USAID
FROM THE AMERICAN PEOPLE

ONE HEALTH WORKFORCE
NEXT GENERATION

YEAR 4 ANNUAL REPORT
October 1, 2022 – September 30, 2023

(Cover page) PHOTO: Côte d'Ivoire

ONE HEALTH WORKFORCE
NEXT GENERATION

YEAR 3 ANNUAL REPORT
October 1, 2022 – September 30, 2023

TO ACCESS OUR PUBLICATIONS ONLINE

Scan with your iPhone camera or other code reader to access our web content or visit **onehealthworkforce.org**

This publication was prepared by the OHW-NG Global Consortium headquartered at the One Health Institute (OHI), School of Veterinary Medicine, University of California, Davis.

EDITORS

David Wolking, MSc
Technical Director, OHW-NG
University of California, Davis

Mary Kearney, MPH
Global Operations Manager, OHW-NG
University of California, Davis

Sonja Neumeister, MPH
Global Operations Manager, OHW-NG
University of California, Davis

Jennie Lane, DVM, MPH
AFROHUN Global Liaison, OHW-NG
University of California, Davis

Karen Saylors, MPH
AFROHUN Global Liaison, OHW-NG
University of California, Davis

Mac Farnham, DVM, MS, CPH
SEAOHUN Global Liaison, OHW-NG
University of California, Davis

Woutrina Smith, DVM, MPVM, PhD
Project Director, OHW-NG
University of California, Davis

EDITORIAL CONTRIBUTIONS

Dele Ogunseitan, Ndola Prata, Alexandra Zuber, and Global Consortium working groups.

AFROHUN (AFRICA ONE HEALTH UNIVERSITY NETWORK)

- AFROHUN Secretariat
- 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)

- SEAOHUN Secretariat
- Cambodia One Health University Network
- Indonesia One Health University Network
- Lao One Health University Network
- Malaysia One Health University Network
- Myanmar One Health University Network
- Philippine One Health University Network
- Thailand One Health University Network
- Viet Nam One Health University Network

ohwng.org
One Health Institute
1089 Veterinary Medicine Drive
Davis, CA 95616
(530) 752-7526
www.onehealth.institute

LAYOUT & DESIGN

Eunah Preston
UC Davis, OHI

CONTENT

This report represents a collaborative effort in which all implementing partners and University Networks within the One Health Workforce-Next Generation project provided content. This publication was substantively developed and contributed by editors (see above), One Health University Networks, and the OHW-NG Global Team (University of California, Davis; Columbia University; Ata Health Strategies; EcoHealth Alliance; University of California, Berkeley; University of California, Irvine; University of New Mexico, Labyrinth Global Health, the American Society for Microbiology, and the Smithsonian Institution).

SUGGESTED CITATION

One Health Workforce-Next Generation Consortium. 2023 Annual Report. One Health Institute, University of California, Davis, December 2023.

COPYRIGHT INFORMATION: This report was produced for USAID and may be reproduced in part (with attribution to USAID One Health Workforce-Next Generation Project) or in whole for noncommercial use; however, photographs throughout the document are subject to copyright beyond this permission and are individually and collectively protected by United States and international copyright laws and treaties. This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the OHW-NG Consortium and do not necessarily reflect the views of USAID or the United States Government. The success realized by the OHW-NG project, documented herein, would not have been possible without the valuable contributions of the USAID OHW-NG Team including Marilyn Crane, Delali Boneudi, Alisa Pereira, Tiffany D'Mello, Angie Garvey, Monica Sanchez, and Toni Hudson.

Photo: SEAOHUN

TABLE OF CONTENTS

vi **Acronyms & Abbreviations**

01 **Executive Summary: One Health University Networks in Action (2022-2023)**

16 **Global**

OBJECTIVE 1: Training & Empowerment
OBJECTIVE 2: Assessment & Tracking
OBJECTIVE 3: Organizational Sustainability
Project Management & Communications

78 **Performance Data**

Monitoring Evaluation & Learning Plan Update

92 **Appendices**

Business Plan Update
Gender Action Plan Update
Knowledge Management & Learning Plan Update
Transition Plan Update

110 **One Health University Network Reports**

AFROHUN
SEAOHUN

Photo: AFROHUN DR Congo

Acronyms & Abbreviations

AFROHUN	Africa One Health University Network
AMR	Antimicrobial Resistance
AOHWA	AFROHUN One Health Workforce Academy
ARPA	American Rescue Plan Act
ASEAN	Association of Southeast Asian Nations
CAMBOHUN	Cambodia One Health University Network
CBE	Competency-based Education
CCMS	Curriculum Curation Management System
CDC	Centers for Disease Control
CHEA	Council for Higher Education Accreditation
CIQG	Council International Quality Group
CLASS	Calibrated, Lifelong, Adaptive, Scalable, and Sustainable
COI	Conflict of Interest
COVAB	College of Veterinary Medicine, Animal Resources and Biosecurity
COVID-19	Coronavirus Disease 2019
CPD	Continuing Professional Development
CUGH	Consortium of Universities for Global Health
DDL	Development Data Library
DEC	Development Experience Clearinghouse
DRC	Democratic Republic of Congo
ECHO	Extension for Community Healthcare Outcomes
ECOWAS	Economic Community of West African States
EISMV	Ecole Inter-Etats des Sciences et Medicine Veterinaires
FAO	United Nations Food and Agriculture Organization
FAQ	Frequently Asked Question
GAP	Gender Action Plan
GHSA	Global Health Security Agenda
GL	Global Level
HCM UMP	University of Medicine and Pharmacy at Ho Chi Minh City
HCM NLU	Nong Lam University at Ho Chi Minh City
HMU	Hanoi Medical University
HR	Human Resources
HUAF	Hue University of Agriculture and Forestry
IBOHE	International Board of One Health Examiners
ICE	Institute for Credentialing Excellence
ICT	Information and Communication Technologies
IHR	International Health Regulations
IIUM	International Islamic University Malaysia
IMED	International Meeting on Emerging Diseases and Surveillance
INDOHUN	Indonesia One Health University Network
IPC	Infection Prevention and Control
IRB	Institutional Review Board
ISE	Institut des Sciences de l'Environnement
ISED	Institut de Santé et Développement
JEE	Joint External Evaluation

KM	Knowledge Management
KML	Knowledge Management and Learning
KMS	Knowledge Management System
KSPH	Kinshasa School of Public Health
LAOHUN	Lao One Health University Network
LOE	Level of Effort
M&E	Monitoring and Evaluation
MEL	Monitoring, Evaluation and Learning
MMOHUN	Myanmar One Health University Network
MOU	Memorandum of Understanding
MPH	Master of Public Health
MSU	Management and Science University
MyOHUN	Malaysia One Health University Network
NGO	Non-governmental Organization
NICRA	Negotiated Indirect Cost Rate Agreements
NUOL	National University of Laos
NUPAS	Non-US Organization Pre-Award Survey
OCA	Organizational Capacity Assessment
OH	One Health
OHI	One Health Institute
OHSC	One Health Student Club
OHUN	One Health University Network
OHWA	One Health Workforce Academy
OHW-NG	One Health Workforce - Next Generation
OIE	World Organisation for Animal Health
PhilOHUN	Philippine One Health University Network
PIRS	Performance Indicator Reference Sheet
PM	Project Management
PMC	Project Management and Communications
PNCA	Prek Leap National College of Agriculture
PO	Project Outcome
RCCE	Risk Communication and Community Engagement
RM	Resource Mobilization
RUA	Royal University of Agriculture
SAM	System for Award Management
SEAOHUN	Southeast Asia One Health University Network
SMART	Specific, Measurable, Appropriate, Realistic, Time-bound
SOHIC	Student One Health Innovation Club
SOP	Standard Operating Procedure
SWOT	Strengths, Weaknesses, Opportunities, Threats
TA	Transition Award
TAC	Technical Advisory Committee
TAOHUN	Taiwan One Health University Network
THOHUN	Thailand One Health University Network

TOT	Training of Trainers
TPI	The Partnering Initiative
UB	University of Buea
UC	University of California
UCAC-ICY	Catholic University of Central Africa - Catholic Institute of Yaoundé
UCAD	Université Cheikh Anta Diop
UCD	University of California, Davis
UdM	Université des Montagnes
UHS	University of Health Sciences
UiTM	Universiti Teknologi MARA
UKM	Universiti Kebangsaan Malaysia
UM	Universiti Malaya
UMK	Universiti Malaysia Kelantan
UMS	Universiti Malaysia Sabah
UMT	Universiti Malaysia Terengganu
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIKIN	University of Kinshasa
UNILU	University of Lubumbashi
UNIMAS	Universiti Malaysia Sarawak
UniSZA	Universiti Sultan Zainal Abidin
UoC	University of Cyberjaya
UPM	Universiti Putra Malaysia
USAID	United States Agency for International Development
USG	United States Government
USIM	Universiti Sains Islam Malaysia
USM	Universiti Sains Malaysia
vCOP	Virtual Community of Practice
VNUA	Viet Nam National University of Agriculture
VOHUN	Viet Nam One Health University Network
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organization

USAID
FROM THE AMERICAN PEOPLE

ONE HEALTH WORKFORCE
Next Generation

EXECUTIVE SUMMARY

One Health University Networks in Action (2022-2023)

Empowering University Networks to strengthen national capacities to prevent, detect, and respond to emerging diseases and pandemic threats

One Health Workforce - Next Generation (OHW-NG) is the largest globally-connected university network that educates, trains and empowers the human resources critical for global and national health security. Together with institutions and university partners committed to the Africa One Health University Network (AFROHUN) and Southeast Asia One Health University Network (SEAOHUN), OHW-NG trains the workforce we need to provide scalable and sustainable solutions to complex health threats in the most vulnerable areas for disease emergence.

For more project information, visit our website

WHY UNIVERSITY NETWORKS?

- Universities are trusted stakeholders with crucial roles in preparing national workforces to **prevent, identify and respond to emerging disease threats, and pandemics**.
- Universities are uniquely positioned to bridge disciplinary silos, **foster multi-sectoral collaboration**, inform and drive policy agendas, engage national and subnational actors, and catalyze public-private partnerships.
- **Universities house expertise and human resources**, innovative potential, infrastructure, and commitment to community service essential for trust and effective engagement.
- Through global, regional, and international networking AFROHUN and SEAOHUN grow stronger, **providing reliable foundations for training, education, and even surge capacity support to address health emergencies**.

IN NUMBERS

Our training programs have reached >53,300 participants, targeting faculty and students, healthcare workers and other in-service professionals ranging in topics from antimicrobial resistance (AMR), COVID-19, zoonotic disease prevention/surveillance/response, risk communication and community engagement, and outbreak response, to leadership, gender equity, and policy advocacy.

9 AFROHUN
8 SEAOHUN
COUNTRIES IN THE NETWORK

18 AFROHUN
104 SEAOHUN
UNIVERSITIES IN THE NETWORK

36 AFROHUN
40 SEAOHUN
STUDENT CLUBS IN THE NETWORK

>53.3K
TRAINED

>1.4K
TRAINING MATERIALS & PRODUCTS

178
NEW PARTNERSHIPS

IN ACTION

OHW-NG **developed the world's first global academy** for workforce development that aims to advance training and education in One Health approaches for pandemic preparedness and response (**onehealthworkforceacademies.org**)

Our globally-connected One Health experts **provide invaluable support to all member countries in Africa and Southeast Asia, showcasing the latest science, best practices, policies, and recommendations** to improve delivery of AMR, biosafety, zoonotic disease, and workforce development programs

Through our global and regional networks, we foster **peer exchange and learning**, including international conferences, communities of practice, scientific exchange, and performance monitoring.

Photo: AFROHUN Côte d'Ivoire

Human Resources

Human Resources for Implementation of International Health Regulations (IHR)

Bridging the gap. OHW-NG and the One Health University Networks foster collaboration through education and training between human health, animal health, and environmental sectors, aligning with the One Health approach at the heart of the IHR. By connecting stakeholders, fostering knowledge exchange, strengthening skills, and advocating for transdisciplinary approaches to health challenges, our Networks act as a force multiplier, strengthening global health security and contributing to a safer, healthier world.

Seven fellows received host institution placements this year through the **SEAOHUN** Fellowship Program, which provides hands-on training, aligns with the workforce development outlined in JEE, and contributes to the establishment of a skilled and agile health workforce. The SEAOHUN Fellowship Program continues to play an important role in building capacity among early- to mid-career professionals in the fields of human, animal, and environmental health. This program pairs professionals with leading research institutions, providing practical experience to address complex and dynamic health challenges.

AFROHUN Kenya developed a One Health Alumni and Experts database, a valuable resource that tracks trained alumni with One Health expertise in Kenya and beyond. This initiative aligns with Kenya's objective to establish and maintain well-documented policies and procedures for sustainable human resources across all relevant sectors. These resources are essential for the timely detection, assessment, notification, reporting, and effective response to events in accordance with the provisions of the IHR.

AFROHUN Tanzania played a crucial role in collaborating with ministry authorities to facilitate the review and approval of integrated One Health curricula for diploma and certificate training programs spanning human health, animal health, environmental health, and agriculture sectors. Through a three-day face-to-face workshop (November 2023), involving 12 officials from the Ministry of Health, Ministry of Agriculture, and Ministry of Livestock and Fisherie, these key stakeholders were familiarized with the One Health integrated curricula and their endorsement was secured. Participants also engaged in the refinement of existing facilitators' guides, incorporating essential aspects of OH. They also requested AFROHUN to organize regular training sessions for college tutors, enabling them to effectively impart this integrated curriculum. This comprehensive approach to curriculum development is supporting competency-based training and directly strengthening Tanzania's capabilities to empower human resources for One Health.

Workforce Training

OHW-NG unites a global network of universities dedicated to training the next generation of One Health professionals. Our Networks are talent incubators, fostering collaboration and equipping students and professionals with the knowledge, skills, and mindset needed to tackle complex health challenges.

CAMBOHUN supported four health professionals to attend Participatory Epidemiology Training of Trainers (ToT) sessions facilitated by two regional experts, Dr. Sirikachorn Tangkawattana (Khon Kaen University, Thailand) and Dr. Terdsak Yano (Chiang Mai University, Thailand) in June 2023. The ToT training was delivered to 14 in-service professionals from the Field Epidemiology Training Program (FETP), Cambodia Applied Veterinary Epidemiology training (CAVET), and member universities. This training equipped in-service health professionals with the skills to utilize participatory epidemiology in addressing national One Health issues and enhanced workforce development by providing health professionals with a better understanding of the One Health approach.

With American Rescue Plan Act (ARPA) funding, **AFROHUN CDI** strengthened national workforce capacity by training 35 health workers across four university hospitals (CHU de Cocody, Angré, Treichville and Bouaké) in safe care procedures, prevention and management (medical and medico-legal) of blood exposure accidents, and infection control in the healthcare environment (September 2023). Additionally, the AFROHUN team trained 99 junior faculty members from target universities in Cote d'Ivoire in the One Heath approach, infectious disease awareness and safe and effective COVID-19 vaccination as part of efforts to foster their role in promoting COVID-19 vaccine acceptance within at-risk university communities identified with high vaccine hesitancy and low vaccination rates during the national campaign.

Photo: LAOHUN

AFROHUN DRC played a pivotal role in supporting the Ministry of Interior by conducting a five-day training program in April 2023. This initiative focused on transforming Territorial Administrators from the National School of Administration (NSA) into proficient Trainers of Trainers (ToTs), equipping 29 future trainers with essential One Health leadership skills. The comprehensive program covered key modules such as introduction to One Health, risk communication and community engagement, and competency-based education, enhancing the participants' capabilities as NSA Trainers.These training efforts aim to fortify the knowledge and skills of Territorial Administrators, enabling them to collaborate more effectively with their communities during health emergencies. In the upcoming phase, the program is set to expand, targeting a broader audience of over 500 students from the NSA and 151 Territorial Administrators.

AFROHUN Kenya is dedicated to engaging and supporting students in their network from training to workforce placement. This year, they facilitated the placement of a Student One Health Innovation Club (SOHIC) alumna and another intern in paid internships with the USAID funded Transformational Strategies for Farm Output Risk Mitigation (TRANSFORM) project, contributing to workforce capacity building. The SOHIC alumna was subsequently employed by TRANSFORM, which called for another SOHIC alumna to fill the vacant position.

LAOHUN organized a participatory epidemiology (PE) training at Dangdok campus and asethnabong Faculty of Agriculture, NUOL, for 16 in-service professionals (April 2023). PE is the use of participatory approaches and methods to assess knowledge, attitudes, and practices of a particular cohort. This training focused on increasing participants' capacity to apply PE in their public health work. Participants shared ideas and discussed complex issues together from a One Health perspective. This was also an opportunity for them to expand their national OH network. This activity equipped health professionals with a strong understanding of One Health concepts and collaborative skills, preparing them to address complex health challenges throughout Laos.

In September 2023, **PhilOHUN** organized "Integration of One Health to the Intermediate Epidemiology Course of the Department of Health," with the Department of Health, Epidemiology Bureau (DOH-EB). A total of 30 participants utilized One Health concepts and fundamental principles to redevelop the DOH-EB Intermediate Epidemiology Course (IC) modules for their FETP fellows. Additionally, they identified One Health competencies to incorporate into the FETP IC. Staying true to the One Health spirit, the cohort consisted of multisector and multidiscipline One Health professionals from throughout the Philippines. This training enhances workforce capacity by equipping in-service health professionals with the necessary skills in One Health competencies to address complex health challenges in the country.

Photo: PhilOHUN

In April 2023, One Health Student Club (OHSC) leads and **THOHUN** alumni conducted the activity, "Beach cleanup," at Bang Saen beach in Chonburi province. During the event, the 65 THOHUN member university and non-member university students assessed community health problems and proposed innovative solutions as a multi-disciplinary team. This activity strengthened their core One Health competencies integral to the future Thai One Health workforce.

In preparation for field outbreak investigation and response, **AFROHUN Uganda** trained 16 graduate students drawn from four Universities (Lira, UCU, Makerere and MUST), who were taken through trainings in the basic principles of epidemiology, outbreak investigation and emergency response. Later, five students were selected to participate in an outbreak investigation and emergency response of anthrax in Kween district (Ngenge and Sundet) sub-counties (April 2023).
In addition, AFROHUN Uganda hired a consultant to evaluate the Uganda One Health Institute (OHI). Report findings informed the development of priority activities aimed at building capacity among in-service cadres in Infectious Disease Management. A resulting course now being developed, aims to equip frontline workers with skills and competencies to prevent, detect and respond to emerging and re-emerging pandemic threats thereby bolstering the workforce and national health security.

The **AFROHUN Secretariat** conducted a virtual Community of Practice (vCoP) on Emerging Diseases and Preparedness using the Extension for Community Healthcare Outcomes (ECHO) model from January to March 2023. The three sessions attracted 248 participants from academia, the health sector, the private sector and government, focused on zoonotic diseases endemic to Africa, and featured local subject matter experts handpicked due to recent experiences in outbreak prevention and response. In addition to strengthening participant knowledge and skills in disease prevention, management, and response, this model enabled AFROHUN to reach more beneficiaries across a wide range of sectors across the entire African continent, a model critical for cultivating regional and continental health security networks and for strengthening multi-sectoral communication and coordination.

Photo: AFROHUN Senegal

In March 2023, **VOHUN** conducted the training course, "Joint Risk Assessment for Human Health and Animal Health Professionals," in Can Tho for 34 human health and animal health staff working at One Health Sites (OHS). Participants from the human health sector shared their knowledge of risk assessment with personnel from the animal health sector and engaged in group discussions to exchange ideas regarding joint risk assessment tools.VOHUN arranged a two-day course for 37 One Health in-service professions at One Health Sites in Can Tho. The participants worked in the Can Tho and Long An CDC, DAH, sub-DAH, district health centers, animal health stations, Department of Agriculture, and regional universities. The training focused on the One Health approach, One Health core competencies, identifying priority One Health problems, and facilitating students' development at OHS.

SPECIAL FEATURE

One Health Workforce Academies

The OHW-NG Consortium is providing health security training to the entire global community through the One Health Workforce Academies (OHWA) platform. This platform provides a diverse selection of online courses such as outbreak response, risk communication and community engagement, Antimicrobial Resistance (AMR), etc. that are specifically designed to equip professionals with One Health knowledge and skills to respond effectively to health emergencies. This year, 12 courses were made publicly available along with numerous education and training resources across a broad range of topics from climate change and health to case studies in zoonotic disease management and control. A table listing offerings published to the OHWA platform is below. Substantial growth in the OHWA's reach is expected moving forward, while at the regional level, AFROHUN and SEAOHUN are planning the launch of their regional OHWA platforms catering to learners in the Africa and Southeast Asia region early in 2024.

Photo: CAMBOHUN

OHWA Offerings and JEE Technical Areas

OHWA Resource	Type	Primary JEE Technical Area	Secondary JEE Technical Area
Fundamentals of One Health	Course	D3. Human resources	P5. Zoonotic Disease
One Health in the World	Course	D3. Human resources	P5. Zoonotic Disease
Introduction to AMR	Course	P4. AMR	P7. Biosaftey and biosecurity
Advanced AMR	Course	P4. AMR	P7. Biosaftey and biosecurity
Outbreak investigation	Course	P5. Zoonotic Disease	D2. Surveillance
Risk communication	Course	R5. Risk communication and community engagement	D3. Human resources
Health care quality improvement	Course	R4. Infection prevention and control	D3. Human resources
Grant writing	Course	D3. Human resources	
Gender and One Health	Course	D3. Human resources	R5. Risk communication and community engagement
Virtual communities of practice	Course	D3. Human resources	P5. Zoonotic Disease
COVID-19	Course	R1. Health emergency management	D3. Human resources
Introduction to Epidemiology	Course	P5. Zoonotic Disease	D3. Human resources
Climate science and One Health	Facilitator guide	D3. Human resources	P5. Zoonotic Disease
Drug resistance avoidance	Facilitator guide	P4. AMR	D3. Human resources
One Health outbreak investigation card game	Facilitator guide	P5. Zoonotic Disease	D3. Human resources
One Health approach to risk management	Facilitator guide	P5. Zoonotic Disease	D3. Human resources
PPE Olympics	Facilitator guide	P7. Biosaftey and biosecurity	D3. Human resources
One Health zoonotic disease prioritization guide	Facilitator guide	P5. Zoonotic Disease	D3. Human resources
Investigating livestock and human health in the Ruaha Ecosystem, Tanzania	Case study	P5. Zoonotic Disease	D3. Human resources
TB management and control in Kruger National Park	Case study	P5. Zoonotic Disease	D3. Human resources
Responding to cases of Rocky Mountain Fever in California	Case study	D2. Surveillance	D3. Human resources
Communicating human-animal interaction risks in Guinea, West Africa	Case study	R5. Risk communication and community engagement	D3. Human resources
Potential novel pathogen in a remote Congo Basin Village, Africa	Case study	P5. Zoonotic Disease	D3. Human resources
Investigating a gastroenteritis outbreak in Dhaka, Bangladesh	Case study	P6. Food Safety	D3. Human resources
Watershed management in the Njoro Region of Africa, Kenya	Case study	P5. Zoonotic Disease	D3. Human resources
Community health needs assessment in Knights Landing, California	Case study	R5. Risk communication and community engagement	D3. Human resources
Restoring a wet meadow ecosystem in California	Case study	D3. Human resources	R5. Risk communication and community engagement
Sea otter mortality off the coast of California	Case study	D2. Surveillance	D3. Human resources
Exploring the cause of kidney disease in Sri Lanka	Case study	D2. Surveillance	D3. Human resources
Fatal febrile disease outbreak in Tanzania, Africa	Case study	D2. Surveillance	D3. Human resources
AMR among household poultry in Tanzania	Case study	P4. AMR	D3. Human resources
Mountain Gorilla respiratory disease dynamics in Rwanda, Africa	Case study	P5. Zoonotic Disease	D3. Human resources
Needs assessment of community health in Sabana Grande, Nicaragua	Case study	R5. Risk communication and community engagement	D3. Human resources
Biosafety and PPE	SOP	P7. Biosaftey and biosecurity	D3. Human resources
Rodent sampling	SOP	P7. Biosaftey and biosecurity	D3. Human resources
Bushmeat sampling	SOP	P7. Biosaftey and biosecurity	D3. Human resources
Non-human primate sampling	SOP	P7. Biosaftey and biosecurity	D3. Human resources
Bat sampling	SOP	P7. Biosaftey and biosecurity	D3. Human resources
One Health Competency Framework (English & French)	Toolkit	D3. Human resources	

The **AFROHUN Secretariat** spearheaded the conceptualization and design of the Mentored Experiential Learning and Training (MELT) Program, AFROHUN's flagship initiative to address One Health Workforce challenges in Africa and beyond. The MELT program is intended to develop and strengthen a local One Health workforce with the capacity to prepare, prevent, detect, and respond to infectious disease outbreaks and complex health challenges in the African region and beyond. Specifically, MELT is designed to:

- Promote capacity building, develop and deliver a mentored experiential learning and training educational offering in alignment with prioritized One Health core competencies;
- Promote professional development, research and innovations uptake and translation of knowledge for diverse consumers using a one health approach
- Undertake Information and Knowledge management through the mentored experiential learning and training program
- Build and leverage strategic partnership and engagements with governments, local, regional and international organizations, the private sector, and networks to drive One Health
- Promote institutionalization of capacity building, sustainability and resilience through establishing systems, policies, procedures, and revenue generation agenda.

MELT is planned to launch in 2024.

Additionally, **AFROHUN** worked with the National Council for Higher Education (NCHE) in Uganda to pursue accreditation for the AFROHUN One Health Workforce Academy. Presentation of accreditation requirements was made to NCHE and subsequent revisions were made to meet various NCHE requirements. As of this report, AFROHUN awaits approval and accreditation of the AFROHUN One Health Workforce Academy from the NCHE.

Multi-sectoral collaboration & workforce strategy

OHW-NG's One Health University Networks foster partnerships, harness and share knowledge, and empower communities. Together, the Networks connect universities, governments, NGOs, and private entities, breaking down walls and creating common ground for workforce strategy development and action.

SEAOHUN solidified its commitment to advancing One Health education by becoming an affiliate member of the Southeast Asian Ministers of Education Organization (SEAMEO). This affiliation carries significant weight, signifying an enhanced level of engagement and collaboration in the realm of One Health education across Southeast Asian countries.

SEAOHUN's affiliation with SEAMEO opens avenues for collaborative initiatives, especially through SEAMEO's Tropical Medicine and Public Health (TROPMED) Network and various SEAMEO Centers. These partnerships extend to raising awareness about One Health principles in schools, universities, and communities across the Southeast Asian region.

In a collaborative effort with the Food and Agriculture Organization (FAO), **Democratic Republic of the Congo (DRC)** worked closely with the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) to formulate a preliminary workforce and recruitment plan. This comprehensive plan received support from key stakeholders, including Makerere University's COVAB and in July 2023, a crucial meeting was convened with the Commissioner for Animal Health at MAAIF where a draft concept, outlining the objectives, scope, and data requirements, was prepared. Additionally, a data collection tool was developed to facilitate the subsequent stages of the initiative. Subsequently, technical officers and commissioners from MAAIF conducted a needs assessment to gauge job satisfaction levels, assess job design and suitability, and project the requirements for a responsive workforce five years into the future. This assessment also entailed profiling the existing workforce in the animal sector and identifying critical workforce gaps. The outcome of this assessment informed a series of recommendations and the formulation of a roadmap, serving as a guide for the development of a workforce strategy tailored to the animal sector. AFROHUN Uganda will continue to lead and facilitate this initiative, working collaboratively with other Global Health Security (GHS) partners.

AFROHUN CDI supported the national One Health platform (PNUSS) in the establishment of a One Health Human Resources Technical Working Group (GTT-RH-OH) designed to integrate the key sectors of the One Health approach. Through an inaugural workshop held on April 20, 2023, the interactive One Health Human Resources map was presented, terms of reference for the GTTRH-OH were validated, and the GTT-RH-OH Board of Directors was established. Next steps involve the operationalization of the GTT-RH-OH within the platform, the execution of multi-sectoral Human Resources OH strategy actions, engagement of additional members in the GTT-HR-OH for effective participation, and the formulation of a costed annual work plan for the GTT-HR-OH.

In addition, **AFROHUN CDI** collaborated with USAID partner Data for Implementation (Data.FI) to identify OH human resources across Cote d'Ivoire and subsequently design an interactive mapping tool of OH human resources across the public sector. A report was generated and an interactive tool is in development, which will support decision making in Human Resources and workforce development for ministry partners.

In July 2023, **AFROHUN Senegal** participated in a World Health Organization (WHO) Joint External Evaluation (JEE) workshop held in Dakar, organized by the Ministry of Health (MOH), and shared their contributions to elevating Senegal's JEE scores. The team gained valuable insights into the external evaluation process and will enable AFROHUN to better align its efforts with JEE priorities in country.

SPECIAL FEATURE

The "Next Generation" Health Workforce

Student One Health Clubs

AFROHUN and SEAOHUN have long invested in One Health clubs for students to provide education, training, and experiential learning opportunities that equip the future health workforce with the skills and leadership and communication experience essential for modern health challenges. AFROHUN Rwanda, for example, has significantly invested in the development of Rwanda's future health workforce by strengthening training programs for One Health professionals at all levels of experience. Their Student One Health Innovation Clubs (SOHICs) at various universities across Rwanda provide competitive small grant funds, pairing student club leadership with faculty advisors and mentors, sharing learning opportunities for the One Health leaders of tomorrow. SOHIC participants report that club engagement has helped them increase critical thinking and problem solving skills, taught them how to collaborate across disciplines, and even shaped their academic and career goals. SOHIC members all shared a sense of responsibility and commitment to systematic improvements: "to make my contribution to the country for environmental sustainability and fight against diseases".

> ***"One Health is crucial if we are to sustain life on the planet. Man, animals, and environment are interdependent and should live in harmony if they are all to stay."***
>
> –Third year nursing student SOHIC member, Rwanda

> ***"Overall, participating in a One Health Innovation Club can provide students with a unique and valuable learning experience, while also contributing to the advancement of interdisciplinary research and innovation in the field of health."***
>
> –SOHIC Faculty Advisor, Rwanda

Photo: THOHUN

Antimicrobial Resistance

The specter of a world where common infections become untreatable, where routine surgeries carry deadly risks, haunts our future. Antimicrobial resistance (AMR) is the silent pandemic threatening to unravel the fabric of modern medicine. Through the One Health University Networks, OHW-NG shines a beacon of hope, leading initiatives in training, education, and innovative projects actively pursuing solutions for antimicrobial stewardship practices, reduced use of antibiotics in food systems, and increased community awareness about AMR.

Aiming to catalyze a global movement for action against the global threat of AMR, **SEAOHUN** was thrilled to join the Quadripartite AMR Multi-Stakeholder Partnership Platform. In addition, Dr. Vipat Kuruchittham, SEAOHUN Executive Director, now represents the Network as one of 14 members of the Quadripartite Working Group on Youth Engagement for AMR to engage youth in the global response to AMR. Each member is from a different country and represents youth-serving or youth-led organizations.

AFROHUN Cameroon addressed a deficiency in training courses related to AMR identified during Cameroon's 2017 JEE by developing courses for a masters degree training program on AMR at the University of Buea (UB). Further, through partnerships with the USAID projects Medicines, Technologies, and Pharmaceutical Services (MTaPs) Program and Infectious Disease Detection and Surveillance (IDDS), an eLearning platform for the AMR master's training program was established at UB.

AFROHUN Kenya trained 21 multidisciplinary participants through a virtual Community of Practice (vCoP) on Analysis of Health Surveys Using R Software (April-June 2023). One of the participants later used knowledge gained from the vCoP to compete in a global Antimicrobial Resistance (AMR) Data Challenge, and won the grand prize.

Risk Communication & Community Engagement

In the face of global health threats, fear and misinformation can weave a tapestry of chaos. The One Health University Networks connects member universities, trusted partners in local communities, and provides a unique platform for risk communication and community engagement based on trust, understanding, and empowered action.

With support of American Rescue Plan Act (ARPA) funds, **AFROHUN Côte d'Ivoire** reached 43,177 people from the university communities through dissemination of COVID-19 vaccination awareness messages across five target universities considered at-risk due to vaccine hesitancy and low vaccination rates in the national campaign. In addition, the team sensitized 427 university faculty members from Abidjan, Bouaké, Daloa and Korhogo through panel seminars aimed to involve teachers, administrative and technical staff (PAT) and students in awareness-raising about vaccination against COVID-19 within the university environment (June-August 2023).

Further, in a collaborative effort, **AFROHUN Cameroon** and USAID's Breakthrough Action (BA) orchestrated a comprehensive training workshop from July 11 to 13, 2023, in Yamoussoukro that was specifically tailored for members of the Student One Health Innovation Clubs (SOHICs). Twenty-nine (29) individuals participated 18 males and 11 females) across five universities. The primary objective of the training was to empower SOHIC members with the skills necessary to conceive and execute effective, innovative awareness-raising solutions targeting the five priority zoonotic disease groups. The training program also focused on bolstering students' proficiency in several key areas, including Risk Communication and Community Engagement (RCCE), AMR, rabies, COVID-19, rumor management during crises, and leadership development.

MyOHUN awarded booster scholarships for One Health teaching and learning to six recipients to conduct One Health-related community level or field activities for the courses attached to their program curriculum. These scholarships empower recipients to champion One Health initiatives at the community level, offering them the chance to engage with real world situations and effectively address challenges within the One Health realms.

Following news of an Ebola outbreak in Uganda and suspect cases of Ebola in the neighboring Kagera region of Tanzania, **AFROHUN Tanzania** mobilized 37 SOHIC members from the Muhimbili University of Health and Allied Sciences (MUHAS) to participate in a public education outreach event about Ebola, which was supported by the Ministry of Health and held in a bus terminal in Dar es Salaam in December 2022. The event supported the development of collaboration, leadership, and communication skills for SOHIC members, who are the future One Health Workforce.

FOCUS ON GENDER

A successful and sustainable One Health Network must have the capacity to address gender norms, gender-related barriers/ constraints, gender roles, and gender relations, and embed gender mainstreaming, gender equity, and fair treatment for all genders throughout its systems, operations and institutional structures. Gender is central to the design of the OHW-NG project and a cross-cutting theme in all project objectives. Through our Gender Action Plan and regional Network gender communities of practice, our Consortium strives to mainstream gender competencies in organizational culture and in efforts towards building a transdisciplinary One Health workforce.

This year, in close collaboration with experts from South-east Asia and Sub-Saharan Africa, we developed and launched our Gender and One Health Course on the One Health Workforce Academies platform. The first of its kind, the six module course attracted 316 individuals during enrollment, and 68 completed all six modules. Of those who completed the course, 54% were from SEAOHUN countries, 12% from AFROHUN countries, and overall, 65% identified as female. The course received overwhelming positive feedback about the content, instructors, the OHWA platform itself, and the value such a course brings to those striving to work in One Health.

> ***"As a woman myself, I felt that the subject was very empowering. I find the topic visionary. I like how the lecturers were very consistent in their goal of creating gender inclusive programs."***
>
> –Learner from the Philippines

> ***"Learning on this web was the best thing that happened to me. I do admire it! Everything went smoothly. The course, is one of the best among the rest."***
>
> –Learner from Liberia

INDOHUN conducted a gender assessment to assess the situation of gender mainstreaming among OHW-NG beneficiaries across Papua and Aceh. Gender mainstreaming involves ensuring that gender perspectives and attention to gender equality are central to policy development, research, advocacy and dialogue, legislation, resource allocation, planning, implementation, and project monitoring. Mainstreaming gender will advance gender equality and equity, therefore enabling it to unlock the full potential of One Health.

AFROHUN has created gender policies and frameworks that continuously provide the mandate, the political support and the resources to ensure integration of gender considerations in all program activities. In addition, **AFROHUN** integrates gender concepts and principles in all training, programming activities and interventions, member institutions are gender aware and gender sensitized, and can carry out gender analysis of situations to ensure they can identify gaps and solutions.

Immunizations

Vaccinations offer vibrant threads of protection against infectious diseases. OHW-NG's One Health University Networks support initiatives that have contributed to reductions in vaccine hesitancy during the COVID-19 pandemic, increased rabies vaccination rates domestic animals in Africa, and fostered collaboration between veterinarians and physicians in Asia to develop and implement One Health-based vaccination campaigns for zoonotic diseases.

Through American Rescue Plan Act (ARPA) funds, **AFROHUN CDI** conducted awareness campaigns resulting in the vaccination of thousands of university community members of which, 70% received their first dose. In addition, the AFROHUN CDI team Installed 28 mobile vaccination sites through which 3,883 students, professors, administrative and technical staff from the various target universities (Abidjan, Bouaké, Daloa and Korhogo) and university hospitals were vaccinated.

PHOTO: AFROHUN Côte d'Ivoire

Zoonotic Diseases

Zoonotic diseases – diseases that can spread between animals and people – cast a long and menacing shadow. OHW-NG together with the One Health University Networks combats zoonotic disease threats through One Health education and training, transdisciplinary research collaborations, and community engagement. Our Network is uniquely positioned to develop context-specific solutions for zoonotic disease prevention and response, while also strengthening the workforce on the frontlines of disease emergence.

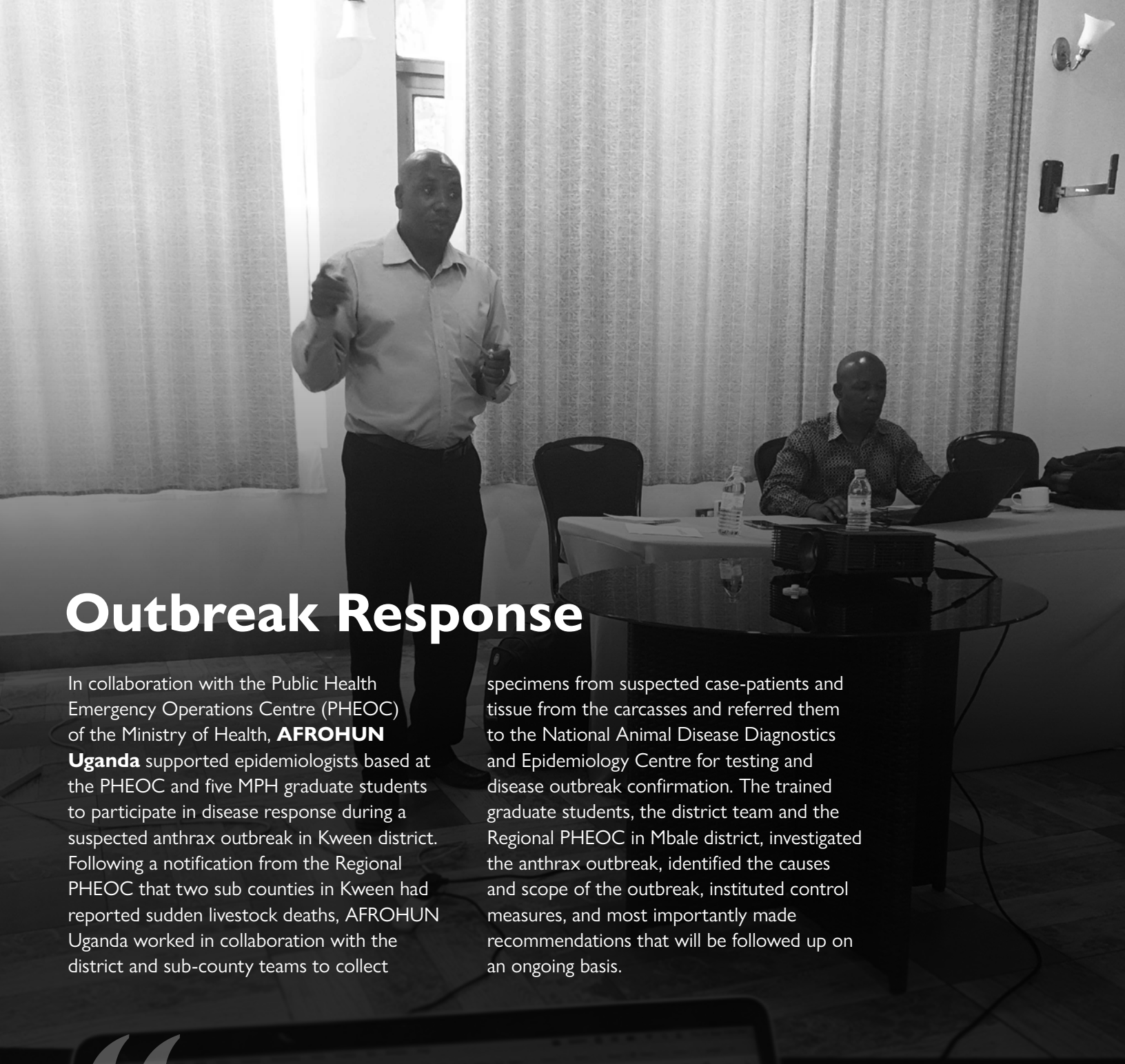
AFROHUN DRC participated in a joint workforce development activity with fifty Student One Health Innovation Club (SOHIC) members on September 28, 2023 (Rabies Prevention and Awareness Day), at Lemba Township in Kinshasa. In partnership with the Food and Agriculture Organization (FAO) and USAID's Breakthrough Action (BA), the SOHIC members conducted a rabies sensitization and vaccination campaign, which reached more than 200 households and resulted in the safe and ethical vaccination of over 200 dogs and cats, all by SOHIC veterinary students under expert guidance.

LAOHUN conducted a training workshop on prevention and control of zoonotic diseases at two places in June 2023: UHS, Vientiane Capital, with 58 students and Champasak University with 47 students. By the end of the program, the students had not only acquired a robust understanding of OH fundamentals but had also gained the ability to identify, assess, and address the challenges posed by zoonotic diseases. With expanded knowledge and enhanced capacity, they are becoming as well informed and skilled young professionals capable of making meaningful contributions to the field of OH.

In August 2023, **MyOHUN**, in collaboration with Boehringer Ingelheim Malaysia, Chevron, SEAOHUN, Universiti Putra Malaysia (UPM), Rhone Ma, and local stakeholders, launched the Angels Initiative and Stop Rabies Campaign. The initiative aimed to raise rabies awareness among secondary school students in Kebangsaan Kota Samarahan and implement a rabies vaccination program in the Serian District, Sarawak.

AFROHUN Senegal joined the USAID Mission on a visit to Saint-Louis to observe key achievements related to Highly Pathogenic Avian Influenza (HPAI) outbreak management. During this visit, local authorities, the local One Health platform members, and AFROHUN Senegal Student One Health Innovation Club (SOHIC) members engaged in discussions and built a foundation for future collaborations in local health security. Earlier in the year, AFROHUN Senegal provided field based training to 21 SOHIC members from five public and one private universities in the Parc National de la Langue de Barbarie (PNLB) in the Saint-Louis region. PNLB receives millions of migratory birds every year and has faced several Highly Pathogenic Avian influenza (HPAI) outbreaks. During the hands-on training, students gained valuable experience, including the management of high pathogenic avian influenza, monitoring of wild birds, handling plastic waste, and implementing risk communication strategies through visits to 20 households in the community.

In **Uganda**, the Makerere University Veterinary Students' Association, organized a group of 26 students for the World Rabies Day celebration outreach event in Gomba District, where they worked to raise awareness about the dangers of rabies and promote responsible pet ownership among community members. The students also conducted school outreach programs in different schools in Gomba and around the Kampala metropolitan area, and sensitized over 500 primary school students on how rabies can be spread, controlled and prevented. Under expert supervision, the students gained hands-on experience vaccinating more than 300 pets effectively safeguarding these animals against rabies, and providing essential veterinary services to the local communities by conducting safe and ethical spays and neuter surgeries. The students also provided pet owners with personalized advice on pet care, nutrition, and general health. Approximately 150 pet owners benefited from the interventions.



Outbreak Response

In collaboration with the Public Health Emergency Operations Centre (PHEOC) of the Ministry of Health, **AFROHUN Uganda** supported epidemiologists based at the PHEOC and five MPH graduate students to participate in disease response during a suspected anthrax outbreak in Kween district. Following a notification from the Regional PHEOC that two sub counties in Kween had reported sudden livestock deaths, AFROHUN Uganda worked in collaboration with the district and sub-county teams to collect specimens from suspected case-patients and tissue from the carcasses and referred them to the National Animal Disease Diagnostics and Epidemiology Centre for testing and disease outbreak confirmation. The trained graduate students, the district team and the Regional PHEOC in Mbale district, investigated the anthrax outbreak, identified the causes and scope of the outbreak, instituted control measures, and most importantly made recommendations that will be followed up on an ongoing basis.

> ***"I knew little about surveillance, response, detection and prevention but now, undertaking this training has enabled me to learn in-depth concepts of epidemiology and disease prevention. I feel competent, I have oriented my teams on what I was taught, I am fully equipped to take lead in outbreak investigation, implement public health actions and make evidence-based recommendations and conclusions accordingly."***
>
> –Milly Akullu, graduate student from Lira University, Uganda

Photo: AFROHUN Uganda

Towards Sustainability

One of the OHW-NG project's core objectives is 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. Below are this year's highlights and key achievements.

We produced extensive research on the private sector to create AFROHUN's first database of prospective private sector partners across the region, organized by industry, country, and interests. In several meetings with the Global Team, AFROHUN then prioritized companies and strategized approaches for outreach, including inviting companies to attend or sponsor the planned fourth AFROHUN International Conference now planned for April 2024.

Photo: SEAOHUN Secretariat

Together with SEAOHUN, we held a four-day in-person sustainability planning workshop for 28 staff from six OHUNs, in Kuala Lumpur, Malaysia. Each OHUN team conducted strategic analyses, refined their value proposition, considered changes to their organizational model and activities for efficiency and sustainability, and mapped external and internal sources of revenue. The OHUNs walked away with the major ingredients of a sustainability plan for their organizations post OHW-NG and a resource mobilization plan for the remainder of the year.

Also with SEAOHUN, we launched a virtual community of practice (vCOP) and intensive one-on-one coaching of all eight OHUN teams. The vCOP focused on advancing sustainability and resource mobilization for the Network post-award. Twenty-five people attended the first session focused on fee-based courses, and one-on-one support was provided to four OHUNs.

We finalized the zero draft of sustainability plans for the Global One Health Workforce Academy, the AFROHUN One Health Workforce Academy, and the SEAOHUN One Health Academy. Combined as one joint plan, this draft document explains how the three academies propose to work together, identifies key management and staffing models, recommends partnership approaches, and includes a financing model that projects costs and revenue for each academy for a ten year period and proposes a self-financing model.

OUR CONSORTIUM

The OHW-NG Global Consortium is a partnership between AFROHUN, SEAOHUN, and globally recognized One Health leaders from institutions across North America, led by the University of California, Davis One Health Institute. Building on the foundation established by USAID's Emerging Pandemic Threats RESPOND (2009-2014) and One Health Workforce (2014-2019) Projects, OHW-NG empowers AFROHUN and SEAOHUN as global leaders in One Health through the delivery of state-of-the-art, scalable, and sustainable workforce development programs.

Learn more: **www.onehealthworkforce.org**

AFROHUN website:
afrohun.org

SEAOHUN website:
seaohun.org

USAID FROM THE AMERICAN PEOPLE
UCDAVIS One Health Institute School of Veterinary Medicine
AFROHUN Advancing One Health
SEAOHUN Southeast Asia One Health University Network
EcoHealth Alliance
Ata Health Strategies
icap Global Health
Berkeley University of California
Project ECHO
UCI University of California, Irvine
Smithsonian Institution
LABYRINTH GLOBAL HEALTH, INC.
AMERICAN SOCIETY FOR MICROBIOLOGY

AFRICA ONE HEALTH UNIVERSITY NETWORK MEMBERS

18 MEMBER UNIVERSITIES

23 MEMBER INSTITUTIONS

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 Rwanda

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

University of Global Health Equity

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 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

SOUTHEAST ASIA ONE HEALTH UNIVERSITY NETWORK MEMBERS

CAMBOHUN 5

Kampong Cham National Institute of Agriculture
Prek Leap National College of Agriculture (PNCA)
Royal University of Agriculture (RUA)
Royal University of Phnom Penh
University of Health Sciences, Cambodia (UHS-Cambodia)

INDOHUN 20

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 5

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

MMOHUN 3

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

MyOHUN 18

University of Cyberjaya (UoC) University
International Islamic University Malaysia (IIUM)
International Medical University
Management and Science University (MSU)
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 11

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

THOHUN 16

Burapha University
Chiang Mai University
Chulabhorn Royal Academy
Chulalongkorn University
Kasetsart University
Khon Kaen University
Mahasarakham University
Mahidol University
Mae Jo University
Mae Fa Luang University
Naresuan University
Prince of Songkla University
Srinakharinwirot University
Suranaree University of Technology
Thammasat University
Walailak University

VOHUN 27

Bac Giang Agriculture and Forestry University
Buon Ma Thuot University
Can Tho University
Can Tho University of Medicine & Pharmacy
Dong A University
Hai Phong University of Medicine & Pharmacy
Hanoi Medical University
Hanoi University of Natural Resources and Environment
Hanoi University of Public Health
Hue University of Agriculture & Forestry
Hue University of Medicine & Pharmacy
Nam Dinh University of Nursing
Nghe An University of Economics
Nong Lam University - Ho Chi Minh City
Phenikaa University
Quy Nhon University
Tay Nguyen University
Thai Binh University of Medicine and Pharmacy
Thai Nguyen University of Agriculture & Forestry
Thai Nguyen University of Medicine & Pharmacy
Tra Vinh University
University of Medicine and Pharmacy at Ho Chi Minh City
University of Medicine and Pharmacy - Vietnam National University, Hanoi
Viet-Duc University
Vietnam National University of Agriculture
Vinh Long University of Technology Education
Vinh Medical University

INSTITUTES, COLLEGES, & UNIVERSITIES

OBJECTIVE ONE

Training & Empowerment

Developing, delivering, and institutionalizing training of essential workforce to meet current and future demands of global health security in alignment with One Health competencies

TARGETED OUTCOMES & IMPACTS

- Increased proficiency in One Health competencies for pre-service and in-service professionals
- A well-trained and technically proficient workforce pipeline
- Engaged 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 Workforce Academies

1.3 One Health Empowerment and Career Development

1.4 One Health Experiential Learning

1.5 One Health Policy Engagement

MAJOR ACTIVITIES

Global (GL) Activity 1.1.1 Develop and implement One Health training activities

GL Activity 1.1.2 Implement credentialing pathway through training in updated essential One Health competencies

GL Activity 1.1.3 Improve integration of gender into One Health education and training

GL Activity 1.2.1 Enhance One Health Workforce Academies websites

GL Activity 1.2.2 Implement and transition virtual Communities of Practice

GL Activity 1.2.3 Engage with student One Health club activities

GL Activity 1.3.1 Implement criteria for Continuing Professional Development

GL Activity 1.3.2 Activate the One Health employment forum

GL Activity 1.4.1 Technical assistance for One Health short course and other experiential learning activities

GL Activity 1.5.1 Training on One Health science communication for policy makers

Human Resources: D3.3 Workforce Training

The flagship platform for competency-based training in One Health and Global Health Security was launched this year and is fully operational. A manuscript describing our research to assess the perspectives of potential stakeholders regarding the structure and function of the One Health Workforce Academies was accepted for publication by the peer-reviewed journal, *One Health Outlook*. The results are informing strategic progress on the implementation of the Consortium-managed One Health Workforce Academies and the implementation of the regional academies managed by AFROHUN and SEAOHUN. In summary, survey respondents (N=231) from 24 countries reported differences in their perspectives on the relative importance of competency domains of the One Health approach. More than 90% of the respondents would seek to acquire a competency-based Certificate in One Health, and 60% of respondents expect that earning such a credential would be rewarded by employers. Among potential barriers, time and funding were the most cited. The study showed strong support by potential stakeholders for a One Health Workforce Academy that hosts competency-based training with opportunities for certification and continuing professional development.

Citation: Ava Sullivan, Oladele Ogunseitan*, Jonathan Epstein, Vipat Kuruchittham, Mabel Nangami, David Kabasa, William Bazeyo, Irene Naigaga, Olesya Kochkina, Winnie Bikaako, Nur Ahmad, Agnes Yawe, Christine Muhumuza, Rahmi Nuraini, Indira Wahyuni, Raja Adli, Saengduen Moonsom, Lai Huong, Phuc Pham, Terra Kelly, David Wolking, Woutrina Smith, and One Health Workforce-Next Generation Consortium. 2023. International Stakeholder Perspectives on One Health Training and Empowerment: A Needs Assessment for a One Health Workforce Academy. *One Health Outlook*, 5, 8.

doi.org/10.1186/s42522-023-00083-4

To update and revise One Health competencies, we integrated a wide range of activity results including the Delphi Panel and review of competency frameworks and modules previously developed by AFROHUN and SEAOHUN, to derive a set of 20 competency domains which are guiding further development of One Heath training and empowerment, credentialing and including continuing professional development, which are essential for strengthinging a national and global One Health workforce for health security. The OHW-NG's One Health Competencies Framework and Assessment Toolkit was revised accordingly and is available on the OHWA platform.

By the end of Year 4, Global Consortium partners developed twelve full courses and numerous case studies all of which have been installed on the flagship learning platform of the One Health Workforce Academies. As of this report,, we have witnessed robust international engagement with these courses with 3,683 learners from 91 countries who have formally registered to be trained through OHWA. Collectively, these learners have enrolled in 6,600 courses. The learners include 1,927 pre-service students, and the others are in-service professionals, including a wide range of occupational sectors: 30% from government sector, 28% from academia, 20% from non-governmental organizations, and 13% from international agencies. A majority (56%) of learners identify as female.

The development of a course on "Gender and One Health" was completed and published on the One Health Workforce Academies flagship learning platform. As of the end of Year 4, 316 learners had enrolled in the course. A version of the courses features experts from AFROHUN and a second version features experts from SEAOHUN.

See the ***Success Story*** for more details.

Human Resources: D3.1 Multi-sectoral Workforce Strategy

As part of our strategy to liaise the One Health Workforce Academies with other global academies dedicated to One Health and Global Health Security, we joined the Technical Advisory Group of the World Health Organization's Health Workforce Office program to implement the Roadmap for Public Health and Emergency Response. We served as workgroup chair for the United Nation's Tripartite (WHO, WOAH, FAO) project on developing a competency framework and guidelines for curriculum development and assessment procedures for One Health Field Epidemiology. We were invited to participate in the launching of the Global Partnership for Field Epidemiology.

One Health Workforce Academies & Health Security

OHWA Resource	Type	Primary JEE Technical Area	Secondary JEE Technical Area
Fundamentals of One Health	Course	D3. Human resources	P5. Zoonotic Disease
One Health in the World	Course	D3. Human resources	P5. Zoonotic Disease
Introduction to AMR	Course	P4. AMR	P7. Biosaftey and biosecurity
Advanced AMR	Course	P4. AMR	P7. Biosaftey and biosecurity
Outbreak investigation	Course	P5. Zoonotic Disease	D2. Surveillance
Risk communication	Course	R5. Risk communication and community engagement	D3. Human resources
Health care quality improvement	Course	R4. Infection prevention and control	D3. Human resources
Grant writing	Course	D3. Human resources	
Gender and One Health	Course	D3. Human resources	R5. Risk communication and community engagement
Virtual communities of practice	Course	D3. Human resources	P5. Zoonotic Disease
COVID-19	Course	R1. Health emergency management	D3. Human resources
Introduction to Epidemiology	Course	P5. Zoonotic Disease	D3. Human resources
Climate science and One Health	Facilitator guide	D3. Human resources	P5. Zoonotic Disease
Drug resistance avoidance	Facilitator guide	P4. AMR	D3. Human resources
One Health outbreak investigation card game	Facilitator guide	P5. Zoonotic Disease	D3. Human resources
One Health approach to risk management	Facilitator guide	P5. Zoonotic Disease	D3. Human resources
PPE Olympics	Facilitator guide	P7. Biosaftey and biosecurity	D3. Human resources
One Health zoonotic disease prioritization guide	Facilitator guide	P5. Zoonotic Disease	D3. Human resources
Investigating livestock and human health in the Ruaha Ecosystem, Tanzania	Case study	P5. Zoonotic Disease	D3. Human resources
TB management and control in Kruger National Park	Case study	P5. Zoonotic Disease	D3. Human resources
Responding to cases of Rocky Mountain Fever in California	Case study	D2. Surveillance	D3. Human resources
Communicating human-animal interaction risks in Guinea, West Africa	Case study	R5. Risk communication and community engagement	D3. Human resources
Potential novel pathogen in a remote Congo Basin Village, Africa	Case study	P5. Zoonotic Disease	D3. Human resources
Investigating a gastroenteritis outbreak in Dhaka, Bangladesh	Case study	P6. Food Safety	D3. Human resources
Watershed management in the Njoro Region of Africa, Kenya	Case study	P5. Zoonotic Disease	D3. Human resources
Community health needs assessment in Knights Landing, California	Case study	R5. Risk communication and community engagement	D3. Human resources

Go to page 11 for full course list

OBJECTIVE 1 OBJECTIVE 2 OBJECTIVE 3

ACTIVITIES

GL Activity 1.1.1 Develop & implement One Health training activities

Learners from all corners of the world are now able to register and enroll in 12 courses that we developed and implemented on the One Health Workforce Academies' flagship learning platform. In addition, all visitors to OHWA can explore several fully developed case studies and numerous other unique training materials. This accomplishment was made possible through collaborative effort of all consortium partners and contributions from the university networks, AFROHUN and SEAOHUN.

GL Activity 1.1.2 Implement credentialing pathway through training in updated essential One Health competencies.

The results of activities conducted over the past three years to review and update essential competencies for One Health were integrated to derive a set of 20 competency domains. These domains are being used as guideposts for the development of competency-based courses and case studies implemented on the OHWA flagship learning platform. The updated competency framework also informed a self-assessment tool for learners to identify gaps in their knowledge with the opportunity to acquire competencies through enrolling in courses available in OHWA. The pathway to credentialing, namely, the Certificate in One Health will thus hinge on the demonstration of competence through focused assessment and continuing professional education. We continue to explore options for accreditation of OHWA through our membership of the Institute for Credentialing Excellence.

GL Activity 1.1.3 Improve integration of gender into One Health education & training

A course on "Gender and One Health" was developed and installed on the One Health Workforce Academies' Training and Empowerment Platform. The course development was led by consortium partners with contribution by experts in AFROHUN and SEAOHUN universities. Enrollment in the course was opened in March 2023, and rapidly exceeded 300 learners enrolled before the beginning of the course instruction in April 2023.

See the ***Success Story on Page X*** for details.

GL Activity 1.2.1 Enhance One Health Workforce Academy websites

The exhilarating level of interest shown by learners from all over the world in course offerings on OHWA Training and Empowerment Platform was accompanied by intense work to continue enhancing the website to accommodate new courses. Currently, 3,683 learners were registered by the end of Year-4. The website is now visited by hundreds of individuals daily and is managed flawlessly by Consortium partners, OHW-NG course creators, and our expert teams.

GL Activity 1.2.2 Implement and transition virtual Communities of Practice

In Year 4, we provided technical support for AFROHUN Secretariat's implementation of a virtual Community of Practice as a follow-up to the successful implementation of a vCoP on remote learning which was initiated previously. Topics for the vCOP series focused on zoonotic diseases and outbreak prevention and response, with the first session organized around Ebola disease prevention and outbreak response, a timely focus because in February and March 2023, outbreaks diseases associated with Marburg virus (in the same virus family as Ebola virus) occurred in Africa, and more recently in Tanzania, a member country of AFROHUN.

GL Activity 1.2.3 Engage with student One Health club activities

We anticipated that many students engaged in AFROHUN and SEAOHUN member institutions would be interested in course offerings on the OHWA Training and Empowerment Platform. Therefore, we paid particular attention to advertising the open enrollment through student clubs. In Year 4's offering of courses, we note that 52% of learners on the OHWA flagship learning platform are students. We will continue this outreach effort for the remainder of Year 4. In Quarter 4, we announced a call for entries into the inaugural Multimedia Context. We collaborated with the One Health Institute at UC Davis and with the Consortium of Universities for Global Health. The competition was designed to conclude with a symposium on the 2023 One Health Day.

GL Activity 1.3.1 Implement criteria for Continuing Professional Development

We reviewed the AFROHUN Tanzania Continuing Professional Development (CPD) activity to provide constructive feedback on national and regional variation on credit allocated to One Health training by various professional councils interested in One Health. We also mapped the time demands of current courses offered on the OHWA Training and Empowerment Platform to calibrate their potential contributions to CPD credit.

GL Activity 1.3.2 Activate the One Health employment forum

We continue to reference employment opportunities that have been published on the employment forum of the One Health Workforce Academies website. We participated in the WHO Health Workforce Office's convening on the roadmap for public health and emergency response, including the workgroup focus on defining the public health "worker" that integrates One Health competencies, with the goal of assigning specific designations for these categories of the health workers in the International Standard Classification of Occupations.

ISCO: **ilostat.ilo.org/resources/concepts-and-definitions/classification-occupation**

GL Activity 1.4.1 Technical assistance for One Health short course and other experiential learning activities

We reviewed and provided feedback for AFROHUN Academy's plan to implement their signature program that focuses on "Mentored Experiential Learning and Training" (MELT). We provided technical support for THOHUN to transform their experience course (THOHUN-TELI) into a potential offering on the future SEAOHUN-Academy.

GL Activity 1.5.1 Training on One Health science communication for policy makers

Global Consortium partners developed a concept note for activities to follow the successful implementation of workshops on communicating science to policymakers.. AFROHUN and SEAOHUN partners provided feedback on the concept note. Consortium partners plan to develop an introductory training on writing policy briefs, for implementation on OHWA flagship learning platform.

LESSONS LEARNED

Co-production of Courses on the One Health Workforce Academies' Training and Empowerment Platform

CHALLENGE: The One Health Workforce Academies' flagship training and empowerment learning platform was successfully launched to remarkable success and acclaim, with more than 3,500 registered and enrolled learners from all major continents and more than 90 countries. The initial vision for course development is that each course will have a broad range of experts from participating Network universities involved in the co-production of content. This vision was implemented successfully for a couple of courses, but it was a very time-intensive and expensive operation logistically.

SOLUTION: Consortium partners took leadership roles in developing some courses to expedite the process of implementing the courses on the OHWA Training and Empowerment Platform, as pilot demonstration projects to inform AFROHUN and SEAOHUN experts on how to accomplish the goals of developing and implementing courses on regional academy platforms. The clear success of the flagship OHWA academy proved to be a strong incentive for the regional academies to emerge with their signature training and empowerment programs.

Empowering Development of Regional One Health Workforce Academy Platforms

CHALLENGE: At the beginning of the One Health Workforce-Next Generation project, the Global Consortium envisioned a single One Health Workforce Academy platform that caters to a global audience and bridges the considerable clout of AFROHUN and SEAOHUN. In Year 4 , we met with AFROHUN leadership to discuss the trajectory of the OHWA. We presented a sustainability plan to both Networks with three options. Clearly, each regional academy desires a distinctive signature academy that caters to regional needs and demands. The Consortium remains committed to an international and inter-regional collaboration to empower OHWA as a global resource that complements the work of other global agencies such as the quadripartite One Health partnership. We will also need to work to empower AFROHUN and SEAOHUN to transition to a sustainable network with regional OHWAs that is sensitive to regional needs while aspiring to the standards of excellence needed for international accreditation.

SOLUTION: We have embarked on supporting AFROHUN to develop the AFROHUN Academy-MELT signature program, which is expected to feature prominently during the AFROHUN-hosted international conference planned for September 2023. We are also working with individual countries in SEAOHUN to develop national and regional-level training programs for the regional academy.

NEXT STEPS

The policy context of One Health approach is increasingly being recognized as urgent, and we are planning to support the Networks by developing a training activity on science communication to policy makers and policy brief writing to be sustainably integrated into the One Health Workforce Academies' Training and Empowerment Platform.

We are expediting the implementation of a curriculum roadmap to accommodate the available competency-based courses currently being offered through the One Health Workforce Academies' Training and Empowerment Learning Platform. The roadmap will lead to a proctored assessment and accredited credential with opportunities for continuing professional development.

GENDER EMPOWERMENT

The development and implementation of the Gender and One Health course on the One Health Workforce Academies' Training and Empowerment Platform is a milestone, and the enrollment of 316 learners in the course is a further endorsement of the significance of OHW-NG's leadership in ensuring that gender context matters for One Health approach to be effective in its role within the global health security framework.

PHOTO CREDIT: MyOHUN

OHWA

ONE HEALTH WORKFORCE ACADEMIES

SPECIAL FEATURE

One Health Workforce Academies' mission is to promote the development, delivery, institutionalization, accreditation, and emplower recognition of training and educational activities that are in alignment with One Health Core Competencies and technical skills, to strengthen the workforce essential for global health security.

In support of this mission, the OHWA team has worked to produce and launch 12 high-quality asynchroous courses that are accessible to a global community of learners. This year, our team engaged >3,500 learners from >90 countries who enrolled in our competency-based One Health courses.

1200	Fundamentals of One Health
1079	Inro to AMR
747	Outbreak Investigation
705	Advanced AMR
543	Risk Communication
537	Health Care Quality Improvement
527	Grant Writing
527	One Health in the World
316	Gender and One Health
191	Virtual Communities of Practice
175	COVID-19
53	Intro to Epidemiology

DEVELOPMENT

Course Development was led by Members of the UC Davis Team (Outbreak) and Eco-Health Alliance (Fundamentals) with contributions by professionals in both the AFROHUN and SEAOHUN Networks.

ENROLLMENT

Courses were advertised by Network Partners. Enrollment was open to all adult learners. Tuition was waived for all who enrolled.

ENGAGEMENT

512 learners representing 58 Countries enrolled in our courses. Of these learners, 55% identified as female. Learners represented a variety of professional roles including the Govermnent Sector (30%), NGOs (20%), and International Agencies (13%). Many learners represented academia including University Faculty (28%) and Students (15%).

LEARNER OUTCOMES

OUTBREAK INVESTIGATION & RESPONSE

- **The percentage of learners reporting highest level of competency with risk reporting increased from 10% to 45%**
- **52% of learners reported highest level of competency in applying epidemiological thinking to One Health issues**
- **Knowledge assessment scores increased by 56% from pre- to post-course**

FUNDAMENTALS OF ONE HEALTH

- **The percentage of learners reporting highest level of competency with risk reporting increased from 15% to 65%**
- **98% of learners reported that their completion of the course will be valuable to their professional goals**
- **Knowledge assessment scores increased by 21% from pre- to post-course**

LEARNER FEEDBACK

> *"I am currently a veterinarian working in the academe, and for me, we don't do as much One Health Work as I want to. I am trying to really gain competency regarding One Health so that I could do further research, thus I am very very grateful for this."*

> *"Thank you very much for this course. I learned a lot more about the One Health Concept. The course helped widen my perspective even more. The experiences shared by the expert instructors were valuable. I am incredibly grateful for the opportunity and can't wait to share the knowledge I gained here with my students."*

> *"This was such an engaging and wonderful online course! I am so thankful to have been given the opportunity to sign up for this pilot cohort. This subject area and discipline is exactly what I want to focus on in my career so I feel very empowered and determined that I now have a solid introductory foundation to outbreak investigation and response."*

SPECIAL FEATURE

Gender & One Health Course

Developed in close collaboration with experts from Southeast Asia and Sub-Saharan Africa, the OHW-NG project's six module Gender and One Health Course was launched on April 3rd, 2023, and attracted 316 learners during enrollment. Of these, 68 completed the course, 54% from SEAOHUN member countries and 12% from AFROHUN member countries. Overall, 65% of learners identified as female.

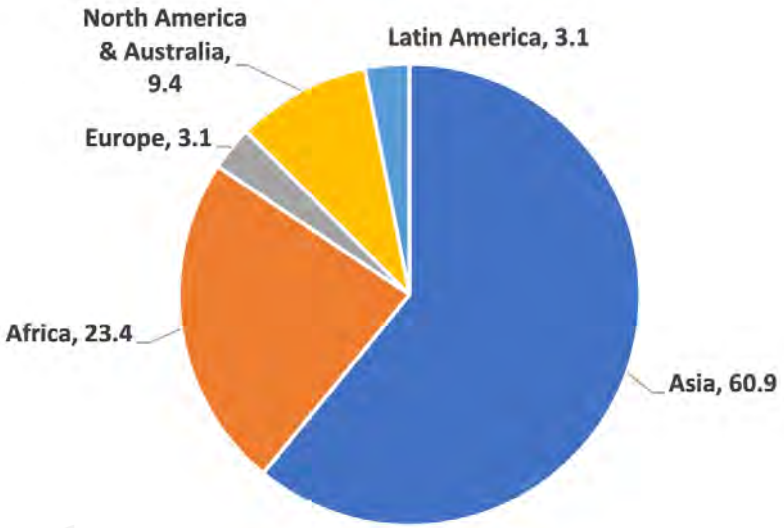
Course modules cover critical topics for education and training and are relevant for both pre- and in-service professionals looking to advance knowledge and skills in One Heath and infectious disease using a gender lens.

Module 1: Introduction to Gender and One Health (G&OH)
Module 2: Assessing Gender
Module 3: G&OH: Infectious Diseases and outbreak investigation
Module 4: Gender Sensitive Emergency Response Outbreak Planning
Module 5: G&OH: Risk Communication
Module 6: G&OH: Disaster Risk Management

During the initial offering this spring, learners were asked to self-assess their competency on a scale of 1-4 (no to very little knowledge vs. proficiency) before and following the course. The five competencies addressed included:

A. Application of gender sensitive approaches to address gender dynamics:
B. Identify basic principles and related concepts of gender and disease transmission, prevention, and treatment:
C. Identify basic gender principles and related concepts including sex, gender, gender roles, equity, and equality
D. Report and use gender-relevant lessons learned, identify gender gaps and apply findings for subsequent program adaptation
E. Integrate gender into health programs

Pre and post test results for all competencies assessed show large statistically significant improvements among all learners. In addition, the course received overwhelming positive feedback about course content, the instructors, the OHWA platform as a learning tool, and the value of including a gender-focused course for strengthening the One Health workforce.



As a woman myself, I felt that the subject was very empowering. I find the topic visionary. I like how the lecturers were very consistent in their goal of creating gender inclusive programs."

– Learner from the Philippines

Thanks to OHWA for providing us the opportunity; shifting our focus to be more mind-rounded while we go on pursuing our career in different professions. Learning on this web was the best thing that happened to me. I do admire it! Everything went smoothly. The course is one of the best among the rest."

– Learner from Liberia

OBJECTIVE TWO

Assessment & Tracking

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

TARGETED OUTCOMES & IMPACTS

- Improved quality and increased use of workforce and assessment data for decision making
- Increased placement of One Health alumni in targeted sectors
- Improved multi-sectoral workforce strategies within AFROHUN country chapters and SEAOHUN One Health University Networks

STRATEGIES

2.1 Establish Regional Knowledge Management Strategies

2.2 Develop a Standardized One Health Competency Assessment Toolkit using a Capability Maturity Model

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

MAJOR ACTIVITIES

GL Activity 2.1.1 Support AFROHUN to develop and implement a KM strategy and toolkit

GL Activity 2.1.2 Support SEAOHUN and other OHUNs in identifying and implementing KM tools

GL Activity 2.1.3 Support alumni tracking and engagement systems (and strategies)

GL Activity 2.1.4 Support website development for the One Health Workforce Academies

GL Activity 2.1.5 Refine and transition the curriculum curation database

GL Activity 2.2.1 Finalize and disseminate competency-based evaluation toolkit and learning exercise handbook for One Health trainees

GL Activity 2.2.2 Support the adaptation of the One Health Competency Framework and Assessment Toolkit

GL Activity 2.3.1 Conduct SEAOHUN Country-Level One Health Workforce Policy and Planning Data Scans to Develop Country Profiles

GL Activity 2.3.2 Conduct Virtual Country-Level Meetings to Share Country Profiles

Human Resources: D3.3 Workforce Training

- A Pipeline survey and Career Tracker survey were designed to assess student and alumni engagement with University Network training programs. The Pipeline survey was developed and shared with the Secretariats for feedback. Due to funding delays, core Global Team partners leading this initiative closed subawards earlier than anticipated and alumni tracking and engagement were transitioned to Network leadership.
- Two virtual Communities of Practice (COP) were launched with AFROHUN and SEAOHUN on implementing competency-based education (CBE) to strengthen workforce training and education programs. These COPs build on intensive CBE workshops held in Kampala, Uganda and Bangkok, Thailand in Year 3 and are supporting implementation of CBE action plans with the Networks.
- One abstract on challenges and opportunities around implementing CBE was presented at the Consortium of Universities for Global Health (CUGH) Conference (April 2023).
- In collaboration with the Objective 1 team, we supported the development, launch, and enrollment of over 3,600 course users from 90 countries on the One Health Workforce Academies website. See Objective 1 for more details.

Human Resources: D3.1 Multi-sectoral Workforce Strategy

- This year, we supported AFROHUN and SEAOHUN in development of tools for surveying and assessing alumni to enable deeper insights into the impact of One Health training on the broader national health workforce, an invaluable resource for country stakeholders and donors. We continued to support capacity strengthening and the planned transition of alumni tracking and engagement strategies with the Networks.
- Together with the OHUNs, we initiated country-level data scans to develop Country Profiles, which are country-specific assessments of engagement between academic institutions and One Health coordinating bodies and national platforms designed to highlight strengths, challenges, and opportunities for improvement in workforce training and capacity strengthening to support global health security goals. Due to funding delays, further progress on data scans and OHUN Country Profiles was postponed.

ACTIVITIES

Strategy 2.1 Establish Regional Knowledge Management (KM) Strategies

GL Activity 2.1.1 Support AFROHUN to Develop and Implement a KM Strategy and Toolkit

This year, AFROHUN brought on additional staff to help to accelerate KM including an IT officer and Data Analyst, which are now part of the architecture of the Secretariat. In Year 4 Quarters 1 and 2, the Secretariat worked with the Global Team's KM consultant to socialize the KM strategy and finalize KM learning products from the workshop that took place during the Fall of 2022. AFROHUN has prioritized the following activities: (1) Exploration and planning of the consolidation of KM Platforms and Tools; and (2) Supporting identified "librarians" to continue to build a robust "smart library" by developing processes and procedures for use and adoption of the library across Network universities. AFROHUN is now independently managing KM for the regional Network, representing a successful transition from Global Team support to AFROHUN leadership.

GL Activity 2.1.2 Support SEAOHUN and other OHUNs in Identifying KM Tools

In Year 4, we continued to support the SEAOHUN's KM advisor in identifying KM priorities; supported VOHUN in conducting additional KM workshops across the Network to start drafting and designing a KM Strategy and Action Plan; and worked to formally share lessons learned and key outcomes with the larger SEAOHUN countries and Secretariat and offer technical assistance to other OHUNs and the Secretariat to replicate the KM workshop and activities.

We also explored interest among the Secretariat and OHUNs in development of a KM strategy and provision of technical support with regard to developing/enhancing KM strategies, systems, and tools. As with AFROHUN, SEAOHUN is independently managing KM for their regional Network, representing a successful transition from Global Team support to Secretariat and OHUN leadership.

GL Activity 2.1.4 Support Alumni Tracking and Engagement Systems (and Strategies)

Better Understanding of Workforce Pipeline is Critical to Gauging One Health Program Efficacy Network universities do have information with respect to how many One Health training program participants go into health-related fields (e.g., nursing, epidemiology, infection control, community health, veterinary medicine etc.) but the type of data and depth of information remains uncertain. Knowing these data will help the Secretariats (and funders) better understand the potential magnitude of One Health training and job training exposure within and across professions prior to entering the workforce. By understanding the pipeline of near-graduates (final-year students)—via data collection from member universities—Networks will be able to better gauge where One Health-trained graduates are headed in the workforce and how the work force can be positively impacted by this training.

This year, we supported AFROHUN and SEAOHUN in development of tools for surveying and assessing alumni to enable deeper insights into the impact of One Health training on the broader national health workforce, an invaluable resource for country stakeholders and donors. We continued to support capacity strengthening and the planned transition of alumni tracking and engagement strategies with

the Networks. However, due to delayed funding that forced earlier than anticipated close-out of Global Consortium partners supporting these activities, alumni tracking and engagement were transitioned to AFROHUN and SEAOHUN leadership in Quarter 4.

GL Activity 2.1.5 Support Website Development for the One Health Workforce Academies

In Year 4, our web development team worked collaboratively with the Objective 1 course creation teams to actively develop, launch, and enroll users in the first launch of OHWA courses. There have been two pushes for course enrollment, which have resulted in over 3,600 enrollees in all course offerings on the website. On the back end, the web team continued to refine the development and functionality of the website by providing technical support to trainees and course content creators for easy navigation and use and to support AFROHUN and SEAOHUN with the development of their regional Academy platforms.

A private messaging group for instructors was also set up for trainees to reach out to course creators/instructors in case of any questions or challenges. In addition, we contributed courses on COVID-19 (including local language translations for francophone countries and the Southeast Asia region), and Quality Assurance/ Quality Improvement (QA/QI) to the OHWA platform, which are now also open for enrollment.

GL Activity 2.1.6 Refine and Transition the Curriculum Curation Database

Work on the curriculum curation database has been finalized and management and maintenance of the database was transitioned to AFROHUN and SEAOHUN this year.

Strategy 2.2 Develop a Standardized OH Competency Assessment Toolkit Using a Capability Maturity Model

GL Activity 2.2.1 Finalize and Disseminate the Competency-based Evaluation Toolkit and Learning Exercise Handbook for One Health Trainees

In Year 4, we edited the One Health Competency Framework to align with the revised set of 20 domains. Based on these revised competencies, we also revised the One Health Evaluation Toolkit. This toolkit includes assessment tools for each level of the Kirkpatrick Levels of Assessment (Level One Reaction, Level Two Learning, Level Three Behavior, Level Four Results) and instructions on how to modify the tools for various competencies and settings. These tools can be utilized in both a training and education setting to assess trainee progress as well as for in the professional setting to assess individual and institutional progress in workforce development.

GL Activity 2.2.2 Support the Adaptation of the One Health Competency Framework and Assessment Toolkits

In Year 4, we prepared both AFROHUN and SEAOHUN to implement and utilize the One Health Competency Framework and Assessment Toolkit by implementing virtual Communities of Practice (COP). These COPs continue the training that was started during the in-person workshops in Kampala, Uganda and Bangkok, Thailand and which was completed in Year 3. These COP sessions focus on supporting Networks to effectively implement competency-based education (CBE) in their institutions by providing training on designing curriculum, utilizing various forms of assessment, and incorporating systems thinking

into CBE planning. These trainings supported the Networks to adapt the Competency Framework and Assessment Toolkit to their contexts and to meet the needs of their institutions. vCOP sessions averaged 16 participants (six female, 10 male) for AFROHUN and 24 (13 female, 11 male) for SEAOHUN. Additionally, we developed an abstract on the challenges and opportunities for implementing CBE, which was presented as a poster at the Consortium of Universities in Global Health (CUGH) Conference in April 2023.

Strategy 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

GL Activity 2.3.1 Conduct SEAOHUN country-level One Health workforce policy planning data scans to develop Country Profiles

In the first half of Year 4, the Objective 2 team actively engaged with SEAOHUN on activities designed to facilitate future planning efforts with national One Health coordinating platforms. Building on the successes and lessons learned from the AFROHUN region in Years 2 and 3, we began working with the OHUNs to undertake data scans of country-level One Health workforce policy and planning evidence. These data scans include an in-depth review of publicly available materials such as journal articles, workshop reports, policy and planning documents, and national Joint External Evaluation (JEE) reports. We gathered the data to develop Country Profiles, which are country-specific assessments of engagement between academic institutions and One Health coordinating bodies that highlight strengths, challenges, and opportunities for improvement. Due to funding delays, further progress on data scans and OHUN Country Profiles was postponed.

GL Activity 2.3.2 Conduct virtual country-level meetings to share Country Profiles

In Year 3, the Global Team, in collaboration with AFROHUN, completed the Country Profiles for six AFROHUN countries – Cameroon, Ethiopia, Kenya, Rwanda, Tanzania, and Uganda. These Country Profiles are a result of the One Health national platform desk reviews, the national One Health coordination survey, and the expert interviews conducted during Years 2 and 3, and they highlight the country-level strengths, needs, gaps, resources, and opportunities for engagement between universities and training institutions and national One Health platforms. At the midpoint of Year 4, we shared these documents with the individual country chapter teams for review. We then hosted an virtual meeting to review the goals and overarching objectives of the Country Profiles, and to determine next steps for use and utility. Due to funding delays, additional activities involving Country Profile use were postponed.

LESSONS LEARNED

Delayed funding and impact on the OHW-NG Global Consortium and implementation timelines

CHALLENGE: Due to the shift to localization and bilateral financing via USAID Mission field support, Year 4 funding for the OHW-NG project was delayed forcing a temporary pause in implementation and need to adaptively manage the project and our Consortium. As a result, several Global Team Consortium partners closed subawards earlier than anticipated, including partners leading Objective 2's scope in assessment and tracking.

SOLUTION: Both Secretariats have integrated Knowledge Management into their Transition Awards as we approach the end of the OHW-NG project. This year, AFROHUN and SEAOHUN hired full-time Knowledge Management Advisors and in doing so, KM efforts and strategies have improved and become more focused. As a result, we were able to transition more leadership of the Objective 2 scope to Secretariat leadership. KM and alumni tracking and engagement are now independently managed by the Secretariats, and they are also providing KM capacity strengthening support to their Country Chapters and OHUNs as needs are identified. The Global Team still provides KM support, especially with regard to the One Health Workforce Academies platforms, and in competency-based education for effective delivery of successful and impactful One Health education and training programs.

NEXT STEPS

KM activities were successfully transitioned over to the Secretariats in Year 3 and are now under Secretariat leadership. The Global Team will continue to support and encourage KM alignment with the other objectives.

We successfully delivered a fully functional and sophisticated online platform that incorporates a learning management system with cross-continent tracking of One Health resources and that incorporates competency-based education to equip learners with the knowledge, competencies, and skills needed in a health workforce. Moving forward, the web team will continue to make site improvements based on feedback from website users taking the available courses, as well as work with the Secretariats KM and Academies teams to build capacity and provide technical assistance in the development and launch of the Network's own regional Academies platforms.

Photo: AFROHUN Kenya

OBJECTIVE THREE

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

TARGETED OUTCOMES & IMPACT

- Networks become direct recipients of external donor funding
- Networks secure new and diverse funding partners and enhanced ability to identify and develop partnerships
- Networks identify revenue generating models to promote self-reliance

STRATEGIES

3.1 Assessment, Benchmarking, and Strategic Planning

3.2 Build Network Organizational Capacities

3.3 Develop New and Diversified Partnerships, Tools, and Capacities to Advance Partnership Development and Resource Mobilization Strategies within the Five-Year Business Plan

3.4 Pilot and Scale Revenue Generating Mechanisms for the University Networks

MAJOR ACTIVITIES

GL Activity 3.1.1 Support independent update by Secretariats to Business Plans

GL Activity 3.1.2 Support annual review and update of OHW-NG Programmatic Transition Plan

GL Activity 3.2.1 Capacity support for emerging issues with donor-funded awards

GL Activity 3.2.2 Project management support for AFROHUN country chapters

GL Activity 3.2.3 AFROHUN Executive Board workshop

GL Activity 3.2.4 OHUN sustainability planning workshop, followed by virtual community of practice

GL Activity 3.3.1 Coaching support for Network Secretariats to achieve new private sector partnership and resource mobilization goals

GL Activity 3.4.1 Support each Network to pilot or expand fee-based CPD training offerings through the OHWA

GL Activity 3.4.2 Development of Regional Network OHWA Sustainability Plans

GL Activity 3.4.3 Support each Network to officially approve and plan implementation of membership models

OBJECTIVE 1

OBJECTIVE 2

OBJECTIVE 3

HIGHLIGHTS

- In Quarter 1, we produced extensive research on the private sector to create **AFROHUN's first database of prospective private sector partners** across the region (n=69), organized by industry, country, and interests. In several meetings with the Global Team, AFROHUN then prioritized companies and strategized approaches for outreach, including inviting companies to attend or sponsor the planned 2023 AFROHUN conference.
- Together with SEAOHUN, we held a four-day in-person **sustainability planning workshop** for 28 staff from six OHUNs, in Kuala Lumpur, Malaysia. Each OHUN team conducted strategic analyses, refined their value proposition, considered changes to their organizational model and activities for efficiency and sustainability, and mapped external and internal sources of revenue. The OHUNs walked away with the major ingredients of a sustainability plan for their organizations post OHW-NG and a resource mobilization plan for the remainder of the year.
- Also with SEAOHUN, we launched a **virtual community of practice (vCOP) and intensive one-on-one coaching of all eight OHUN teams**. The vCOP focused on advancing sustainability and resource mobilization for the Network post-award. Twenty-five people attended the first session focused on fee-based courses, and one-on-one support was provided to four OHUNs.
- We finalized the zero draft of sustainability plans for the Global One Health Workforce Academy, the AFROHUN One Health Workforce Academy, and the SEAOHUN One Health Academy. Combined as one joint plan, this draft document explains how the three academies propose to work together, identifies key management and staffing models, recommends partnership approaches, and includes a financing model that projects costs and revenue for each academy for a ten year period and proposes a self-financing model.

ACTIVITIES

GL Activity 3.1.1 Support independent update by Secretariats to Business Plans

In Year 4, the Global Team dedicated specific working sessions with the Networks to discuss key changes to their business plans for the final year of OHW-NG. The focus of these discussions was the emphasis on changes to their activities or partnership or resource mobilization strategies to ensure sustainability in the post-OHW-NG era. This year, each Network completed the updates independently of the Global Team, as designed under the OHW-NG transition plan. The Global Team enabled this by converting the lengthy business plans to PowerPoint versions, for ease of Network use and adaptation in the future, independent of our support. Each Network now has a fully updated Business Plan for Year 5 in the lengthy, narrative version as well as the short PowerPoint version.

GL Activity 3.1.2 Support annual review and update of OHW-NG Programmatic Transition Plan

In Quarter 4, as part of Year 5 work planning, the Global Team held focused sessions with each Network to review their transition plan dashboards and narratives to support an accelerated transition of remaining OHW-NG activities from Global Team implementation to Network implementation. Both Networks updated and approved their Transition Plans, which were then provided to the Consortium who reviewed and provided feedback.

GL Activity 3.2.1 Capacity support for emerging issues with donor-funded awards

Managing transition and other new awards. As described more fully in the 2023 OHW-NG Semi-annual Report, in Quarters 1 and 2, the Global Team provided frequent coaching calls to both Networks to address emerging questions related to the new USAID Transition Awards (and other new funding awards). Examples include timesheets and labor distribution, budgeting for USAID advance payments, legal and regulatory compliance, and staff performance management and retention, among many other topics. Two Global Team SMEs conducted a site visit to AFROHUN in Quarter 2 to review specific improvement areas for management of donor awards, and addressed many issues on-site. A checklist of 23 ongoing action items was drafted to support ongoing capacity development, and each item was addressed over the year. A refresher training on financial management and sub-award management best practices was delivered by a Global Team SME to OHUNs and Secretariat staff attending the Sustainability Planning workshop series in Malaysia in Quarter 1.

Supporting Network response to localization. In Quarters 3 and 4, the Global Team assisted the Networks to be responsive to USAID's shift in funding decision-making of OHW-NG from Washington to field support from country Missions. The Global Team helped each Secretariat and country Network to pivot workplans towards Mission-driven priorities, including reshaping their activities and budgets to more strongly link to Global Health Security capabilities. Further, the Global Team produced regional and country Network dashboards capturing all JEE and SPAR scores for each network to help inform Network discussions with USAID. PowerPoint slides were also produced for every country chapter or OHUN that: 1) captured the JEE scores for each country that were most related to One Health activities, and 2) aligned each of the network activities to these scores. This was designed as a communications tool for use with the Missions and other partners.

The Global Team delivered these resources as part of three workshops with AFROHUN Secretariat staff to strategize effective communications with USAID staff. By AFROHUN request, the Global Team also delivered in these workshops a draft guidance document for Country Chapters on effective Mission communications. These Mission communication discussions were also held with SEAOHUN Secretariat staff, as part of Objective 3 calls. The Global Team further conducted a training of MEL advisors in the SEAOHUN region on how to align MEL data, activity tracking, and reporting with each country's JEE indicators. Additionally, the Global Team helped each Network to develop regional value proposition documents, which clearly articulate their value to USAID Missions and other donors, vis-a-vis country networks.

Network organizational capacity tool. Lastly, the Global Team made good use of the delayed funding and subsequent implementation pause to develop a Network organizational capacity assessment tool, which can help AFROHUN and SEAOHUN Country Chapters and OHUNs to assess their Network capabilities and make improvements in the future. This can serve as a key product from OHW-NG that can benefit other global health networks, and can be a resource for Missions interested in the development of the networks.

GL Activity 3.2.2 Project management support for AFROHUN country chapters

During a February site visit by a Global Team SME, AFROHUN selected Senegal for this intensive Country Chapter support and outline Secretariat level project management support activities. A kick-off call was held with the country team and a Project Management SME from the Global Team in April 2023.

This activity was stopped due to the delayed funding and implementation disruption.

GL Activity 3.2.3 AFROHUN Executive Board workshop

AFROHUN planned to hold an in-person Executive Board workshop immediately preceding the annual conference. Objective 3 SMEs worked with AFROHUN to develop an agenda, including for a parallel workshop for the Dean's Leadership Summit, which was also to convene in-person before the annual conference.

This activity was postponed to Year 5 due the delayed funding and implementation disruption.

GL Activity 3.2.4 OHUN Sustainability Workshop & Virtual Community of Practice (SEAOHUN Only)

In Quarter 1, the Global Team delivered a four day in-person workshop in Kuala Lumpur, Malaysia in December 2022, dedicated to helping OHUNs plan the sustainability of their Networks in the post-OHW-NG era. Six OHUNs participated (IndOHUN, MYOHUN, PhilOHUN, THOHUN, VOHUN, LAOHUN) as well as the Regional Public Health Laboratory Network. The workshop series provided didactic presentations on sustainability approaches, including reducing operational costs, shifting cost structure from more fixed to variable costs to accommodate revenue shortfalls, mapping external resource providers and earned income options; researching funding opportunities, conducting strategic analyses (trends and opportunities in the political, economic, social, technological, legal environment; organizational strengths, weaknesses, opportunities and threats); and developing a resource mobilization plan.

The workshop also included a special guest presentation on lessons learned on network sustainability by a leading U.S.-based social impact network researcher from the University of Chicago. Each session also included ample time for each OHUN to work together as a team to strategize their sustainability

as a team to strategize their sustainability approaches, and meet in pairs with other OHUNs to share their ideas and get feedback. At the end of the workshop, each OHUN had the major components of a sustainability plan for their organization and activities for the post OHW-NG era.

In Quarter 2, the Global Team, in partnership with SEAOHUN Secretariat, launched a virtual Community of Practice of these OHUN teams, designed to support the teams to implement their sustainability and resource mobilization plans. The first two sessions (February 22 and May 10, 2023) focused on helping the OHUNs to deliver fee-based courses, as this was a shared priority across most of their resource mobilization plans (see GL 3.4.1). The third session was held on August 14, 2023, and focused on how to use artificial intelligence in resource mobilization, such as to identify new funding opportunities and to write proposals and outreach communications. All sessions featured didactic content, regional discussion, and real-life case studies from the region and from the U.S. Short evaluations were completed by participants after every session, reflecting very high satisfaction and utility scores for each session, and documenting key areas of interest for future sessions.

GL Activity 3.3.1 Coaching support for Network Secretariats to achieve new private sector partnerships and resource mobilization goals

In Year 4, the Global Team intensified coaching of both regional Networks to encourage greater partnership development and resource mobilization. In Quarter 1, the Global Team met routinely with the AFROHUN Secretariat, to strategize outreach to Canadian government offices (e.g., IDRC, climate action fund), approaching GIZ for funding of the AFROHUN Academy, and approaching private sector partners to attend or sponsor the AFROHUN conference (e.g., Rockefeller Foundation, Fleming Fund, Chevron), all of which AFROHUN initiated. AFROHUN is presently awaiting a funding decision from one of the climate-related offices, which is looking very promising for successful award.

In this same quarter, the Global Team also completed robust research and established the first-ever AFROHUN private sector potential partner database. This database includes over 65 international and Africa-based companies that are potential funders for AFROHUN, along with corporate priorities, location, contact persons, and where the best match between the company and AFROHUN activities exists. We presented this research to AFROHUN, and then held a formal prioritization workshop to support AFROHUN to prioritize this list and identify the top 10 companies to approach for their scientific conference and Academy workstreams.

In Quarter 2, we worked with AFROHUN to plan outreach to companies for sponsorship of their scientific conference, as a key earned income strategy to pilot in the year. The Global Team provided draft sponsorship materials (e.g. a conference sponsorship menu, outreach email, brochure). We met with AFROHUN several times to strategize approaches to generating revenue from the conference, including charging for site visits before the official event, charging for registration, and holding a fee-based dinner with VIP speakers. For the SEAOHUN region, the Global Team provided resource mobilization fundamentals to the complete MYOHUN NCO office, with didactic and case study components. VOHUN representatives also attended, and requested this training be delivered to their Network through a two-day workshop planned for June (this VOHUN workshop was paused due to delayed funding). The Global Team further provided intensive one-on-one support to OHUNs on resource mobilization and sustainability planning, including helping review and design resource mobilization plans, capability statements, pitch

decks, and partnership meetings for MYOHUN, VOHUN, THOHUN and INDOHUN. We also supported the delivery of a well-established two session training provided by the Public Contracting Institute on Successful Proposal Writing for U.S. Government Awards to the SEAOHUN region (the same training that was delivered to AFROHUN in Year 3). The training explained the unique aspects of U.S. government funding solicitations and how to improve the changes of network success.
In Quarter 3, the Global Team further provided intensive support to each Secretariats to apply for two new major funding opportunities, including the World Bank Pandemic Fund and Indo-Pacific Regional Health Partnership. In support of AFROHUN, the Global Team strategized with the Secretariat on win themes, potential activities, partnership outreach strategies, and AFROHUN communication plans. With the SEAOHUN Secretariat, our staff actually co-led the proposal development process, convening a joint team of Global Team and SEAOHUN staff working together complete all of the proposal sections. This collaboration not only served to help SEAOHUN mount a high-quality proposal for ongoing funding of the SEAOHUN Academy, it also introduced effective proposal management strategies for SEAOHUN staff in a real-life example. In the end, AFROHUN was successful in having all country chapters except one successfully included in live country proposals to the World Bank Pandemic Fund. One Country Chapter will ultimately be awarded funds from the World Bank Pandemic Fund. SEAOHUN made it through equally fierce competition in two rounds of short-listing for the Indo-Pacific Regional Health Partnership, but unfortunately was rejected at the final stage. The SEAOHUN team expressed much greater confidence and capacity to mount a proposal of this magnitude in the future.

GL Activity 3.4.1 Support each Network to pilot or expand a fee-based CPD training or offerings through the OHWA

In Quarter 1, the Global Team dedicated a session in the OHUN Sustainability Planning workshop in Malaysia to helping each OHUN to identify opportunities for earned income, including fee-based courses. As a result, each SEAOHUN One Health University Network identified specific fee-based courses they wish to launch in their resource mobilization plans. The Global Team then helped the OHUNs to take further steps to design and implement their fee-based courses through the delivery of two interactive virtual workshops. These virtual workshops were held as part of the OHUN Sustainability vCoP series (see GL 3.2.4). Sessions included guidance on how to select appropriate courses for fees, how to price courses, mechanisms for collecting and sharing revenue, and other implementation best practices based on real case studies from the region and the U.S.

In their Year 4 Business Plans, AFROHUN identified MELT as a series of fee-based courses to launch in Year 5. The Rwanda Country Chapter also included a work plan activity to support a fee-based course. Both activities were paused due delayed funding. Moving forward, both Networks intend to advance fee-based courses through their Academies.

Lastly, the Global Team created a draft AFROHUN revenue-sharing legal agreement that can be used between training institutions when launching fee-based courses, to ensure the appropriate sharing and transfer of course payments. We also developed a one-page companion document that explains the legal agreement in non-technical language for any party to understand. The plan was to present this framework in Quarter 3 or 4, but this activity was postponed to Year 5 due delayed funding.

GL Activity 3.4.2 Development of regional OHWA sustainability plans

In June, 2023 the Global Team re-presented our Global OHWA sustainability plan to the AFROHUN One Health Workforce Technical Committee for review and discussion, and a site visit was planned to develop the AFROHUN regional plan. This activity was paused on the Network side due to delayed funding. However, the Global Team continued working on the plan during this time, moving forward to draft the regional sections of the OHWAs plan. The OHWAs Sustainability Plan now contains complete content for global and both regional academies, including a projected financial model for each of the three academies, a description of how all academies fit together (roles and responsibilities and governance structures) as well as suggested staffing. The plan also includes proposed funding strategies. The purpose of this consolidated zero draft plan is to help the Networks have a strawman to react to and refine over time to plan for the sustainability of their regional academies (and the global academy as a joint endeavor). These more fully elaborated plans will be shared with the networks in Year 5 for review and refinement.

GL Activity 3.4.3 Support each Network to officially approve and plan implementation of membership models

In Quarter 1, the Global Team facilitated a membership model design workshop at the December SEAOHUN OHW-NG Sustainability Planning Workshop. Global Team facilitators helped six OHUNs to propose changes to their membership model, including creating tiers of members, adding new types of members, and establishing fees for membership. These membership models remain in plan format and no further work to operationalize them was conducted in Year 4 due delayed funding.

Also in Quarter 1, AFROHUN's Board officially reviewed and gave preliminary approval to the new expanded, fee-based membership model (which the Global Team supported AFROHUN to produce in Year 3). To support AFROHUN's continued development of their membership model, a Global Team site visit was planned to AFROHUN in Quarter 3 to help them operationalize their membership model for May. This five-day visit was to include the Objective 3 lead and membership subject matter expert, and an agenda and travel plans were made. However, this visit was cancelled due to delayed funding.

OBJECTIVE 1 OBJECTIVE 2 OBJECTIVE 3

LESSONS LEARNED

Pivot to localization starts an important shift for sustainability

CHALLENGE: In Year 4, the Networks and Global Team were invited to change their work plans for Quarter 4 and for Year 5, in support of USAID's shift to localization field support from USAID Missions. This required the redesign and reframing of all regional and international activities under OHW-NG to meet the specific priorities and needs of country Missions. This process was time consuming and occurred in the middle of the implementation of Year 4 workplans, which resulted in many activities being postponed or cancelled.

SOLUTION: The solution to this was to design a Year 4 / Quarter 4 and Year 5 work plan that aligned all global and regional activities under each country work plan vs. Our conventional work plan structure with separate plans for the Global Team and regional Secretariats. This required reshaping activities to more directly support JEE and global health capabilities and other country-specific Mission priorities. While challenging, this exercise now positions the Networks to both better plan for, and articulate, their country and regional activities in terms of value and impact to each country Mission (instead of just at the regional level), which should enable more opportunities for country-level funding than before.

The Academies are a core component of Network sustainability

CHALLENGE: Both Networks have strong priorities to continue to advance innovative and high-quality training to students and in-service professionals well in to the post-OHW-NG era. However, most Networks will not be able to sustain the same volume of activities as USAID supported post-award, without more time to mobilize and execute on new donor funds.

SOLUTION: Each Network has prioritized the development of regional One Health Workforce Academies as primary vehicle for sustaining the training and educational resources of the country and regional networks in the post-OHW-NG era. These Academies provide each Network the opportunity to deliver a high volume of educational programming at minimal cost through the online platform. The online platforms allow for a wider accessibility by beneficiaries than traditional in-person approaches, and the scale and credentialing feature offer visibility and gravitas to the Networks that previous one-off trainings could not provide. The successful development and resource diversification of the Academies is an essential step to accomplish before the USAID OHW-NG project ends, to protect the legacy of the suite of USAID investments in One Health workforce, and to secure the sustainability of both networks.

NEXT STEPS

Focus on sustainability. In Year 5, we will work with each country Network and the Secretariat teams to plan for the continuation of their Networks and core activities using the revenue they are committed to have at this stage. Changes to staffing and activities will be planned to ensure that Networks can continue even with a reduced or zero funding portfolio. We will also help every country Network and the Secretariat teams define and implement their resource mobilization plans, to improve the revenue generated for the post-OHW-NG era.

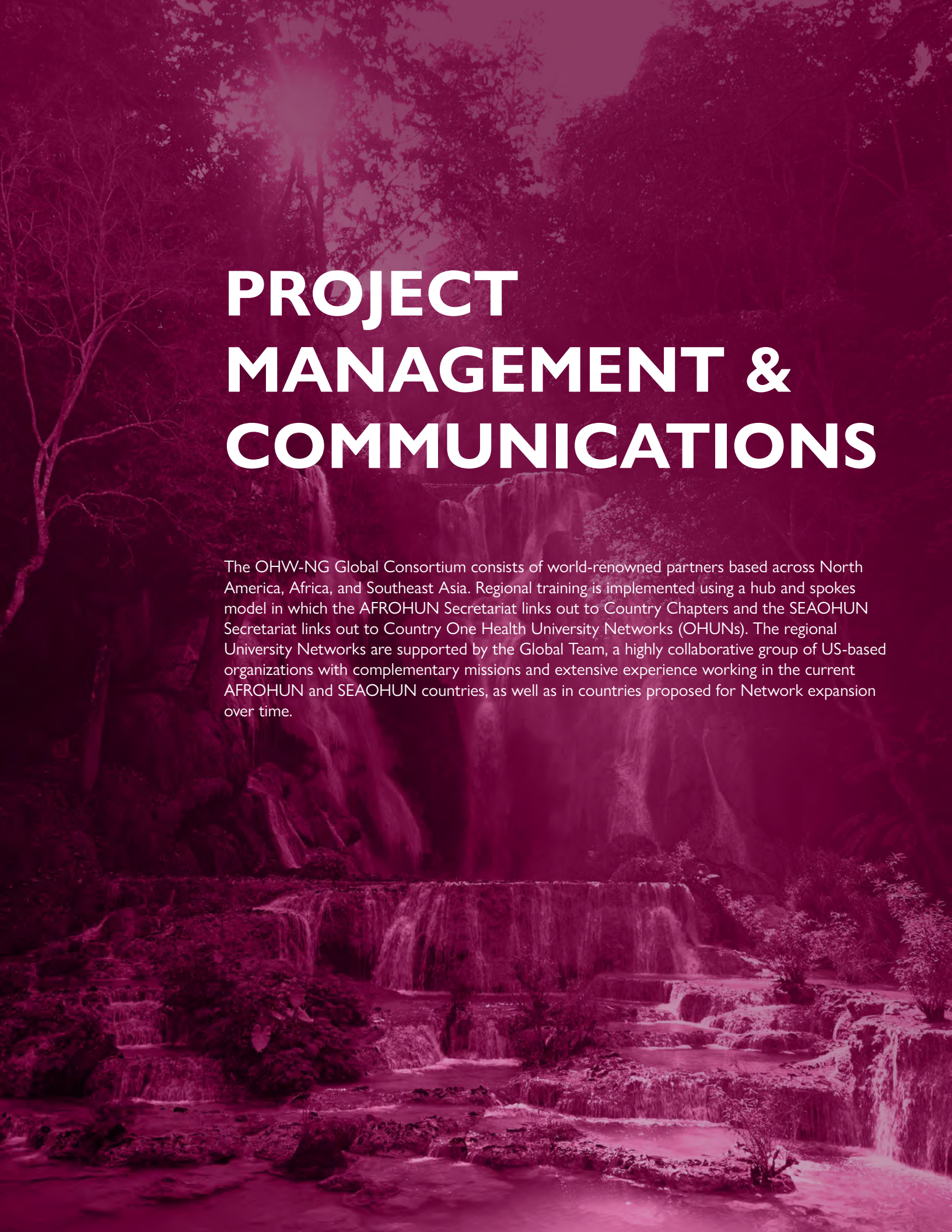
Photo: AFROHUN Senegal

Success Story

Building Capture Management Capacity for Network Sustainability

Two important, multi-year funding opportunities emerged in Year 4 for AFROHUN and SEAOHUN Network members - the World Bank Pandemic Fund and the Australian Government Indo-Pacific Regional Health Partnership (IRHP). Both Secretariats actively capitalized on these opportunities and engaged in the most robust proposal development process in Network history. The AFROHUN Secretariat quickly mobilized and reached out to eligible funding partners at the regional and Country Chapter level, such as FAO and member country Ministries of Health, to propose joint teaming agreements across the region. With support from active strategy sessions with the Global Team, the Secretariat identified and shared with Country Managers a list of key activities AFROHUN could support in regional and national proposals. The Secretariat also followed-up routinely with Country Managers to ensure they secured a role in country-level proposals. As a result, every Country Chapter except one joined a team proposal for the Pandemic Fund, and one country chapter, AFROHUN Ethiopia, was part of a successful team that will receive funding.

The SEAOHUN Secretariat, in partnership with MYOHUN, also mounted a robust proposal to the Institute for Human Resources Professionals (IHRP) to support the sustainability of the SEAOHUN One Health Workforce Academy post award. With support from a joint Global and Secretariat-led proposal team, Secretariat staff developed a concept for continuing Academy support and affiliated educational activities, and conducted the major steps of proposal development, including identifying key personnel and developing the technical and cost proposals. The SEAOHUN proposal made it through two consecutive rounds of elimination but was rejected at the final stage. The SEAOHUN team reported great satisfaction in building their skills to mount a complex proposal process, and expressed greater confidence in capture management, teaming, and capacity to apply for future opportunities.



PROJECT MANAGEMENT & COMMUNICATIONS

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 the AFROHUN Secretariat links out to Country Chapters and the SEAOHUN Secretariat links out to Country One Health University Networks (OHUNs). The regional University Networks are supported by the Global Team, 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.

HIGHLIGHTS

External Evaluation

In December 2022, the One Health Workforce – Next Generation's External Advisory Board (EAB) shared the results of the project's independent evaluation, conducted over the course of Year 3 (2021-2022) with USAID. The EAB was charged with conducting an objective performance evaluation assessment and with reporting findings to inform strategic direction for the project as it transitions for the regional University Networks to take ownership and sustain success in the future. To complete the assessment, the EAB was provided with key documents including annual reports for Years 1 and 2, the Year 3 work plan, the Monitoring, Evaluation and Learning (MEL) framework performance indicators, including reports) and Strength, Weakness, Opportunity, and Threat (SWOT) analyses from the regional Networks. In addition, reviewers held brief conversations with USAID officers in the U.S. and within the Network regions. The EAB assessment report includes impressions of the project progress and a detailed performance evaluation, along with strategic recommendations to guide project implementation and future investments for the long-term viability and success of the One Health University Network model.

Adapting to Localization

This year, USAID began implementation of a new localization policy, defined as "the set of internal reforms, actions, and behavior changes that we (USAID) are undertaking to ensure our work puts local actors in the lead, strengthens local systems, and is responsive to local communities." Through this policy, partial funding for the OHW-NG project this year was shifted from Washington D.C. to field support from local USAID Missions, critical partners in our goal towards strengthening and empowering One Health University Networks to support global health security. This shift involved adapting planning and implementation to be more responsive to local Mission priorities and goals, and working in closer partnership with the Missions on OHW-NG plans, activities, reporting streams, and communications. We worked closely with AFROHUN and SEAOHUN to adaptively manage this change and successfully weathered a challenging period of delayed funding due to the financial transition, which disrupted Year 4 implementation plans leading to cancellation or postponement of several activities. Also in response to this shift, the OHG-NG Global Team was forced to restructure to enable flow of more funds to our AFROHUN and SEAOHUN partners, and unfortunately many key OHW-NG consortium partners closed their subawards earlier than originally planned. Our Global Team now consists of a smaller, nimble unit of technical and administrative expertise and our OHW-NG consortium model reflects the equitable collaboration and co-leadership paradigm this project was intended to enshrine.

ACTIVITIES

GL Activity PMC.1.1 Collaborative and adaptive management of project operations and compliance with policies and procedures

- The OHW-NG Consortium worked together with USAID to dynamically manage the project in close coordination with the newly executed Transition Awards. In the fourth year of the project, we have phased the transition of leadership and management to the AFROHUN and SEAOHUN Secretariats. Both Secretariats are now independently managing their own Transition Awards, while also co-managing core project objectives and activities.
- Together with SEAOHUN, we worked with USAID Washington and USAID/ Philippines to develop a new scope of work and Mission-funded project targeting Global Health Security and strengthening Field Epidemiology Training Programs. The new project was launched on March 28, 2023.
- Working closely with AFROHUN, a delegation of project management and finance professionals traveled to Kampala, Uganda in February 2023 to work with the Secretariat on strengthen systems for grant and award management, administration, and compliance. The team worked together for a week, leaving behind resilient systems for core and Transition Award management and operations.
- With the project moving towards the final year and close-out, we began trainings for collaborative technical reporting in official USAID systems with both the AFROHUN and SEAOHUN Secretariats. Trainings and orientations were held on accessing and managing submissions to USAID's Development Data Library (DDL), Development Experience Clearinghouse (DEC), and Development Information Solution (DIS).
- Due to a shift from USAID's centrally-funded mechanism to field support provided directly from USAID Missions, the OHW-NG project experienced funding delays leading to paused Year 4 implementation. As a result, Year 4 work plans and activities were quickly re-prioritized and we worked closely with the USAID project manage team to adjust and adapt for success.
- In the final quarter, two delegations of Global Team members visited both regional Secretariats in Kampala, Uganda and Chiang Mai, Thailand to work with AFROHUN and SEAOHUN on finalizing Year 4 implementation and strategic planning for the fifth and final year of the project.

GL Activity PMC 1.2 Responsive Communications & Reporting

- Understanding the importance of both internal and external communications, we worked with both regional Networks to strengthen communications and reporting within the project, with USAID, and with key Network donors and stakeholders. As the Networks are now managing individual Transition Awards, reporting burden has intensified, and as part of Objective Three's focus on organizational sustainability, several workshops and trainings were held on communications and reporting to improve efficiencies and product quality.
- In addition, we worked with USAID to respond to technical and financial reporting requests from country Missions and Washington D.C. Technical support was also provided to the AFROHUN and SEAOHUN Secretariats to support requests for information and reporting as appropriate.
- As part of the transition to field support this year, we intensified training and mentorship on USAID Mission communications and engagement, especially with regard to reporting and work plan consultations. AFROHUN and SEAOHUN navigated the new Mission consultation process this year and successfully conducted the Year 5 work plan and budget development and approval process.

GL Activity PMC 1.3 Monitoring Performance & Showcasing Impact

- Together with our Network-specific Monitoring, Evaluation, and Learning (MEL) working groups, we continued strengthening regional and country-level MEL capacity through regularly scheduled meetings, trainings, and workshops. This quarter we focused specifically on improving MEL team knowledge and awareness of GHSA and Joint External Evaluation technical areas and indicators, and working towards greater alignment of project activities, outputs, and outcomes with regard to GHSA and JEE frameworks. These efforts intensified with the transition to USAID Mission field support, and work plans and reporting have been overhauled for closer alignment with JEE and GHS technical areas and indicators. See the ***Performance Monitoring chapter on page X*** for details.

GL Activity PMC.1.4 Legacy products: archiving and sharing products and deliverables

- As we adapted to localization, bilateral funding, and stronger USAID Mission management this year, we evolved strategic communications to better target outcomes and achievements to country-specific goals and closely align with Mission priorities and JEE technical areas.
- During trips to Uganda and Thailand in September 2023, we initiated planning for OHW-NG project demobilization and development of legacy projects that showcase OHW-NG, AFROHUN, and SEAOHUN successes and lasting impact.
-

GL Activity PMC.1.5 One Health Workforce – Next Generation 2023 Global Consortium Meeting

- Due to delayed funding, planning for the Global Consortium meeting commenced with the AFROHUN Secretariat, which will host the event, but the event was postponed to Year 5. However, event structure, location, program, and sponsors were confirmed and the meeting will be held in April 2024.

GL Activity PMC.1.6 One Health Workforce – Next Generation 2023 Semi-annual/Mid-Year Consortium Meeting

- Also due to delayed funding, the planned mid-year meeting was cancelled and many Global Team partners forced to close-out subawards earlier than anticipated. Focus shifted to strategic planning to adapt to localization and bilateral funding which commended in Quarter 4.

NEXT STEPS

- The OHW-NG Consortium will continue to work with AFROHUN and SEAOHUN on strategic planning and management, especially as we continue to adapt to the shift to localization and bilateral project financing.
- Next year, the fifth and final year of the project, we plan for an intensive implementation timeline as we prepare for demobilization, close-out of the project, and investments legacy products to ensure long-term impact from our Consortium's investments.

Photo: THOHUN

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

- 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

OBJECTIVE 2
Assessment & Tracking

- Improved quality & increased use of workforce & assessment data for decision-making
- Increased placement of One Health alumni in targeted sectors
- Improved multisectoral workforce strategies within participating countries

OBJECTIVE 3
Organizational Sustainability

- 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

Outcome-Level Indicators

PO 1: Evidence of increased progress toward institutionalization of competency-based training in One Health
PO 2: Evidence of placement of One Health alumni in targeted sectors (qualitative and quantitative)
PO 3: Utilization of KMS data to inform decision-making (qualitative and quantitative)
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 Network Universities with a mentored SOHIC/OHSC
1.4: Total # of evidence-based informational resources and products developed

2.1: # of Network Universities using One Health competency assessment toolkits to strategically integrate One Health competency assessments into activities
2.2: # of countries in which Network Universities are actively involved in national coordination of One Health activities (quantitative and qualitative)
ES.2-1*: *# of host country higher education institutions receiving capacity development support with USG assistance*

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 gender was prioritized
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

The goal of the OHW-NG Project 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. We designed our Monitoring Evaluation and Learning (MEL) framework, plan, and working group to measure progress towards achieving this goal. MEL indicators capture consistent metrics that tell the collective "story" of the 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 AFROHUN and SEAOHUN Network partners in developing 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.

MONITORING, EVALUATION, & LEARNING

To monitor performance and support decision making, our Consortium must learn from activity progress and data. Reviewing indicator data as well as the data collection process continues to be an ongoing activity. In partnership with the regional Network MEL officers, our MEL working group collaborated with USAID to refine several output and outcome indicators, along with indicator targets in response to Year 3 Annual Report data collection and reporting. Specific changes made to the MEL plan and Performance Indicator Reference Sheet (PIRS version 12) this period are detailed below. Going forward, our MEL plan and PIRS will continue to be revised in close collaboration with our regional Network MEL officers and working group teams to address the ever-evolving aspects of the plan.

- **PO2** – **Evidence of placement of OH alumni in targeted sectors**: With Network input, we revised the quantitative component (number of alumni placed in targeted sectors) to one alumni placed per AFROHUN university and one alumni placed per SEAOHUN country. The targets for this indicator were based on the current ability of Networks to track alumni placement.
- **PO3** – **Utilization of KMS data to inform decision making**: In addition to both Secretariates using KMS, we revised the quantitative target to include all country chapters/OHUNs using KMS.
- **1.1 – Total number of existing OH training content and delivery modes, curated, updated, and implemented**: We specified the life of project target to be one catalogue of content available for training and implementation.
- **1.2 – Total number of individuals trained**: We added disaggregates for two additional grant categories: travel grants for faculty and students to travel to OH related activities, and SOHIC/OHSC grants for SOHIC/OHSC related trainings and activities.
- **1.4 – Total number of evidence-based information resources and products developed**: We removed degree awarded as a disaggregate and removed training module from the definition of a product. The life of project goal was revised to 95 or 1 product per country and Secretariat per year.

- **2.1 – Number of network universities using One Health competency assessment toolkits**: After consultation with the Networks, the life of project goal was revised to 10 universities per Network
- **2.2 – Number of countries in which Network universities are actively involved in coordination of OH activities**: We revised the Year 4 target for this indicator to be 50% of all countries.
- **3.1 – Evidence of measurable improvement of key capacities for organizational sustainability**: Based on Network progress thus far, we made the life of project goal for this indicator three revenue-generating activities per Network.
- **3.2 – Number of new and diverse partnerships established for the Networks**: We revised the partnership goal to be one new partnership per Network each year, with a life of project goal of four partnerships per Secretariat and two partnership strategies per Secretariat.
- **G1 – Number of gender policies developed and available**: It is important that we revise and update outdated content under our learning agenda. The Year 4 target was revised to one updated gender policy and one updated gender strategy per Network.
- **G2 – Number of activities that include a gender component and/or gender was prioritized**: We increased the goal from two activities per Network per year to one activity per country in Year 4.
- **G3 – Evidence of changes made improving sex balance and impact of sex balance**: Previously, the target for this indicator was a 20% increase in leaderships positions held by women until equilibrium, but as the Networks have nearly reached equilibrium, we revised the Year 4 target to be 50% of leadership positions held by women in each Network.
- **ARPA – COVID-19 Saving Lives Now & Global Vaccine Access Initiative**: The COVID-19 Saving Lives Now & Global Vaccine Access Initiative Compendium was updated by USAID in May 2022. AFROHUN CDI reported data from supplemental ARPA funds in the USAID Development Information System (DIS) throughout Year 4 and will continue to do so through the beginning of Year 5. Supplemental ARPA funds for AFROHUN Cameroon ceased by Year 4, thus our PIRS Compendium v13 has been revised accordingly to reflect these changes.
- **KSPH – DRC KSPH Supplemental Funding Indicators**: The AFROHUN Democratic Republic of Congo chapter and the local USAID Mission requested that we report the Kinshasa School of Public Health Supplemental Funding scholarship data in DIS. Starting in Year 3, we began reporting on two relevant indicators (ES.2-2 and ES.2-52) from USAID's recently updated Education Programming Compendium in DIS. We updated our PIRS Compendium to reflect these additions.
- **AFROHUN Ethiopia and AFROHUN Rwanda**: The AFROHUN Ethiopia and Rwanda country chapters closed out of OHW-NG during Year 4. These chapters will not feed into our MEL data collection during Year 5.

STATUS UPDATE

This period, we continued to collaborate closely with our Consortium MEL working groups to coordinate MEL plan evolution with crosscutting objective activities and plans.

- Our partners and project leads worked tirelessly to curate content for the OHWA under the Objective 1 scope. Nearly 1,300 learners participated in the 11 modules published on the OHWA in Year 4. Using statistics and learner feedback on courses, we are prepared to update and refine modules to better suit learner needs as we prepare for accreditation in Year 5 (See ***Objective 1 special on the OHWA page XXX*** for more details).
- In Year 4, alumni tracking initiatives were transitioned to both Networks under their Transition Awards. Both Networks have since refined and implemented alumni tracking surveys suited to their regional contexts. Data from these surveys will inform decision making at institutional, country, and regional levels.
- The SEAOHUN MEL working group continued monthly meetings evolving into a virtual Community of Practice. These meetings have been invaluable for connecting Global Team, Secretariat, and OHUN MEL officers and staff and led to many of the progressive changes in the MEL plan and PIRS described above. The SEAOHUN MEL working group has also embraced Knowledge Management and developed a sophisticated system in Airtable for tracking activities, timelines, and outputs. The SEAOHUN MEL Officer shared MEL dashboards created on Airtable, bringing new data visualizations to inform decision making that were then adopted by the Global Team for other project monitoring activities.
- As we near the end of the OHW-NG project and aim to transition the bulk of reporting responsibilities to the Networks as part of their transition and sustainability plans, we worked with both Networks on Global Health Security (GHS) reporting and work plan training. Additionally, we worked with AFROHUN to transition ARPA and KSPH Supplemental Funding reporting in DIS to their MEL Officers.
- In support of efforts to localize global health security, we have begun to link each regional Network activity with JEE 3.0 indicators in our Activity Trackers. As we move forward in the project this will streamline the GHS reporting and work planning process and help communicate the value of our activities to local Missions and external funders.
- To prepare for project closeout we analyzed our MEL data to refine targets for Year 5 and the life of the project. Doing so helped us curate Year 5 activities accordingly.

NEXT STEPS

- Continue refinement of the MEL plan in close coordination with USAID and the Networks.
- Work with the Networks on using MEL dashboards and data to engage with Missions and show the value of One Health University Networks.
- Continue the transitioning of reporting responsibilities in USAID systems, such as DIS, DDL, and the DEC, for independent performance data management.
- Closely monitor our MEL data to ensure life of project targets are met.

Supplemental Funding

The One Health Workforce - Next Generation (OHW-NG) Global Consortium has been active for two years working towards building scalable and sustainable systems that train and empower human resources to combat complex and dynamic global health threats in the world's most vulnerable areas for disease emergence. With the support of USAID, AFROHUN and SEAOHUN have forged University Networks to train and equip the health workforce with the One Health skills needed to prevent, detect, and respond to health threats such as emerging infectious diseases and antimicrobial resistance. Through additional, supplemental funding awarded to several country partners, these efforts were magnified during Year 2 (2020-2021) and countries were empowered to respond to the COVID-19 pandemic nationally, to strengthen their risk communication and community engagement and university e-learning platforms, and to support students seeking advanced degrees in One Health. The impact of these supplemental funding sources that continued into Year 4 is summarized below, highlighting the progress made toward training and building capacity of the current and future One Health workforce to raising awareness among community members on COVID-19 and other zoonotic disease risks.

Côte d'Ivoire	
People reached through USG-supported mass media and social media with COVID-19 vaccine-related messaging	43,604
SOHICs trained on COVID-19 vaccination and related topics	126
SOHICs trained on community engagement to promote COVID-19 vaccination	95
Vaccination sites supported	28
University community members who received a first dose of a COVID-19 vaccine	2,787
University community members who received a second dose of a COVID-19 vaccine	723
University community members who received a booster dose of a COVID-19 vaccine	373

DR Congo	
Successful graduates from cohort one	30
On track to graduate from cohort two	30
Scholarships awarded in Year 4	28

Côte d'Ivoire received USAID ARPA funding to support these activities.

ARPA American Rescue Plan Act
RCCE Risk Communication & Community Engagement

CÔTE D'IVOIRE

221

SOHIC MEMBERS ENGAGED IN COVID-19 RELATED ACTIVITIES

FEMALE **77** MALE **144**

Supported by ARPA funds

DR CONGO

28

SCHOLARSHIPS PROVIDED

FEMALE **11** MALE **17**

Supported by USAID/DR Congo funds

PERFORMANCE DATA

2022-2023 | Cumulative life of project data is provided where indicated

Existing, Updated, and Newly Developed One Health Training Content

Network	Cumulative Total	Year 4 Total	Updated	New
AFROHUN Secretariat	9	4	1	3
AFROHUN Cameroon	57	2	2	0
AFROHUN Côte d'Ivoire	4	4	4	0
AFROHUN DRC	20	0	0	0
AFROHUN Ethiopia	42	0	0	0
AFROHUN Kenya	86	0	0	0
AFROHUN Rwanda	57	0	0	0
AFROHUN Senegal	49	0	0	0
AFROHUN Tanzania	48	1	1	0
AFROHUN Uganda	43	0	0	0
SEAOHUN Secretariat	89	42	0	42
CAMBOHUN	18	15	0	15
INDOHUN	183	98	7	91
LAOHUN	9	8	0	8
MyOHUN	96	9	0	9
MMOHUN	0	0	0	0
PhilOHUN	38	31	1	30
THOHUN	65	24	1	23
VOHUN	90	0	0	0
GLOBAL TEAM	38	0	0	0
AFROHUN Total	415	11	8	3
SEAOHUN Total	588	227	9	218
GLOBAL CONSORTIUM TOTAL	1041	238	17	221

Indicator 1.1: Total # of existing and new One Health training content and delivery modes curated, updated, and implemented. Cumulative Total: cumulative sum of existing, updated, and newly developed education and training programs; Year 4 Total: education and training programs updated and newly developed during the reporting period (Year 4); Updated: production of a current up-to-date version of specific training activities based on previous versions to now include new information generated by research or other forms of new knowledge during the reporting period (Year 4); New: education and training programs newly developed during the reporting period (Year 4).

1,886 YEAR 4 AFROHUN

1,808 YEAR 4 SEAOHUN

4,980 YEAR 4 TOTAL

>53.3K CUMULATIVE TOTAL

48% FEMALE

41% MALE

11% UNKNOWN

1.2 INDIVIDUALS TRAINED

39 (89%) YEAR 4 AFROHUN

40 (36%) YEAR 4 SEAOHUN

79 YEAR 4 TOTAL

1.3 MEMBER UNIVERSITIES WITH AT LEAST ONE MENTORED SOHIC

14 YEAR 4 AFROHUN

135 YEAR 4 SEAOHUN

164 YEAR 4 TOTAL

679 CUMULATIVE TOTAL

1.4 INFORMATIONAL RESOURCES & PRODUCTS DEVELOPED*

8 NUPAS DOMAINS CHANGED (AFROHUN)

6 OCA TOOL DOMAINS CHANGED (AFROHUN)

3.1 MEASURABLE IMPROVEMENT OF KEY CAPACITIES FOR ORGANIZATIONAL SUSTAINABILITY

18 YEAR 4 AFROHUN

20 YEAR 4 SEAOHUN

38 YEAR 4 TOTAL

178 CUMULATIVE TOTAL

3.2 NEW & DIVERSE PARTNERSHIPS ESTABLISHED

16 TOTAL

2.2 NETWORKS INVOLVED IN NATIONAL COORDINATION OF ONE HEALTH ACTIVITIES

INDICATOR 2.2: # of Countries in Which Network Universities are Actively Involved in National Coordination of One Health Activities

*Includes "peer reviewed pubs, policy briefs, situational reports, risk assessments, grant submissions, and awards

Seven of the AFROHUN products were created through support of ARPA funding.

INDICATOR 3.1: Evidence of Measurable Improvement of Key Capacities for Organizational Sustainability

INDICATOR 3.2: # of New & Diverse Partnerships Established for the Networks

INDICATOR 1.3: # of Member Universities with at Least One Mentored SOHIC

INDICATOR 1.4: Total # of Evidence-Based Informational Resources & Products Developed

PERFORMANCE DATA

2022-2023 | Cumulative life of project data is provided where indicated

Number of Individuals Trained

Network	Cumulative Total	Year 4 Total	Gender				Type of participant								
			Female	Male	Other	Unknown	Professional (govt)	Professional (private sector)	Faculty	Student (under grad)	Student (graduate)	Student (other)	NGO staff	Community member	Other	Unknown
AFROHUN Secretariat	1357	278	127	151			11	56	22	21			52			116
AFROHUN Cameroon	1821	41	12	29			2		35				4			
AFROHUN Côte d'Ivoire	2266	1174	428	746			331	3	13	492	334		1			
AFROHUN DRC	905	59	26	33			29			30						
AFROHUN Ethiopia	491	0														
AFROHUN Kenya	1692	208				208				208						
AFROHUN Rwanda	394	48	22	26			3		10	35						
AFROHUN Senegal	436	45	20	25						23	15	7				
AFROHUN Tanzania	372	17	6	11			7		10							
AFROHUN Uganda	969	16	7	9			1				15					
SEAOHUN Secretariat	828	19	10	9									17		2	
CAMBOHUN	95	36	16	20			19		15			2				
INDOHUN	9860	675	474	201			194	7	59	249	35		4	126	1	
LAOHUN	450	282	129	153			2		9	220		51				
MyOHUN	6588	280	178	102			70		6	151	42	11				
MMOHUN	0	0														
PhilOHUN	1959	28	12	14	2				3	25						
THOHUN	1194	156	122	33	1		10		1	75	12			58		
VOHUN	20060	332	201	131			93		106	113				3	17	
GLOBAL TEAM	1605	1286	787	482	8	7	146	182	143	272	372	77	94	0	0	0
AFROHUN Total	10703	1886	648	1030	0	208	384	59	90	809	364	7	57	0	0	116
SEAOHUN Total	41034	1808	1142	663	3	0	388	7	199	833	89	64	21	187	20	0
GLOBAL CONSORTIUM TOTAL	53342	4980	2577	2175	11	215	918	248	432	1914	825	148	172	187	20	116

Indicator 1.2: Total number of individuals trained. Disaggregate data is provided for Year 4 only. The cumulative total and Year 4 total do not uniformly account for duplicative individuals trained, but was addressed when possible.

16
YEAR 4 AFROHUN

6
YEAR 4 SEAOHUN

25
YEAR 4 TOTAL

98
CUMULATIVE TOTAL

G2 ACTIVITIES WITH A GENDER COMPONENT

26 (35%)
AFROHUN

31 (40%)
SEAOHUN

57 (38%)
TOTAL

G3 WOMEN IN LEADERSHIP POSITIONS

16
AFROHUN

34
SEAOHUN

50
TOTAL

1.2 GRANTS, SCHOLARSHIPS, FELLOWSHIPS AWARDED

16
YEAR 4 AFROHUN

436
YEAR 4 SEAOHUN

452
YEAR 4 TOTAL

PO2 ALUMNI PLACED IN TARGET SECTORS

11
TOTAL

G4 GENDER EXPERTS

19
AFROHUN

13
SEAOHUN

32
TOTAL

G4 GENDER CHAMPIONS

29
TOTAL

1.2 INTERNSHIP PLACEMENTS

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

28 of the AFROHUN scholarships were awarded through supplemental funding supporting Masters students at KSPH in DR Congo.

INDICATOR 2.1: # of Network Universities using One Health Competency Assessment Toolkits to Strategically Integrate One Health Competency Assessments into Activities

INDICATOR 1.2 # of Individuals Trained and Scholarships, Fellowships, and

APPENDICES

Knowledge Management & Learning

Knowledge Management (KM) is an integrated system of accumulating, compiling, archiving, and sharing knowledge within an organization. Through the process of creating, assimilating, and applying knowledge, KM initiatives help organizations embed knowledge into their processes for improved learning and outcomes. Under the umbrella of the OHW-NG Project, successful KM and learning works to enhance effective multisectoral learning and planning, helping to strengthen the One Health workforce pipeline and ensuring that countries have the needed mix and distribution of One Health expertise and skills – the right people, with the right skills, in the right place, at the right time. The desired long-term impacts of the OHW-NG KM strategy are to: 1) improve the quality and use of workforce and assessment data for decision making and learning; 2) increase the placement and tracking of One Health graduates in targeted sectors, as well as creating opportunities for their engagement in One Health activities; and 3) improve multi-sectoral workforce strategies, utilizing best practices and lessons learned.

Given these ambitious aims and the breadth, depth, and diversity of relevant information and data, the SEAOHUN and AFROHUN Secretariats have developed KM and learning strategies and tools to collect, generate and disseminate information of high interest to University Network members, stakeholders, donors, and the wider universe of One Health partners. KM strategies have enabled each Secretariat to prioritize KM goals and objectives, clarify staff roles and responsibilities related to KM, and select KM systems that best advance this agenda. Recognizing that the Secretariats may have different approaches to KM, and understanding the importance of collaborative design, utility, and sustainability, the OHW-NG project implemented a phased approach to the development, implementation, and evaluation of the KM and learning interventions.

Intersection of Knowledge Management & Monitoring, Evaluation & Learning (MEL)

Knowledge Management and MEL are two technical areas that complement each other and align under USAID's Collaborating, Learning and Adapting (CLA) Framework. MEL relies on the people, processes, and systems that KM puts into place, and both work toward more strategic learning and operating for an organization. OHW-NG developed and uses KM systems to strengthen current and future Network MEL practices. There are many ways that this continues to materialize across the Networks, including use of collaborative digital tools such as Airtable and AFROHUN's MEL system to track indicators, reporting documents, regular KM & MEL meetings with our Consortium's working groups, and trainings and workshops that help advance our learning agenda. Through a systemic and holistic approach to KM and MEL practices, we continue to strengthen coordination to ensure accurate reporting and to increase awareness, knowledge, and capacity across the project's lifecycle.

Learning Plan: Monitoring Institutional & Accreditation of One Health Training & Empowerment - CLASS Scoring System

Universities have unique roles in the institutionalization of competency-based training and continuing professional education for empowering the One Health workforce. The university partners of AFROHUN and SEAOHUN embarked on the institutionalization process and monitoring progress through a Learning Plan that is Calibrated, Lifelong, Adaptive, Scalable, and Sustainable (CLASS) within and across the participating institutions. Early in the project, we defined institutionalization and accreditation as the processes through which a set of strategic activities in One Health training and empowerment becomes an integral and sustainable part of a university's formal activities, or a university network's standard operating procedures for quality assurance at country or regional levels. Institutionalization of educational programs inspires confidence in potential pre-service trainees to embark on career paths that require One Health technical and implementation skills, while also inspiring confidence in in-service trainees and employers that maintaining currency in the skills will continue to be meaningful for career advancement and effective in addressing emergent challenges to global health security.

To monitor progress, we devised a Training and Empowerment Accreditation and Institutionalization Scoring System (CLASS Scores), based on assessment of 10 proximate outcomes evaluated on a scale of 0 to 10 to produce a total maximum score of 100 for each University in the Networks, and for the role of Network Secretariats in supporting regional and international accreditation initiatives. These scores are recorded annually through a self- assessment process and are independently verifiable by Global Consortium partners to evaluate progress. CLASS Scores enhance the KM and MEL systems by providing rich data for strategic planning, responsibilities to maintain excellence, and opportunities for knowledge sharing and dissemination of best practices. In addition, a cross-sectional assessment of CLASS Score profiles also allow the Global Consortium to identify gaps in training and empowerment activities which could be supplemented through the agenda of the One Health Workforce Academies.

ACTIVITIES & HIGHLIGHTS

Transitioning Knowledge Management to the Regional Networks

This year, both AFROHUN and SEAOHUN made great strides in operationalizing knowledge management within their Networks. As part of the USAID Transition Awards, the Secretariats onboarded new KM staff that rapidly provided value and utility to Network projects and activities. Going into the final year of the five-year OHW-NG project, KM has been successfully transitioned to the Network Secretariats, with the Global Team providing technical assistance on demand.

Cross-Sectional Survey of Institutionalization and Learning Plan: CLASS Scores

A major accomplishment of the OHW-NG project is the implementation of the CLASS Score questionnaire and installation into the One Health Workforce Academies web platform to facilitate data entry and report writing. In Year 4, data entry has been robust, allowing a cross-sectional survey of strengths and gaps in institutionalization of One Health training and empowerment activities in the universities and schools within the AFROHUN and SEAOHUN Networks. The number of university activities reporting information in the web-based platform increased from zero in March 2022 to 152 a year later in March 2023, increasing further to 224 by the end of Year 4 (Figure 1). To illustrate action items that can result from analysis of the CLASS scores reported for each of the 10 questions, we note that 30% of the institutions have implemented sustainable and institutionalized training in competency-based One Health, whereas another 30% of the institutions do not have such training, and the remaining 40% have One Health training at various stages of implementation (Figure 2). The narrative comments provided with the scores indicate ongoing plans, challenges, and opportunities.

Implementation of Learning Plan Strategies on the One Web Platform of the Health Workforce Academies

Form Name	Created	All Time
CCMS Training Activities	April 30, 2021	82
CCMS University Register	April 22, 2021	70
University CLASS Scores Questionnaire	March 10, 2022	0
Secretariats CLASS Scores Questionnaire	March 10, 2022	1

2022

Form Name	Created	All Time
Secretariats CLASS Scores Questionnaire	March 10, 2022	5
University CLASS Scores Questionnaire	March 10, 2022	152
CCMS Training Activities	April 30, 2021	84
CCMS University Register	April 22, 2021	82

2023

Figure 1

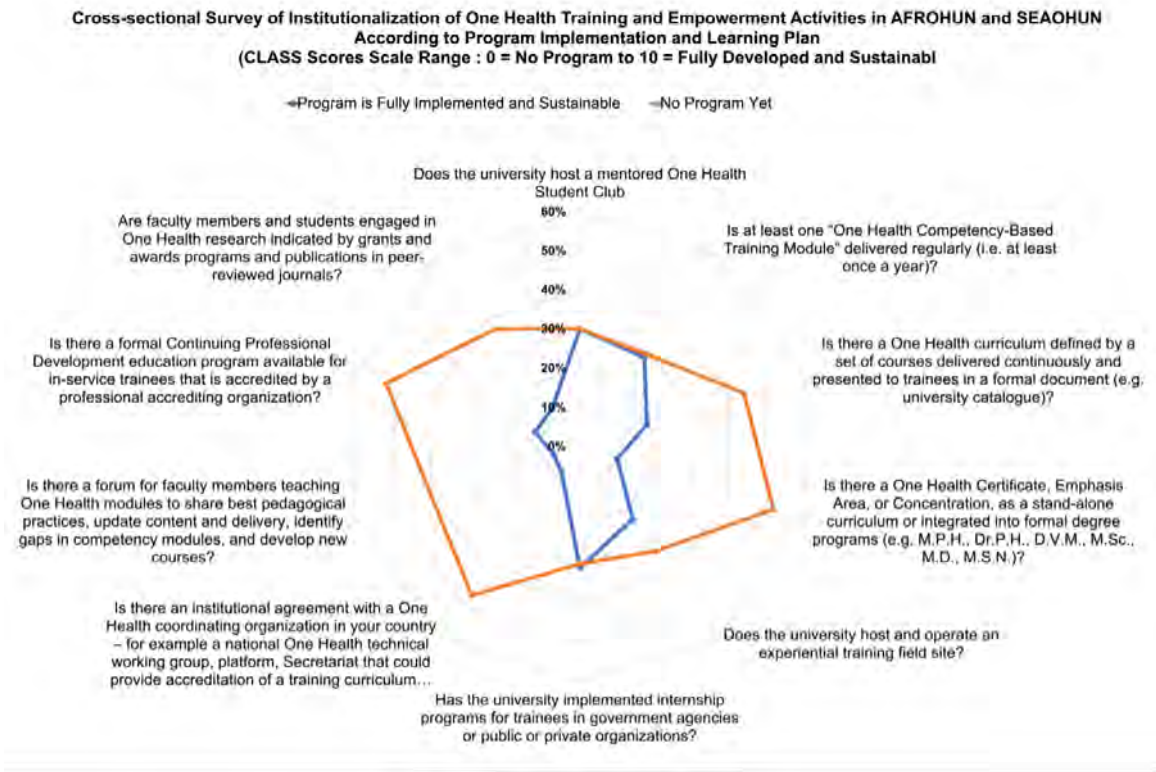


Figure 2

LESSONS LEARNED

Using CLASS Scores to Monitor Opportunities for One Health Workforce Academies through Learning and Progress Toward Institutionalization of Training and Empowerment

The implementation of the CLASS Score process in a web platform available to all those responsible for evaluation and scoring has made the process more transparent and improved the fidelity of the evaluation before work planning to identify and fill gaps. Given that not all universities in the Networks are likely to have the capacity to develop training activities that accommodate each of the 20 competency domains of One Health, CLASS Score profiles are facilitating the fine-tuning of a regional and international agenda for course development and offerings through the One Health Workforce Academies. However, some gaps may remain in the proper tagging and completion of the Curriculum Curation Management System (CCMS), which may prevent accurate scoring of some evaluation questions in the CLASS Scoring scheme. AFROHUN is expected to conduct a review of the CCMS bi-annually, and SEAOHUN continues to bridge some country-level gaps. The CCMS and CLASS-Scores are mutually informative and reinforce one another in the overarching learning plan.

Coordinating Learning Plan, Institutionalization and OHWA Sustainability Plan

In Year 4, we presented the models of sustainability plans for the One Health Workforce Academies to AFROHUN and SEAOHUN. It is now clear that the regional academies will adopt and implement their own signature programs, while also benefiting from the flagship OHWA currently managed by the Global Consortium. This has required prioritizing technical support for the implementation of various activities in the regional academy web platforms, for example, AFROHUN's Mentored Experiential Learning and Training (MELT) while also ensuring that the successful programs already launched in the flagship OHWA continue to gain international attention and subscription to its offerings. We note that the flagship OHWA now offers a dozen fully online asynchronous courses and several case studies with more than 3,500 learners registered from more than 90 countries. Overall enrollment in the courses exceeds 6,000.

NEXT STEPS

Knowledge Management

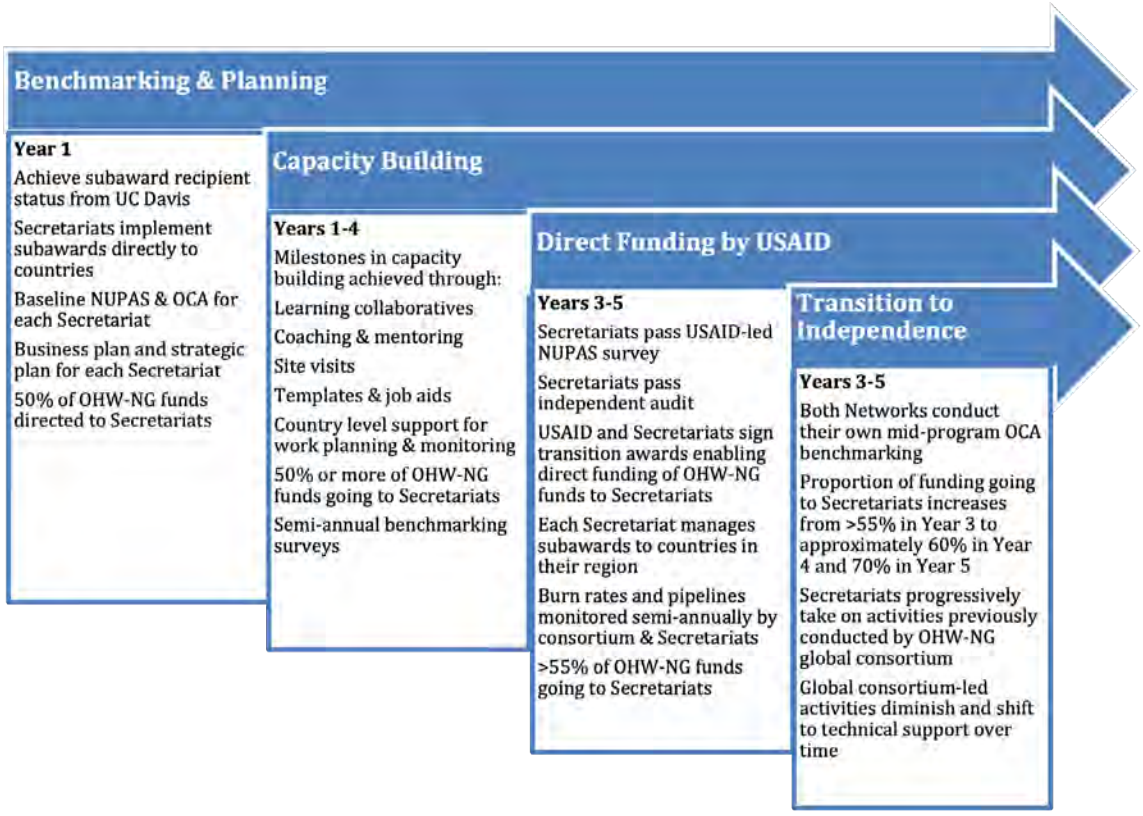
Both the AFROHUN and SEAOHUN Secretariats have now hired and onboarded Knowledge Management professionals to integrate KM into Network operations. Through the OHW-NG core project and the Network Transition Awards, KM continues to play a central role in supporting regional Network knowledge and decision making. Building on the momentum, as both Networks continue to use their KM tools, platforms, and strategies, OHW-NG will assist the Secretariats in exploring where there may be potential to consolidate and/or link these systems and platforms in order to support their management and provide a seamless user experience and utility for Network gain.

CLASS

The CLASS Score profile assessments for AFROHUN and SEAOHUN will be reviewed periodically as part of transition to long term sustainability and institutionalization of the training and empowerment initiatives. The assessments can also inform regional and national-level applications for accreditation of training programs and the regional academies.

Transition Plan

The USAID OHWNG calls for two important transitions to occur over the course of the initiative, which were designed to enhance each Network's organizational sustainability. First, each Network is intended to transition to direct funding from USAID around Year 3. This milestone was designed to help each Network develop experience as a prime partner and establish robust systems and operations that will enhance their ability to manage other donor funds. Second, the OHW-NG Consortium is implementing a shift of programmatic activity and funding from the Global Team to the Networks over each year of the project, intensifying in Years 4-5. This 'programmatic transition' is also an important and required step to support the continuity and sustainability of key OHW-NG interventions by the Networks after the end of the award. USAID requires a transition plan to be developed and updated annually to guide and oversee these transitions. This OHW-NG Transition Plan is illustrated in Figure 1.



ACTIVITIES

Stage 1: Benchmarking and Planning

Official NUPAS

In Year 3, both Networks successfully passed their NUPAS assessments. No further action was taken in Year 4.

Capacity Plans

In Year 4, both Networks shifted away from robust capacity-building plans, designed to help them transition to direct USAID funding. However, both Networks did create short plans focused on addressing emerging issues related to managing donor awards and building their partnership development and resource mobilization capability. Key achievements are highlighted in the Objective Three chapter of the report.

Benchmarking

The Networks have successfully completed their routine benchmarking on the NUPAS, as well as their baseline and mid-program OCA benchmarking assessments. The Networks will complete a final OCA assessment at the end of Year 5. In Year 4, the Global Team created a network-specific OCA assessment tool for the Networks, which measures functions and capabilities that are specific to effective networks, not previously captured in the more general OCA tool. This tool will be included in the Year 5 assessment by the Networks.

Business Plans

Both Networks completed an update to their business plans at the end of Year 4, independent from substantive Global Team support. The Global Team converted their lengthy plan narratives to PowerPoint versions, for easy updates in future years, and for use as a communication tool with external partners.

Progress Dashboards

The final OHW-NG capacity plan dashboard was completed in Year 3, with the completion of the final NUPAS benchmarking. This monitoring approach is no longer needed as the Networks have shifted away from capacity-building of NUPAS domains.

Stage 2: Capacity Building for Transition

in Year 4, each Network shifted away from robust, annual capacity-building targeted towards supporting their eligibility for direct USAID funds, as they had successfully secured direct USAID transition awards in Year 3. However, the Networks and the Global Team prioritized joint work to address emerging capacity issues related to management of donor awards, including the USAID Transition Awards. We supported AFROHUN to address special award stipulations, such as strengthening timekeeping and labor distribution, and held several coaching calls to address issues such as budgeting for advance payment and recruiting and retaining staff for multiple awards. Further, we conducted a site visit to AFROHUN to full explore all areas of improvement in grants management of donor awards, and addressed each topic with advice, templates, and tools to strengthen AFROHUN practices and procedures. Together with AFROHUN, we established a checklist of 24 pending action items to monitor and support development of policies, procedures, and best practices over the remainder of Year 4, including timesheets, payment of tax and value-added tax, conference planning, USAID Mission communications and more. We also worked closely with the SEAOHUN Secretariat to address staff retention challenges by exploring new performance management, recruitment, and staff engagement tactics.

In Quarter 3, another Global Team visit to the AFROHUN Secretariat was conducted to follow up on action items from the previous site visit, review and revise the Year 5 budget and narrative, check in and provide guidance regarding management of the transition award and challenges faced, continue conference planning discussions, and touch base on project closeout procedures.

In Quarters 3 and 4, we supported the Networks as we navigated a reduction to the Year 4 budget and delays in the obligation of funds for Year 4 Quarter 4 and Year 5 due to the transition from USAID core to Mission funding. In Quarter 4, the Global Team further helped the Networks to realign their work plans in support of the localization shift by USAID. This shift moved decision-making for OHW-NG funding from USAID Washington to field support from the USAID Missions and is supportive of USAID's local capacity strengthening policy. The Global Team supported the Networks to devise a new work plan format, consolidate activities, and realign regional and global activities in support of country-specific plans. The Global Team further compiled dashboards of JEE scores in each country and region, and developed PowerPoint slides for each country Network that conveyed how Network activities supported specific JEE capabilities. The Global Team also held workshops and discussions with both Network Secretariats to improve communication with USAID Missions and to design the regional Networks' value proposition to country-specific work plans. For AFROHUN, the Global Team also develop a draft guidance document for Country Chapters on effective communications with USAID Missions.

Stage 3: Transition to Direct USAID Funding

Transition Milestones

In Year 3, AFROHUN and SEAOHUN completed all transition-related milestones. No action conducted in Year 4.

Transition Letters

Transition letters were submitted to USAID on behalf of the two networks in Year 2 and Year 3, and no further action was needed in Year 4.

Signed Transition Awards

Both Networks successfully achieved the direct transition award milestone in Year 3.

Both Networks faced delays in their onboarding of new staff and programmatic activities related to the transition awards. However, by Quarter 2, both Networks were fully underway with program implementation. Both Networks successfully completed their work plans and annual reporting requirements independently and continue to improve on financial and program reporting.

Stage 4: The Programmatic Transition

The OHW-NG Consortium maintains a Programmatic Transition Plan document, which captures the key programmatic activities to be transitioned, the target transition date, and the annual work plan activities needed to prepare the Networks to assume full leadership of this activity by the target date. Our Consortium, including the Networks, reviews this annually, in advance of work planning. We also conduct a mid-year review, which is reported below and in ***Table 1***, the OHW-NG Programmatic Transition Plan Dashboard.

Proportional increase in network funds

Key progress updates on the OHW-NG programmatic transition as of Sept 30, 2023

Curriculum Curation Management System (CCMS): As of Year 3, this system was integrated into the flagship OHWA website with access to update data and generate summary

results provided to both SEAOHUN and AFROHUN. Data is also populated for each, marking completion of this activity's transition. completion of this activity's transition.

Annual CLASS Scoring: In Year 3, the CLASS Scoring questionnaire was installed on the flagship OHWA website to facilitate engagement at the university level. Training orientation sessions were conducted for both Networks and transition is completed. In Year 4, we encouraged the Networks to independently conduct the CLASS scoring in preparation for Year 5 planning. By the end of Year 4, there were 224 CLASS Score profiles completed, a major increase from 152 by mid-Year 4. This activity is fully transitioned.

OHWA Content Development: In Year 4, there was a major acceleration of course development by the Global Consortium: 12 courses were developed and delivered and over 3,500 registered learners from 91 countries enrolled in these courses. At the end of Year 4, more than 6,000 course enrollments were registered on OHWA. In Year 4, AFROHUN identified the Mentored Experiential Learning and Training (MELT) program to be the signature training and empowerment activity of AFROHUN Academy, and the Global Team provided technical review of AFROHUN's curriculum strategy for MELT. Both Networks also intend to develop course content for the Academies independently through their transition awards, including AFROHUN Academy's course in risk communication and community engagement which may be required for trainees accepted in to the Mentored Experiential Learning and Training (MELT) program. While this activity is transitioned, light technical support may be provided to help ensure the regional academies successfully format and upload training to their respective sites.

OHWA Website Maintenance: Since Year 3, the OHWA website has been "live" with extensive functionality for taking courses, uploading courses, and filtering courses included. Continuous iteration and improvements to the site, testing site links and functionality occurred throughout Year 3 and Year 4. Early in Year 4, with the piloting of several new OHWA courses, we refined registration, enrollment, and communication with learners. The Global Team is also updating and refining standard operating procedures. We also initiated the process of populating AFROHUN Academy's website functions and capabilities to transition the website fully to AFROHUN in Year 5. We provided technical support to both Networks to identify staffing needs for independent website support in Year 5 work plans.

OHWA Governance: In Year 3, the Global Team produced a draft Sustainability Plan for the Global OHWA, which outlines three difference governance scenarios for the global and regional academies, as well as potential costs and funding strategy. In Year 4, we introduced this document to leadership from AFROHUN and SEAOHUN and initiated discussions about the production of regional academy sustainability plans. During the stop work, which occurred due to delayed funding, the Global Team progressed on these plans to produce draft regional sustainability plans for the Networks to review. These plans articulate the staffing, governance, priorities, and funding strategy of each regional Network's academy, which will be useful for approaching other sponsors. Also included is an Excel-based finance model, which projects all costs and revenue sources for each regional academy for the next 10 years. In Year 3, AFROHUN identified a Director of the AFROHUN OHWA (AOHWA), and in Year 4, the AOHWA technical advisory committee met periodically and independently. We also provided technical support and encouraged SEAOHUN to activate their technical advisory committee for their regional academy, as well as to elaborate their governance model. Continued support will be provided to both networks to further codify their governance structures to continue in the era after OHW-NG.

International Board of Examiners (IBOHE): Building on work in Years 2 and 3, where the IBOHE developed terms of reference, established criteria for nominations, and reviewed the outcome of the eDelphi Panel on One Health competencies, in Year 4 the IBOHE reviewed technical materials and published a manuscript on stakeholder engagement and needs assessment of the One Health Workforce Academies. Our OHW-NG Consortium produced a draft self-assessment tool for the OHWA, consisting of 100 questions and test scenarios. The self-assessment test will be installed into the flagship OHWA training site in Year 5, and its implementation and outcomes will be evaluated by the IBOHE. Future management of the IBOHE depends on the agreement of each Network to their regional academy models, and the governing relationship with the flagship OHWA. Transition remains on track and is planned for Year 5.

Communities of practice (CoPs): In Year 3, SEAOHUN proposed to launch community of practice on competency-based education and on student professionalism under their USAID transition award, marking completion of the transition of this activity. In Year 4, SEAOHUN led a monitoring and evaluation working group with OHUN representation that functions like a community of practice, and independently led a gender community of practice with rotating OHUN representation. In Year 4, the AFROHUN Secretariat continued to lead and manage their own community of practice on emerging and re-emerging infectious diseases, with modest support from the Global Team for logistics and data collection. To support transition of these logistics and data tasks, we provided a follow-up training on i-ECHO data entry and tracking. This marks the transition of the activity to AFROHUN. If requested, light back-up support of AFROHUN vCOPs in Year 5 may be provided to reinforce AFROHUN's leadership.

Alumni tracking and engagement-Advanced analytics and strategy: AFROHUN and SEAOHUN alumni surveys have been completed and presented across country chapters, and survey and basic analytics tools have been handed over to the Secretariats to facilitate future survey design and fielding. Both Networks have adapted their surveys and intend to conduct alumni surveys through their direct transition awards, marking the completed transition of the alumni tracking activity. With the addition of a new knowledge management advisor for SEAOHUN, a special request was made to the Global Team for capacity-building on alumni tracking to reinforce their independent management of their next alumni survey deployment, and this was provided in Year 4. Also in Year 4, AFROHUN led the deployment of the alumni survey, with light, on-demand technical support from the Global Consortium to update the questionnaire and to provide best practices for survey implementation and analytics.

Knowledge Management (SMART Library): In Year 3, ahead of schedule, both Networks proposed to lead KM activities independently as part of their transition awards, marking this activity transitioned. In Year 4, AFROHUN onboarded a new KM staff person funded by GIZ to further strengthen their KM activities in line with the KM strategy they developed under the OHW-NG project. With respect to the SMART library in particular, in Year 4, user rights have been handed over and training conducted for the SMART library, marking full transition of this pending activity. Higher-level integration of all KM systems by AFROHUN, including the Smart Library will continue in Year 5, to ensure sustainability once the project has been completed. SEAOHUN onboarded a new KM advisor in Year 4 as well, and we provided an orientation to this staff person on all the KM activities conducted by SEAOHUN and OHUNs under OHW-NG to date (e.g., alumni surveys, VOHUN KM training, KM assessment). In Year 5, the Global Team stands poised to provide on-demand technical support as needed.

Competency-based assessment: In Year 4, we launched vCOPs with both Networks in competency-based training. Three sessions were completed with each Network to date ranging from 17 to 34 participants. The Global Team also provided technical assistance to both Networks on how to customize competency-based education material and to roll-out CBE training, including a formal orientation workshop for the VOHUN team. We responded to questions by multiple faculty from across country networks related to implementing the competency-based assessment framework manual, continuing to advocate for its use. Also in Year 4, the competency-based assessment toolkit manual was developed and shared for review, and revisions were made based on feedback.

Lastly, in Year 4 our Consortium drafted a simulation exercise handbook, which is a guide to universities to design, implement and assess simulation exercises for experiential learning, such as outbreak investigation and response. In Year 5, based on demand, the toolkit manual will be translated to French and distributed to all countries across both networks and uploaded to the global OHWA. If requested based on demand, webinars will be organized to introduce the toolkit and have a dialogue with interested country teams. The Global Team is poised to provide technical assistance for interested countries to adapt & use the toolkit manual to incorporate in their training materials for optimal evaluation of competencies acquired in each of trainings. We expect to finalize the simulation exercise handbook in Year 5. Dissemination and sensitization to the Networks will proceed in a similar fashion as the toolkit manual and competency-based assessment framework manual, including inclusion in the vCOP series.

Platforms and Policies: The Global Team and AFROHUN finalized Country Profiles for each of six participating countries, which detail the current policy landscape, with particular emphasis on workforce planning and development efforts, as well as identified strengths, challenges, and opportunities moving forward. All of the information within the documents is derived from a data scan, survey, and key informant interviews conducted in Year 3. In the SEAOHUN region, a data scan process was started with six OHUNs. PHILOHUN and THOHUN completed the first drafts of their scans, which will become the main content for their country profiles. Work on country profiles was postponed due to delayed funding in Year 4. Going forward, the Global Team will work with the Networks and stands by to provide further assistance on demand.

OCA self-assessment: AFROHUN and SEAOHUN both conducted the OCA self-assessment at end of Year 3 without any assistance from the Global Team, marking the transition of this activity as completed. Both networks will repeat the OCA as a final benchmarking of their progress in OHWNG in Year 5.

Work planning: In Year 4, both Networks worked directly with USAID to prepare work plans for the transition awards, marking the transition of this activity as completed.

MEL: In Year 4, both Networks independently prepared MEL plans and conducted semi-annual and annual reporting for their direct transition awards, marking the transition of this activity completed. The Global Team further provided workshops to both Networks on how to integrate GHSA and JEE reporting to their MEL approaches, in alignment with the USAID localization strategy.

External communications: In Year 4, the Global Team provided a workshop for the AFROHUN Secretariat and Country Chapters on effective communication with USAID Missions, which reviewed best practices for progress updates, handling information requests, and negotiating changes to scope, as well as learning from experiences in the region. Ongoing support was provided to further strengthen each Network's communications with external stakeholders, including through success stories, presentations, website materials and social media. AFROHUN and SEAOHUN are now managing communications independently, especially with the direct transition awards, marking the transition of this activity as completed. However, the Global Team will continue to provide technical assistance in external communications under the Objective 3 scope for the duration of the award.

Gender: A gender policy is now approved by the SEAOHUN Executive Board. The SEAOHUN Gender Working Group is now managed by the OHUNs and they meet quarterly to share experiences, guest lectures and discussion. The Global Team supported the development of two new Gender and One Health courses for the OHWA, which consist of six modules, each tailored to AFROHUN and SEAOHUN, featuring experts from the respective regions. Importantly, in Year 4, a version of the course was offered through the flagship OHWA, and by the end of Year 4, there were more than 300 learners enrolled in the course. Work through Year 5 is planned to capacitate faculty in gender analysis and integration of gender into the One Health curriculum at the network universities. Building on training in prior years, MyOHUN plans to train university network members on gender analysis, and the Global Team is planning a training in gender analysis and integration into programs for AFROHUN in April 2024. This training will encourage changes in programmatic activities and curriculum to improve the integration of gender to align with the new gender policy. The Global Team will continue to provide technical assistance for gender analysis by INDOHUN in select regions.

OHWNG PROGRAMMATIC TRANSITION DASHBOARD					
TARGET PROJECT YEAR FOR FULL TRANSITION OF ACTIVITY				STATUS (09/23)	
ACTIVITY	YEAR 3	YEAR 4	YEAR 5	AFROHUN	SEAOHUN
OBJECTIVE 1					
Curriculum curation management system	✓			Completed	Completed
Annual CLASS scoring system		✓		Completed	Completed
OHWA content development		✓		In Progress	In Progress
OHWA website design & maintenance			✓	On-track	On-track
OHWA governance			✓	Completed	On-track
OHWA International Board of Examiners			✓	On-track	On-track
OHWA communities of practice		✓		Completed	Completed
OBJECTIVE 2					
Alumni tracking & engagement	✓			Completed	Completed
Knowledge management		✓		Completed	Completed
Competency based assessment			✓	Completed	Completed
Platforms and policies			✓	On-track	On-track
OBJECTIVE 3					
Business plan annual update		✓		Completed	Completed
OCA benchmarking	✓			Completed	Completed
PROJECT MANAGEMENT					
Work planning	✓			Completed	Completed
Monitoring, evaluation and learning		✓		Completed	Completed
External communications		✓		Completed	Completed
GENDER					
Gender Assessment to inform Gender Action Plans			✓	On track	On track

Figure 1. OHW-NG Programmatic Transition Dashboard

Photo: LAOHUN

Gender Action Plan

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 and effectively collaborate in order to sustainably manage health systems. To this end, we developed a Gender Action Plan (GAP) to support explicit project, Network and activity-level institutional commitments to gender

HIGHLIGHTS

Equitable Access to Gender Training through Innovative Virtual Platforms: "The Gender and One Health Course" for the One Health Workforce Academy

Working in close partnership with AFROHUN and SEAOHUN, we designed regional-specific Gender and One Health courses, which are both in the final stages of development for integration on the virtual One Health Workforce Academy (OHWA) platform (**onehealthworkforceacademies.org**).

Each regional Gender and One Health Course contains six modules:

1. Introduction to Gender
2. Gender Analysis
3. One Health and Gender
4. Gender Sensitive Emergency Response Planning and Disease Outbreaks
5. Risk Communication
6. Disaster Risk Management and One Health

The courses provide essential information to increase learner knowledge about gender norms, gender-related barriers / constraints, gender roles, and gender relations, and the modules include case studies and interactive quizzes linked to core gender and One Health competencies.

These courses were officially launched this year and 268 learners enrolled with 68 completing the course. Feedback from learners was extremely positive and the courses offer the opportunity for AFROHUN and SEAOHUN to learn OHWA course development, management, and administration.

Scan with your iPhone camera or other code reader to access the OHWA website:

> "Thank you for I have learned a lot in this course especially on how gender and one health inter-related. I hope I can use my basic knowledge in the near future or even enhance it by enrolling again for free in other OHWA courses if given the chance."
>
> –Workshop participant from the Philippines

> "As a woman myself, I felt that the subject was very empowering. I find the topic visionary. I like how the lecturers were very consistent in their goal of creating gender inclusive programs."
>
> –Workshop participant from Liberia

SEAOHUN Gender Policy & Community of Practice

This year, SEAOHUN institutionalized the Gender Policy and is actively utilizing it, in collaboration with OHUN partners for ongoing project implementation and in the design of new projects and proposals. SEAOHUN also developed a Gender Working Group among OHUN members that has organically evolved into a community of practice. Meetings are held quarterly with facilitation shared by OHUN members. VOHUN kicked off the working group series and THOHUN held the second session. Each series features a keynote speaker and lively discussion of gender in health, in the workplace, and in community development.

AFROHUN Training on Gender Analysis and Integration in Programs

In collaboration with AFROHUN, the Global Team co-designed a training planned for Year 4 Quarters 3 and 4 that builds on the strong foundation established through gender trainings earlier in the project. Participants in the Gender training "tracer study "conducted in Year 2 of the project reported gender analysis and gender integration into programs as two major sub-topics that participants felt not comfortable with. This new training addresses this gap and targets a selected group of gender champions from AFROHUN. The training consists of several modules on gender analysis and gender integration into programs to deepen the current knowledge to incorporate gender equity into One Health training and workforce development programs. In addition, the training will create the ability of participants to develop their own gender action plans (GAP) to increase gender awareness in the Networks and with their partners, provide gender training to different stakeholders, identify gender barriers and opportunities for gender equity, thereby closing the gender gap in the network. Through the training we envision the following outcomes:

- AFROHUN has created gender policies and frameworks that continuously provide the mandate, the political support and the resources to ensure integration of gender considerations in all program activities
- AFROHUN integrates gender concepts and principles in all training, programming activities and interventions, member institutions are gender aware and gender sensitized, and can carry out gender analysis of situations to ensure they can identify gaps and solutions

This training was postponed to Year 5 due to delayed funding.

LESSONS LEARNED

As the project progress through Year 4 to the final year and close-out, initial efforts to incorporate gender as a cross cutting them into all OHW-NG project activities and culture are now bearing fruit. Both Networks have successfully progressed towards greater gender equity and inclusion in organizational culture and programming and we are on trach to achieve targets for the four gender indicators included in our performance monitoring plan ***(See Performance Monitoring chapter on page X for details***). In addition, the Networks are advancing towards their own gender action plans and communities of practice independently of Global Team leadership, enabling the long-term sustainability capacity gains.

NEXT STEPS

1. Continue to provide technical support to AFROHUN and SEAOHUN and build capacity for designing and implementing their independent Gender Action Plans under the Transition Awards.
2. Continue managing the online course on Gender and One Health on the One Health Workforce Academy and support AFROHUN and SEAOHUN with integration of these courses on their regional Academies platforms building their capacity to develop and administer Academy content.
3. Conduct training of trainers from AFROHUN on gender analysis and gender integration.
4. Continue activities on gender sensitization with SEAOHUN and identify gender champions in each OHUN.
5. Provide technical support to MyOHUN in training faculty and students on integrating gender into research and programs.
6. Continue to provide technical support to AFROHUN DR Congo and the KSPH study on gender inequalities in access to master's degree training, including visits to DR Congo to support AFROHUN with program evaluation and optimization.

Photo: AFROHUN DR Congo

Business Plan

Updating and enriching business plans to ensure the organizational and financial sustainability of AFROHUN & SEAOHUN

This year we focused on two major priorities in the implementation of Network business plans: 1) Capacity-building of Network operations and staff to support successful attainment of USAID transition awards; and 2) Expanding Network partnerships and revenue generation for long-term financial sustainability. Both Networks worked tirelessly to achieve their Capacity Plans, as summarized below and in the progress dashboard in Figures 1 and 2. Further, AFROHUN and SEAOHUN explored and tested models for financial sustainability, including conference sponsorship, fee-based membership models, and fee-based courses.

ACTIVITIES & HIGHLIGHTS

Managing Diversified Business Models for Sustainability

Year 4 represented an important shift in the Consortium's priorities for work under Objective 3 to strengthen Network sustainability. Both Networks intentionally shifted away from the robust capacity-building plans and tactics of Years 1-3 under the project, which were designed primarily to help each Network successfully apply for and manage directly funded USAID awards. Year 4 Business Plans focused instead on effectively managing new funded awards and setting an ever-higher bar for new partnership development and resource diversification.

Managing New Funding Awards

The first priority for both Network business plans in Year 4 was to successfully implement the new funding awards secured in Year 3, from USAID and GIZ. AFROHUN successfully onboarded a new GIZ consultant, who is embedded for two years at the AFROHUN Secretariat to work on knowledge management activities. AFROHUN developed and has implemented an approved GIZ scope of work related to creating new, innovative knowledge management products (e.g., a 10-year anthology of AFROHUN lessons learned) and worked with OHW-NG Consortium staff to ensure synergy and complementarity between the two

sources of support. SEAOHUN continued to implement its ongoing Chevron funding, while AFROHUN continued to increase its scope of work under the USAID STOP-Spillover award secured in Year 2.

Both Networks also submitted revised work plans for new direct USAID Transition Awards in Year 4 Quarter 1, and AFROHUN successfully achieved the handful of required actions that were made as special conditions to their award. Both Networks conducted routine meetings with their USAID counterparts, and recruited staff to effectively manage the new scopes of work. Both Networks faced delays or other challenges with recruiting or retaining staff to lead the onboarding of these new projects in Quarter 1. However, by Quarter 2, the Networks had recruited staff and were actively managing funding and program activities. Such growing pains are typical in the organizational growth trajectory of many organizations, and both Networks are becoming increasingly experienced and skilled to manage the Transition Awards. Other areas of improvement in the operational and financial management of the Transition Awards were actively identified and addressed, through a site visit by the Global Team in Quarter 2, follow-up calls, and use of a checklist.

In Quarter 4, both Networks undertook a robust process of changing their Year 4 work plan to realign Quarter 4 activities and Year 5 activities into country-specific work plans. This supported the localization shift of decision-making by USAID on OHW-NG activities and funds, from Washington, D.C. to field support from country Missions. Both Networks created a new template for their work plans and held robust discussions with their country Networks and Mission representatives, to ensure the activities and budgets proposed aligned with Mission priorities. As part of these meetings, the Secretariat offices had to define their unique value proposition to country-specific activities and outcomes, a task supported by the Global Team. The Networks were ultimately successful in submitting their new plans for and were tentatively approved for Quarter 4 and select Year 5 activities.

Both Networks have progressed against their ambitious annual resource mobilization targets. As of Year 4 Quarter 4, SEAOHUN had secured over 80% of its cumulative Year 5 target, and AFROHUN had secured over 40% of its cumulative Year 5 target. Both Networks will need to continue working to secure additional revenue for a sustainable funding mix post award. Given higher fixed costs in AFROHUN's organizational model, the gap between fixed costs and projected revenue is greater and more intensive work will be needed on both revenue generation and cost reduction to ensure sustainability.

Board Engagement

In Quarter 4, AFROHUN convened a two-day workshop of the Executive Board, focused on discussing sustainability approaches for the network. AFROHUN invited the Global Team to facilitate the workshop, via virtual participation. The Board first examined two likely funding scenarios and conducted contingency planning. Next, the Board brainstormed approaches to reducing costs and mobilizing new revenue. By the end of the workshop, the Board had prioritized several strategies, including engaging national governments, activating the Board resource mobilization committee, and empowering and supporting Country Managers responsible for mobilizing resources together with the Secretariat. The Network followed up the meeting by identifying members of the resource mobilization committee, writing the terms of reference, and activating the committee.

New Partnership Development

In Year 4, both Networks prioritized forming new partnerships with the private sector. SEAOHUN and the Global Team established a list of over 30 potential private sector partners in Year 3, some of which SEAOHUN prioritized for engagement at its annual conference in 2022. In Year 4, SEAOHUN aimed to outreach to a new private sector partner every quarter, drawing first from the companies that attended the SEAOHUN conference and expressed interest to maintain a relationship. SEAOHUN opted to pause new private sector outreach Quarters 1 and 2, to focus on onboarding the new transition awards amidst the unexpected turnover in key staff. With the announcement of the important Indo-Pacific Regional Health Partnership (IPRHP), SEAOHUN Secretariat opted to make a region application to this award its top priority for late Quarter 2 and early Quarter 3. A resumption of private sector partner engagement and outreach was planned for Quarter 4. SEAOHUN Secretariat and MyOHUN collaborated, with Global Team support, to submit a proposal to the IPRHP focused on sustaining the SEAOHUN Academy. SEAOHUN was successfully short-listed for two rounds of IPRHP review but were ultimately excluded at the final stage of decision-making. SEAOHUN staff reported that the process was an excellent rehearsal, where they learned valuable skills in forming a proposal team and coordinating an international proposal submission, which they can take to future efforts. Quarter 4 plans to outreach to private sector companies were paused due to delayed funding.

AFROHUN made important headway on its goal to create more private sector partners in Year 4. The Global Team produced a robust analysis of global and Africa-based companies that were prospective partners to AFROHUN and developed the first-ever AFROHUN prospective private sector database. The database comprises 69 companies, listed by industry, areas of interest and potential synergy with AFROHUN, country of operations, and likelihood to partner with AFROHUN. AFROHUN then prioritized 10 companies for outreach in Year 4. AFROHUN set as its objective to invite these companies to attend the AFROHUN conference, and in select cases, has approached some to provide sponsorship. With support from the Global Team, AFROHUN began reviewing SEAOHUN conference sponsorship materials for ideas on how to structure the sponsorship menu and communications. However, due to delayed funding, AFROHUN opted to reschedule their annual conference to Year 5.

In Quarter 3, AFROHUN displayed great leadership in its approach to the new World Bank Pandemic Fund opportunity, where it liaised with FAO and other partners and secured teaming arrangements for every single AFROHUN chapter except one. The time to respond to such large proposal was very limited, but AFROHUN positioned itself successfully for country-level awards. AFROHUN chapters drew upon their existing relationships with governments to be included in these proposals. In Quarter 4, AFROHUN was informed of the results of the funding opportunity; one country in the Network had a successful, winning proposal, which will include the Ethiopia Country Chapter in the scope of work. The competition was very intensive, with hundreds of countries applying and just dozens of awards made.

Further, AFROHUN actively approached two foundations to participate in the planned Year 4 AFROHUN international conference and two existing funders to consider conference sponsorship. AFROHUN further engaged the Canadian government institution "Climate Change Africa", and a funding award to AFROHUN is being actively discussed between the two organizations related to climate and health. Finally, AFROHUN secured a commitment by GIZ of approximately $55,000 for its annual conference, now planned for April 2024.

Additionally, SEAOHUN prioritized expanding its regional fellowship program to new partners and becoming a part of the Southeast Asian Ministers of Education Organization (SEAMAO)

in its Year 3 Business Plan, both which it achieved. The OHUNs further worked closely with the Global Team in Year 4 through in-person workshops, a virtual community of practice and one-on-calls to create first-ever sustainability plans for their organization post award, develop resource mobilization plans for the remainder of Year 4, and create professional communications materials - such as capability statement and pitch decks - to use with potential partners. OHUNs had variable success in Year 4; some obtained new diverse funding sources while others were at more nascent levels of maturity focused more on establishing strong programmatic activities. All OHUNs will need to establish some diversification in their funding in order to continue operations post-OHWNG.

Exploring Fee-based Membership Models

Both Networks planned for the further development of their Network membership model in the Year 4 Business Plans. AFROHUN's Executive Board preliminarily approved the new expanded, fee-based membership model, and focused work by the Global Team was planned for early Quarter 3 to operationalize this model. A dedicated site visit was scheduled by the Global Team to help AFROHUN develop its operational plan for the new membership model. This visit was cancelled due to delayed funding.

Four of six OHUNs developed draft membership models at the SEAOHUN OHUN Sustainability Workshop in Malaysia, in December 2023. Support was planned to SEAOHUN in Quarters 3 and 4 to develop regional guidance to OHUNs on membership models, to ensure greater coherence and consistency across the region. This activity was cancelled due to delayed funding.

Creating Fee-based Courses

The Global Team supported development of a draft revenue sharing agreement that AFROHUN can use as a legal agreement with training institutions with whom it wishes to conduct fee-based courses. The agreement outlines the formula for cost-sharing, as well as the procedure for payment and reporting. It was planned to share this document with AFROHUN in Quarter 4, so that the Network could finalize and disseminate the agreement to its Country Chapters. However, that activity was stopped due to delayed funding.

Also in Year 4, AFROHUN's Rwanda Country Chapter planned to implement a new fee-based course in Year 4, and the AFROHUN Secretariat planned to make the AFROHUN MELT course have a tuition component. Due to the slow-down and eventual close-out of the Rwanda chapter due to the change in USAID Mission funding, the Rwanda training was not implemented. AFROHUN continues to plan a tuition component to the AFROHUN MELT program and is actively planning its implementation.

Also in Year 4, AFROHUN's Rwanda Country Chapter planned to implement a new fee-based course in Year 4, and the AFROHUN Secretariat planned to make the AFROHUN MELT course have a tuition component. Due to the slow-down and eventual close-out of the Rwanda chapter due to the change in USAID Mission funding, the Rwanda training was not implemented. AFROHUN continues to plan a tuition component to the AFROHUN MELT program and is actively planning its implementation.

In the SEAOHUN OHUN Sustainability Workshop in Malaysia (December 2023), four OHUNs developed resource mobilization plans that center on launching fee-based courses. For this reason, the first two sessions of the SEAOHUN OHUN Sustainability vCOP series (Quarters 2 and 3 respectively) were focused on giving guidance and case study examples of how best to implement fee-based courses, including how to cost and price courses, how to select appropriate courses, and how to secure blended financing (fees with sponsorship), among other topics.

Business Planning for Year 5

In Quarter 4 of Year 5, the Global Team held discussions with both Networks to update their Business Plans for Year 5. As planned in the OHW-NG programmatic transition plan, this update was conducted more independently by the Networks, with less writing and technical support Global Team. To support this transition, the Global Team converted the lengthy business plan files to PowerPoint, to enable the Networks to make efficient updates independently in future years.

LESSONS LEARNED

Board engagement is critical for advancing sustainability efforts

Over the first three years of the OHW-NG project, the Global Team worked closely with the AFROHUN leadership team to plan and implement activities to strengthen the organization's sustainability, however the Board members were not directly engaged. Important strides were made, such as in organizational capacity development and new partnership development, toward a robust vision of AFROHUN. In Year 4, the Global Team planned a hybrid workshop to more actively engage the AFROHUN Executive Board in these efforts. The Board members attended in person and the Global Team attended virtually. Over two days, the Global Team led the Executive Board through contingency planning centered around two realistic funding scenarios, including exploring changes to staffing and operations to respond to these scenarios. Board members then brainstormed methods to mobilize new resources and streamline the network model moving forward. The workshop was highly successful; Board members assumed a sense of real urgency about making changes, and they immediately determined clear priorities and action steps that they could support. After the workshop, AFROHUN reactivated its Board resource mobilization committee and activated country managers in the resource mobilization efforts. Action steps will be supported in Year 5 by the Global Team through Objective 3. This was a critical step to engaging all levels of the organization to work collectively toward a more achievable vision of sustainability after OHW-NG.

USAID's shift to localization interrupted work plans, but was fruitful for sustainability

In Year 4, USAID made an important shift in decision-making related to OHW-NG funding, from Washington, D.C. based staff to Mission staff and field support in each of the AFROHUN and SEAOHUN member countries. Starting in Quarter 3 of Year 4, an activity slow-down and eventual stop work occurred, given funding delays related to this shift. Each Network was invited to redesign their work plans for Quarter 4 of Year 4 and Year 5, to ensure all plans were country-specific, rather than regional or global. We worked closely with the Networks to strategize how activities could more directly impact country-specific outcomes, including JEE indicators and other country priorities.

This shift, closely following the Networks adoption of the transition awards, required a great level of effort from all regional and country level staff, and reduced and stopped many planned activities. In two cases, country specific budgets were closed out entirely with little advance notice, forcing one chapter to close and another to operate on a temporary, lean budget, until more funds may be identified in the future. These interruptions and delays to the Year 4 work plan were substantive and affected our ability to progress on our sustainability objectives. However, at the same time, such a shift positions the Networks now to more aptly appeal to and secure country-level donors. Consequently, we believe the Networks are in a stronger position to sustain funding at the country level for the future.

NEXT STEPS

In Year 5, both Networks will focus on intensifying resource mobilization efforts to secure a more diverse funding position by the end of the OHW-NG project. AFROHUN will host a scientific conference and look for corporate sponsorship and fee-based services as part of that activity. AFROHUN will also support a workshop on sustainability at the Board and Dean's Leadership Summit, which will occur immediately preceding the conference, and can help sustain momentum from the Year 4 Quarter 4 workshop.

Also in Year 5, both Networks have a focused interest to secure sponsors for their Academies and will revise and refine the regional sustainability plans for the Academies developed by the Global Team in Year 4. Lastly, in Quarters 1 and 2, all country and Secretariat Networks will produce actionable plans for how their Network will continue post-OHW-NG award, irrespective of new funds available. These plans will also include a funding strategy and resource mobilization plan, to help secure diversified funds where possible in the time remaining in the project period.

Photo: MyOHUN

AFRICA ONE HEALTH UNIVERSITY NETWORK REPORTS

SOUTHEAST ASIA ONE HEALTH UNIVERSITY NETWORK REPORTS

SUGGESTED CITATION

One Health Workforce-Next Generation Consortium. 2023 Annual Report. One Health Institute, University of California, Davis, December 2023.

USAID
FROM THE AMERICAN PEOPLE

UCDAVIS
One Health Institute
School of Veterinary Medicine

AFROHUN
Advancing One Health

SEAOHUN
Southeast Asia One Health
University Network

EcoHealth
Alliance

Ata Health Strategies

icap
Global
Health

Berkeley
UNIVERSITY OF CALIFORNIA

Project
ECHO

UCI
University of
California, Irvine

Smithsonian
Institution

LABYRINTH
GLOBAL HEALTH, INC.

AMERICAN
SOCIETY FOR
MICROBIOLOGY