and Veterinary Medicine
- Faculty of Health Sciences

University of Ngaoundéré
- School of Veterinary Medicine and Sciences

AFROHUN Côte d'Ivoire

Université Félix Houphouët-Boigny

AFROHUN DRC

University of Lubumbashi (UNILU)
- School of Veterinary Medicine

University of Kinshasa (UNIKIN)
- School of Public Health

AFROHUN Ethiopia

Jimma University
- College of Public Health and Medical Science
- College of Agriculture and Veterinary Medicine, School of Veterinary Medicine

Mekelle University
- School of Veterinary Medicine
- School of Public Health

Addis Ababa University
- Aklilu Lemma Institute of Pathobiology

AFROHUN Kenya

Moi University
- School of Public Health

University of Nairobi
- Faculty of Veterinary Medicine
- School of Public Health

AFROHUN Senegal

Université Cheikh Anta Diop (UCAD)
- Institut des Sciences de l'Environnement (ISE)
- Institut de Santé et Développement (ISED)

Ecole Inter-Etats des Sciences et Medicine Veterinaires (EISMV) de Dakar

AFROHUN Rwanda

University of Rwanda
- School of Public Health
- School of Animal Sciences and Veterinary Medicine

University of Global Health Equity

AFROHUN Tanzania

Muhimbili University of Health & Allied Sciences
- School of Public Health and Social Sciences

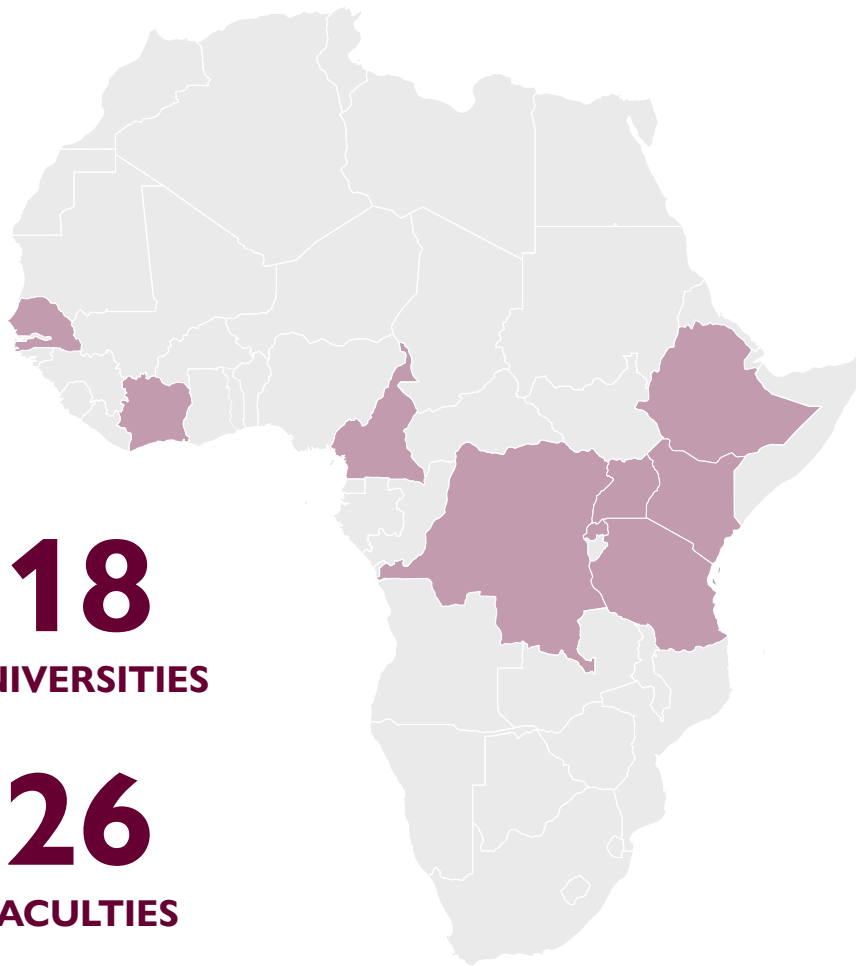Sokoine University of Agriculture
- Faculty of Veterinary Medicine

AFROHUN Uganda

Makerere University
- School of Public Health
- College of Veterinary Medicine, Animal Resources and Biosecurity (COVAB)

Mbarara University of Science and Technology
- Faculty of Medicine

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UNIVERSITIES

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FACULTIES

SUGGESTED CITATION