



ONE HEALTH WOORKFORCE NEXT GENERATION

YEAR 3 ANNUAL REPORT October 1, 2021 – September 30, 2022

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- 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

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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).

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AFROHUN SEAOHUN



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

HUAFHue 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 |oint 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

MSUManagement and Science UniversityMyOHUNMalaysia 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 Ne

OHUN One Health University Network
OHWA One Health Workforce Academy

OHW-NG
One Health Workforce - Next Generation
World Organisation for Animal Health
PhilOHUN
Philopine One Health University Network
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

UNESCOUnited Nations Educational, Scientific and Cultural Organization

UNIKIN
UNILU
UNIMAS
University of Kinshasa
University of Lubumbashi
Universiti Malaysia Sarawak
UniSZA
Universiti Sultan Zainal Abidin

University of Cyberjaya
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

WASHWater, Sanitation, and Hygiene
WHO
World Health Organization





ESECUTIVE

One Health Workforce - Next Generation

Empowering the Africa One Health University Network (AFROHUN) and Southeast Asia One Health University Network (SEAOHUN) to become global leaders in transforming workforce capacity to prevent, detect, and respond to emerging disease threats.



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THIS YEAR IN NUMBERS





9 AFROHUN COUNTRY CHAPTERS



32 GLOBAL ACTIVITIES



SEAOHUN COUNTRY NETWORKS (OHUNS)



ACTIVITIES INCREASING CAPACITY TO RESPOND TO COVID-19



123
AFROHUN
NETWORK
ACTIVITIES



11 GLOBAL TEAM PARTNERS



92 SEAOHUN NETWORK ACTIVITIES



117
MEMBER
UNIVERSITIES

Learn more about our Global Consortium:

Scan with your smartphone camera or other code reader to learn more about the OHW-NG project, our consortium, AFROHUN and SEAOHUN, and to access the full list of our resources and publications



THE OHW-NG CONSORTIUM

Our Consortium consists of experienced partners across North America, Africa, and Asia, and training is coordinated and implemented through the AFROHUN and SEAOHUN Secretariats. The OHW-NG Global Team is a highly collaborative group of organizations (mostly US-based) with complementary missions and extensive experience working in the AFROHUN and SEAOHUN member countries, including those countries proposed for Network expansion over time.

The US-based Global Team institutions include the 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.



























THEALTHEALTH

The One Health University Networks are uniquely positioned to serve as knowledge hubs of credible information and to prepare and connect current and future health professionals with the knowledge and skills for strengthening health security for enhanced disease prevention, detection, and response.





18

MEMBER UNIVERSITIES



26

MEMBER INSTITUTIONS



35

STUDENT ONE HEALTH INNOVATION CLUBS



4,780

Individuals trained



37

PRODUCTS DEVELOPED



21

NEW PARTNERSHIPS

SELECTED HIGHLIGHTS

(2021-2022)

- The AFROHUN Secretariat secured \$5 million over two years in direct USAID funding through a new innovative Transition Award (TA), which has been part of the OHW-NG project design from the start. Through the Transition Award AFROHUN will build their Mentored Experiential Learning and Training (MELT) program and design and implement other activities focused on rabies and COVID-19 in the region.
- Marking a major milestone for both the Country
 Chapter and the Network as a whole, AFROHUN
 Tanzania carried out the first revenue generating
 activity by piloting a fee-based One Health course,
 which offered Continued Professional Development
 (CPD) credits to in-service professionals across the
 country.
- This year, AFROHUN secured a high-profile partnership with the German Corporation for International Cooperation (GIZ) to support knowledge management and regional training programs as part of the One Health Workforce Academy.

TRAINING & EMPOWERMENT

- AFROHUN Cote d'Ivoire was awarded American Rescue Plan Act (ARPA) funding from the local USAID Mission to support the national COVID-19 vaccination strategy and combat misinformation across six university campuses and training hospitals. This year, efforts reached >2,400 community members with targeted evidence-based messaging on COVID-19 vaccination in a key demographic (university communities) identified with high rates of vaccine hesitancy.
- AFROHUN Cameroon was also awarded ARPA funding from the USAID Mission and focused efforts on COVID-19 risk communication and community engagement (RCCE). AFROHUN Cameroon trained 25 journalists in RCCE to improve regional reporting on the pandemic.
- AFROHUN worked to expand the role of One Health demonstration sites in training programs by establishing a cross-country mentorship approach designed to improve experiential learning activities at existing demonstration sites in Kenya, and to support the establishment of new demonstration sites in Senegal and Cameroon.

- AFROHUN Kenya's University of Nairobi and Moi University launched a joint Master's in Science degree program in Infectious Disease and Global Health, the first of its kind in the region. Three fully funded scholarships will be offered to the first cohort.
- The Secretariat organized 11 monthly virtual Community of Practice sessions through Project ECHO, training >400 faculty and graduate students on e-learning and strengthening university capacity for delivery of online courses.
- The Secretariat organized and carried out four workshops on Knowledge Management (KM) strategies and action plans for Network Country Managers and thematic leads. As part of the KM strategy, country teams participated in a KM writeshop during a Year 4 (fiscal year 2023) work planning meeting in Dakar, Senegal.

GENDER EMPOWERMENT

Over the last two years, the AFROHUN team in DR Congo, supported by supplemental funding from the USAID Mission, provided scholarships to two 30-student cohorts as they pursued master's degrees in public health at the Kinshasa School of Public Health (KSPH). The team also conducted a gender gap analysis at KSPH, and the findings are being used to inform university leadership on strategies for increasing female enrollment in the program.



Scan with your iPhone camera or other code reader to access the AFROHUN report:



AFRICA ONE HEALTH UNIVERSITY NETWORK MEMBERS



AFROHUN Cameroon

Université des Montagnes (UdM)

University of Buea (UB)

- Faculty of Agriculture and Veterinary Medicine
- Faculty of Health Sciences

University of Ngaoundéré

 School of Veterinary Medicine and Sciences

AFROHUN Côte d'Ivoire

Université Félix Houphouët-Boigny

AFROHUN DRC

University of Lubumbashi (UNILU)

• School of Veterinary Medicine

University of Kinshasa (UNIKIN)

• School of Public Health

AFROHUN Ethiopia

Jimma University

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

Mekelle University

- School of Veterinary Medicine
- School of Public Health

Addis Ababa University

• Aklilu Lemma Institute of Pathobiology

AFROHUN Kenya

Moi University

School of Public Health

University of Nairobi

- Faculty of Veterinary Medicine
- School of Public Health

AFROHUN 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



MEMBER UNIVERSITIES



182

MEMBER FACULTIES



29 ONE HEALTH

STUDENT CLUBS



INDIVIDUALS TRAINED



140 PRODUCTS

PRODUCTS DEVELOPED



14

NEW PARTNERSHIPS

SELECTED HIGHLIGHTS (2021-2022)

- In September 2022, the Secretariat organized and hosted the 2022 SEAOHUN International Conference in Bangkok, Thailand. The conference brought together over 300 One Health practitioners from 34 countries across the globe to share knowledge and expertise on complex health challenges interconnecting human, animal and environmental health. The four conference tracks; One Health Education, Policy Gaps and Partnership Needs in One Health, Lessons Learned from the COVID-19 pandemic, and Combating Antimicrobial Resistance using One Health Approach - provided excellent networking opportunities and perspectives being used to combat emerging health threats. Conference highlights included in-depth oral and poster presentations provided by selected One Health University Network faculty, scientific researchers, and students.
- Immediately following the 2022 SEAOHUN International Conference, SEAOHUN leveraged the opportunity for in-person interactions to convene a day-long One Health partnership workshop. Eightynine educators, researchers, and practitioners joined the workshop to explore areas for collaboration across academic, public, and private sectors. Workshop participants took part in a modified gap analysis to explore gaps and collaborative opportunities on topics including One Health education and training, One Health research, surveillance and laboratory capacity, and surge capacity. The workshop prioritized key gaps and areas targeted for cross-sectoral collaboration including; 1) Building a business case and value proposition for multi-disciplinary One Health approaches, 2) Translating One Health research into policy and action, 3) Continuing professional development for in-service personnel, 4) Providing risk communication training for university students, 5) Broadening One Health surveillance and 6) Climate change research for One Health.

- In October 2021, SEAOHUN was formally admitted as a member of the Global Health Security Agenda (GHSA), a multilateral and multisectoral collaboration of over 70 countries, international and non-government organizations, and private sector companies who envision a world safe and secure from global health threats that are caused by infectious diseases. The GHSA was initiated in 2014 to better prepare for the infectious diseases outbreaks that afflicted the world such as SARS (2002), H1N1 influenza (2009), MERS-CoV 2012, H7N9 influenza (2013), and Ebola (2014). As a strong advocate for global health security, SEAOHUN joined the global platform to collaborate with other actors on efforts to develop resilient and competent One Health workforces in Southeast Asian countries to effectively prevent, detect and respond to infectious disease threats by leveraging education, research, and training excellence. Admittance to the GHSA demonstrates recognition of the value that One Health University Networks are providing from local and national to regional and global levels.
- Coinciding with International Women's Day on March 26, 2022, SEAOHUN launched its first Student Journal Club virtual webinar. Twenty-nine university students from across the regional network joined and had opportunity to learn together with their peers, exploring together One Health related literature and research articles on integrating gender into disease outbreak preparedness and response. The regional Secretariat is leveraging this virtual Student One Health Journal Club pilot as a community of practice across the Southeast Asia region.
- Country OHUNs are marking expansion of student engagement through establishment and support for One Health Student Clubs. Student club support from local National Coordination Offices includes competitive small grant funds for club activities, pairing student club leadership with faculty

- advisors and mentors, and sharing learning opportunities for the One Health leaders of tomorrow.
- In September 2022, SEAOHUN kicked off its annual Regional Students Competition, with the theme "Communicating antimicrobial resistance (AMR) through Art". The competition was announced on September 21, 2022, and students were invited to form two-member, crossdisciplinary teams to create visual art to communicate the theme to a non-scientific community. Following the competition's announcement, the SEAOHUN Secretariat hosted a webinar "Communicating the Impact of AMR through Art" featuring subject matter experts from the OHW-NG Global Consortium who shared technical background information on AMR along with information and ideas on communicating scientific facts and research findings through
- SEAOHUN continues to grow now 99
 member universities across eight Southeast
 Asian countries. Country Networks
 (OHUNs) are leveraging project activities
 to introduce and sensitize One Health
 concepts and approaches to expanding
 audiences. During this reporting period
 alone, OHUN efforts have reached tens of
 thousands via risk communications outreach
 and by providing virtual training content to
 audiences eager to foster multi-disciplinary
 efforts addressing complex global challenges.



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SOUTHEAST ASIA ONE HEALTH UNIVERSITY NETWORK MEMBERS

CAMBOHUN

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

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

(UHS-Laos)

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

MMOHUN

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

MyOHUN

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

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

Burapha University

Chiang Mai University

Chulabhorn Royal Academy

Chulalongkorn University

Kasetsart University

Khon Kaen University

Mahasarakham University

Mahidol University

Prince of Songkla University

Thammasat University

Walailak University

VOHUN

Bac Giang University of Agriculture and Forestry

Buon Ma Thuot University

Can Tho University

Can Tho University of Medicine and Pharmacy

Hai Phong University of Medicine and Pharmacy

Hanoi Medical University (HMU)

Hanoi University of Natural Resources &

Environment

Hanoi University of Public Health

Hue University of Agriculture and Forestry

(HUAF)

Hue University of Medicine and Pharmacy

Nam Dinh University of Nursing

Nghe An College of Economics

Nong Lam University at Ho Chi Minh city

(HCM NLU)

Phenikaa University

Quy Nhon University

School of Medicine and Pharmacy, Vietnam

National University, Hanoi

Tay Nguyen University

Thai Binh University of Medicine and Pharmacy

Thai Nguyen University of Agriculture and Forestry

Thai Nguyen University of Medicine and Pharmacy

Tra Vinh University

University of Medicine and Pharmacy at Ho Chi

Minh city (HCM UMP)

Viet-Duc University

Viet Nam National University of Agriculture

(VNUA)

Vinh Long University of Technology and Education Vinh Medical University West Visayas State University

OBJECTIVES & GENDER

Objective 1: Training & Empowerment

Develop, deliver, and institutionalize training and educational offerings in alignment with prioritized One Health core competencies and technical skills

One Health Workforce Academies website:



SELECT HIGHLIGHTS

One Health Workforce Academies

- Approximately 300 individuals expressed interest and pre-registered for enrollment in training programs offered by the One Health Workforce Academies (OHWAs: onehealthworkforceacademies.org). Two courses were developed: Outbreak Investigation and Response, and Part-1 of the Fundamentals of One Health Practice course. These two courses will open for enrollment in November 2022 and online instruction will begin in January 2023.
- We developed, reviewed, and installed a set of One Health Case Studies on the OHWA training platform. We also developed, reviewed, and published a set of experiential field training guides for the OHWA's faculty scholars' pedagogy platform. Finally, we developed a guideline for implementing communities of practice based on the ECHO model for installation into the OHWA's faculty scholars' practice platform.
- We held the inter-regional meeting of the International Board of One Health Examiners, a critical step towards realizing our goal of establishing the One Health credential as a competency-based certification that is suitable for continuing professional development of in-service professionals.

Publications

- We prepared a manuscript describing the results of the stakeholder survey for the One Health Workforce Academies, designated for submission and publication after peer review in the journal One Health Outlook.
- We integrated results of the eDelphi Panel,

which was convened to review and update essential One Health competencies, into a revised competency framework resulting in 20 competency domains that will guide the implementation of training activities on the One Health Workforce Academies, and the curriculum of the One Health Certificate. We presented the preliminary results at international conferences to advertise the project and solicit broad feedback, including the International Meeting on Emerging Diseases and Surveillance (IMED) organized by the International Society for Infectious Diseases (ProMED). The abstract and video presentation were peer-reviewed, and the abstract was selected for publication in the International Journal of Infectious Diseases in February 2022 ("Competencies for One Health Workforce Quality Assurance: Disciplinary Diversity and Consensus in a Global eDelphi Panel". International Journal of Infectious Diseases, 116, pp.S67-S68).

- We submitted a proposal for a study guide textbook to Springer Publishing based on the outcome of the eDelphi Panel and a review of curricula for One Heath training for pre-service and in-service professionals in the Networks and various international institutions. Eight anonymous reviewers provided comments that we used to further improve the proposal, which was accepted by the publisher with a timeline for manuscript completion by Summer 2023 and publication by Fall 2023.
- We published an essay focused on the "Importance of Competency Sharpening, especially soft skills, for Current and Prospective Health Workers" (Ogunseitan, O.A. 2021. One Health: Ensuring Excellence in Training Essential Interprofessional Skills for a Competent Workforce. Emerging, vol. 7:12-17. issuu.com/indohun/docs/emerging_7) in the December 2021 edition of Indonesia One Health University Network's (INDOHUN) Emerging Magazine.

Workforce Development

- The AFROHUN-led e-Learning community of practice program based on the ECHO platform continued into the second year, after the completion of the first phase in December 2021. In addition, the AFROHUN Kenya-led community of practice on antimicrobial resistance based on the ECHO platform concluded in December 2021.
- We were invited to join the inaugural steering committee of the World Health Organization's Health Workforce Office program to implement the Roadmap for Public Health and Emergency Response. We subsequently participated in the competency development forum for aligning WHO and partner contributions, which informed the "Action plan: National workforce capacity to implement the essential public health functions including a focus on emergency preparedness and response (2022-2024).

Objective 2 Assessment & Tracking

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

SELECT HIGHLIGHTS

- We launched our alumni tracking and engagement survey with both regional Networks reaching a total of 787 alumni (SEAOHUN: 366 respondents and AFROHUN: 421 respondents).
- Two weeklong Competency-based Education (CBE) workshops were co-created and conducted together with each regional Network reaching 43 participants and culminating in the development of country OHUN CBE action plans committed to integrating One Health and CBE principles into institutional curriculum (See our Success Story on page 46). In addition, we supported two trainings on CBE and curriculum adaption and orientation for both VOHUN and the AFROHUN Tanzania team.

- We facilitated two Knowledge Management workshops this year, one with the AFROHUN Secretariat in July 2022 and one with VOHUN in August 2022.
- Two abstracts were presented at the SEAOHUN 2022 International Conference in Thailand: "Competency-based Education to Strengthen One Health Workforce to Combat Global Health Threats" and "Developing a Competency-based One Health Training Course for Professionals". In addition, together with OHW-NG Objective 1 team, we established a demonstration booth for the One Health Workforce Academy platform that was unveiled at the conference.
- As part of our mission to assess the capacity and potential workforce gaps at the national level, we completed six country profiles for the AFROHUN region and held consultations on integrating these profiles and the data and information they contain into strategic planning to strengthen health security.

Objective 3 Organizational Sustainability

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

SELECT HIGHLIGHTS

- This year, both Networks successfully achieved the major project milestone of becoming a prime recipient of a USAID funding award, as planned in the OHW-NG cooperative agreement. This milestone represents a significant up-levelling in capacity for both Networks and opens up numerous other opportunities to prime USAID or other donor awards. See Success Story on page 61 and 64.
- With support of the Global Team, the Networks achieved 48 out of 56 improvement actions to strengthen capacity gaps identified in their Non-U.S. Organization Pre-award

- Survey (NUPAS) and NUPAS PLUS assessments. Both Networks made progress on their official USAID NUPAS assessments, and with a few special conditions managed to qualify to apply for direct USAID awards.
- Both Networks exceeded their partnership development goals for the second consecutive year in a row. AFROHUN achieved two new funded partnerships with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and Malteser International for knowledge management and training activities, respectively. SEAOHUN successfully obtained three corporate sponsors for their 10th anniversary conference, the SEAOHUN 2022 International Scientific Conference (Chevron, Pfizer, and Zoetis).
- Representing important steps toward their goal of funding diversification, AFROHUN established a new, expanded membership model and presented this model to their Executive Board. This model introduced new tiers of membership for paraprofessional and technical schools, as well as external partners, defined membership services and fees for each tier. In addition, AFROHUN further piloted their first-ever fee-based course, via a five-day One Health course offered in Tanzania to a diverse group of 30 participants.

GENDER

Integrating gender considerations and mainstreaming gender competencies with the One Health University Networks at every level (planning, policy development, program implementation, and program evaluation) for an effective and equitable transdisciplinary workforce

SELECT HIGHLIGHTS

- 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. Each regional
 Gender and One Health Course contains six modules and provide essential information to
 increase learner knowledge about gender norms, gender-related barriers and constraints, gender
 roles, and gender relations, and the modules include case studies and interactive quizzes linked to
 core gender and One Health competencies.
- This year, SEAOHUN's Gender Policy was drafted and reviewed by the OHW-NG Consortium and SEAOHUN Secretariat, then put forward for review and approval by the SEAOHUN Executive Board at the Board meeting in September 2022.
- In DR Congo, we worked with AFROHUN to co-design a study aiming to generate quantitative and qualitative data that can provide insights into existing gender gaps in enrollment, recruitment, and selection of candidates to participate in the Master's in Public Health program at the Kinshasa School of Public Health (KSPH). This study produced data to elucidate the factors limiting women's access to the KSPH program. and is enabling the implementation of actions that can reduce the gender gap by laying a solid foundation for equitable access between men and women to the Master's program. See Success Story in the AFROHUN report on page AFR-52.



- The Viet Nam One Health University Network (VOHUN) conducted a gender analysis study that included a gender learning needs assessment and community gender analysis to explore gender differences and relations and identify gender issues among farmers at the community level in Thai Nguyen Province, Vietnam. Thirty small-scale farmers from the Lau Thuong commune in Vo Nhai District were involved in the study, which included in-depth interviews conducted by faculty and students from VOHUN member universities. See Success Story on page 76.
- Together with the Malaysia One Health University Network (MyOHUN), we designed a workshop intended to reach the indigenous Orang Asli community in the Cameron Highlands, Pahang, Malaysia with training and outreach for students targeting empowerment for women and equitable leadership in One Health. During the workshop, students learned about how traditional gender relations may create imbalances in access to resources and in the distribution of labor and roles given existing cultural norms and values. The workshop reached students from multidisciplinary backgrounds, increasing their knowledge and awareness on gender norms in relation to cultural intersection and acceptance and how that can impact health outcomes, while also building their skills in community outreach with the Orang Asli community. In the village, the students worked with the OHW-NG and MyOHUN team to collect information related to gender and health related issues including zoonosis and presented their findings for discussion with 30 Orang Asli beneficiaries.



OBJECTIVE E

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

- GL Activity 1.1.1 Update of One Health training activities curation project
- GL Activity 1.1.2 Refine One Health core competencies
- GL Activity 1.1.3 Establish an International Board of One Health Examiners
- GL Activity 1.2.1 Enhance One Health Workforce Academy websites
- GL Activity 1.2.2 Implement virtual Communities of Practice
- GL Activity 1.3.1 Define criteria for Continuing Professional Development credits

OBJECTIVE OBJECTIVE 2

ОВЈЕСТІVЕ

HIGHLIGHTS

One Health Workforce Academies

- As of September 2022, approximately 300 individuals expressed interest and preregistered for enrollment in training programs offered by the One Health Workforce Academies (OHWAs). We completed development of a full course in Outbreak Investigation and Response, and Part-1 of the course entitled Fundamentals of One Health Practice. These two courses will open for enrollment in November 2022 and online instruction will begin in January 2023. In addition to these two courses, we developed. reviewed, and installed a set of One Health Case Studies on the OHWA training platform. A set of experiential field training guides were also developed, reviewed, and published to the OHWA's faculty scholars' pedagogy platform in March. Finally, we developed a guideline for implementing communities of practice based on the ECHO model for installation into the OHWA's faculty scholars' practice platform.
- Regarding institutionalization of competencybased educational initiatives, we also implemented the Calibrated, Lifelong, Adaptive, Scalable, and Sustainable (CLASS) Scores assessment tool on the OHWA platform to facilitate data entry, review, and report generation.
- On November 18, 2021, we also held the inter-regional meeting of the International Board of One Health Examiners, a critical step towards realizing our goal of establishing the One Health credential as a competency-based certification that is suitable for continuing professional development of in-service professionals. Sixty three percent (63%) of members on the Board are women, showcasing our project's commitment to gender equity and women leadership in science and technology.

Publications

- We prepared a manuscript describing the results of the stakeholder survey for the One Health Workforce Academies, designated for submission and publication after peer review in the journal One Health Outlook. There were 23 authors on the manuscript (56% female), including seven from AFROHUN, nine from SEAOHUN, and six individuals from the Global Team and grouped partners designated as One Health Workforce-Next Generation Consortium authors. In summary. 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. We concluded that this 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.
- We integrated results of the eDelphi Panel, which was convened to review and update essential One Health competencies, into a revised competency framework resulting in 20 competency domains that will guide the implementation of training activities on the One Health Workforce Academies, and the curriculum of the One Health Certificate. The panel consisted of 80 individuals representing AFROHUN and SEAOHUN university faculty members, experts from the United Nations Quadripartite for One Health, WHO Health Workforce department, and researchers and educators from international institutions offering

training in One Health. We presented the preliminary results at international conferences to advertise the project and solicit broad feedback, including the International Meeting on Emerging Diseases and Surveillance (IMED) organized by the International Society for Infectious Diseases (ProMED) between November 4th and 6th of 2021. The abstract and video presentation were peer-reviewed, and the abstract was selected for publication in the International Journal of Infectious Diseases in February 2022 ("Competencies for One Health Workforce Quality Assurance: Disciplinary Diversity and Consensus in a Global eDelphi Panel". International Journal of Infectious Diseases, 116, pp.S67-S68). We also presented the results at the 2022 conference of the Consortium of Universities for Global Health (CUGH) on March 28th ("EDU_019 eDelphi Panel Approach to Consensus on One Health Competencies for Next Generation Workforce").

We submitted a proposal for a study guide textbook to Springer Publishing based on the outcome of the eDelphi Panel and a review of curricula for One Heath training for pre-service and in-service professionals in the Networks and various international institutions. Eight anonymous reviewers provided comments that we used to further improve the proposal, which was accepted by the publisher with a timeline for manuscript completion by Summer 2023 and publication by Fall 2023. The publishing agreement was signed on December 22nd. As proposed, the book will have four parts: 1) Introductory Chapter; 2) Technical Competency Domains with five Chapters; 3) Functional Competency Domains with five Chapters; and 4) Series of Case Studies.

Workforce Development

- The AFROHUN-led e-Learning community of practice program based on the ECHO platform continued into the second year, after the completion of the first phase in December 2021. In addition, the AFROHUN Kenya-led community of practice on antimicrobial resistance based on the ECHO platform concluded in December 2021. A new topic based on One Health considerations for food production was then implemented and completed during this year. See Lessons Learned for more information.
- We published an essay focused on the "Importance of Competency Sharpening, especially soft skills, for Current and Prospective Health Workers" (Ogunseitan, O.A. 2021. One Health: Ensuring Excellence in Training Essential Interprofessional Skills for a Competent Workforce. Emerging, vol. 7:12-17. issuu.com/indohun/docs/ emerging_7) in the December 2021 edition of Indonesia One Health University Network's (INDOHUN) Emerging Magazine.
- We were invited to join the inaugural steering committee of the World Health Organization's Health Workforce Office program to implement the Roadmap for Public Health and Emergency Response. We subsequently participated in the competency development forum for aligning WHO and partner contributions, which informed the "Action plan: National workforce capacity to implement the essential public health functions including a focus on emergency preparedness and response (2022-2024).

ACTIVITIES

Strategy 1.1 One Health Training **Content Curation & Development**

Global (GL) Activity 1.1.1 Update of One Health Training Activities **Curation Project**

Several One Health training activities were developed during the period, and the training courses, case studies, and guides are being implemented on the One Health Workforce Academy platform to support progress toward to the goal of establishing the One Health credential as a competency-based certification that is suitable for continuing professional development of in-service professionals. We prepared to fully launch two courses for enrollment beginning in Year 4, including "Fundamentals of One Health Practice" and "Outbreak Investigation and Response". Approximately 300 individuals from the two Networks and international locations have registered to express interest in enrolling in the training courses. Additional training content that has been developed includes case studies and several field training guides. For a complete list of training materials, see:

onehealthworkforceacademies.org/training.

GL Activity 1.1.2 Refine One Health Core Competencies

The production of an updated list of One Health competency domains, including the outcome of the eDelphi Panel convened to review and update the essential competencies of One Health for the workforce, is a major accomplishment. Three hundred and sixty (360) potential panelists were invited from various international institutions and agencies, including representatives nominated by AFROHUN and SEAOHUN. Of these, the responses from 80 final panelists (40% female) were reviewed and compiled, and feedback on the results was solicitated from various constituencies. including the audiences at two international conferences (IMED and CUGH, as noted above in highlights). Moreover, the results were instrumental in the submission of a prospectus for a study guide book to be published by Springer Publishers, Inc. following anonymous review and comments by eight international experts.

GL Activity 1.1.3 Establish an International Board of One Health **Examiners**

The inaugural meeting of the 16 members (63% female) of the International Board of One Health Examiners was held on November 18, 2021. The Board members representing diverse fields of expertise convened to review their charge according to the Terms of Reference, and to plan implementation strategies for activities including: 1) Suggesting and supporting authors drafting and reviewing questions based on One Health core competency domains for the certification examination; 2) Establishing eligibility criteria for trainees seeking to sit for the One Health certification examination (e.g., having passed a mentored experiential learning activity coordinated through a practicum course or internship project, with experiences that can only be attested through direct observation); 3) Establishing pass/ fail thresholds for performance in the certification examination; 4) Sensitizing accrediting bodies, professional organizations, and potential employers of pre-service trainees and supervisors of inservice trainees on the One Health Workforce Academies and the One Health certificate and examination; and 5) Suggesting and supporting authors for a study guide for the One Health certificate examination.

GL Activity 1.1.4 Improve Integration of Gender into One Health Education and Training

An online course on the gender context of One Health is being developed for installation on the One Health Workforce Academy. We plan to make the course available for enrollment in February 2023.

Strategy 1.2 One Health Workforce Academies

GL Activity 1.2.1 Enhance One Health Workforce Academy Websites

The website of the One Health Workforce Academy is fully developed with a wide range of content that is attracting an international audience (onehealthworkforceacademies.org).

The main page of the website is organized to emphasize the vision of the Academy as a one-stop-shop for competency-based One Health training and credentialing (See Figure 1.2.1a), including training, certification, faculty resources, students, career paths, and news and events. Each of the top banners have been populated with content to attract first time visitors and to keep them coming back to the site. We have 300 individuals who have expressed interest in the training programs, and we have established the capacity to register up to 1,000 permanent user profiles.

A major accomplishment during this project period is the production of results from a stakeholder survey in the One Health Workforce Academy, including prospective employers. We had numerous respondents to the survey, and the results were presented at the annual meeting of the 2022 conference of the Consortium of Universities for Global Health. The poster presented in Figure 1.2.1b showcases authors from across our global Consortium, including AFROHUN and SEAOHUN partners. A manuscript was composed with contributions from 23 authors including experts from AFROHUN and SEAOHUN for submission to a peer-reviewed journal, *One Health Outlook*.



Figure 1.2.1a. Front page of the One Health Workforce Academy Website

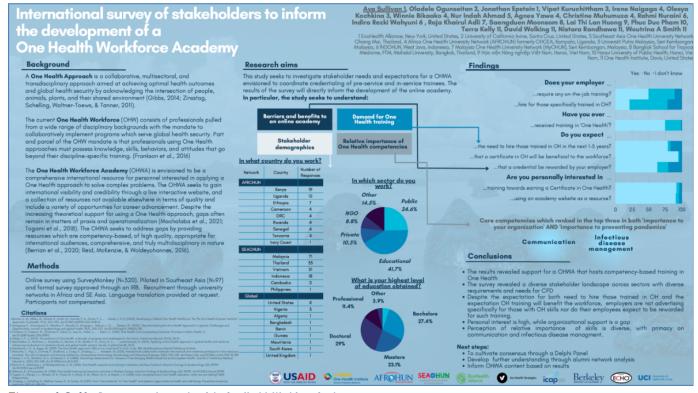


Figure 1.2.1b. Poster presenting results of the One Health Workforce Academy

ENROLLMENT OPEN NOW



One Health Workforce Academies' (OHWA) mission is to promote the development, delivery, institutionalization, accreditation, and employer-recognition of training and educational activities that are in alignment with One Health core competencies and technical skills. As part of this mission, we have developed a publicly accessible One Health Workforce Academies website to provide high-quality, readily available training materials and resources to engage and support One Health students, faculty, and practitioners.

We are pleased to inform you that enrollment for two asynchronous online courses is now open.



Fundamentals of One Health Practice



Fundamentals of One Health Practice includes 3 online modules delivered by experts from around the world. These modules will introduce essential competencies of One Health. Learners should expect to dedicate 4-6 hours working on the modules to successfully complete this course.



Outbreak Investigation & Response



This dynamic training course spans 11 online modules and provides a basic introduction to the principles and concepts of a comprehensive One Health approach to investigating the origins or cause of a zoonotic disease outbreak or other disease event in animals or people. Learners can expect to dedicate 12-20 hours working on the modules to successfully complete this course.

Open enrollment will be available until December 15th, 2022. Once enrolled, trainees will complete the courses at their own pace during the period of January 2, 2023, through March 1, 2023. Tuition will be waived for all who enroll during this period.

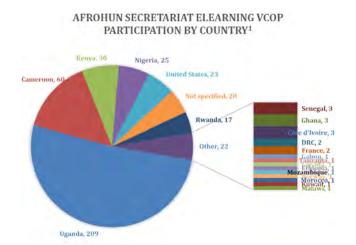
For more information about the courses and to enroll, please follow the link below:

onehealthworkforceacademies.org/training-material/

GL Activity 1.2.2 Implement Virtual Communities of Practice

We implemented two virtual Communities of Practices (vCoP) this year. The vCoP on antimicrobial resistance hosted by AFROHUN Kenya was very successful and concluded in December 2021. The video recordings of the sessions are being edited for installation in the One Health Workforce Academy web platform to demonstrate the value of vCoPs to other OHUNs, Country Chapters or other stakeholders. In addition, AFROHUN-Kenya developed and implemented an ECHO VCoP

on food safety and security. The e-Learning vCoP hosted by the AFROHUN Secretariat also concluded in December 2021 and continued in 2022. The audience participation has been dynamic, representing more than 400 participants from more than 20 countries (Figure 1.2.2a). We designed and implemented a questionnaire to identify opportunities to keep the audience growing. More than a third of participants identified as female (Figure 1.2.2b). Pre- and post-session survey revealed strong improvement in participant's knowledge (Figure 1.2.2c).



AFROHUN SECRETARIAT ELEARNING VCOP
PARTICIPATION BY GENDER
Prefer nut (o say,
5, 3 %)

Not specified, 2,
1%

Male, 249,
61%

Figure 1.2.2a. ECHO VcoP Participation Data for October, 2021 — August, 2022

Figure 1.2.2b. Distribution of e-Learning VCoP by Gender

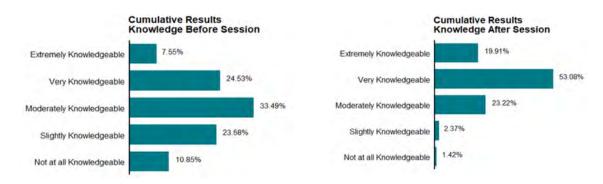


Figure 1.2.2c. Assessment of Impact of e-Learning VCoP

Scan for highlights of the AFROHUN COVID-19 awareness challenge competition:



SEAOHUN 2021 Regional Students' Competition on the Risk of Zoonotic Diseases:



GL Activity 1.2.3 Engage with Student One Health Club Activities

The One Health Workforce Academy features the work of students, including the highlights of the AFROHUN COVID-19 awareness challenge competition and the SEAOHUN 2021 Regional Students' Competition on the Risk of Zoonotic Diseases. Consortium partners also provided technical support for student-oriented events such as SEAOHUN's third regional student competition where students were encouraged to use art to communicate about antimicrobial resistance, and to support initiatives aimed at expanding the public-private partnerships to secure resources to support One Health students in the Networks.

Strategy 1.3 One Health Empowerment and Career Development

GL Activity 1.3.1 Define Criteria for Continuing Professional Development (CPD) Credits

In addition to the charge given to the International Board of One Health Examiners, Consortium partners provided technical support for AFROHUN Tanzania's activity to host a workshop for continued professional development (CPD) training of in-service professionals affiliated with the One Healthoriented councils in Dodoma, Tanzania. Planning built on the successful Year 2 workshop that oriented the professional councils, and the training and development of the curriculum was conducted during the last week of March 2022. The councils assigned equivalent credit for One Health participants in the CPD training consistent with similar professional training in other health sectors (e.g., medicine, veterinary medicine, pharmacy, environmental health). An application was also submitted by the AFROHUN Tanzania team to accredit the One Health CPD training by the Ministry of Health. In collaboration with Objective 2 and 3 teams, we supported the piloting of the revenue generation model based on the CPD training in

the final quarter of the year. We also provided technical support to AFROHUN Senegal to review the report of a needs assessment for CPD training.

GL Activity 1.3.2 Establish a One Health Employment Forum

The One Health Workforce Academy web platform includes an employment forum section (Career Paths) that will include interviews with employed alumni of One Health training, and employment opportunities that have been advertised internationally. To learn more visit: onehealthworkforceacademies.org/careerpaths.

Strategy 1.4 One Health Experiential Learning GL Activity 1.4.1 Technical Assistance for One Health Short Course and other Experiential Learning Activities

The One Health Workforce Academy now include modules of training materials available for browsing. For the development of a few training materials, the competency-based course entitled "Fundamentals of One Health Practice", for example, we adopted a co-production strategy whereby Consortium partners developed the template and initial modules with invitation to Network partners to contribute additional modules. For other training courses and course development guides, the Outbreak Investigation and Response course, the Field Training Guide, and Case Studies for example, Consortium partners developed the materials as complete products that Network partners may use to develop or customize online trainings for additional topics (Figures 1.4.1a and 1.4.1b). A breakthrough accomplishment this year was the technical support that we provided to AFROHUN in the identification and preliminary development of a signature program for AFROHUN-Academy, entitled "Mentored Experiential Learning and Training (MELT). We proposed a curriculum for MELT trainees and expect the first MELT fellows to enroll in available courses, with on-site field training commencing in Summer 2023.



Figure 1.4.1a The cover page for training activities available for browsing on the One Health Workforce Academy website.



Figure 1.4.1b The landing page to browse the first module of our model competency-based One Health Training Course

Strategy 1.5 One Health Policy Engagement

GL Activity 1.5.1 Training on One Health Policy Briefs

The Global Team offered two workshops each for AFROHUN and SEAOHUN entitled "Communicating Science to Inform Policy: From Research to One Health Action". These

workshops were intended for active researchers in the Network universities to learn about strategies for presenting their findings to policymakers in the national and international contexts. The workshops were well attended, and the post-workshop surveys indicated a successful outcome with opportunities to continue the series in the upcoming year.

See Success Story on page 30.

LESSONS LEARNED

Maintaining Participation in National and Regional Communities of Practice

CHALLENGE: Ideally, virtual Communities of Practice (vCoPs) are designed to engage and maintain the participation of members through the power of shared interest where experts and novices may learn together. Sustaining regular or long-term participation may be challenging on topics where there are perceived endpoints by different members (e.g., e-Learning) compared with topics that are emerging or entrenched in the One Health approach (e.g., antimicrobial resistance, food safety and security).

SOLUTION: Two vCoPs were successfully implemented using the Project ECHO platform. A vCoP for AFROHUN Kenya focused on antimicrobial resistance, which gained approximately 70 active participants and maintained regular membership until the end in December 2021. A second VCoP organized by AFROHUN-Kenya on food safety and security gained a consistent audience of 115 participants. The vCoP hosted by the AFROHUN Secretariat on e-Learning initially engaged 50 participants with fluctuating membership. To address this, we developed a solution that designs interventions based on regular feedback from members and has more flexibility in the agenda. As a result, the regional e-Learning vCoP is continuing, and we launched a questionnaire to explore dynamic participation and to identify opportunities to keep the audience growing. The outcome was very successful as participation increased to more than 400 individuals from more than 20 countries.

Enabling Reflection to Enhance the Value of Co-Production of the One Health Workforce Academy

CHALLENGE: It is important to identify the universal context of competency-based One Health training and continuing professional development, while also recognizing the local, national, or regional priorities based on existing gaps in the security of global health systems and workforce shortages. The One Health Workforce Academies have the opportunity and the challenge to develop initiatives that accommodate the breadth of needs across these geographic, political, and cultural landscapes.

SOLUTION: The regular meetings of Consortium partners, Network Secretariats, National Coordinators, Country Managers, and Activity Leads were successful in the early phase of the project where specific individual activities were planned and executed. As we transition into the phase of the project with cross-objective initiatives such as populating the One Health Workforce Academies with content that will appeal to a universal audience, while also maintaining focus on regional and national needs, it became more important to restructure the meetings to make more time for reflection on strategies and approaches that will enable co-production and sustainability of the Academy. We continue to pursue integrated meetings that bridge objectives and enable greater engagement and participation of our diverse Consortium's members. Over the remainder of this year, we are working to empower the Networks and country team members to achieve greater participation and co-creation of content, which will strengthen buy-in and ownership of the Academies over time.

NEXT STEPS

Advertising and cultivating the pipeline of trainees, including pre-service students and in-service professionals to the One Health Workforce Academies (OHWA) are major priorities going forward. Successful launching of enrollment in the various training activities is a fundamental step in this direction. Official publication and distribution of products of OHWA is also very important. In this regard, we are following up on our successful presentations at international conferences to submit manuscripts for peer-reviewed publications in One Health journal(s). The first manuscript focuses on the results of the stakeholder survey of One Health Workforce Academy. The second publication will focus on the results of the eDelphi Panel to review and update essential competencies for One Health training.

The next steps in the production of the competency-based One Health study guide are to designate co-authors for contributing to each of the designated chapters in the prospectus approved by the publisher, Springer, Inc. In collaboration with Objective 2 team, we are also working toward co-production of practice test questions for the certification examination. We expect to produce approximately 400 questions of which we will publish 200 at a time on the One Health Workforce Academy website and rotate these periodically to maximize the benefit to those who wish to practice thoroughly before they sit for the certification examination.



DBJECTIVE OBJECTIVE 2

ОВЈЕСТІУІ

GENDER EMPOWERMENT

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.

Experts in AFROHUN and SEAOHUN were invited to contribute to this initiative under the leadership of Consortium partner Dr. Ndola Prata. 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; and 6) Disaster Risk Management and One Health.

The courses provide essential information to increase learner knowledge about gender norms, gender-related barriers and constraints, gender roles, and gender relations, and the modules include case studies and interactive quizzes linked to core gender and One Health competencies. Enrollment for the online Gender and One Health course will begin on the OHWA platform in January 2023.

In addition a brief introductory module on gender context was included in the course entitled "Fundamentals of One Health Practice", and a chapter on gender context is included in the prospectus approved for a study guide to be published by Springer, Inc. These resources are expected to be valuable preparation for trainees who may not have access to such training in their universities, or who are in-service professionals. The quality of implementation of the training and its contribution to the One Health Certificate will be reviewed by the International Board of One Health Examiners, which consists of over 62% women.





to One Health in Action

In 2021, the OHW-NG project conducted a One Health Coordinating Survey to assess linkages between the One Health University Networks with national One Health platforms, coordinating committees, Global and National Health Security communities, and multisectoral bodies charged with health system policy and disease prevention, detection, and response. At the same time, OHW-NG also conducted a stakeholder survey, which revealed a high level of importance placed on the core competencies of communication and policy and advocacy as functional skills in a One Health workforce, as well as core skills for combating future pandemic threats. Improving formalized communications with One Health University Networks and National One Health platforms could strengthen academic participation in policy development and strategic planning, and better communicate findings from science and research. In addition, these linkages can provide opportunities for

collaboration on educational and training opportunities, increase governmental review of curricula, bolster research on AMR, zoonosis and food safety, and highlight opportunities for collaboration on technology, surveillance and other mandates of a robust One Health Workforce.

Through these paired assessments, the project identified gaps in Network knowledge and capacity for effectively translating findings and implications from science and research to policy makers. To address this gap, the OHW-NG Consortium worked with AFROHUN and SEAOHUN to design a series of workshops on communicating science to inform policy. These workshops built upon earlier trainings conducted with the Networks in 2021-22 on science communication, storytelling, and grant writing for resource mobilization.

Are there barriers to communicating "One Health" to policy makers?

The wicked challenges that a One Health approach most often seeks to address are by nature complex and dynamic. Emerging infectious diseases, antimicrobial resistance, food systems and food insecurity, climate change are global challenges that have massive local and global impact. Understanding these challenges requires research and innovation from multiple disciplines, and often no simple solutions. Multilevel interventions are essential for addressing these challenges to mitigate their impact, and these interventions must be based on the best possible evidence and science.

Co-creation: Regional One Health University Networks Policy workshops

One Health practitioners require the writing and technical skills to create concise, effective, and evidence-based products that frame One Health challenges and present evidence-based solutions. Policy briefs can be a critical bridge between science and research towards public action. Communicating One Health demands a high level of proficiency given the diversity of stakeholders, government sectors, professional disciplines, non-governmental agencies, local community groups and the public.

Together with AFROHUN and SEAOHUN, we designed and implemented training workshops on scientific communication to inform policy and advocacy, with emphasis on the unique features of a One Health approach that make it distinct from other academic and professional disciplines. Prior to the workshops, surveys were developed and shared to customize the delivery of training content to each regional Network. Results of the surveys informed workshop design and helped organizers from the Global Team and AFROHUN and SEAOHUN Secretariat identify and engage experts to prepare and deliver presentations and content.

Workshop Goals:

- Emphasize the importance of audiencespecific policy products to communicate findings from peer reviewed papers and iournals
- Introduce key strategies for evaluating One Health topics suitable for policy development
- Introduce strategies for developing policy briefs
- Present best practices for translating research into evidence-based policy recommendations
- Raise awareness of the challenges of communicating One Health to policy and highlight differences from traditional/ conventional health policy
- Introduce strategies for describing local, regional, and international problems that the One Health approach is best positioned to address

Both regional workshops were conducted virtually in the final quarters of 2022 and consisted of two-hour sessions over the course of two weeks. The workshops featured international experts, including experts from the AFROHUN and SEAOHUN Networks, and were tailored to help participants develop more practical skills, strategies, and best practices that consider regional, national, and local governmental landscapes, priority policy areas, or target audiences. During the workshops, participants focused on effective writing and communication strategies with the aim of translating research results into polished policy briefs. The trainings also emphasized regional priorities in the context of cultural influences on solutions to One Health-oriented challenges.

Our challenge
as One Health
practitioners is to
clearly and effectively
communicate
complexity along with
recommendations
to the decision
makers charged
with putting policies
and interventions in
action.

—David Wolking, Technical Director, OHW-NG Project

I have been engaged with One Health concept trainings, research, and advocacy activities for many years, but this workshop was exceptionally invigorating. It reignited my desire to work with policy makers to create and implement One Health policies. The sessions helped improve my understanding of how to use knowledge and research findings to write effective policy briefs in the One Health sphere. The workshop was amazing." -AFROHUN workshop

This training was excellent.

Scientific finding has no meaning if we cannot make use of it. Translate science to policies/actions is most important."

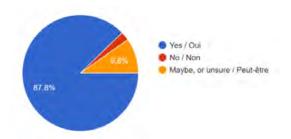
—SEAOHUN workshop participant

participant

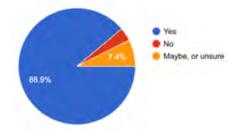
Workshop Results

SEAOHUN. The SEAOHUN Policy Workshop sessions occurred in July 2022. Sixty-six (66) participants were present between the two sessions, with trainees from countries including Malaysia, Vietnam, Thailand, Indonesia, Philippines, Cambodia, Lao PDR. The sessions included lectures from One Health experts from across the world, including from Dr. Michael Wilkes, a medical doctor and journalist entitled 'Driving towards change: Preparing Awesome Policy Papers', a lecture delivered by wildlife veterinarian Dr. William Karesh on the One Health Policy landscape, and a lecture from researcher and medical doctor Dr. Michael Tee on how to include research and data in policy. Both half-day sessions included an interactive activity using small breakout groups wherein participants were able to exercise policy brief writing skills. Results from the post-session survey indicated that most participants experienced an increase in knowledge on identifying an audience for a policy brief after attending the session, as well as an increasing in knowledge of writing an executive summary for such a brief. Overall, the survey measured that the workshop was effective in supporting understanding of translating science into policy.

AFROHUN. The AFROHUN Policy Workshop sessions kicked-off in September 2022. Fifty-five (55) participants were trained between the two sessions, with participants coming from Cameroon, DR Congo, Ethiopia, Kenya, Rwanda, Senega, Tanzania, and Uganda. Session one was lecture-based and championed by AFROHUN professors. The lectures were designed to contextualize OH and policy in the region. Session two was activity-based and included a breakout session in which participants worked on their policy brief writing skills. Results from the postsession survey indicated that participants felt the breakout session was highly effective at improving their knowledge and skills in policy brief writing. Moreover, feedback from the AFROHUN Policy Workshop was overwhelmingly positive, with most participants indicating they were interested in joining a virtual Community of Practice (vCoP) on policy or future workshop sessions on policy brief writing.



Results from the AFROHUN post workshop survey showing participant interest in joining a virtual Community of Practice focused on science communication for policy makers.



Results from the SEAOHUN post workshop survey showing participant interest in joining a virtual Community of Practice focused on science communication for policy makers.

The Road Ahead – From Policy Training to Advocacy

The workshops were a successful step towards further policy engagement for the One Health University Networks and our Consortium plans to build off this foundation in the years ahead. Plans in the upcoming year include additional trainings along with practical exercises and even experiential learning to encourage application of acquired knowledge and skills through One Health communication strategies targeting policy advocacy and activism.

As there is considerable Network interest, we also plan to encourage the creation of Communities of Practice and potentially a One Health Policy Fellows program that connects University Members with the expertise they need for effective policy communication and advocacy. We also plan to explore avenues for channeling knowledge about the health workforce and national capacities through WHO's Joint External Evaluation Tool to identify gaps and opportunities for development of policy engagement strategies that better link the power and unique strengths of universities with the public servants in charge of health security.



The flyer shared with SEAOHUN to promote the two-session policy workshops.

Hands-On One Health in 2022!

From learning first-hand how to engage with communities to address health issues impacting their families and livelihoods, to grasping for the first time the interconnection and interdependence between and across human, animal, and wildlife populations that share our environments, experiential learning is critical to implementing One Health. A mainstay of effectively implementing collaborative multidisciplinary One Health approaches is providing hands-on in situ training opportunities for both pre-service and in-service health professionals.

The SEAOHUN and AFROHUN regional networks and their respective OHUNs and Country Chapters have marked considerable success utilizing established One Health field and demonstration sites as real-world learning laboratories to understand the complex dynamics, interconnections and interdependencies at the human, animal,

environmental interface. The Networks also rely on other real-world teaching and training opportunities to support disease outbreak response, integrated disease surveillance, just-in-time risk communications and community outreach, at local, national, and regional levels. Activities at these demonstration sites provide pre-service and in-service health professionals from different disciplines opportunities to work and learn together.

Following more than two years of lockdowns, social distancing, and limited group interactions inherent with the COVID-19 pandemic, the latter half of this year finally provided opportunities for students, teaching and research faculty, and in-service health professionals to reinvigorate in-person One Health experiential learning and training opportunities. Highlighted here are some examples of students and in-service professionals getting their hands-on One Health in 2022.

What is a One Health field & demonstration site?

One Health field and demonstration sites are locations where One Health University Network faculty, staff, and students engage with communities and health professionals to tackle real-world challenges. At these sites, learners gain invaluable experience putting knowledge and skills in practice and working together in multidisciplinary teams.

CAMBOHUN One Health Field Trip

The workshops were a successful step In Cambodia, the National Coordinating Office organized a highly successful One Health field trip (March 26-28, 2022) taking students and faculty advisors to Kep Province to provide learning opportunities at the human, animal, environmental interface and to stimulate the establishment of One Health student clubs. The field trip was the first experience for many participants to: practice identifying One Health issues and propose solutions, exchange knowledge and skills in One Health across university faculties, and to improve communication skills critical to working collaboratively across disciplines. Kep is a coastal province in Southern Cambodia known for nearby islands and as a hub of seafood production for the country. During the field trip participants focused on the food safety aspects of One Health and visited the seafood market to practice their communications and participatory epidemiology skills in interviewing vendors about their food safety and hygiene practices.

Rwanda's Rwinkwavu One Health Demonstration Site

AFROHUN Rwanda organized an experiential learning opportunity at their Rwinkwavu One Health Demonstration site, located adjacent to Akagera National Park, a renowned location for studying the interface of wildlife, domestic animals, humans, and their shared environment. This year's experiential learning activity focused on waterborne diseases and human-animal interactions through water sources. Student participants led community engagement and risk communication efforts to raise awareness on the risks and dangers of waterborne diseases and identified ways to provide community members viable alternatives to mitigate risks from utilizing limited water sources often shared by humans, domestic animals, and

wildlife species. Participants also had the unique opportunity to work with the district veterinary officer assisting with cattle immunizations for Rift Valley Fever virus, which causes a viral hemorrhagic fever in animals and humans and is thus a nationally recognized priority zoonotic disease. With sporadic outbreaks of Rift Valley Fever in the area that can have devastating impacts on livestock and human populations, student participants gained an appreciation for the critical need for developing their skills community outreach and risk communications to raise awareness and help prevent disease spread before an outbreak occurs.

VOHUN's Unique Public-Private Partnership One Health Site

This year, VOHUN established a new One Health Site through a unique public-private partnership with the Thien Thuan Tuong company, a Vietnam-based science and technology enterprise in livestock and crop production. The company has 1,200 breeding sows, producing 6,000 gilts, 5,000 commercial breeding pigs, and 20,000 fattening pigs on an annual basis. VOHUN member, Thai Nguyen University of Agriculture and Forestry (Thai Nguyen UAF), organized a field-based training course at this new One Health Site in Quang Ninh province, which engaged 35 students from two universities (Thai Nguyen UAF and Hai Phong University of Medicine and Pharmacy). This year's training focused on biosafety and biosecurity in pig production and participants gained hands-on experience performing rapid tests for the African Swine Fever virus, a significant animal disease currently threatening swine production systems in the region. This kind of public-private partnership is a critical component to demonstrating the value-addition of collaborative One Health approaches in addressing complex challenges in agricultural production.

OBJECTIVE OBJECTIVE OBJECTIVE 2

OBJECTIVE

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 2.1.3 Support SEAOHUN to conduct a KM needs assessment
- GL Activity 2.1.5 Support alumni tracking and engagement systems
- GL Activity 2.1.6 Support website development for the One Health Workforce Academies
- GL Activity 2.2.1 Finalize the OH competency framework
- GL Activity 2.2.2 Develop an evaluation toolkit for OH trainees at the basic, proficient and advanced levels
- GL Activity 2.3.2 Synthesis of data scan results and country-level One Health workforce policy and planning support

OBJECTIVE 7

ОВЈЕСТІ

HIGHLIGHTS

- We launched our alumni tracking and engagement survey with both regional Networks reaching a total of 787 alumni (SEAOHUN: 366 respondents and AFROHUN: 421 respondents).
- Two weeklong Competency-based Education (CBE) workshops were cocreated and conducted together with each regional Network reaching 43 participants and culminating in the development of country OHUN CBE action plans committed to integrating One Health and CBE principles into institutional curriculum (See our Success Story on page 46). In addition, we supported two trainings on CBE and curriculum adaption and orientation for both VOHUN and the AFROHUN Tanzania team.
- We facilitated two Knowledge Management workshops this year, one
 with the AFROHUN Secretariat in July 2022 and one with VOHUN in
 August 2022.
- Two abstracts were presented at the SEAOHUN 2022 International Conference in Thailand: "Competency-based Education to Strengthen One Health Workforce to Combat Global Health Threats" and "Developing a Competency-based One Health Training Course for Professionals". In addition, together with OHW-NG Objective 1 team, we established a demonstration booth for the One Health Workforce Academy platform that was unveiled at the conference.
- As part of our mission to assess the capacity and potential workforce gaps at the national level, we completed six country profiles for the AFROHUN region and held consultations on integrating these profiles and the data and information they contain into strategic planning to strengthen health security.

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

In Year 3, the Secretariat continued to work with the KM consultant to identify the best way to roll-out a KM Strategy across the Network that incorporates change management best practices. AFROHUN prioritized several activities related to KM, including finalizing and implementing their KM strategy. Development of the KM Strategy set the foundation to: (1) Provide technical support to finalize the KM strategy across the AFROHUN Network; (2) Support AFROHUN in the implementation of priority activities identified during phase one of the KM strategy; (3) Support four 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; and (4) hosted a KM working session to advance KM awareness and provide learning space for Country Managers (held in July of 2022). This work has laid the foundation for further KM maturity within AFROHUN and will facilitate greater knowledge exchange and learning among the Secretariat and its Country Members.

GL Activity 2.1.2 Support **VOHUN** in Identifying KM Tools

Building on the Monitoring and Evaluation (M&E) workshop conducted in Year 2, VOHUN continued to focus on Knowledge Management (KM) awareness and capacity building. In Year 3, VOHUN hosted a KM workshop that included individuals from their university members, as well as other OHUNs. This workshop provided additional foundational awareness of KM but also invited sharing through sessions with AFROHUN's KM expert and from our policies and platforms

workstream (Strategy 2.3 below). This approach showcased the breadth of reach that KM covers and has provided VOHUN members with a reframing of what may be possible within their own KM strategies. Moving into Year 4, our goal is to continue supporting VOHUN and other OHUNs in thinking through their strategic KM needs to help advance their KM maturity.

GL Activity 2.1.3 Support SEAOHUN and OHUNs in Development and Implementation of KM Strategy and Toolkit

Efforts this past year were focused on VOHUN as a potential model for other OHUNs in the Southeast Asia region. Going forward, we will continue to explore interest among the Secretariat and OHUNs in development of a KM strategy and provision of technical support to the SEAOHUN Secretariat and any of the OHUNs with interest in developing/enhancing KM strategies, systems, and tools.

GL Activity 2.1.4 Support Alumni Tracking and Engagement Systems

The alumni tracking survey was successfully launched with both regional OHUNs and we received a total of 787 alumni responses (366 respondents from SEAOHUN and 421 from AFROHUN).

Separate analyses of the surveys (one for each region) was conducted and data packs shared with the Secretariats for further analysis and review. Analysis of the alumni survey data highlighted that alumni have very favorable views of One Health curricula. Alumni indicated wanting to be more engaged with local chapters/OHUNs by way of events, contributing to courses as faculty, acting as mentors to other alumni, and advertising sources and requests for funding to support their job activities. A desire for additional education and training activities and a willingness to pay was also highlighted.

Utilizing the results of alumni tracking data and analytics from this past year, Secretariats can now develop focused alumni events and offerings (e.g., alumni conferences and networking events, experts' directories, mentoring, and local/regional alumni "ambassadors" to drive events and connection opportunities). In addition, the surveying and analysis capabilities transitioned to the Secretariats can be used to field additional surveys with foci specific to other project activity areas, such as a proposed competency self-assessment survey for use by the competency assessment sub-team.

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

In Year 3, our web development team continued to refine the OHWA website to deliver a robust platform for training of One Health pre-service and in-service trainees. The team refined the search function of the website and worked closely with course development teams to create courses with improved user friendliness and functionality. In addition, CLASS score surveys were incorporated into the already existing Curriculum Curation Management System (CCMS). Additional surveys will be incorporated as courses are developed. With regard to sustainability of the OHWA website, a number of orientation and training sessions on website functionality were facilitated as a way to increase the knowledge base for website support, including creation of video and written instructions and procedures to direct creators on how to design courses using the LearnDash software, as well as how to update the website and the CCMS system, and how to create course videos. The Objective 2 team also launched and showcased the OHWA website at a booth at the SEAOHUN 2022 International Conference in Bangkok, Thailand, where conference participants had the opportunity to learn more about the Academy, inquire about the website and platform, and explore how their institutions could be involved in future developments. We supported the design and manning of the demo booth and created flyers that conference participants could take away to review the platform, register, and

continue engagement. So far, approximately 3,500 visitors have been to the OHWA website.

GL Activity 2.1.6 Develop a Curriculum Curation Database

In Year 3, the Objective 2 team continued to support the functionality and use of the curriculum curation database by providing technical support and training and ensure continued curation. A CLASS Scores questionnaire was also added to the database. However, there are still issues with the "user friendliness" of the system and the web development team is continuing to make improvements to the functionality of the CCMS to improve and enhance user experience.

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

GL Activity 2.2.1 Finalize the Competency-based Evaluation Toolkit for One Health Trainee

In Years 2 and 3, the competency framework and assessment strategies were drafted including assessment tools for the identified domains in the framework. The Global Team remapped the One Health domains resulting in a revised list of 20 domains. The competency-based evaluation toolkit for One Health trainees is now under review and undergoing formatting. To promote the use of the competency-based evaluation toolkit, experiential learning tools including simulation exercises, and evaluation strategies were developed. The evaluation tools were designed using the 20 domains and compiled in line with the competency-framework manual enabling a comprehensive guide for competency-based education (CBE) and evaluation strategies in the delivery of One Health courses and workforce development.

GL Activity 2.2.2 Contextual Adaptation of the One Health Competency Framework and Assessment Toolkit

To ensure the use of the One Health Competency Framework manual in the participating Network Universities, continuous support on designing and implementing competency-based education (CBE) and assessment methods as well as guiding documents will be required. In order to build the capacity of OHUNs, in-person training on CBE and simulation exercises were provided to AFROHUN and SEAOHUN. The first training was provided to representatives from eight African countries (Ethiopia, Kenya, Tanzania, Senegal, Cameroon, DRC, Rwanda, and Uganda) and AFROHUN Secretariat staff in Uganda. The training was then provided to seven South East Asia member countries (Cambodia, Indonesia, Laos, Malaysia, Philippines, Thailand, and Vietnam) and the SEAOHUN Secretariat team in Thailand. These workshops introduced the One Health competency framework, and assessment tools and facilitated learning on the implementation of CBE and competency assessment strategies. A total of 43 (21 from AFROHUN; 22 from SEAOHUN) were trained, among these 22 were female and 21 were male participants. These workshops introduced the One Health competency framework and assessment tools and facilitated learning on the implementation of CBE and competency assessment strategies. We also developed an abstract on the development and delivery CBE training, which was later presented at the SEAOUN 2022 International Conference and was accepted for presentation at the 7th World One Health Congress. See Success Stories for more information.

We conducted a survey to scan experiences on the One Health workforce competency assessment, CBE, and One Health course delivery strategies in AFROHUN and SEAOHUN member countries. The survey explored the extent to which One Health competency frameworks and evaluation tools have been

developed in OHUN countries. Survey results will be used to inform the design of trainings and strategies that provide technical assistance to member countries and universities for contextual adaptation of the One Health competency framework and assessment.

We also continued providing technical assistance in designing and delivery of CBE training and learning sessions for Network universities. In collaboration with the Objective 1 team, we facilitated sessions and supported the CBE training by VOHUN to introduce a CBE approach for curriculum development. Furthermore, we supported AFROHUN to design and implement Continuous Professional Development (CPD) course on One Health, which was provided to various professional participants.

Strategy 2.3 Engage One
Health Coordinating Bodies
to Support Workforce
Assessment and Tracking
with Inclusion of One Health
Competencies in Continuing
Professional Development
Certification Requirements

GL Activity 2.3.1 Desk Review and Survey Validation for Assessing Engagement with One Health Coordinating Bodies, GL Activity 2.3.2 One Health National Platform Expert Interviews, & GL Activity 2.3.3 Platforms and Policies Country Data Packs

In Years 2 and 3, the Objective 2 team worked with AFROHUN to conduct "data scans" of country-level One Health workforce policy and planning evidence. These insights, which were drawn from a review of publicly available materials such as journal articles, workshop reports, policy and planning documents, and national Joint External Evaluation (IEE) reports, were then compiled and presented

"Demystifying" Knowledge Management

What is Knowledge Management?

Knowledge management (KM) is the process of capturing, synthesizing, sharing, and effectively using individual and institutional knowledge

A key element of knowledge management is turning tacit knowledge — information that is often subconscious, internalized, and difficult to transfer from one individual or institution to another — into explicit knowledge — information that is conscious, readily transferable, and able to be codified.

What is a Knowledge Management System? What about KM Tools?

By creating and implementing effective processes, tools, and systems to capture, distill, and share knowledge - especially institutional memory - we can ensure the best use of an expansive knowledge base that is built over time and not forgotten. A critical part of organizational growth is institutionalizing the processes (source, capture, distill, and share) that help individuals, teams, and programs to manage knowledge, learn, generate data, and incorporate them into decision making.

By definition, a Knowledge Management System (KMS) is a system for applying and using knowledge management principles to enable individuals to create, find, and share relevant information quickly.

Similarly, KM tools facilitate the generation, capture, and sharing of knowledge. KM tools can be integrated into a KMS or operate independently, depending on the needs of the organization.

What is a Knowledge Management Strategy?

A KM strategy is a specific plan to help an organization manage information, data, and knowledge for the benefit of an organization and their stakeholders. Successful KM strategies align with any overarching organizational strategy and objectives and keep the KM team focused on goals, priorities, and needs.

How is the OHW-NG Consortium using Knowledge Management to reach project goals?

We are utilizing KM in a variety of ways. We intentionally conducted a KM assessment at the start of the project to identify needs and gaps, which facilitated the creation and development of a KM strategy for AFROHUN. Through existing and newly developed KM systems and tools, knowledge is now being captured, generated, and shared by both AFROHUN and SEAOHUN, improving decision-making and ultimately supporting the achievement of our Consortium's goals and objectives.

for review as SWOT-style analyses. These country-by-country overviews were followed by a regional-level crosswalk of shared JEE areas of strengths and weaknesses, as well as a review of regional gaps and opportunities for platform strengthening. In Year 4, the team will work with SEAOHUN to conduct similar data scans and build upon the strategies that were used for the successful completion of the AFROHUN data scans.

In Year 3, the Global Team in collaboration with the Networks, completed the One Health national platform desk reviews, the national One Health coordination survey, and the expert interviews to evaluate engagement of member

Universities with national One Health platforms, with review and validation by country teams. The information collected through these various activities was then compiled into various visual products, most critically individual Country Profiles that also incorporate information from the desk reviews and data scans. These Country Profiles highlight the country-level strengths, needs, gaps, resources, and opportunities for engagement between universities and training institutions and national One Health platforms and are a valuable resource on national One Health capacity for use in KM systems and for strategic planning.

LESSONS LEARNED

Knowledge Management Strategy

Adaptive Management is an integral part of Knowledge Management

CHALLENGE: During Year 3, both AFROHUN and the SEAOHUN OHUN member, VOHUN were able to advance their KM work. While both groups started off the year with their goals, throughout the year, each was met with their own respective challenges that required them to adapt and shift their own plans forward. Within AFROHUN, country member attrition provided an unexpected challenge. For VOHUN, it learned that each of its university members were in various stages in their individual KM maturity. These challenges required both groups to adaptively manage plans and shift to address new realities.

SOLUTION: AFROHUN: Within AFROHUN, attrition of country member focal points required the Secretariat to provide additional

working sessions to bring new members up to speed. While this step wasn't initially planned, it is a good reminder that effective KM needs to hold space for reflection, iteration, learning and bringing all stakeholders together along the journey.

VOHUN: Building on the momentum of the M&E and KM workshop, as well their own KM Assessment, conducted in Year 2, VOHUN planned for a follow-on KM workshop in Year 3. One of the challenges that arose included each of their member Universities being at various KM maturity levels. Using this information, VOHUN adapted the original scope of the workshop to include knowledge exchange and lessons learned from AFROHUN. VOHUN was able to shift and adapt their approach as new information was obtained, which led to a more inclusive approach for all members.

Alumni Engagement

Alumni Engagement: Meeting the Connection Needs of Alumni

CHALLENGE: We need to create more opportunities (e.g., virtual/remote and in-person) for alumni to connect in meaningful ways through mentoring, guest lecturing, funding awareness, and job placement.

SOLUTION: Based on our survey results, alumni have clear interests in establishing mentoring networks, guest lecturer roles in courses, job placement and promotion support, and local chapter/OHUN "Ambassadors" who can act as central points of contact for ongoing alumni activities. We will continue to work with the Secretariats to drive activities that increase alumni engagement.

Alumni Networks: Formalization of Networks Will Be a Key to Receiving Donor Funding

CHALLENGE: We need to create and encourage formal networks with local leadership that can demonstrate value from alumni activities such as improved job placement, "expert" directories, and linkages to key ministries and firms via country chapter/OHUN "Ambassadors".

SOLUTION: We are using survey results to identify those alumni willing to step-up to leadership roles and engage them as local Ambassadors. This will not only formalize the

networks but will also create a point of contact for increased revenue in the future via executive education and lifelong learning. These will attract funders looking to invest in network capacity building and to gain access to valuable alumni.

One Health Platforms & Policies

CHALLENGE: In Year 3, the Global Team in collaboration with AFROHUN, identified some possible best practices in terms of the engagement between universities and national One Health coordinating bodies. One of the best practices that was highlighted in the data scans, the survey, and the expert interviews was the formalization of communication mechanisms between institutions. However, these formal communication mechanisms do not exist or are not fully developed in each of the six countries (Cameroon, Ethiopia, Kenya, Rwanda, Tanzania, and Uganda) that participated in the data scans, survey, and interviews.

SOLUTION: Going forward, there is tremendous opportunity to explore improving knowledge and information exchange via strategic communication plans, continued participation and engagement with One Health platform and coordinating bodies, and through consultations and discussions with convening agencies such as local USAID Missions and other donor-funded initiatives.

NEXT STEPS

Knowledge Management Adoption & Sustainability

Throughout the duration of the OHW-NG project, AFROHUN has used a variety of platforms and systems to achieve their goals. Using the opportunity of transitioning to a USAID award as a time to pause and reflect, AFROHUN would like to use the upcoming year to explore how best to integrate the existing systems and platforms

for greater collaboration and management. This process will help to identify how each of these platforms can continue to be managed and supported after the completion of OHW-NG, leading to greater sustainability.

Alumni Tracking & Engagement

We continue to collect more survey data as more countries come online with the tracking survey

and will work to: 1) compile results and measure potential impacts of programming changes for alumni; 2) devise alumni engagement events and programming and market to alumni (using identified Ambassadors as key contact points); and 3) support the use of the results of mentoring, ongoing education, funding support, and career services to seek additional external funding for formalized networks. In the upcoming year, we hope to field two surveys: 1) a "pipeline survey" targeting OHUN member universities and a 2) "recent alumni" career tracking survey to assess jobs, job titles, and organizations that are hiring One Health-trained graduates.

One Health Workforce Academies

As the OHWA evolves and develops, we continue to refine website functionality, support finalization of OHWA courses, support onboarding of instructors, content creators, and editors, and make plans towards integrating certification requirements towards the Academy's goal. In addition, we will continue to develop the CCMS and revise/adjust based on user feedback to ensure the CCMS is user friendly and valuable. In Year 4, our team will develop and finalize a One Health certificate in close collaboration with the Objective 1 team and continue to provide training to the AFROHUN and SEAOHUN Secretariats aimed at transitioning website hosting and maintenance to the Secretariats towards the end of 2023.

One Health Competency Framework

We plan to finalize the competency-based assessment toolkit based on 20 identified One Health domains and will continue providing technical assistance to OHUN member countries and universities to use CBE approaches for One Health courses by supporting countries/ universities for contextual adaption of the One Health competency framework and assessment tools. In collaboration with the Secretariats, we are also establishing Community of Practice (CoP) for AFROHUN and SEAOHUN participants to advance CBE and evaluation strategies. The CoP is a learning network designed to accelerate CBE scale-up by fostering joint learning, exchange of best practices, and targeted technical assistance as requested by OHUN member countries. The CoP promotes CBE and ensures university faculty and representatives remain connected to contemporary practice and share relevant guides and resources to integrate CBE principles in their settings. It also allows for a forum in which member countries can problem-solve issues with CBE implementation with support from other members. The continuous technical support will focus on the use of active learning strategies and simulation exercises, and practically guide participating Network universities to implement a standardized competency framework and evaluation approach in their respective universities' education and training programs.

GENDER EMPOWERMENT

We continue to work with the OHW-NG Gender Working Groups to ensure gender is integrated as a component into all activities, trainings, workshops, and through the thoughtful design and implementation of curricula, systems, and educational resources and tools. As part of the OHW-NG MEL plan, we disaggregate data based on gender and monitor activity outcomes to ensure understanding of any gender disparities in engagement with Objective 2 activities and achievement of our goals, including those outlined in the Gender Action Plan. For

example, this year we tracked gender engagement in both of our alumni surveys:

- With SEAOHUN, the alumni survey was completed by 366 people (as previously reported). Of the survey respondents, 54% identified as male and 46% of respondents identified as female. This survey covered three OHUNS across 50 institutions.
- For AFROHUN, a total of 421 respondents completed the survey, 69% male and 31% female.



Competency-Based Education and Assessment

Three out of every four new or emerging infectious diseases in people come from animals, according to the U.S. Centers for Disease Control (CDC). A One Health approach to tackling and responding to disease outbreaks and related emergencies through collaborative efforts of experts across human, animal, and environmental health has created a high demand for workforce

Over the past year, we supported the development of an innovative CBE training program to train representatives from AFROHUN and SEAOHUN. We designed the training program to demonstrate the use of active learning strategies and simulation exercises and practically guide institutions to advance workforce development and assessment strategies. The training curriculum covers essential topics like Backward Design in Curriculum Development; Stage-based Maturity Models; Competency-based Assessment; Experiential Learning Strategies; Simulation-based Assessments, among others.

-Fatima Tsiouris, MS, OHW-NG Objective 2

Co-Lead, ICAP

practice to guide

based education (CBE) approach is In May 2022, representatives from the Objective 2 team supported the training of 43 participants from AFROHUN and SEAOHUN during inperson workshops held in Kampala, Uganda and Bangkok, Thailand. The participants were enthusiastic about the training and eager to integrate the learnings into their education system. Among the 40 (93%) participants who completed pre and post-tests, there was a median of 26% knowledge score increase (range 15-37%). Of the 34 (79%) participants who completed the post-training survey, 30 (88%) strongly agreed that the training was relevant or very relevant to their daily responsibilities, and

32 (94%) reported that they were somewhat or extremely likely to apply the learning in their current setting. The training demonstrated and prepared participants to conduct and roll out simulation-based exercises and practical competency-assessment strategies using Kirkpatrick's four levels of training/education evaluation. The CBE training was devised to promote creative thinking and problem-solving skills and advocate for competency-based assessment strategies.

Overall, participants were satisfied with the training workshop.

There are many benefits to the use of competencies in practice-based education, such as the establishment of rigorous standards and providing competency-assessment strategies and tools for workforce development. However, while One Health competencies exist, CBE models are not widely practiced by educational institutions. Disseminating and promoting this training model will guide not only AFROHUN and SEAOHUN member universities but many other educational institutions and countries in the region to strengthen One Health regional and national workforce preparedness to prevent and respond to outbreaks.

—Getachew Kassa, MSc, MPH, DrBA, Objective 2 CBE Subject Matter Expert and developer of the CBE training toolkit,

Also over the past year, we presented abstracts summarizing CBE training activities and best practices at the 2022 SEAOHUN International Conference in Thailand and the 7th World One Health Congress in Singapore. Our team is also providing technical assistance to countries like Tanzania, Vietnam, and the Philippines to roll out competency-based training and integrate the approach in their educational system and adapt evaluation strategies/tools in their settings. For example, one of the training participants from Tanzania led and successfully piloted a Continuous Professional Development (CPD) course with AFROHUN Secretariat. To further promote and ensure university faculty

and representatives use the CBE approach and associated resources, we shared terms of reference with the Secretariats and agreed to launch a community of practice (CoP) with OHUN member institutions who participated in the training activities. The aim of the CoP is to accelerate CBE scale-up efforts by fostering the learning exchange of best practices and to support targeted technical assistance as requested by OHUN member countries. This will be a great opportunity for continuous engagement of university faculty, ongoing feedback and technical assistance, and for sharing guides, resources, and tools that support the implementation of CBE approaches.



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 Assessment of advancement towards compliance with Non-U.S. Organization Pre-Award
- Survey (NUPAS) and other organizational requirements
- GL Activity 3.1.2 Monitor Business Plan implementation
- GL Activity 3.2.1 Strengthen AFROHUN and SEAOHUN Board & Network legal & operational capacity
- GL Activity 3.2.2 Grant writing and project management training workshops
- GL Activity 3.3.1 Develop a specific strategy to diversify partnerships, as well as assess the resource requirements to successfully engage new potential partners
- GL Activity 3.4.1 Implement pilot revenue generating activities

1 2

ОВЈЕСТІVЕ

HIGHLIGHTS

- Strategy 3.1: This year, both Networks successfully achieved the major project milestone of becoming a prime recipient of a USAID funding award, as planned in the OHW-NG cooperative agreement. Funding announcements for these awards were released in early Quarter 2, and the Networks independently developed and submitted applications in Quarters 2 and 3. This milestone represents a significant up-levelling in capacity for both Networks and opens up numerous other opportunities to prime USAID or other donor awards. See Success Stories on pages 60 and 64.
- Strategy 3.2: With support of the Global Team, the Networks achieved 48 out of 56 improvement actions to strengthen capacity gaps identified in their NUPAS and NUPAS PLUS assessments. Both Networks made progress on their official USAID NUPAS assessments, and with a few special conditions managed to qualify to apply for direct USAID awards.
- Strategy 3.3: This year, both Networks exceeded their partnership development goals for the second consecutive year in a row. Goals were set to secure at least one new funded partnership each year.
 AFROHUN achieved two new funded partnerships with GIZ and Malteser International for knowledge management and training activities, respectively.
 SEAOHUN successfully obtained three corporate sponsors for their 10th anniversary conference, the SEAOHUN 2022 International Scientific Conference (Chevron, Pfizer, and Zoetis).

• Strategy 3.4: This year, AFROHUN established a new, expanded membership model and presented this model to their Executive Board. This model introduced new tiers of membership for paraprofessional and technical schools, as well as external partners, defined membership services and fees for each tier. AFROHUN further piloted their first-ever fee-based course, via a five-day One Health course offered in Tanzania to a diverse group of 30 participants. These two activities represent an important step toward AFROHUN's goal of funding diversification.

ACTIVITIES

Strategy 3.1 Assessment, Benchmarking, and Strategic Planning

GL Activity 3.1.1 Monitoring the Network Plans for Transition to Direct USAID Awards

Both Networks successfully achieved direct funding awards from USAID, on schedule and as planned in the OHW-NG cooperative agreement for Year 3. This achievement represents their significant improvement in capacity and status from subrecipients to prime recipients of U.S. government funding. This achievement not only provides them a new avenue of funding within the OHW-NG, it opens up new funding opportunities from USAID and other donor sources.

The Global Team supported this process in Quarter 1 by submitting a Letter for Transition to Direct USAID Award on behalf of SEAOHUN. The letter was similar to the transition letter that was submitted on behalf of AFROHUN in Year 2 Quarter 4; it summarized the organizational capacities and specific transition milestones that the Network had achieved in order to move forward to be considered for eligibility to apply for a USAID direct award. Following submission of the transition letters, USAID initiated the Transition Award process. Transition Award requests for proposals were released in Quarter 2, and in Quarters 2 and 3 the networks independently prepared and submitted proposals.

The Global Team further provided technical guidance to the Networks to prepare for and execute a program-specific audit of a country chapter. The Global Team shared important U.S. federal guidance and a standard template for developing a Terms of Reference for audit firms to conduct a Yellowbook audit, which the Networks

used in their recruitment of audit firms. As of Quarter 4, AFROHUN completed their audit of their subrecipient in Democratic Republic of Congo, and SEAOHUN completed its audit of VOHUN.

In support of the OHW-NG Programmatic Transition Plan, the Global Team conducted an annual progress review of the transition of implementation responsibility for key program activities from the OHW-NG Global Team to network leadership. The results of this review are summarized in the Transition Plan Progress Update Appendix. In support of this activity, the Global Team compiled an estimation of maintenance costs for each activity in the programmatic transition, and sent these costs to Objective leads, to use in their transition planning with the Networks for Year 4.

GL Activity 3.1.2 Conduct NUPAS / OCA Annual Benchmarking

Each Network independently self-assessed their capacity on the Organizational Capacity Assessment (OCA) tool, and shared feedback with the Global Team to inform Year 4 action planning. In the same guarter, the Global Team and Networks reviewed each Network's progress on NUPAS-related capacities for year-end reporting. Additionally, the Global Team supported an assessment of AFROHUN on 16 additional domains of capacity in the NUPAS PLUS tool, to enable them to make even greater organizational capacity gains over the year. AFROHUN and the Global Team had a priority-setting workshop after reviewing the results, and priorities were included in a checklist. A Global Team Subject Matter Expert worked one-on-one with operations staff in each regional Network to complete items from the checklist in priority order. Progress against this checklist is reported under Strategy Area 3.2.

GL Activity 3.1.3 Support Annual Updates to Secretariat Business Plans

Progress of the Networks on their business plans is reported in the Business Plan Appendix. At end of Year 3, the Global Team supported each Network to produce updates to their business plans to include new partners, funding streams, activities, staffing changes, and priorities for partnership, revenue generation, and capacity plans for Year 4.

GL Activity 3.1.4 Assist SEAOHUN to Provide Support to One OHUN in the Development of Country Business Plans to Achieve Organizational Sustainability

The Global Team supported three OHUN Executive Boards and the SEAOHUN Executive Board to focused Board meetings on organizational sustainability. In three separate sessions, the Global Team and SEAOHUN Secretariat presented first to THOHUN Executive Board, then to the MYOHUN Executive Board, and additionally to all OHUN teams on key steps they could take to strengthen organizational sustainability, as well as on areas of technical support the Global Team could provide. The focus at these country OHUN meetings on organizational sustainability is an important signal of the country teams taking the issue seriously at this midpoint of the OHW-NG Project.

Additionally, in Quarter 4, the Global Team was invited to facilitate a special SEAOHUN Executive Board session on sustainability. The Board conducted contingency planning related to two funding scenarios for post-OHW-NG, and then brainstormed opportunities related to four sustainability strategies: streamlining and diversifying the Executive Board, strengthening the SEAOHUN membership model, identifying cost-savings and efficiencies, and mobilizing new resources. Importantly, the Board reached agreement on a high-level approach to

strengthening their membership model and to reducing the size of the Board, to make room for expanded participation by private and other sectors. The Global Team will work closely with SEAOHUN in Year 4 to build on this momentum and implement these strategies.

Strategy 3.2 Build Network Organizational Capacities

GL Activity 3.2.1 Continued Strengthening of Network Readiness for Transition to Direct USAID Awards

Human Resources

The Global Team supported AFROHUN to implement their staffing plan developed in Year 2, by guiding them in the development of a specific recruitment strategy for new funded initiatives, including the Cote d'Ivoire ARPA funds, the programmatic transition, and the direct transition awards. A small working team including Global Team and AFROHUN staff supported the development of AFROHUN's first ever formal recruitment strategy, which prioritized hires and established a timeline and process for recruitment. With templates provided by the Global Team, AFROHUN then created position descriptions for key positions.

Importantly, the effort intended to prepare AFROHUN to recruit for transition award staff early, to help ensure the organization could begin implementation early. Global Team staff provided advice and consultation on human resources to SEAOHUN when requested.

Project Management

The Global Team delivered a five-part Project Management Training Series to 30 AFROHUN Secretariat staff and Country Managers over Quarters 1 and 2. This series was adapted from a similar series delivered for SEAOHUN in Year 1. The series focused on project selection methods, project definition, workflow

structure and activity planning, qualitative risk management, and Monitoring, Evaluation and Learning (MEL). New this year was a special session dedicated to project management software and a session dedicated to developing project budgets for proposals, in response to perceived gaps in this capacity area. As a follow-on to this applied training, the Global Team provided AFROHUN a revised project management manual draft.

Proposal Development

The release of Transition Award Requests for Proposals forced a postponement in the proposal development training planned for Quarter 2. AFROHUN postponed this activity to Quarter 4 and SEAOHUN moved this activity to Year 4. As of Sept 30, 2022, AFROHUN had received the first of two, two-hour sessions, focused on the U.S. government contract process, key terms, and recommendations for effective response to solicitations. The second session, planned for October 2022, will focus on how to create teams and write successful proposals in response to U.S. government solicitations.

Prime Management Mentorship

The Global Team continued to provide guidance and mentorship on prime award management to each Network through the standing Prime/ Secretariat management team calls as well as through an in-person meeting at the SEAOHUN Secretariat office. Support provided included audit guidance, tips and tools for financial management, including expense tracking and projection, budget re-allocation and procurement processes. The ongoing calls have been productive opportunities to provide guidance and troubleshooting support for questions regarding reporting and compliance expectations, tracking effort across multiple projects, preparation for the transition to being a prime recipient of a USAID award, staffing recruitment and retention, as well as mentorship on successful project implementation.

Priority Areas of the NUPAS Assessment

Both Networks focused heavily on improving areas of weakness identified during the NUPAS and NUPAS PLUS benchmarking, which they articulated in checklists of priority improvement actions. This year, with targeted support from two SMEs from the Global Team, AFROHUN accomplished 37 out of 44 of their improvement actions, while SEAOHUN achieved 11 of 12.

SEAOHUN strengthened their financial management and internal control systems, and finalized and submitted their Subaward manual, Subrecipient Site Assessment Report, and Prevention of Human Trafficking plan for presentation to the Board for approval. In Quarter 3, SEAOHUN also worked closely with the Global Team to improve and progress their procurement manual and cost allocation plan and practices.

AFROHUN worked together with the Global Team to resolve issues identified in both the NUPAS and NUPAS plus assessments. A large amount of activity occurred during Quarters 1 and 2, and improvements were made in all priority areas, including procurement practices, financial and property management, travel policy and human resources. The Subaward Manual, Cost Allocation Plan and Information Technology Policy have all been finalized for presentation to the Board in Quarter 3.

GL Activity 3.2.2 Supporting Capacity-Building in Areas Deemed a Priority by each Network Secretariat

Executive Coaching

A senior member of AFROHUN received an Executive Coaching program supported by UC Berkeley Executive Education program to strengthen leadership and management skills, in a similar format to the executive coaching program that SEAOHUN leadership benefited from in Year 2. The coaching sessions started in December 2021 and concluded by June 2022.

Expansion Planning (AFROHUN)

In Quarter 1, by request of AFROHUN, the Global Team provided technical guidance for organizational expansion, including options for market segmentation approaches, and for finding efficiencies in staff and operational costs. AFROHUN summarized key considerations for expansion in their Business Plan. An important first step in their expansion was to refine their membership model, described in activity 3.4.3.

Communications

At the request of AFROHUN and SEAOHUN, the Global Team and regional Networks codeveloped several communications workshops this period, focused on strengthening strategic communications, improving report narratives, and telling compelling stories that bring to life the investments in One Health training, education, and interventions. The workshops were well attended and there was enthusiasm from participants who shared ideas for future content creation and planning to integrate storytelling and communications into Network activities as they intensify over the next several years.

Strategy 3.3 Partnership Development

GL Activity 3.3.1 Support Partnership Development Training for Secretariat & Country Staff

In Quarters 1 and 2, the Global Team supported 19 SEAOHUN Secretariat staff and OHUN representatives to attend an applied training series entitled "Building Effective Partnerships in the SEAOHUN Region". Delivered by The Partnering Initiative, based on their training of the AFROHUN region in Year 2, the course presented fundamentals of partnering, such as types of partnerships, how to establish partnering structure and governance, partnering documents and legal agreements, how to maximize value in partnerships, how to effectively negotiate and manage power imbalances, and how to evaluate partnerships. The course received very high scores from participants and SEAOHUN now intends to use one of the tools provided to assess the areas of improvement in their partnership with each of the OHUNs.

GL Activity 3.3.2 Provide One-On-One Coaching to Networks to Achieve their Partnership and Resource Mobilization Strategies

With support from one-one-coaching, both Networks achieved their partnership development goals, to secure at least one funded partnership each year. This is the second consecutive year the networks have achieved this goal.

AFROHUN secured funding from the German Corporation for International Cooperation (GIZ) for \$175,000 in new funds, to support a new AFROHUN staff and select activities

dedicated to knowledge management.

AFROHUN further secured over \$35,000 from Malteser International, to support One Health training in Democratic Republic of Congo. This milestone achieves AFROHUN's goal of one new funded partnership in Year 3, as articulated in their partnership engagement strategy.

In Quarter 1, the Global Team worked with AFROHUN to prioritize four high potential prospective donors that could be cultivated via new partner outreach. In Quarter 2, AFROHUN focused on the donor with the highest potential - GIZ. The Global Team and AFROHUN participated in strategy sessions to prepare for, and debrief from, each meeting with the funder. The Global Team further helped AFROHUN to develop a two-page visual brief on the AFOHUN OHWA, as well as a pitch deck and capability statement, as communications materials AFROHUN could use in its partnership discussions. The team then helped AFROHUN to strategize meetings with Malteser International and provided substantive input into the MOU between the two organizations.

In Quarters 1 and 2, the Global Team continued monthly calls with the SEAOHUN partnership development team to support SEAOHUN's revenue generation priority for Year 3 - its 10th conference (the SEAOHUN 2022 International Scientific Conference). The Global Team worked with SEAOHUN to identify and prioritize prospective corporate funders, develop a conference sponsorship menu and pitch deck, and plan outreach to companies, which included inviting several to attend even without sponsorship (as a means to establish new relationships). The Global Team also helped plan agendas for the newly organized Network-wide SEAOHUN Resource Mobilization Committee.

In Quarter 3, SEAOHUN conducted outreach to over ten companies to either sponsor or participate in the SEAOHUN annual conference. In Quarter 4, SEAOHUN achieved corporate

sponsorship from three companies: Chevron, Pfizer, and Zoetis, and funds were used to defray conference costs. Additionally, in Quarter 4 the SEAOHUN Secretariat held a day-long meeting of SEAOHUN partners adjacent to their annual conference, where they encouraged new and existing partners to brainstorm opportunities for expanded partnership with SEAOHUN in key priority areas. The Global Team helped to plan the agenda and facilitate the discussion groups. In Year 4, the Global Team will work with SEAOHUN Secretariat to follow-up on the successful meetings and sponsorship to cultivate additional corporate partnerships.

Strategy 3.4 Pilot and Scale Revenue-Generating (i.e. Earned Income) Mechanisms for the University Networks

GL Activity 3.4.1 Support each
Network to Pilot a Fee-based
Continuing Professional Development
(CPD) Training and Review for Scale-up

In Quarters 1 and 2, the Global Team produced a market analysis of over 20 e-Learning platforms and One Health-related online courses to assess the pricing strategy of competitors. They conducted a pricing analysis of online One Health courses and identified a price per credit hour that is within the range of competitors and could be applied to OHWA courses.

Additionally, the Global Team provided technical support to the AFROHUN Tanzania team to produce their first ever fee-based course. The five- day One Health course was delivered to over 30 participants, nine of which paid tuition. Funds will be applied to the OWH-NG work plan in Year 4. This represents a key milestone in their goal of funding diversification. In Year 4, the Global Team will work with AFROHUN to replicate this model with other country chapters.

GL Activity 3.4.2 Provide Technical Support and Facilitation for Sustainability Planning for the OHWA

By Quarter 4, the Global Team successfully produced a sustainability plan for the Global component of the OHWA. This plan included a summary of the current program model, three options for the future model after OHW-NG ends, a basic governing and staffing structure for these three models, key partners, an annual estimated budget for these three models, and a financing model and strategy.

In Quarter 3, the Global Team produced a financing model for the global OHWA. This is an Excel-based tool that projects expected revenue and expenditures of the Global OHWA, based on key assumptions of growth in demand for courses and certification over time. A key revenue source identified for the global OHWA is certification fees and the team made further recommendations on key funding sources and estimated funding values as a result of this analysis.

After producing this tool, the Global Team conducted a cross-objective site visit to AFROHUN Secretariat to present this information to AFROHUN leadership and promote dialogue on the future of the AFROHUN One Health Workforce Academy (AOHWA). The site visit achieved consensus on the overall model of the AOHWA and its relationship to a global OHWA, identified and prioritized a revenue generation options for the AOHWA, and secured support for the basic assumptions used in the financing model and strategy.

A key input for the governance and staffing component of this plan was the robust market analysis of over 20 e-Learning platforms mentioned in GL activity 3.4.1, which identified common and best practice methods of staffing,

partner engagement, content access, revenue generation models, credentialing, quality assurance, and tracking course completion, and marketing.

In Year 4, the Global Team will work with each Network to develop Regional OHWA Sustainability Plans. These plans will specify governance and staffing structure, budget, and financing strategy for the regional academies, as separate but related entities to the global OHWA.

GL Activity 3.4.3 Support each Network to Review Feasibility of a Membership Services Model for Revenue-Generation in the Long-Term

In Year 3, both Networks achieved a formal review of their membership model, with a view to assessing the feasibility of expanding the model as a source of revenue generation and improved program impact. AFROHUN further achieved the significant deliverable of creating a new membership model, which they presented to the AFROHUN Executive Board for approval by end of the year. The new model significantly expands the types of members that can join AFROHUN, including paraprofessional and technical schools, as well as external partner organizations, establishes tiers of membership, and clearly defines membership services and fees for each tier. AFROHUN utilizes a price differentiated model, whereby institutions based in high income countries (e.g., the U.S.) pay a higher membership fee than institutions based in lower-income countries. AFROHUN accomplished this deliverable by convening a membership committee, which worked virtually over Quarters 3 and 4, and met in -person for a three-day meeting in September to finalize the model.

The Global Team supported this achievement by:

- Developing a white paper of the major ingredients to be included in a Network membership model (e.g. types and tiers of members, membership services, member fees, member eligibility, and member recruitment and marketing)
- 2. Producing and presenting a robust landscape analysis of membership models by similar organizations in the region and globe
- 3. Providing review of AFROHUN membership committee agendas and working documents

The Global Team further wrote a background paper of membership models for the

SEAOHUN Executive Board, and facilitated focused discussion on the topic among SEAOHUN Executive Board members at the SEAOHUN 2022 International Scientific Conference. This discussion established Board agreement on the need to expand the SEAOHUN membership model and the need to define a membership policy that allows for OHUN customization while also ensuring consistency across the region.

In Year 4, the Global Team will work with both Networks to obtain Executive Board approval of their membership models, and with AFROHUN to plan the implementation steps for its new membership model.

LESSONS LEARNED

Need for Agile Project Management Strategies and Techniques

In Quarters 2 and 3, the OHW-NG Consortium faced a challenge to implement the proposed work plan at the same time as the Networks were developing their first independent applications to USAID for the Transition Awards. The Transition Award application process is time intensive for any organization, and the Secretariats had to complete this task with existing staff that already had high workloads. We learned that implementing project activities at the same time as the application process was a challenge, and that agile project

management techniques could help improve performance for successful achievement of deliverables and the Transition Award applications. We selected and piloted the Scrum methodology, which operates as short sprints of collective action in prescribed periods of time. We accomplished the Global OHWA Sustainablity Plan with this tactic, and we plan to introduce this as a technique that the Networks can use in Year 4. We believe this cutting -edge technique can be a resource for the teams for future work under any donor award.

Lessons for Future Transition Award Processes

The OHW-NG project provides a unique model and pioneering approach to supporting sustainability of donor-funded organizations. There are two novel elements in our project: the direct funding / Transition Awards granted to each Networks this year (and the capacity-building effort leading to that milestone), and the proportional increase in OHW-NG funds towards the Networks over the five-year initiative. Both are welcome additions to strengthen the Networks capacity and sustainability.

However, these two features require the Networks to scale-up activities and staffing to implement the funds successfully, and at the same time, encourages them to seek out alternative donor funding to sustain their operations after the OHW-NG project ends. Concomitantly, we have asked that they consider a leaner operating model that may be more sustainable after OHW-NG, in case insufficient funds are secured.

We have learned that this approach has the potential to pull the Networks in several directions at once- one, focusing on implementing the core OHW-NG project activities; another on scaling up to implement Transition Award activities; another to identify new donor funds and partnerships; another to implement the scope funded by those new donor funds and partnerships; and yet another to consider how to streamline operations to a leaner model. Successful organizations have to juggle many competing priorities, and the Networks will navigate these challenges. However, the lesson learned is that future initiatives focusing on a Transition Award and sustainability may consider sloping down funding over the fiveyear period, so that increased - not decreased - staff focus and time can be spent on raising alternative sources of funds and partnership development. The organization may also use that as an opportunity to begin to implement a leaner operating model during the period of the award, so they are positioned for efficiency when the initiative ends.

NEXT STEPS

Next year, the Global Team will continue work with the Networks to advance their new partner outreach, to support their resource mobilization goals of one new funded partnership, as articulated in their Partnership Engagement Strategy in their Business Plans (See Appendix on page 106). This includes continued conducting research on prospective private sector partners, providing guidance and feedback on network prioritization of private sector partners for outreach and strengthening communication materials.

Second, the Global Team will work with each Network to obtain Board approval of a strengthened membership model. Additional assistance will be provided to AFROHUN to develop implementation materials for their membership model, once approved. Finallly, the Global Team will support sustainability planning for the regional One Health Workforce Academies – building from the Global OHWA sustainability plan we developed in Year 3 – and among the OHUNs, through a four-day inperson workshop.





SEAOHUN's Capacity Strengthening Success (2019-2022)

Since 2011, the Southeast Asia One Health University Network (SEAOHUN) has worked tirelessly to develop the One Health workforce in countries across the region. Under the USAID One Health Workforce - Next Generation (OHW-NG) project, SEAOHUN has had the unique opportunity to focus efforts on strengthening Network and Secretariat organizational capacity, to increase the organization's impact and sustainability for years to come. Over three years of the OHW-NG project (2019-2022), SEAOHUN has made some notable achievements in this realm.

Since the beginning of the project in Year 1 (2019), SEAOHUN has demonstrated measurable improvement in 39 organizational capacity domains. Some of the most significant

improvements have been in: board development; procurement systems; project management and operational support for country members; financial management; partnership development; financial management; human resources; monitoring, evaluation, and learning; revenue generation/earned income; and additional USG compliance measures. SEAOHUN strengthened organizational capability by at least one full stage of development in 22 of 28 subdomains of the USAID Non-U.S. Organizational Pre-Award Survey (NUPAS) tool by end this third project year (Figure 1). SEAOHUN's progress to date on the USAID Organizational Capacity Assessment Tool (OCA) is illustrated in Figure 2.

One of the first critical efforts was building the capability of the Secretariat to issue and manage sub-awards. In Year 1, SEAOHUN issued sub-awards to four OHUNs, and developed a sub-award management manual, articulating policies and procedures for award, monitoring, and closure of such agreements. In Year 2,

SEAOHUN strengthened its monitoring practices and procedures. This capability proved important to securing new funding awards in Year 2 from USAID Strategies to Prevent (STOP) Spillover and Chevron, which both leveraged SEAOHUN's sub-award management capacity.

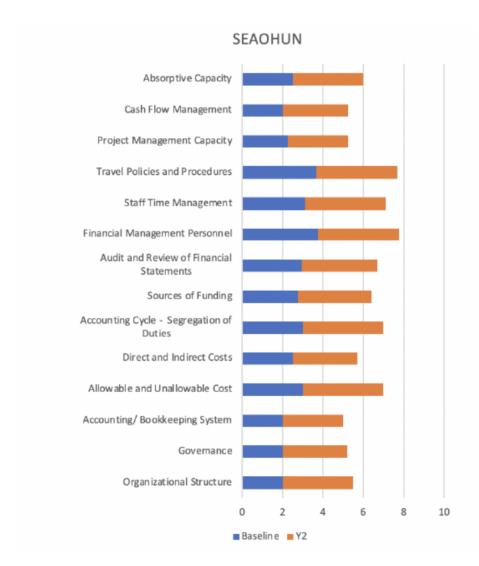


Figure 1. SEAOHUN improvements that resulted in a full stage increase in capacity on the USAID NUPAS (2019-2021). Source: One Health Workforce Next Generation Annual Report October 1, 2020 — September 30, 2021.

Another impactful SEAOHUN achievement has been revisions to the SEAOHUN Executive Board bylaws and organizing documents. This has helped to better differentiate roles and responsibilities from the Foundation Board as well as incorporating the formal designation of a Management Committee. The Network has created and implemented several new policies for its Board members, such as a conflict of interest policy and a letter of commitment with roles and responsibilities, and, over the course this year, has continued to hold regular Executive Board meetings with increased interest and direct engagement with board members.

Financial management has been an additional priority for SEAOHUN. In Year 2, SEAOHUN conducted their first business process audit to determine areas of improvement, and developed an audit tracker to help manage subsequent changes to the finance manual and management procedures. Over two years, SEAOHUN addressed every improvement area in the tracker, through changes to the Finance and Procurement Manual and staff procedures. The organization adopted budget variance and cash flow budgeting practices, which assist in maintaining positive financial health in the context of multiple donors. SEAOHUN opened a U.S. currency bank account to resolve currency issues, and improved costs on petty cash management. SEAOHUN has further achieved two years in a row with successful financial program audits by an international firm.

SEAOHUN has strengthened its management of the most critical organizational asset - people. SEAOHUN employed a new cloud-based human resources system, as well as a procedure for documenting level of effort across multiple funding streams and projects. An exit interview procedure was established to manage attrition and anti-human trafficking and conflict of interest policies were developed. SEAOHUN further developed a plan for staffing and recruitment to coincide with direct funding transition award issued by USAID at the end this year.

A significant achievement for SEAOHUN has been marked progress in project management

and monitoring, evaluation, and learning (MEL) systems. After the network participated in a robust workshop series on project management, the Secretariat developed its first ever project management manual, to codify best practices and standardized procedures. The Network hired a Program Manager and a Senior MEL Officer to provide more support and oversight of country activities. SEAOHUN further supported robust training of OHUN staff on collection, analysis, and interpretation of monitoring and evaluation data, substantively improving the timeliness and quality of program reporting. They have also strengthened their expertise in developing effective success stories and communications outreach materials for external stakeholders.

Lastly, SEAOHUN made major strides to develop new partners and diversify funding. In each project year thus far, SEAOHUN has set partnership and resource mobilization goals, and every year, SEAOHUN has achieved their goals. As of 2022, SEAOHUN had received new USAID funding, first-ever private sector funding, and first-ever conference sponsorship. The network has also achieved 14 new technical partnerships with government and civil society, including being a member of Global Health Security Agenda and a development partner on the ASEAN+3 Field Epidemiology Training Network Steering Committee. This year, SEAOHUN successfully organized their SEAOHUN 2022 International Conference. Through strong planning for revenue generation as part of the conference, SEAOHUN was able to host partners from various countries at the conference and facilitate a strategic Partnership Day to create new opportunities for strategic partnership with ASEAN, FAO, WHO, WOAH, the private sector and more. Supporting these achievements, SEAOHUN built their funding pipeline database to track prospective donors, conducted outreach, and developed communications materials

Taken together, these select accomplishments, among others, catapult SEAOHUN to a new level of organizational capability and operational

capacity. Over three years, this improved capability enabled the organization to take on three new sources of revenue and establish 43 novel partnerships. This success demonstrates the unwavering dedication of SEAOHUN's staff and leadership to their goals, despite facing

obstacles and set-backs. It is clear SEAOHUN has established a firm foundational capacity to continue to build on their successes, growing and sustaining demonstrable network impacts on the One Health workforce in the region and beyond.

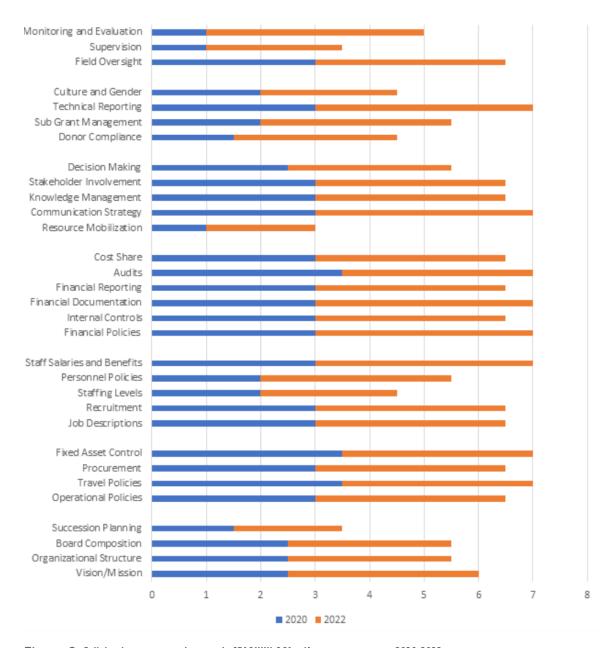


Figure 2. Full development stage increase in SEAOHUN OCA self-assessment scores, 2020-2022



AFROHUN has grown considerably from its founding in 2010, encompassing now 19 university members across nine countries in West, East, and Central Africa. The organization has a laudable vision to be the leading One Health organization in Africa, with impact and influence well beyond the continent. A key ingredient to attaining this goal is strengthening AFROHUN institutional capacity to successfully manage new funded partnerships, programs, and country members. Over the course of the first three years of the One Health Workforce - Next Generation (OHW-NG) project, AFROHUN made notable strides in this area.

Since the first year (2019-2020), AFROHUN has achieved a full stage improvement in 66

organizational capacity domains. The most important improvements were in: board development; procurement systems; project management and operational support for country chapters; financial management; human resources; monitoring, evaluation, and learning; partnership development, revenue generation; and USG compliance measures. AFROHUN progressed a full stage on 24 domains of the USAID Non-U.S. Organizational Pre-Award Survey (NUPAS) (highlighted in the OHWNG Year 2 Annual Report), and 22 out of 46 domains of the Organizational Capacity Assessment Tool (OCA), from 2019 to 2022, illustrated in Figure 1.

One of the first important milestones achieved was changing their organizational name and branding, from OHCEA to AFROHUN, to represent a continent-wide mandate and mission. AFROHUN further sought legal registration of its Chapters in all member countries- many of which had to be re-registered due to the name change. This legal status removes obstacles from the Chapters operating fully and even mobilizing resources from other donors.

AFROHUN later drafted their first Executive Board bylaws to improve Board governance and created and implemented a new Board structure to include members with gender and sectoral diversity. In Year 3 (2021-2022), AFROHUN appointed one new francophone Board member, and articulated plans for Board member succession, chair appointment, and capacity-building.

Another important milestone was establishing the Network's first sub-award to a Country Chapter. To govern this, the organization developed a sub-award management manual, as well as various subaward monitoring practices and a sub-recipient site visit protocol. AFROHUN also conducted its first audit of a sub-recipient. These activities establish the foundation for AFROHUN to successfully manage sub-awards among all of Country Chapters and members, opening up opportunities for new funded work by various donors. This year, AFROHUN strengthened their overall procurement policy, in the areas of conflict of interest, gifts, segregation of duties and more.

AFROHUN also increased its project management support of Country Chapters. Secretariat and country staff attended a five-part training on project management and budget preparation, and subsequently drafted a project management manual to standardize best practices. AFROHUN trained country staff on financial management and U.S. government reporting requirements in Years 2 and 3 (2020-2022). In addition, AFROHUN rolled out a new enterprise-wide software that tracks project completion and reporting at the country-level,

which is used in routine leadership meetings for decision-making.

AFROHUN human resources management also improved. Over the first two years of the project, AFROHUN developed a volunteers and intern policy and created a staffing plan for future planned expansion in funding. This year, AFROHUN updated their human resources manual to include payroll reconciliation and code of conduct compliant with U.S. government mandatory standard provisions. AFROHUN developed a first-ever recruitment strategy and developed job descriptions for all new positions. AFROHUN further strengthened its labor activity system to accurately document staff level of effort across projects and charge direct and indirect costs appropriately, which is key for managing multiple funding awards. New software was also adopted that automates staff timesheets, improving accuracy and efficiency.

AFROHUN also made important improvements to its financial management, including important updates to the Network's finance manual, such as to define allowable and unallowable costs for donor compliance and to improve bank reconciliations. Monthly reporting was strengthened to monitor budget variance. A cost allocation plan was also developed to document, identify, and allocate program costs, and additional policies were put in place to better manage AFROHUN and Country Chapter finances. AFROHUN further installed cloud-based QuickBooks to strengthen financial reporting and trained finance secretariat staff in its use.

Having undertaken the advanced NUPAS PLUS tool, AFROHUN made special advancements in information technology infrastructure and cyber security, including developing an information technology policy addressing key factors such as data retention, back-ups, staff access and more, ensuring adequate oversight staff, and expanding risk assessment procedures. AFROHUN also initiated required terrorism finance and disbarment checks and child safeguarding and human trafficking policies to be compliant with USG requirements.

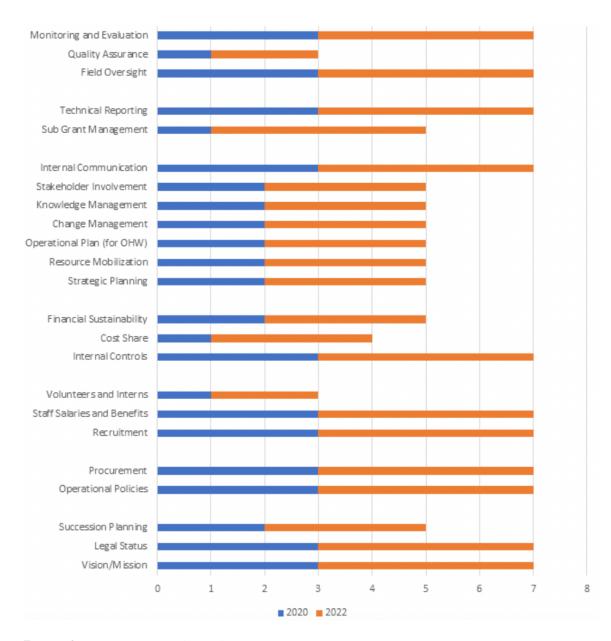


Figure 1. Full development stage increase in AFROHUN OCA self-assessment scores, 2020-2022

Lastly, AFROHUN transformed their approach to partnership development and revenue generation and diversification. Gleaning new knowledge and approaches from an eight-part partnership development course, AFROHUN improved the way it approaches partnerships and articulates its value. AFROHUN enshrined this approach in a new partnership engagement strategy, conducted stakeholder mapping, and conducted outreach to priority funding partners. By Year 3, AFROHUN attained new funding from USAID STOP Spillover project, new bilateral American Rescue Plan Act (ARPA) funding for Country Chapters in Cameroon and Cote D'Ivoire, and two new funding partnerships with Malteser International and the German Society for International Cooperation (GIZ), along with the major project milestone: a direct USAID transition award (See Success Story for more details), all showcasing

AFROHUN's capacity to identify opportunities, secure partnerships, and manage new awards. AFROHUN further piloted a fee-based One Health course for in-service professionals through the Tanzania Country Chapter, and defined a fee-based membership model, both important steps toward diversifying revenue.

These accomplishments, among others in monitoring, evaluation, and learning, communications and stakeholder relations, gender policy, and business planning, have allowed AFROHUN to expand funding and activities, diversify revenue, and secure and grow 62 new partnerships with government, academic institutions, and civil society. Despite many obstacles, AFROHUN has exemplified dedication to developing capacity necessary for securing organizational sustainability.



One of the main objectives of the USAID One Health Workforce Next-Generation project is to strengthen organizational capacity and the long-term sustainability of the Africa One Health University Network (AFROHUN) and Southeast Asia One Health University Network (SEAOHUN). The cornerstone of this strategy, by design, was for each Network to be in position to apply for and receive direct funding from USAID by the third year of the project (2021-2022).

Why is direct funding so important for Network sustainability?

Since their inception, AFROHUN (formerly the One Health Central and East Africa or "OHCEA" Network) and SEAOHUN have received funding from USAID through large consortium cooperative agreements and

projects, including through the current OHW-NG award. USAID recognized however, that as the Agency shifts towards a strategy of localization, empowering the Networks to receive direct funding and operate independently of a broader consortium was critical for their long-term viability and success.

When an organization is eligible for direct funding and has a demonstrated track record of successfully managing awards, it is better positioned to be competitive for additional donor-funding, whether through US Government Departments or Agencies such as USAID or the Department of Defense, International NGOs, as well as philanthropic and private sector investors seeking strong partners and collaborations.

What does it take to qualify for direct funding?

In the OHW-NG project, empowering the Networks to be in position to apply for direct funding was designed into our work plan and metrics for success. Through a three-year capacity development agenda, our Consortium collaborated with the AFROHUN and SEAOHUN Secretariats on organization-specific workstreams that included technical and operational support from project subject matter experts.

Organizational Pre-Award Survey (NUPAS) and the Organizational Capacity Assessment (OCA) Tool. The NUPAS is essentially a risk assessment, while the OCA tool is designed to capture additional ingredients towards successful organizational performance. By working together in trainings and workshops in Year 1, the Networks created capacity plans, and this benchmarking and planning step was conducted annually, both to measure progress over the year and to plan for each subsequent year.

We also provided targeted assistance where requested, including mobilizing specialized trainings and subject matter experts, producing virtual and in-person workshops, leading coaching and mentoring sessions, reviewing and providing input to policies and other technical documents, and supporting communities of practice among Network member chapters. Over three years, the Networks strengthened their policies and practices with respect to staffing, program management, financial management and internal controls, procurement, managing diverse donor funding, and more, which are summarized in two *Success Stories on pages 60 and 64*.

What is a Transition Award?

According to USAID Office of Acquisitions and Assistance (OAA) guidance reference no. 303mbb, a transition award is "an assistance award to a local entity or locally established partner... that is or has been a subrecipient under a USAID assistance award". A transition award occurs in tandem to an "initial award" with a recipient that builds the capacity of the local subrecipient(s) to become more capable of receiving a direct USAID award.

For the OHW-NG project, USAID granted our initial award to the UC-Davis led OHW-NG Consortium, though transition awards were incorporated into the cooperative agreement and designated for our subrecipients, AFROHUN and SEAOHUN. Together, we followed an established process to direct funding. First, the Networks demonstrated achievement of all major organizational milestones showcasing their capacity to qualify for direct funding. Following this first milestone, we submitted "Transition Letters" to USAID, summarizing the Networks achievement of these milestones and recommending their potential to apply for the Transition Awards.

Upon receipt of the Transition Letters, USAID initiated the development of two Reguests for Application (RFA) for Transition Awards, one for each Network, which were released in early 2022. AFROHUN and SEAOHUN then mobilized their teams to complete and submit high quality proposals in response to the RFAs. Both Networks submitted their applications by the deadline, after which USAID conducted formal NUPAS assessments to determine their risk level for taking on the investment as prime award recipients. Finding low organizational risk or deficiencies in the assessments, USAID then worked with AFROHUN and SEAOHUN to officially execute the two Transition Awards at the end of Year 3.

AFROHUN Transition Award Main Objectives

The goal of the AFROHUN Transition Award, is to develop and strengthen a local OH workforce with the capacity to prepare, prevent, detect, and respond to infectious disease outbreaks and complex health challenges in the Africa region.

- Design and deliver regionally relevant training on risk communication and community engagement (RCCE) for rabies and COVID-19
- 2. Support professional development and research opportunities in zoonotic disease among students and faculty through fellowships, internships, and small grants
- 3. Manage regional knowledge in curriculum development and conduct alumni tracking and engagement to better understand and address One Health workforce gaps

SEAOHUN Transition Award Main Objectives

- 1. Equip future health professionals with One Health competencies and foster them to become future One Health leaders
- 2. Extend the SEAOHUN Small Grants
 Program to include specific focus on
 COVID-19 and antimicrobial resistance as
 areas for research or projects
- 3. Establish, maintain, and promote the One Health Workforce Academy knowledge management platform for Southeast Asia as gateway to One Health courses and educational materials

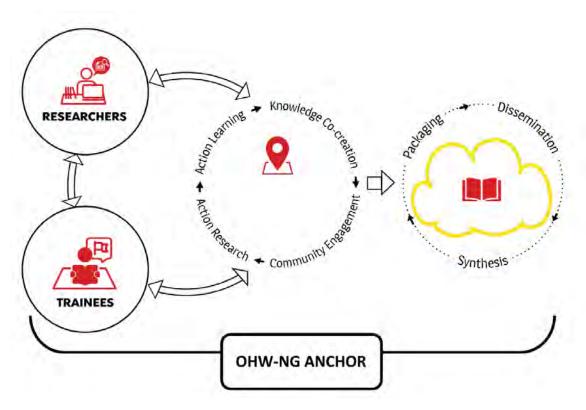


Figure 1. The AFROHUN Transition Award Implementation Approach

Will the Transition Awards Change the Networks?

Both Networks have expressed a sense of achievement for how far they have progressed, and enthusiasm for the future opportunities these awards present. While the Transition Awards increase the level of effort and responsibility of each organization, they enhance the ability of the Networks to communicate and problem-solve directly with USAID regarding their organization's activities and priorities. In addition, they further enable the Networks to be competitive for new funding opportunities

as prime recipients. This expands the number of funding opportunities for the Networks, and more importantly, puts the Networks in the driver's seat for program design and execution of those same awards. The Transition Award process is a critical step towards advancing the values of localization espoused by USAID. Indeed, as USAID moves to implement its recently released Local Capacity Strengthening Policy, the Agency can reflect on successful models and lessons learned from our project's experience with this innovative transition award mechanism.

To learn more about USAID's LCS Policy, please visit this link:



The Transition Award presents a great opportunity for SEAOHUN to demonstrate our ability to independently manage direct funding from USAID. Our experience in applying for and managing the Transition Award increases our competitiveness in bidding for opportunities with USAID, other international aid agencies, and donors, resulting in network sustainability in the long term.

-Dr. Vipat Kuruchittham, SEAOHUN Executive Director

The capacity building that we at AFROHUN received whether systems improvements, targeted staff trainings on a wide range of areas including USAID requirements, the mentorship support including experiences we observed working with UCD - led consortium was very important in successfully putting together a complete and successful AFROHUN Transitional Award. If we had not received this three-year capacity support, I highly doubt that we would have made it. On a personal note, as one of the key staff members responsible for resource mobilization and partnerships, with my experience writing grants and working with different funders, USAID is by far very rigorous. I am very confident that AFROHUN can now manage a USAID grant in Prime role and any other funding.

–Agnes Yawe, AFROHUN Head Grants & Resource Mobilization

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 integration as a core competency.



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 (https://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. Enrollment

for the online Gender and One Health course will begin on the OHWA platform in January 2023.

Gender Policy and Implementation Strategy for SEAOHUN

This initiative supports SEAOHUN in developing organizational gender strategies and policies, a key component of our GAP. The objectives of the SEAOHUN gender strategy are:

- 1. To promote a gender-responsive organizational culture
- 2. To mainstream gender across SEAOHUN Secretariat and its work
- 3. To promote a workforce that recognizes gender related vulnerabilities in addressing complex health challenges using a One Health approach and empowering them to address such vulnerabilities
- 4. To build capacity of the network to address gender related challenges
- 5. To conduct gender assessments

This year, SEAOHUN's Gender Policy was drafted and reviewed by the OHW-NG Consortium and SEAOHUN Secretariat, then put forward for review and approval by the SEAOHUN Executive Board at the Board meeting in September 2022.

Identifying Gender Gaps in the Health Workforce in DR Congo

Through this initiative, we collaborated with the AFROHUN DR Congo chapter to co-design a study that aims to generate quantitative and qualitative data that can provide insights into existing gender gaps in enrollment, recruitment, and selection of candidates to participate in the Master's in Public Health program at the KSPH. This study produced data to elucidate the factors limiting women's access to the KSPH program. and is enabling the implementation of actions that can reduce the gender gap by laying a solid foundation for equitable access between men and women to the Master's program. See Success Story in the AFROHUN report on page AFR-52.

Assessing Gender-related Challenges to Livelihood Improvement among Rural Households in Vietnam

Under the OHW-NG project, the Viet Nam One Health University Network (VOHUN) conducted a gender analysis study that included a gender learning needs assessment and community gender analysis beginning in March 2022. The goal was to explore gender differences and relations and identify gender issues among farmers at the community level in Thai Nguyen Province, Vietnam. Thirty small-scale farmers from the Lau Thuong commune in Vo Nhai District were involved in the study, which included in-depth interviews conducted by faculty and students from VOHUN member universities. See Success Story on page 76.

Empowering Women and Leadership in One Health in Malaysia

Together with the Malaysia One Health University Network (MyOHUN), we designed a workshop intended to reach the indigenous Orang Asli community in the Cameron Highlands, Pahang, Malaysia with training and outreach for students targeting empowerment for women and equitable leadership in One Health. The workshop was conducted from July 23-26, 2022, and included a visit by students and the MyOHUN team with support from the OHW-NG Global Consortium's Gender Lead and Dr. Ndola Prata (University of California, Berkeley), to the Orang Asli village. During the workshop, students learned about how traditional gender relations may create imbalances in access to resources and in the distribution of labor and roles given existing cultural norms and values. The workshop reached students from multidisciplinary backgrounds, increasing their knowledge and awareness on gender norms in relation to cultural intersection and acceptance and how that can impact health outcomes, while also building their skills in community outreach with the Orang Asli community. In the village, the students worked with the OHW-NG and MyOHUN team to collect information related to gender and health related issues including zoonosis and presented their findings for discussion with 30 Orang Asli beneficiaries.

LESSONS LEARNED

Though initially challenging to gain traction as the project launched in Years 1-2, efforts to continue to create awareness around the importance of gender in One Health with SEAOHUN were very successful in Year 3. This period, SEAOHUN's Gender Policy was brought to the Executive Board for review and approval, and we continued gender trainings with both MyOHUN and VOHUN. VOHUN, for example, conducted a student needs assessment for gender training with results showing that 88% had never received any previous gender training and the majority are interested in further participation. VOHUN also conducted a gender analysis of a small farmer program in one Province providing the regional Network with a model of gender advocacy in moving from plans to action. See the Success Story on page 76 for more information.

NEXT STEPS

- Provide technical support to AFROHUN and SEAOHUN and build capacity for designing and implementing their independent Gender Action Plans under the newly received Transition Awards (October 2022 - March 2023)
- 2. Provide technical support to the SEAOHUN Secretariat to help finalize, approve and disseminate their Gender Policy (October February 2023)
- 3. Open enrollment for the online course on Gender and One Health on the One Health Workforce Academy (January February 2023)
- 4. Conduct training of trainers from AFROHUN on gender analysis and gender integration (January September 2023)
- Continue activities on gender sensitization with SEAOHUN and identify gender champions in each OHUN (January - September 2023)
- 6. Provide technical support to MyOHUN in training faculty and students on integrating gender into research and programs (January September 2023)
- 7. Continue to provide technical support (as needed) to AFROHUN DR Congo and the KSPH study on gender inequalities in access to master's degree training.



SUCCESS STORY

Assessing Gender-related Challenges to Livelihood Improvement among Rural Households in Vietnam

Under the OHW-NG project, the Viet Nam One Health University Network (VOHUN) conducted a gender analysis study that included a gender learning needs assessment and community gender analysis beginning in March 2022. The goal was to explore gender differences and relations and identify gender issues among farmers at the community level in Thai Nguyen Province, Vietnam. Thirty small-scale farmers from the Lau Thuong commune in Vo Nhai District were involved in the study, which included in-depth interviews conducted by faculty and students from VOHUN member universities. Interviews were conducted using a questionnaire designed to ensure gender comparisons following USAID's Five Domains Framework for a Gender Analysis.

A higher percentage of women participated in the study, and many cited different occupationrelated challenges in their primary livelihood activity (farming) compared to male participants. For example, 44% of female respondents reported sick livestock to be a major constraint for livestock production practices compared to 18% reported by their male counterparts. Another 18% of the male respondents indicated market access was a challenge, compared to 6.5% of females. With regard to household decision making across a range of tasks and activities, a higher proportion of decisions in the household were reportedly made by women, especially when involving childcare, caring for animals, healthcare, and clothing and food expenditures. Findings from the study have shed light on the gender-based constraints rural households face in these villages and will help identify potential intervention and mitigation strategies aimed at improving rural health and livelihoods.



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

- Over the past several years, the Global Team has empowered AFROHUN and SEAOHUN leadership and bolstered organizational capacity through a series of workshops, trainings, and discussions tailored to management of USAID awards. These sessions were designed to equip the Networks with the knowledge and awareness of how to be a prime recipient of USAID funds and best practices for managing USAID awards. In addition, the project's Objective 3 team hosted a project management training series. These synergistic efforts aimed to prepare the Secretariats for direct receipt of USAID funding through the Transition awards, and both AFROHUN and SEAOHUN achieved major milestones this year by successfully applying for and receiving Transition Awards (see Success Stories on pagse 60 and 64).
- The OHW-NG project's senior financial management team visited SEAOHUN in September 2022 and worked with the Secretariat on best practices for program management, award and subaward administration and management, accounting practices, and assuring compliance for donor-funded awards and grants. This mission successfully prepared SEAOHUN staff for the new task of managing the Transition Award and a similar mission is planned with the AFROHUN Secretariat in the upcoming year.
- As part of SEAOHUN's highly successful 2022 International Scientific Conference in Bangkok Thailand, the OHW-NG consortium organized a "Cross Network" event to bring together AFROHUN and SEAOHUN members for the first time since the project launched in 2019. During

- the dinner and working session, AFROHUN and SEAOHUN members discussed and strategized opportunities for collaboration through activities such as Student One Health Clubs, field-based learning sites and experiences, One Health Workforce Academies for training and education, and Network organizational sustainability. As a result, participants drafted strategies for continuing engagement and plans for the connecting and advancing action plans over the last two years of the project (see Success Story on page 83).
- This year, we convened the project External Advisory Board (EAB), which is comprised of nine current members: Professor Wondwossen Gebreyes (the EAB Chair), Dr. Yewande Alimi (Africa CDC), Ms. Amara Chunplang (Pfizer), Dr. Wondwossen Gebreyes (The Ohio State University), Dr. Wantanee Kalpravidh (formerly FAO), Dr. Theo Kanellos (Zoetis), Dr. Grace Keverenge-Ettyang (Moi University), Dr. Nicole Lurie (CEPI), and Dr. Jonna Mazet (UC Davis).). We held three meetings with the EAB, starting in October 2021 to orient them on the project and discuss Board goals, objectives, and terms of reference, and in March 2022 introduced EAB members to AFROHUN and SEAOHUN leadership to begin planning for the project's mid-year evaluation. Over the rest of the year, the EAB worked together on the mid-year project evaluation and Drs. Kalpravidh and Kanellos delivered a summary of preliminary findings to the OHW-NG Consortium during a side event at the SEAOHUN 2022 International Scientific Conference. The final report will be shared with the consortium and USAID early in Year 4.

- In collaboration with AFROHUN and SEAOHUN, the Global Team cocreated multiple workshops designed to strengthen communications and reporting. In preparation for technical reporting, a workshop was held for SEAOHUN and collaborating OHUNs on USAID reports and telling compelling success stories; for AFROHUN, we designed a two-part workshop and held sessions on strengthening report narratives and success stories with interactive activities using case studies from a fictional AFROHUN country chapter in Tunisia. The AFROHUN sessions included representatives from the USAID STOP Spillover project, providing an opportunity for Network members from both projects to collaborate and work together on mutually beneficial activities. Both the AFROHUN and SEAOHUN workshops were a success and are helping develop a foundation for strategic communications strategies into the future.
- We launched our project website (www.onehealthworkforce.org) and designed a communications strategy to improve project outreach and amplify communications already underway by AFROHUN and SEAOHUN. Our new products such as the newsletter (the first edition released in April 2022), social media, and forums and interactive pages on the One Health Workforce Academies (www. onehealthworkforceacademies.org) site will serve as resources hosting project and Academy materials, will contain invaluable information and training materials on One Health, and will be a legacy platform for learners and professionals to interact and collaborate over time.

ACTIVITIES

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

- We continued to organize and participate in coordination meetings between the prime, Global Team, Secretariats, country teams, and other implementing partners, as well as in specific operational team calls and responded to all requests from the broad spectrum of stakeholders engaged in the project (e.g., implementing organizations, ministries, USAID mission, GHSA stakeholders, etc.).
- We established and coordinated the project External Advisory Board to provide project input and conduct a mid-year project report in the context of stakeholders and

- high priority opportunities to facilitate the journey to self-reliance and promotion of global health security. See highlights above for more details.
- while closely monitoring COVID-19 across all partner countries and as travel emerged as a priority for more in-person meetings and face-to-face interaction, we updated project travel standard operating procedures and worked with USAID to ensure appropriate travel authorizations and approvals.
- Travel intensified through in-person events and workshops and the consortium successfully managed to coordinate attendance of Global Team, AFROHUN, and SEAOHUN participants at the highly successful SEAOHUN 2022 International Scientific Conference in Thailand.

GL Activity PMC 1.2 Responsive Communications & Reporting

- In close collaboration with AFROHUN, we continued voluntary monthly COVID-19 reporting for ARPA-funded activities in Cameroon and Cote d'Ivoire and in response to USAID and Mission requests, shifted reporting to USAID's Development Information Solution (DIS) platform.
- Outreach continued with other USAID investments such as STOP Spillover to improve collaboration and identify potential synergies for the projects.
- The Global Team conducted several communications workshops for SEAOHUN and AFROHUN helping train the Networks on effective and strategic communications (see highlights above).

GL Activity PMC 1.3 Monitoring Performance & Showcasing Impact

- The M&E indicators, MEL plan, and PIRS
 were continually revised this period to
 better track performance and adjust targets
 based on Year 1 (2019- 2020) baseline
 data and assessment and feedback from
 Year 2 data collection, both from within the
 project and together with USAID.
- Guided by the Global Team, we worked closely with USAID and the AFROHUN and SEAOHUN Monitoring, Evaluation, and Learning (MEL) working groups to refine the project MEL plan, improve collaboration and co-creation for greater inclusivity and "voice" in MEL plan evolution, and to update project Performance Indicator Reference Sheets (PIRS) in response to 2021 annual report feedback and 2022 semi-annual report feedback as part of our learning agenda. The MEL plan will continue to evolve as we adaptively manage the project and improve performing monitoring criteria and systems.

GL Activity PMC 1.4 One Health Workforce – Next Generation 2021 SEAOHUN and AFROHUN Global Consortium Meetings

- We conducted the first in-person OHW-NG Global Team meeting (June 1-3, 2022 at the University of California, Davis) and crafted strategies for developing synergistic project work plans in anticipation of successful receipt of Transition Awards by both AFROHUN and SEAOHUN. Year 4 planning was initiated early and continued through quarters 3-4 in close coordination with the regional Networks to pave the way for work plan approvals and implementation early in the fiscal year.
- Together with SEAOHUN, we supported planning and coordination of the SEAOHUN 2022 International Conference & separate SEAOHUN Partnership (September 6-8, 2022 in Bangkok, Thailand).

NEXT STEPS

- We will continue to collaborate with both Networks to strengthen project management systems, including staffing, knowledge management, and strategic communications, especially given the newly added burden of managing both the OHW-NG project award and newly received Transition Awards in the upcoming year.
- As part of our commitment to
 Organizational Capacity Strengthening and
 Sustainability (Objective 3), the OHW NG Global Team plans to support both
 Networks in a mentorship and coaching
 capacity with regard to best practices
 for program management, financial
 management, and performance monitoring
 for the Transition Awards, while respecting
 the Networks independence for award
 implementation.
- We aspire to continue to strengthen
 the equity of collaboration across all
 Objective working groups and to improve
 efficiencies in implementation, especially
 as many activities planned in the final two
 years of the project are cross-cutting and
 involve training, knowledge management,
 and sustainability or revenue generating
 elements.
- Following successful Year 3 models such as the MEL working groups, we aim to continue improve South to South collaboration among Network and project working group members. Together with the Networks, the Global Team also aims to empower Network leadership and foster greater dialogue with a focus on learning.

Success Story AFROHUN & SEAOHUN Cross Network Event

On Tuesday September 6, 2022, members of the Global One Health Workforce - Next Generation Consortium gathered together in-person for the first time in Bangkok Thailand. After three long years working together virtually and through smaller hybrid meetings and workshops in response to travel restrictions from the COVID-19 pandemic, our Consortium finally convened together in Bangkok to celebrate the project and attend the SEAOHUN 2022 International Conference. To celebrate the occasion, we organized a special meeting on the first day of the conference: the AFROHUN and SEAOHUN Cross Network Event, including representatives from the AFROHUN Secretariat, AFROHUN Country Chapters, SEAOHUN Secretariat, Southeast Asia region OHUNs, members from all of the Global Team's partner organizations, representatives from our project's External Advisory Board, and of course partners from USAID.

During the event, we shared collective project highlights and held a working session to explore

cross-Network collaborative opportunities that bring the Networks closer together towards common goals for strengthening the One Health workforce and health security. The working session was organized by three themes:

1) Cross-network student engagement & competitions, 2) Collaborative course modules for One Health Workforce Academies platform, and 3) Resource mobilization / organizational sustainability strategies for country Networks. Discussions were dynamic, and we learned a lot about challenges and opportunities facing the Networks as they seek to grow and position themselves for long-term viability and success.

Finally, members of the OHW-NG External Advisory Board shared a preview of their mid-project external evaluation report highlighting comments, critiques, and strategic recommendations for the project and Network sustainability. The presentation was well received and the official report will be released before the end of 2022.



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 externa 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

Indicators

Output-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
- 1.1: Total # of existing and new One Health training content and delivery modes, curated, updated, and implemented
- **1.2**: Total # of individuals
- **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 decisionmaking, our Consortium must learn from activity progress and data. Review of indicator data as well as the data collection process continues to be an ongoing activity. This period, our MEL working group collaborated with USAID to refine several output and outcome indicators along with indicator targets in response to Year 2 Annual Report data collection and reporting. Specific changes we made to the MEL plan and Performance Indicator Reference Sheet (PIRS version 11) this period are detailed below. Going forward, our MEL plan and the PIRS will be further revised in in close collaboration with our regional Network MEL officers and working group teams to address continually evolving aspects of the plan, especially as activities transition back to in-person and hybrid in-person and virtual events.

 PO1 – Evidence of increased progress towards institutionalization of competency-based training in One Health: We revised targets from "region/ country specific" to university/institution specific consistent with how CLASS scoring is implemented (see the Knowledge Management and Learning Plan Update for more details).

- PO2 Evidence of placement of One Health alumni in targeted sectors: We added a quantitative component (number of alumni placed in targeted sectors) with disaggregation to this previously qualitative only indicator.
- PO3 Utilization of KMS data to inform decision making: We added a quantitative indicator to this previously qualitative only indicator (number of Networks utilizing KMS data to inform decision-making) with disaggregation and clarified the target to refer to the regional Networks, which provide a model for additional adoption of KMS by country OHUNs over time.
- 1.1 Total number of existing One Health training content and delivery modes, curated, updated, and implemented: We added disaggregate information for "implemented content" to the data collection form to support OHUN requests for reporting and to improve tracking over the life of project.
- 1.2 Total number of individuals trained: We provided definitions for scholarships and research grants for clarity and added relevant measurement criteria

- for improved disaggregation and tracking of scholarships and research grants by institution, gender, recipient type, and discipline.
- 3.2 Number of new and diverse partnerships for the Networks: We updated this indicator to clarify that OHW-NG consortium members cannot be counted as "partnerships".
- G2 Number of activities that included a gender component and/or gender was prioritized. After consultation with our Gender Lead and Gender Working Group, Gender "Sensitization" and Gender "Awareness" were condensed into a single "Gender Sensitization/Awareness" category as they are considered synonymous in OHW-NG use and implementation.
- G3 Evidence of changes made improving sex balance and impact of sex balance: We refined "expected/desired change" for this indicator to reflect positions

- in which the SEAOHUN and AFROHUN Networks have the ability to make direct hires and influence change, thereby excluding deans and other university-level positions outside of OHUN control.
- E21 Number of host country higher education institutions (HEIs) receiving capacity development support with USG assistance: We revised the baseline from the country level to the institution level to better address indicator specificity. The baseline was initially set at eight countries but was updated to 47 HEIs. In addition, we confirmed the target to reflect that each country within the respective regional Network will have at least one HEI receiving capacity development support over the life of the project.

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.

- Working closely with the Objective 1
 team, we refined user ability to access
 CLASS Score data (Calibrated, Lifelong,
 Adaptive, Scalable, and Sustainable)
 on the OHWA platform (see the
 Knowledge Management and Learning
 Plan Appendix). Hosting CLASS Score
 Questionnaires on the OHWA platform
 enables access to critical indicator data
 for analysis of improved organizational
 capacity and the development, delivery,
 and institutionalization of training and
 educational offerings at the university level.
- OHW-NG MEL working groups continued to collaborate on Objective 2 assessment and tracking activities, specifically as data from the alumni tracking and engagement survey was analyzed and shared. Reacting to preliminary findings from the survey, we held multiple discussions on opportunities to refine criteria and strengthen definitions of One Health learners, trainees, and alumni, and will be working closely with the regional Networks to refine these definitions as part of our learning agenda.
- With respect to organizational sustainability, we worked closely with the Objective 3 team and organized workshops as part of Project Management Sessions to include

- best practices in designing and implementing Monitoring & Evaluation plans (see Objective 3 for more details).
- Regarding our cross-cutting gender theme, we worked with the OHW-NG Gender Lead and regional gender working groups to refine project gender indicators and simplify data collection (see above for details).
- In preparation for Year 4, both Networks have been encouraged to take greater ownership in the Consortium's overall MEL plan and have been actively involved in reviewing the MEL indicators for PIRS version 12.
- During the 2022 SEAOHUN Conference in Bangkok, the MEL working groups seized the opportunity to meet in-person for the first time and established a culture of cross Network mentorship for MEL.
- The SEAOHUN MEL working group is developing a competency-based "MEL for One Health Projects" course for MEL Officers within the Network and beyond that will be published on the One Health Workforce Academy.

NEXT STEPS

- Continue refinement of the MEL plan in close coordination with USAID and the Networks.
- Establish regular MEL working group calls with AFROHUN starting in Year 4
- Explore existing country and Secretariatlevel MEL dashboards to use as models for
- integration with KM tools for improved monitoring and decision-making.
- Prepare for transitioning, orienting the Networks to USAID systems (DIS, DDL, and the DEC) for independent performance data management.

REFLECTING ON 8 YEARS OF MEL

Working collaboratively, the MEL working groups authored the abstract, "From Concept to Implementation: Evolution of Monitoring, Evaluation, and Learning for One Health Projects (2014-2022)", which was accepted for poster presentation at the 2022 SEAOHUN International Conference in Bangkok, Thailand. In developing the poster, our team reflected on the evolution of monitoring and evaluation over eight years of USAID-funded One Health programs and provided insights on the process and inner workings of various project MEL working groups. Additionally, developing the poster was an opportunity to reflect on the status of MEL within our own OHW-NG Project and helped our MEL working group identify next steps and opportunities for improving the project's MEL plan, data collection, networking, and collaboration.



Global Team and AFROHUN MEL working group members pose for a photo in front of the poster at the SEAOHUN Conference in Bangkok, Thailand. September 2022.

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 3 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.

Cameroon							
Universities in which RCCE training was conducted							
SOHIC members & leaders of other clubs trained in RCCE for COVID-19							
ARPA COVID-19 posters developed							
Journalists trained in proper COVID-19 reporting							
Universities in which e-Learning capacity & engagement was strengthened							

Côte d'Ivoire	
Faculty, students, & staff surveyed to understand why vaccination rates among faculty was low	338
Participants who attended the seminar series "Why Get Vaccinated Against COVID-19? Challenges & Perspectives"	307
SOHIC members trained on community engagement on COVID-19 vaccination	38
SOHIC members engaged in COVID-19 vaccination awareness campaigns	31
Universities & university teaching hospital campuses receiving support	6

DR Congo	
Scholarships awarded	30
Students from the first cohort who passed their exams	24

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

ARPA American Rescue Plan Act

RCCE Risk Communication & Community Engagement

e-Learning The delivery of training and educational content through online platforms

CAMEROON

INDIVIDUALS TRAINED ON COVID-19-RELATED TOPICS IN YEAR 3



Supported by ARPA funds

CÔTE D'IVOIRE

SOHIC MEMBERS ENGAGED IN COVID-19-RELATED ACTIVITIES IN YEAR 3

FEMALE



FEMALE



SCHOLARSHIPS

PROVIDED IN YEAR 3

DR CONGO

Supported by ARPA funds

Supported by USAID/DR Congo funds

PERFORMANCE DA'

2021-2022 | Cumulative life of project data is provided where indicated

Network	Cumulative Total	Year 3 Total	Updated	New	
AFROHUN Secretariat	5				
AFROHUN Cameroon	55	4	3	1	
AFROHUN Côte d'Ivoire	0				
AFROHUN DRC	20	3	3		
AFROHUN Ethiopia	42				
AFROHUN Kenya	86	5	1	4.	
AFROHUN Rwanda	57				
AFROHUN Senegal	49	4	4		
AFROHUN Tanzania	47	7	5	2	
AFROHUN Uganda	43				
SEAOHUN Secretariat	47	2		2	
CAMBOHUN	3	1		1	
INDOHUN	85	6	t	5	
LAOHUN	1				
MyOHUN	87	36	24	12	
MMOHUN	0				
PhilOHUN	7	6		6	
THOHUN	41	15	I.	14	
VOHUN	90	9	3	6	
GLOBAL TEAM	38	27		27	
AFROHUN Total	404	23	16	7	
SEAOHUN Total	361	75	29	46	
GLOBAL CONSORTIUM TOTAL	803	125	45	80	

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 3 Total: education and training programs updated and newly developed during the reporting period (Year 3); 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 3); New: education and training programs newly developed during the reporting period (Year 3).

6,708

>48K CUMULATIVE TOTAL

38% CUMULATIVE

32% CUMULATIVE

30% CUMULATIVE UNKNOWN

1.2 INDIVIDUALS TRAINED

16

52

(89%)

(36%)YEAR 3 AFROHUN YEAR 3 SEAOHUN

1.3 MEMBER UNIVERSITIES WITH AT LEAST ONE MENTORED SOHIC

37 YEAR 3 AFROHUN

146

YEAR 3 SEAOHUN

183

YEAR 3 TOTAL

486

CUMULATIVE TOTAL

1.4 INFORMATIONAL **RESOURCES** & PRODUCTS **DEVELOPED***

8

NUPAS **DOMAINS** CHANGED (YEAR 3 AFROHUN)

NUPAS DOMAINS CHANGED (YEAR 3 SEAOHUN)

(•)

OCA TOOL CHANGED (YEAR 3 AFROHUN)

3.1 MEASURABLE **IMPROVEMENT OF KEY CAPACITIES FOR ORGANIZATIONAL** SUSTAINABILITY

14 YEAR 3

> 35 YEAR 3 TOTAL

138 CUMULATIVE TOTAL

3.2 NEW & DIVERSE **PARTNERSHIPS ESTABLISHED**

10

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

2021-2022 | Cumulative life of project data is provided where indicated

Number of Individuals Trained																
Network	Cumulative Total		Gender			Type of participant										
			Female	Male	Other	Unknown	Professional (govt)	Professional (private sector)	Faculty	Student (undergrad)	Student (graduate)	Student (other)	NGO staff	Community member	Other	Unknown
AFROHUN Secretariat	1079	698	184	262		252		65	178	2	53		76	i		324
AFROHUN Cameroon	1780	663	290	373			5	17	295	267	72		2		5	
AFROHUN Côte d'Ivoire	1092	1092	408	684			36		24	440	577		14			I
AFROHUN DRC	846	541	182	359			79	7		455						
AFROHUN Ethiopia	491	142	31	111			28		78	25	10		- 1			
AFROHUN Kenya	1484	1045	384	541		120	278	123	116	360	40	8	62	7		51
AFROHUN Rwanda	346	86	37	49			11		33	28	6	I	2		4	1
AFROHUN Senegal	391	104	44	60					17	33	51		2		1	
AFROHUN Tanzania	355	135	68	67			24	2	31	78						
AFROHUN Uganda	953	274	116	158			70		20	178	6					
SEAOHUN Secretariat	809	59	34	19	1	5	4	1	8	12	8		7		26	6
CAMBOHUN	59	41	18	23			8		7	20	2				4	
INDOHUN	9185	183	139	44					115	68						
LAOHUN	168	25	11	14					24						1	
MyOHUN	6308	557	323	232		2	143	27	32	249	22	1	68	T	14	
MMOHUN	0	0														
PhilOHUN	1931	334	294	38		2	10		16		L			306		1
THOHUN	1038	376	253	123			256		5	93	13	3		6		
VOHUN	19728	353	179	174			44		194	112			3			
GLOBAL TEAM	319	311	62	92		81	6		22		3	ì	7		16	180
AFROHUN Total	8817	4780	1744	2664		372	531	214	792	1866	815	9	159	7	10	377
SEAOHUN Total	39226	1928	1251	667	1	9	465	28	401	554	46	4	78	313	45	7
GLOBAL CONSORTIUM TOTAL	48362	7019	3057	3423	1	462	1002	242	1215	2420	864	14	244	320	71	564

Indicator 1.2: Total number of individuals trained. Disaggregate data is provided for Year 3 only. The cumulative total and Year 3 total do not uniformly account for duplicative individuals trained, but was addressed when possible.



24
YEAR 3 TOTAL

G4 GENDER EXPERTS

27 (44%)
YEAR 3 AFROHUN
31 (38%)
YEAR 3 SEAOHUN
58 (41%)
YEAR 3 TOTAL
G3 WOMEN IN
LEADERSHIP POSITIONS

28
YEAR 3 AFROHUN
11
YEAR 3 SEAOHUN
39
YEARS 3 TOTAL
G4 GENDER CHAMPIONS

21
YEAR 3 AFROHUN
29
YEAR 3 SEAOHUN
50
YEAR 3 TOTAL
1.2 GRANTS AWARDED

8
YEAR 3 AFROHUN
8
YEAR 3 SEAOHUN
16
YEAR 3 TOTAL
1.2 FELLOWSHIPS
AWARDED

36
YEAR 3 AFROHUN
27
YEAR 3 SEAOHUN
63
YEAR 3 TOTAL
1.2 SCHOLARSHIPS
AWARDED

YEAR 3 TOTAL

2.1 UNIVERSITIES
USING ONE HEALTH
COMPETENCY
ASSESSMENTS OR
ASSESSMENT TOOLS

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

30 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 Grants Awarded



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 will contribute towards:

- Improving the quality and use of workforce and assessment data for decision making and learning;
- Increasing 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. Improving 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 enable 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 is implementing 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 is using KM systems to strengthen current and future Network MEL practices. There are many ways that this is materializing 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 are working towards strengthening 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

The University Networks are institutionalizing One Health training and empowerment activities in a Learning Plan that is Calibrated, Lifelong, Adaptive, Scalable, and Sustainable (CLASS) within and across the participating institutions. We define institutionalization and accreditation as the processes through which a set of strategic activities in One Health training and empowerment are integrated sustainably into a university's official catalogue, or a University Network's standard operating procedures for quality assurance at country or regional levels. Institutionalization and accreditation 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 selfassessment process, and 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.

ACTIVITIES & HIGHLIGHTS

Adaptive Management of AFROHUN's KM Strategy

Showcasing exemplary adaptive management around Knowledge Management, AFROHUN remained flexible yet focused on finalizing their KM Strategy. This period, the AFROHUN Secretariat identified new key stakeholders whose input was not captured during the initial feedback period in Year 2. To expedite onboarding, buy-in, and ownership of the KM Strategy, the Secretariat organized a series of KM workshops, to both socialize the strategy and incorporate new input. Through this flexible approach, the KM Strategy evolved into a living and collaborative process, capable of adaptation and incorporation of new data and information as they move forward.

VOHUN hosts collaborative Knowledge Management Workshop

Viet Nam One Health University Network (VOHUN) invited their University members, as well as other OHUNs to participate in a participatory KM Workshop. Building on past learnings, VOHUN designed the KM workshop to incorporate experiences from AFROHUN's KM journey, as well as showcasing the breadth of KM through a session on Platforms and Policies, in addition to other KM tools and resources. VOHUN used their knowledge of KM to both increase awareness of their stakeholders but also provide space for sharing and learning for all.

CLASS Scoring Implemented on One Health Workforce Academy

Further advancing KM on the One Health Workforce Academy (OHWA) platform, we installed the CLASS Score Questionnaire on the OWHA web platform to facilitate data entry and report generation. Data entry is planned to occur

in the third quarter of Year 3 to support annual review and work planning. The CLASS Score Questionnaire is now in the same web platform as the Curriculum Curation Management System (CCMS), which help coordinate gap analysis and evaluation (Figure 1).

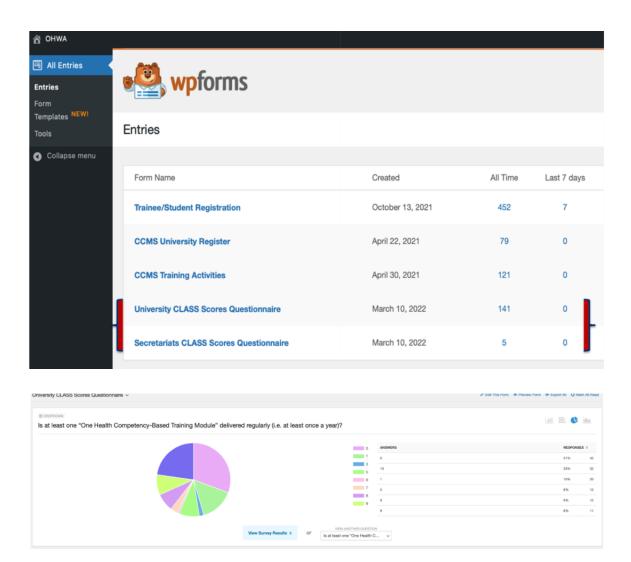


Figure 1. Top Panel: The university and Secretariat CLASS Score evaluation was installed in the same location as the CCMS to facilitate cross- checking and integration. Numbers indicate information entries by universities and Secretariats, including retroactive entries. Bottom Panel: Example of responses to one of the questions in the CLASS Scoring instruments showing university-level assessment of institutionalization of One Health Competency-Based Training deliverance consistency.

LESSONS LEARNED

Practicing Adaptive Management Contributes to Long-term Inclusivity and Improvement

The key component of successful Knowledge Management and Learning is the capacity of an individual, or group of individuals, to devote the time and effort needed to design, create, implement, and maintain the knowledge and learning systematically across an organization, leading to long-term sustainability. The current AFROHUN KM Strategy process showcases how building the capacity and supporting the individuals, processes, and systems will advocate for the strategy and will help to ensure long-term success, strengthening, and sustainability.

Coordinating Institutionalization Progress and Annual Work Planning

Previously, the CLASS Scoring process was conducted too close to annual work planning, which was a challenge for integrating collaborative learning and adaptation. Moving

forward, we installed the CLASS Score process on the OHWA web platform, which is available to all those responsible for evaluation and scoring, making this process more transparent and improving the fidelity of the evaluation enabling more time for identifying gaps as we prepare to develop next year's plans.

Coordinating Institutionalization CLASS Scores and Curriculum Curation Management

Some gaps remain in the proper tagging and completion of the CCMS, which may prevent accurate scoring of some evaluation questions in the CLASS Scoring scheme. To address this, AFROHUN plans to conduct a review of the CCMS every two years, while SEAOHUN plans to address key country-level gaps and evaluate staffing and scale-up potential for the process with the four new country OHUNs oriented and consistently entering data in Year 4.

NEXT STEPS

Knowledge Management

Both the AFROHUN Secretariat and Viet Nam One Health University Network (VOHUN) held Knowledge Management workshops this year. These workshops strengthened general knowledge around KM for new stakeholders, advanced KM skills and share best practices, and introduced tools, templates, and other resources to develop KM capacity and improve evaluation, management and ultimately decision making.

Building on the momentum, VOHUN will look to support their University members in advancing their own KM initiatives, allowing for greater data transparency and enabling VOHUN to provide better support.

As AFROHUN transitions to ownership of their KM systems and platforms, OHW-NG will assist the Secretariat 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.

CLASS

A virtual orientation workshop was conducted for AFROHUN and SEAOHUN to review the new online format of the CLASS Scoring process. Additionally, we covered the coordination of the CCMS with the CLASS Scores along with generation of reports from the online database for strategic planning and annual workplan

Empowerment of employees charged with the responsibility to implement One Health-based solutions to global health problems demands the establishment of a credential through assessment and examination-based certification that is updated with continuing professional development credit. Therefore, we established the International Board of One Health Examiners (IBOHE) consisting of subject matter experts and faculty members who have implemented core competency-based training. IBOHE's ongoing responsibilities include:

- 1. Drafting and reviewing questions based on One Health core competency domains for the certification examination.
- 2. Establishing eligibility criteria for trainees seeking to sit for the One Health Certification Examination, including, for example, previously passing a mentored experiential learning activity coordinated through a practicum course or internship project, and experiences that can only be attested through direct observation.
- Establishing pass/fail thresholds for performance in the certification examination.
- 4. Sensitizing accrediting bodies, professional organizations, and potential employers of pre-service trainees and supervisors of in-service trainees; and convening authors to submit a proposal for a Study Guide for One Health Certificate examination.

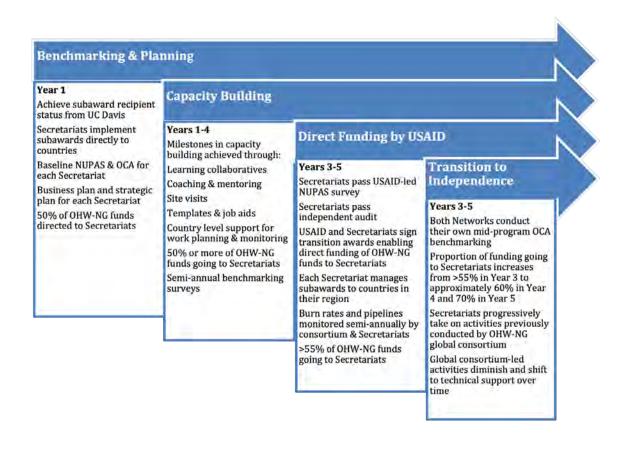
Accreditation is the public recognition awarded to training programs that satisfy established educational standards. Accreditation assures that teaching, student achievement, competency-based curricula, and assessment procedures meet specified levels of quality. At buildout,

the Academies are the portal to accredited One Health credential. The United Nations Educational, Scientific and Cultural Organization (UNESCO) published the "Guidelines for Quality Provision in Cross-border Higher Education" which is relevant to the operations of international networks of Universities such as AFROHUN, and provides a framework for pursuing accreditation of One Health credential hosted by the Academy. Also relevant is UNESCO's "Revised Convention on the Recognition of Studies, Certificates, Diplomas, Degrees, and Other Academic Qualifications in Higher Education in African States" (Addis Convention) which is bound for implementation at the national level by ratifying State Parties, including some AFROHUN chapter countries. The Addis Convention builds on UNESCO's "Global Convention on the Recognition of Qualifications concerning Higher Education" which is designed to facilitate international academic mobility and the recognition of qualifications.

In parallel with the IBOHE's process to establish criteria for the Academy's One Health Certificate, we will encourage the AFROHUN and SEAOHUN Secretariats to request consultation from and apply for membership in the Council for Higher Education Accreditation (CHEA) and join its International Quality Group (CIQG). In addition, we will encourage the Secretariats to seek consultation and membership in the Institute for Credentialing Excellence (ICE), which is a professional association that provides education, networking, and other resources for organizations; a leading developer of standards for both certification and certificate programs; and a provider of assessment-based certificate programs.

Transition Plan

The One Health Workforce – Next Generation Project aims for two important transitions to occur over the course of the initiative, each designed to enhance regional network organizational sustainability. First, both AFROHUN and SEAOHUN have engaged in a variety of training opportunities to build capacity with a goal to be able to apply for transition award funding from USAID around Year 3 of the OHW-NG Project. If transition awards are awarded by USAID, each Network can independently develop experience as a prime partner and may establish robust systems and operations that will enhance their ability to manage other donor funds over time. Second, the OHW-NG Consortium will aim to implement a shift of programmatic activity leadership and funding from the Global Team to the two Networks over each year of the Project. This 'programmatic transition' is an important step to build continuity and sustainability of key OHW-NG activities by the Networks beyond the end of the Project.



ACTIVITIES

Stage 1: Benchmarking and Planning

Official NUPAS

In Quarters 3 and 4 of Year 3, as part of the transition award process AFROHUN and SEAOHUN each were subjected to an official USAID-supported Non-U.S. organization Pre-award Survey (NUPAS) assessment. Both networks received positive feedback on the findings, and no deficiencies were cited that prevented the transition awards from being awarded.

Capacity Plans & Progress Dashboards

Prior to this step, in the first quarter of Year 3, both Networks identified priority areas of organizational capacity improvement using NUPAS and Organizational Capacity Assessment (OCA) tools, based on the benchmarking conducted at the end of Year 2. Both Networks created OHW-NG Capacity Plans, and planned capacity-building activities in collaboration with the Global Team. AFROHUN identified 43 priority action items for improvement in Year 3, whereas SEAOHUN identified 12 priority action items for improvement in this same time period. The Global Team produced the Year 3 dashboard summarizing each Network's progress on the Capacity Plans, which can be found in the Business Plan Update Appendix.

Benchmarking

Both Networks produced their Year 3 benchmarking on the NUPAS tool over the year and conducted a self-assessment on the OCA. Both sets of scores are reported in the project MEL plan under Indicator 3.2. In the first quarter of Year 3, AFROHUN further adopted the more advanced "NUPAS PLUS" tool to benchmark its organizational capacity across 15 additional domains.

Business Plans

Both Networks completed their required Year 3 update to their Business Plans, summarized in the Business Plan Update Appendix.

Stage 2: Capacity Building for Transition

Each Network conducted capacity-building activities designed to support their transition to direct funding awards and the OHW-NG programmatic transition. As of September 30, 2022, SEAOHUN completed 11 of its 12 priority action items, and AFROHUN achieved an impressive 37 of 44 action items. Efforts included strengthening payroll procedures, finance manuals, procurement policy, organizational alignment with Mandatory Standard Provisions, and more.

In addition, the Global Team initiated an activity to support AFROHUN to implement its 'staffing plan for transition', such as guiding AFROHUN in development of a recruitment strategy and follow-up job descriptions and announcements. The team also provided advise on human resources management to SEAOHUN. We also provided applied training workshops in project management, communications, resource mobilization and partnership development for SEAOHUN and AFROHUN, as described in the annual report. Finally, the Global Team leveraged existing management meetings with the leadership of each Network to provide coaching on roles and responsibilities of a USAID prime recipient.

Stage 3: Transition to Direct USAID Funding

Transition Milestones

In the first quarter, SEAOHUN completed its three pending transition milestones, including updating the Network finance manual to strengthen variance analysis and general ledger practices, completing the staffing plan for the transition, and finalizing the sub-award management manual and subrecipient site visit protocol. Additionally, in the Global Team helped each Network to plan and launch the first program-specific audit of their country sub-awards. By the end of Year 3, AFROHUN successfully conducted the audit of their sub-recipient Kinshasa School of Public Health and SEAOHUN conducted the audit of VOHUN.

Transition Letters

The Global Team drafted and submitted the OHW-NG Letter for Transition to USAID Direct Award for SEAOHUN and AFROHUN, which outlined the major capabilities that made the Networks eligible for transition, the specific milestones for transition each Network had achieved, and guidance on the transition award approach. In December, 2022, USAID accepted these letters.

Signed Transition Awards

In the second quarter, USAID released their Request for Proposals for transition awards for each Network. AFROHUN and SEAOHUN completed transition award applications, and in Quarter 4, both Networks received fully executed transition awards. This milestone was accomplished in Year 3 as planned in the OHWNG cooperative agreement.

Stage 4: The Programmatic Transition

In April 2022, the Global Team produced a semiannual review of the programmatic transition plan. To date, all activities are on track for their potential transition to Network leadership over the next two years. Key progress updates are provided below.

Proportional increase in network funds. Part of the OHW-NG programmatic transition design includes a shift in funding from the OHW-NG Global Team to the Networks, consistent with the increase in scope as they take on more responsibility for project implementation. In Year 4 for example and as planned, the Networks will receive 60% of core OHW-NG project funding obligated by the Agency.

Updates on select activities in the OHW-NG programmatic transition:

Curriculum Curation Management System (CCMS): The CCMS is now integrated into both SEAOHUN and AFROHUN OHWA websites, and data is populated for each, marking completion of this activity's transition. Orientation sessions were also conducted for AFROHUN and SEAOHUN country staff. Further engagement of university-level faculty leads is planned to improve quality. OHW-NG Consortium partners finalized the review and update of One Health competency domains and are mapping the existing OHWA courses to the competency domains to derive a curriculum for the One Health certification study guide and assessment.

Annual CLASS Scoring: The CLASS Scoring questionnaire was installed on the OHWA website in the second quarter of this year to facilitate engagement at the university level. Training orientation sessions were conducted for both Networks and the transition was completed with AFROHUN. Staff changes at SEAOHUN imposed some delays and may result in the need for an orientation session for new staff. Otherwise, transition remains on track for Year 4.

OHWA Content Development: OHW-NG Consortium partners worked on the development of 30 training activities for

installation on OHWA website, including courses, case studies, and training guides. An updated set of competency domains was vetted and is being used to map the content of the CCMS and to develop a curriculum for studying and assessment toward certification in One Health. The AFROHUN-OHWA decided on a signature program entitled "Mentored Experiential Learning and Training" (MELT), which will guide the implementation of the Academy and population of the AFROHUN-HWA website. For SEAOHUN, the Academy worked with THOHUN to implement the experiential learning course on the SEAOHUN-OHWA. VOHUN and THOHUN are further taking actions toward curriculum mapping and content development and installation on the OHWA site. Both Networks plan to independently create new content for their Academies in their USAID transition awards, which will result in full transition of this activity in Year 4.

OHWA Website Maintenance: The OHWA website is now "live" with extensive functionality for taking courses, uploading courses, and filtering courses included. The focus is now refining content creation terms of ownership of the website and linkage to existing Secretariat specific sites. In the third and fourth quarters of this year, the web development team worked extensively with the Objective 1 team to finalize course and content creation to begin piloting OHWA courses. The web development team continued to update functionality of the website by updating the CCMS system with Class Score information, converting the search filter view, onboarding instructors, and integrating course certificates. In Year 4, website development will include continuous iteration and improvements to the site, testing site links and functionality to ensure the website is working well, along with developing a master certificate course. To support transition of the website to the Networks, both Secretariats need to onboard an experienced web developer who can connect with the Global Team's web developer. The web development team will also assist with piloting two courses,

which will help the team finalize technical support assistance needs for subsequent courses that will be in development.

OHWA Governance: 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, the Global Team will sensitize this document with Network leadership and aim to produce Regional Academy sustainability plans. Further, AFROHUN has identified a Director of the AFROHUN OHWA, though remaining administrative structure is pending and the Technical Advisory Committee has not met as frequently as planned. SEAOHUN's administrative structure for managing the SEAOHUN OHWA is planned for Year 4. A site visit this year of OHW-NG Consortium partners to the AFROHUN Secretariat for a workshop on the AFROHUN OHWA signature program produced a framework for the Mentored Experiential Learning and Training (MELT) initiative, which will be further developed by AFROHUN leaders and staff as part of the transition program. The governance of SEAOHUN OHWA will be further developed in Year 4.

International Board of Examiners (IBOHE):

The IBOHE met to review the terms of reference and to consider criteria for nominating non-academic members and potential members from the new OHUNs. The board received and are reviewing the outcome of the eDelphi Panel on One Health competencies. Full engagement is expected in Year 4 after further development and training content. Also this year, we received an invitation to join the steering committee of the World Health Organization's Health Workforce roadmap for public health and emergency response, which facilitated a consultation with the current President of the National Board of Public Health Examiners who is considering joining IBOHE and providing consultation for the IBOHE as needed. Transitioning the IBOHE

to the management of the Networks hinges on collaboration regarding One Health certificate, as presented in the transition scenarios elaborated in the sustainability plan for the OHWA. Transition is on track and planned for Year 5.

Communities of Practice (CoPs): The AFROHUN Secretariat continued its leadership of the e-Learning ECHO and AFROHUN-Kenya launched a new ECHO topic on food, nutrition, and One Health. CoPs are on track for transition in Year 4. The AFROHUN Secretariat is expected to continue leading an ECHO session in Year 4 and will further provide coordination support to AFROHUN chapters to launch sessions on various One Health topics. Transition to ECHO hub status will occur in Year 5 to allow more staff engagement in the process. SEAOHUN is expected to launch a CoP on competencybased education and on student professionalism under their USAID transition award, marking completion of the transition of this activity.

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. Future work with the Global Team will focus on implementing alumni engagement strategies created as a result of survey results and analysis and on providing more advanced analytics that tie university-level graduate or "pipeline" data to alumni career paths. By providing advanced surveying tools and analytics, we hope to empower Secretariats with insights that can help drive One Health students and graduates to employment sectors with the highest demand. The alumni tracking team will also continue to support the competency assessment team by providing advanced analytics from alumni selfassessments and by helping that team to deploy strategies that best fill competency gaps at country- and university-levels.

Knowledge Management (SMART Library):

Over the course of Year 3, AFROHUN and SEAOHUN both took on increasing responsibilities with respect to KM. AFROHUN focused on training and producing KM products, as well as continuing to implement their KM Strategy. VOHUN took the lead in KM in the Southeast Asia region, building the capacity of their Network members on data visualization and utilizing KM Systems to meet their needs. Both Secretariats received training in KM. Ahead of schedule, both Networks plan to lead KM activities independently as part of their transition awards. Continued work in Year 4 with the Global Team will focus on integrating all KM systems, including the Smart Library, to ensure sustainability once the project has been completed.

Competency-based Assessment: A toolkit has been developed and virtual workshops were held with AFROHUN Country Chapters and SEAOHUN OHUNs. Two in-person workshops were held in May 2022 which included the development of country and university-specific action plans for encouraging uptake of the assessments. The assessment toolkit development is on track for finalization and distribution to country chapters and OHUNs. Establishment of a CoP on Competency-based education (CBE) is in progress to foster the exchange of best practices and to provide ongoing technical assistance to integrate CBE. Transition is on track for Year 5.

Platforms and Policies: Country profiles have been developed, in collaboration with AFROHUN, for six countries. These profiles highlight key details from a data scan, survey, and key informant interviews and will be shared with Country Chapters in Year 4. Full engagement is expected from AFROHUN in Year 4, with the goal of transferring responsibilities to the

Secretariat and countries moving forward. The Global Team will be undertaking this activity with SEAOHUN as a priority for Year 4.

OCA self-assessment: AFROHUN and SEAOHUN both conducted the OCA self-assessment at end of Year 3 without any assistance from the Global Team. The Networks produced analysis of changes from Year 2 and highlighted areas to focus on in future years. This activity transition is completed for both Networks.

Work planning: The global team worked at end of Year 2 to support AFROHUN and SEAOHUN to more independently prepare work plan narratives and budgets, in preparation for their transition awards. In Year 4, both Networks will work directly with USAID to prepare work plans for the transition awards, marking the transition of this activity as completed.

MEL: This year, the OHW-NG MEL working group made progress to collaborative leadership of MEL activities and the project's learning agenda. With SEAOHUN, the working group is now co-led by Global Team and Secretariat members. With AFROHUN, due to a change in personnel for the Senior MEL position at the Secretariat, plans for co-leadership were delayed until Year 4. In Year 4, both Networks will independently prepare MEL plans and conduct semi-annual and annual reporting for their direct transition awards, marking the transition of this activity completed.

External communications: This year, both AFROHUN and SEAOHUN led the development and production of project technical reports and continued making strides in strategic communications. The Global Team will continue to provide support and mentorship in Year 4 to further strengthen each Network's communications with external stakeholders, including through success stories, presentations, website materials and social media.

Gender: This year a gender policy was drafted for SEAOHUN and shared with their Executive Board in September 2022. Gender analysis training for experts in AFROHUN and SEAOHUN was postponed to Year 4 and will coincide with the release of the Gender and One Health course for the OHWA. Going forward, mentorship will be provided on demand as the Networks develop and implement independent Gender Action Plans as part of the transition awards. Transition of gender activities are on track for Year 5.

LESSONS LEARNED

A Learning Curve in the Transition Award Process

CHALLENGE: A challenge this year was the unpredictability and duration of the transition award process. The transition award request for proposals arrived early from our projections by several months, and as a result, planned proposal development training could not be conducted until after the applications were submitted. A second challenge was the length and intensity of time required for the Networks to develop and submit an application and to respond to questions from USAID. This made it challenging for the Networks to progress on other planned Objective 3-related activities during in the second and third quarters.

SOLUTION: Our solution was to remain flexible, and to prioritize Network needs during the transition award process. As an example, we offered each Network a 'quiet period' from calls across the objectives (to allow them more time to focus), and offered the proposal development training in Quarter 4 or later. The Global Team

further focused on products that we could work on independently, such as drafting the first Sustainability Plan for the Global One Health Workforce Academy and the market analysis of e-learning platforms.

Changing the Transition Plan Format for Progress Review

CHALLENGE: We realized in our first semiannual review of the OHW-NG Programmatic Transition Plan that the Excel-based format for the tool was not optimal for receiving Network and Global Team feedback. The tool was complex and lengthy, making it difficult to populate.

SOLUTION: We have developed a dashboard for the OHW-NG Programmatic Transition Plan, which we introduced in our annual reporting process this year. This tool has made it easier for Consortium leadership and the Networks to review and report progress. It further offers a more visual format for reporting to USAID. This dashboard is included in this Appendix as Figure 1.

NEXT STEPS

- We will retire the NUPAS tool as a means of benchmarking, since it is designed to assess risk in organizations before they are prime recipients of USAID funding, and both Networks have become prime recipients of USAID funding. Further, we shifted OCA benchmarking to occur only in Year 5, to support the shift in Objective 3 focus in the remaining two years of the initiative towards resource mobilization and partnership development, and away from intensive organizational capacity development.
- We will continue to support capacitybuilding activities related to the OHW-NG Programmatic Transition and review progress on the OHW-NG Programmatic Transition Plan at semi-annual and annual time points.
- We will provide support as needed to each Network to help them overcome any operational challenges to managing donor awards the final two years.

OHWNG PROGRAMMATIC TRANSITION DASHBOARD						
TARGET PROJECT YEAR FOR FULL TRANSITION OF ACTIVITY			STATUS (09/22)			
ACTIVITY	YEAR 3	YEAR 4	YEAR 5	AFROHUN	SEAOHUN	
OBJECTIVE 1				•		
Curriculum Curation Management System (CCMS)	√			Completed	Completed	
Annual CLASS scoring system		√		Completed	On-track	
OHWA content development		✓		On-track	On-track	
OHWA website design & maintenance			✓	On-track	On-track	
OHWA governance			√	On-track	Delayed	
OHWA International Board of Examiners			√	On-track	On-track	
OHWA communities of practice		√		On-track	Completed	
OBJECTIVE 2						
Alumni tracking & engagement	√			Completed	Completed	
Knowledge management		✓		On-track	Completed	
Competency based assessment			√	On-track	On-track	
Platforms and policies			✓	On-track	On-track	
OBJECTIVE 3						
Business plan annual update		✓		On-track	On-track	
OCA benchmarking	✓			Completed	Completed	
PROJECT MANAGEMENT						
Work planning	√			Completed	Completed	
Monitoring, evaluation and learning		√		Completed	Completed	
External communications		✓		On track	On track	
GENDER						
Gender Assessment to inform Gender Action Plans			√	On track	On track	

Figure 1. OHW-NG Programmatic Transition Dashboard



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

Capacity Plans

The AFROHUN Capacity Plan featured 29 activities, organized into benchmarking and planning, governance and legal structure, project management, human resources, organizational sustainability, gender and culture, partnership development, and revenue generation. Together with the global team, AFROHUN completed 18 of these activities, notably: achieving legal registration in all but two of eight member countries, completing robust training on project management and budget preparation provided by the Global Team, starting a draft project manual, initiating training on successful proposal development for U.S. government awards; producing a sub-recipient audit, producing new partnership communication materials including pitch decks, briefers and a capability statement, producing a new fee-based membership model, implementing a fee-based course, and many more. Two activities were not started and moved to Year 4 due to competing priorities: a board development workshop and a Network communication strategy. One activity, conducting a semi-annual review and report of the business plan, was discontinued given the concurrent timing of the transition award application. Remaining activities are ongoing. The SEAOHUN Capacity Plan featured 27 activities, organized into benchmarking and planning, procurement, financial management, human resources, organizational sustainability, gender and culture, partnership development, revenue generation, and 'additional triggers for transition award' (a special category of transition-related milestones, which AFROHUN completed in Year 2). SEAOHUN accomplished 16 of these activities, notably: engaging OHUN Boards in discussions with the Global Team on sustainability, updating the SEAOHUN finance manual, completing a robust eight session course on Partnership Development, reviewing the SEAOHUN membership model, finalizing the sub-award manual for Board approval, producing new partnership materials such as a conference sponsorship menu and partnership development day agenda, and more. One activity was discontinued, the semi-annual review of the

SEAOHUN business plan, given the concurrent timing with the transition award application process. Finally, two activities were moved to future years given their lower priority: fee-based course development and identifying revenue sources for the SEAOHUN One Health Workforce Academy.

Developing New Funded Partnerships

This year, both Networks prioritized partnerships they wished to cultivate at the Secretariat level for financial sustainability. SEAOHUN prioritized cultivating private partnerships, through inviting partners to become sponsors of their 10th anniversary conference, the 2022 SEAOHUN International Conference. SEAOHUN developed a list of over 30 potential corporate partners, conducted research on their background and interests, and developed a conference sponsorship menu (with sponsorship tiers and services). SEAOHUN then reached out to seven companies representing the highest potential for sponsoring the conference. Three corporate sponsors were secured, two of which represented brand-new partners for SEAOHUN (Pfizer and Zoetis). SEAOHUN further organized a day-long workshop adjacent to the conference dedicated to partnership. SEAOHUN invited additional private intergovernmental, NGO and donor partners to attend, and with Global Team support, facilitated discussion and prioritization of new potential partnership areas in One Health in the region. SEAOHUN concluded the event by mailing the attending partners a summary of the activities that were prioritized, and where specific donors had elected to volunteer to collaborate in the future. The Global Team will work with SEAOHUN to build momentum from this collaboration seeking to convert this goodwill into concrete partnerships in the final years of the project.

AFROHUN also prioritized developing new funded partnerships. By revisiting the stakeholder map in their business plan, AFROHUN prioritized four partners for outreach over the year, including the German Agency for International Cooperation

(GIZ) and Malteser International. With coaching from the Global Team, AFROHUN pursued outreach and follow-up calls with these partners, resulting in successful funded partnerships within a matter of months. AFROHUN decided to delay engagement with the remaining new partners so they could focus on the GIZ and Malteser International partnerships.

Exploring Fee-based Membership Models

Both Networks worked with the Global Team to explore the feasibility of fee-based membership models as a means to strengthen their mission and produce unrestricted funds to support sustainability. The Global Team first produced a landscape analysis of over 21 global membership organizations, including many in the Africa and Southeast Asia region. We presented this data to both Networks as part of exploratory discussions. AFROHUN subsequently developed a membership model committee representing members from across its Network, and the committee then convened in a three-day workshop to elaborate a new, fee-based membership model for the region. This model would further expand membership to para-professional and technical schools, enabling the organization to impact a greater number of One Health workforce professionals. The model was presented to the Board for review before the end of the year.

SEAOHUN Secretariat leadership also engaged in several exploratory discussions with the Global Team regarding a fee-based membership model and organized a special discussion with their Executive Board in September 2022 on the topic. SEAOHUN Executive Board members responded favorably to the concept of expanding SEAOHUN membership to new types of organizations, having a common framework for membership in the region (which also allows for OHUN customization of their models), and having a revenue sharing model whereby a portion of the fees paid by university members of the OHUNs would be shared with the Secretariat, in a co-enrollment model. Members of the OHUNs would thus be automatically enrolled as members in the Secretariat, thereby

encouraging collaboration and reducing competition for members. The Global Team will work with both Networks in the upcoming year to advance these membership models.

Creating a Fee-based Course

For the first time, AFROHUN successfully piloted a course for a tuition fee. The fiveday course was held in Tanzania and focused on One Health principles and concepts. The course was developed with AFROHUN funding and with close input of five professional regulatory councils, who later provided continuing medical education (CME) credits for the course. Twenty-five professionals registered to attend, but only nine attended, due to scheduling conflicts and other individual obstacles. The participants all represented licensed professionals, some of whom had expired credentials and needed the course CME credits to update their licenses. The tuition fee, paid by a portion of the participants, was set at \$257, based on local market research. The participants rated the course very highly in their course evaluations, and the organizing team is enthusiastic about the promise of delivering feebased courses in the future. The Global Team helped to provide a revenue-sharing agreement for consideration, between the Tanzanian academic institutions and AFROHUN and a costing tool, and Global Team members further helped with some of the technical content.

Business Planning for Year 4

In August 2022, the Global Team conducted a virtual consultative and strategic planning activity with SEAOHUN and AFROHUN, to produce the required annual update to their business plans for Year 4. We suggested major areas of the business plans for review and updates, which include: the Network organograms; Network partnerships and awards; and the Appendices (e.g., Capacity- Building Plan; Partnership Strategy; and Revenue Generation Priorities). For each of those areas, the Networks and Global Team discussed specific activities that could be prioritized for implementation in the

following year. One key change in the Network approach to their business plans was to focus capacity-building activities to only those areas where deficiencies or problems emerge during Network implementation of new donor awards.

This de-prioritization of general capacity-building is intended to enable a great shift of focus and energy on Network implementation of their transition awards, and on generating new partnerships and funding opportunities.

LESSONS LEARNED

Fee-based Courses Hold Great Promise, but Recruitment must Start Early

After successful implementation of AFROHUN's first fee-based course, the AFROHUN team organized a debrief meeting with the Global Team to explore lessons learned that could guide future Country Chapter efforts. A major lesson learned was that there was much more demand for paid training than AFROHUN first assumed, however, this demand could not be capitalized on in the short time frame permitted for advertising and registration. Further, while a revenue sharing model was provided to AFROHUN in advance of this training, it was not utilized in this first pilot. AFROHUN recognized that for both areas, guidance should be created to inform future Country Chapter efforts to pilot feebased training. The Global Team will support this initiative in the upcoming year.

Shift the Engagement Approach to Enable Network Leadership of Objective 3

Each Network is now implementing a range of operational, fundraising and partnership approaches developed in partnership with the Global Team over the first three years of the project. It is thus a strategic moment for the

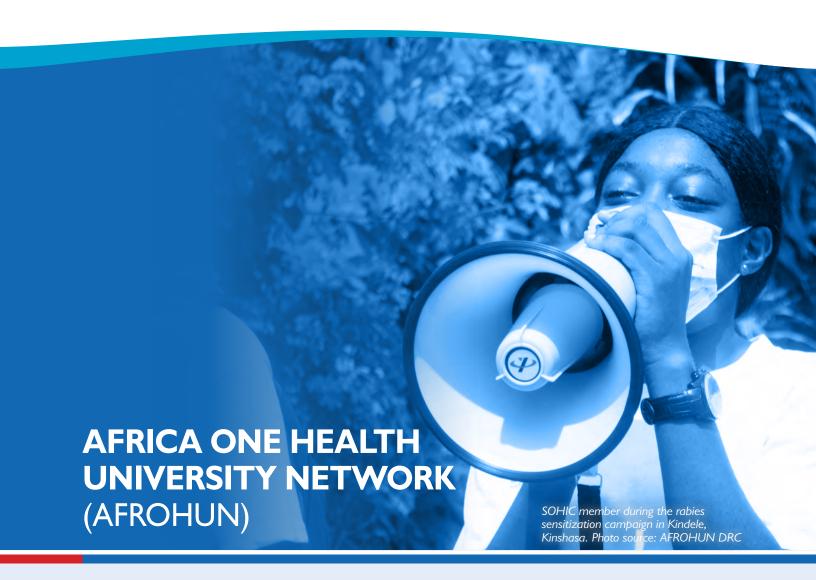
Global Team to begin to shift our approach to advancing Objective 3 activities, to encourage greater Network autonomy and leadership. With two years left in the project, the Networks would benefit from assuming a greater leadership role in identifying, planning, and executing activities that enhance their sustainability capacity. This will be especially important given greater competing demands from implementing the transition awards and new funded partnerships from other donors and sponsors. In Year 4, the Global Team will begin the shift away from a hierarchical leadership role over Objective 3, characterized by Global Team members driving a work plan agenda with deliverables, to more of a technical support role, where Global Team members support each Network to determine priorities and provide support where requested. The breadth of activities completed in Objective 3 will give way to depth and sustainability of activities. Steps will include transitioning the leadership of routine calls and agenda formulation to the Networks and shifting away from advancing Global Team deliverables. We aim to foster more Network input and ownership of the Objective 3 scope, with the Global Team supporting Network-specific work plan deliverables.

NEXT STEPS

Next year, the Global Team will work with each Network to implement their Year 4 Business Plans, including their Capacity Plans, Partnership Development Strategies and Revenue Generation priorities. Given feedback from USAID, the team will explore how to make the vision of the Networks around their organizational model and value proposition after the end of the One Health Workforce Next Generation project more salient in these documents.







ONE HEALTH WORKFORCE - NEXT GENERATION (OHW-NG)

YEAR 3
ANNUAL REPORT

2021-2022



AFROHUN NETWORK

- Secretariat
- Cameroon
- · Côte d'Ivoire
- DRC (Congo)
- Ethiopia
- Kenya
- Rwanda
- Senegal
- Tanzania
- Uganda

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AFROHUN SECRETARIAT

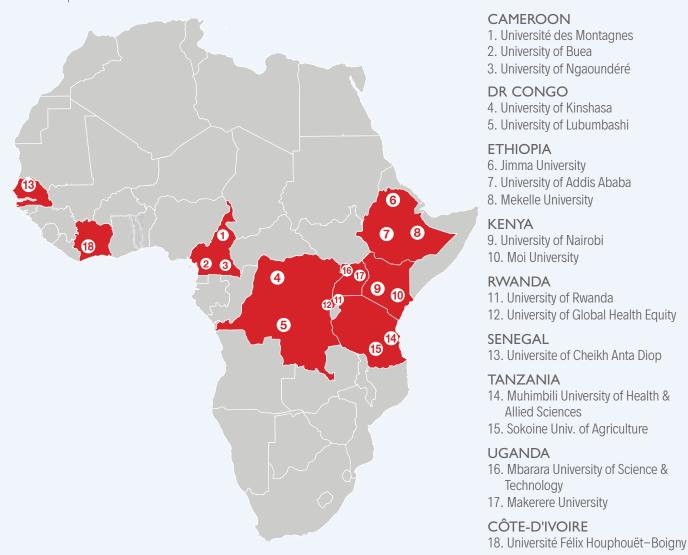
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CONTENT

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HIGHLIGHTS

SUCCESS STORY

TANZANIA

HIGHLIGHTS

ACTIVITIES

ACTIVITIES

ONE HEALTH CHAMPION

ONE HEALTH CHAMPION

SUCCESS STORY

ACRONYMS AND ABBREVIATIONS

Africa One Health University Network	AFROHUN
Antimicrobial Resistance	AMR
American Rescue Plan Act	ARPA
Breakthrough Action	ВА
Brucella Study for Tanzania and Rwanda	BRU_STAR
Catholic University of Central Africa	UCAC
Chief Accounting Officer	CAO
Continuing Professional Development	CPD
Community Based Education Research and Service	COBERS
Commission of University Education	CUE
Democratic Republic of Congo	DRC
Deputy Vice Chancellor	DVC
Emergency Centre for Transboundary Animal Diseases	ECTAD
Ethiopian Student One Health Innovations Club	ESOHIC
European Union	EU
Extension for Community Healthcare Outcomes	ECHO
Global Alliance for Rabies Control	GARC
Global Health Case Competition	GHCC
Global Health Security Agenda	GHSA
Groupe Technique de Travail	GTT
Deutsche Gesellschaft für Internationale Zusammenarbeit	GIZ
Farming Systems Kenya	FSK
Field Experiential Learning	FEL
Focused Group Discussion	FGD
Food and Agriculture Organization	FAO
Human Resource	HR
Infectious Diseases in Global Health	IDGH
Infectious Disease Management	IDM
Integrated Disease Research Collaboration	IDRC
Information, Education and Communication	IEC
Information Technology	IT
International Health Regulations	IHR
Institut de formation des Agents de Santé	INFAS
Institut National de Formation Professionnelle Agricole	INFPA

Institute of Primate Research	IPR
Jaramogi Oginga Odinga University of Science and Technology	JOOUST
Joint External Evaluation	JEE
Kinshasa School of Public Health	KSPH
Knowledge Management	KM
Kenya Red Cross Society	KRCS
Localizing Global Health Security	LGHS
Master of Public Health	MPH
Mbarara University of Science and Technology	MUST
Medicines, Technologies and Pharmaceutical Services	MTAPS
Memorandum of Understanding	MOU
Mentored Experiential Learning and Training	MELT
Ministry of Health	МоН
Ministry of Livestock and Fisheries	MOLF
Muhimbili University of Health and Allied Sciences	MUHAS
National Council for Technical Education	NACTE
National Health Security Action Plan	PANSS
National Technical Awards	NTA
Non-Governmental Organization	NGO
National One Health Platform	NOHP
National Institute of Health	NIH
Non-US Organization Pre-Award Survey	NUPAS
One Health	ОН
One Health Monitoring Tool	OHMT
One Health Workforce Academy	OHWA
One Health Workforce Next Generation Project	OHW-NG
One Planet Education - Transdisciplinary Initiative	I HOPE-TDI
Partnering for Health professional training in African universities	P4PHT11
Prime Minister's Office	PMO
Protestant University of Central Africa	UPAC
National Program for Control of Emerging and Re-emerging Zoonosis	PNLZER
President's Office Regional Administration and Local Government	PO-RALG
Research and Ethics	R&E
Research Institute of Agriculture and Development	IRAD
Research Triangle International	RTI
Request for Proposals	RFA

Risk Communication and Community Engagement	RCCE
School of Specialization in Livestock and Meat Trades of Bingerville	ESEMVB
Service National de l'Education et de l'Information pour la Santé	SNEIPS
State Party Self-Assessment Annual Report	e-SPAR
Students One Health Innovations Club	SOHIC
Student Service and Learning Model	SSLM
Sokoine University of Agriculture	SUA
Technical Advisory Committee	TAC
Technical Working Group	TWG
Training in Tropical Diseases	TDR
Training of Trainers	TOT
Transition Award	TA
Uganda Christian University	UCU
Unité de formation et de Recherche des Sciences Médicales	UFR SM
Université Cheikh Anta Diop	UCAD
Université des Montagnes	UdM
Université Félix Houphouët-Boigny	UFHB
Université Nandjui Abrougoua	UNA
University of Buea	UB
University of Global Health Equity	UGHE
University of Kinshasa	UNIKIN
University of Lubumbashi	UNILU
University of Ngaoundere	UN
University of Rwanda	UR
University of Yaounde I	UYI
United States Agency for International Development	USAID
Veterinary Council of Tanzania	VCT
Virtual Community of Practice	vCOP
World Health Organization	WHO



Our Vision

A global leader in One Health approaches to sustainable health, for healthy, productive animals, prosperous communities and productive ecosystems.



Our Mission

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



Our Core Values

Innovation, Multidisciplinary teamwork, Mutuality and Respect, Strategic Partnerships, Inclusiveness, Collective decision-making, Accountability and Transparency.

AFROHUN Secretariat

Dashboard Overview of Year 3



ACTIVITIES PLANNED









ACTIVITIES COMPLETED



INDICATOR 1.2 INDIVIDUALS

TRAINED



INDICATOR 1.4 PRODUCTS DEVELOPED



INDICATOR 3.2





INDICATOR G2 GENDER ACTIVITIES



BIECTIL

HIGHLIGHTS

- ⇒ AFROHUN finalized the 10-year AFROHUN One Health Research Agenda. (September 2022).
- Conducted II Extension for Community Healthcare Outcomes (ECHO) sessions on e-learning that benefited 406 participants from various AFROHUN member institutions (October 2021 - August 2022).
- Engaged 245 students and alumni in a two-day symposium where they shared experiences on One Health Workforce Development. (July 2022).
- ⇒ AFROHUN gained capacity in alumni tracking and had alumni survey efforts transitioned to AFROHUN from UC Davis (November 2021 - May 2022).
- ⇒ AFROHUN underwent a Non US Organization Pre-Award Survey

- (NUPAS) Plus assessment ahead of the USAID assessment to determine suitability of the network for a prime award (October 2021 and December 2021).
- Staff at the regional and country secretariats benefitted from a project management training conducted through six monthly virtual sessions (November 2021 and February 2022).
- Held partnership and grant writing meetings with both funding and implementing partners (January -September 2022).
- ⇒ AFROHUN Secretariat and country teams attended the SEAOHUN Conference in Bangkok, Thailand (September 2022).

ACTIVITIES



OBJECTIVE I

Training and Empowerment

The Secretariat supported a core team of 14 Thematic Leads, under the leadership of the AFROHUN Academy Research and Ethics Technical Working Group (TWG), to draft the 10-year AFROHUN research agenda (AFR Activity 1.2.5). The leads identified regional and country-level One Health (OH) research priorities, based on a desk review and key informant interviews. A consensus was reached on seven thematic and four cross cutting OH research priority research areas, based on the findings from institutional and national research agendas which guided the team's discussions, evaluation and ranking, for inclusion in the AFROHUN research agenda. The priority thematic areas are; zoonotic diseases, antimicrobial resistance. food safety and security, environmental health, neglected tropical diseases (NTDs), climate change and vector-borne diseases. The cross cutting issues are gender equity and equality, community engagement, collaboration and communication. The team also developed a framework to guide the network's research portfolio and tackle potential strategic and operational issues. Ultimately, the agenda will help coordinate research efforts to inform policy and develop evidence-based interventions both at country and regional level.

During the same period, the R&E TWG presented its road map to the Academy Technical Advisory Committee (TAC) with a request to support kick-start activities that would operationalise the road map. The AFROHUN Secretariat

initiated the accreditation process of the Academy in Uganda. In August 2022, the Secretariat and the One Health Workforce Next Generation (OHW-NG) project consortium brainstormed on the AFROHUN One Health Academy strategic direction and business plan models. The Secretariat is designing a Mentored Experiential Learning and Training (MELT) Program as a flagship program for the Academy that will contribute to addressing the One Health Workforce challenges on the African continent and beyond. The overall goal of the MELT program is to develop and strengthen a local OH workforce with the capacity to prepare, prevent, detect, and respond to infectious disease outbreaks and complex health challenges in the African region and beyond.

Additionally, up to eleven ECHO e-learning sessions were held this year attracting approximately 406 participants from various AFROHUN member institutions (AFR Activity 1.2.4). These were 90-minute interactive sessions that covered different aspects of e-learning with an aim of enhancing the knowledge and skills of faculty amidst the increasing demand for e-learning emerging from the COVID-19 pandemic. The sessions included a case study and didactic presentation from local experts as well as opportunities for attendees to ask questions and use interactive learning management tools. Gender balance was prioritized during selection of experts. A program evaluation for faculty, students, and institutional leads

was initiated to inform the scope and content of the subsequent virtual Communities of Practice (vCOP) sessions.

AFROHUN onboarded two fellows under the AFROHUN Regional One Health Workforce Fellowship program (AFR Activity 1.2.6). The fellowship run for four months beginning in May 2022. One fellow was based at the AFROHUN Regional Secretariat and the other at AFROHUN Cote D'Ivoire. The 2022 cohort of the four-month fellowship program more specifically focused on developing and applying critical leadership and technical skills needed to successfully manage and implement OH programs.

Lastly, AFROHUN organized a virtual two-day symposium that featured student presentations on work arising out of their activities in the field and other training programs, skills building sessions, panel discussions and other events (AFR Activity 1.4.2). Over 245 students, alumni and faculty attended the event. This symposium provided a unique platform for students and alumni to share what they had learned and how they had been changed by these experiences.



OBJECTIVE 2

Developing Knowledge Management System

The draft Knowledge Management (KM) Strategy was disseminated (AFR Activity 2.1.7) in a series of workshops with an emphasis on the roles and responsibilities of stakeholders in implementation of the strategy. Each country developed a KM action plan. Presentations were also made to the AFROHUN Board and the AFROHUN Leadership Summit, both bodies committed support to implementation of the strategy and improved strategic use of AFROHUN knowledge.

Tracking One Health Alumni

After piloting alumni tracking in Year 2, the alumni tracking survey was scaled up to Tanzania, Ethiopia, Cameroon, Senegal, DRC, and Uganda (AFR Activity 2.2.3). Over 400 alumni responded to the survey and the responses provided useful insights into future engagement strategies.

National One Health Coordination Bodies

Similarly, the OH Coordinating bodies assessment, initiated in Year 2, was completed during Year 3 (AFR Activity 2.3.4). Virtual Focus Group Discussions (FGD) in Cameroon, Tanzania, Rwanda, Uganda, Ethiopia, and Kenya were conducted with selected survey participants drawn from universities, professional bodies government ministries and OH implementing partners and/ or research insitituions. The discussions provided richer information from the participants around key emerging themes. Country profiles are being developed in collaboration with the global team and will be used for engagement of National One Health Cordinating bodies at member countries in Year 4.



OBJECTIVE 3

NUPAS Assessment and Readiness

Working collaboratively with the Global Team and external auditors from SustainAbility Solutions (AFR Activity 3.1.5), AFROHUN underwent a NUPAS Plus assessment between October 2021 and December 2021 ahead of the USAID assessment to determine suitability of the network for a prime award. As a result, the AFROHUN Finance and Human Resources policies and procedures were updated, the Information Technology (IT) policy and plan were developed, and all were approved at the 32nd Board of Directors and 24th Leadership Summit in April 2022.

As a follow on to the NUPAS Plus assessment, USAID conducted an interim evaluation of the AFROHUN's financial capability, legal organisation, and written policies and procedures through a document review exercise (February 2022). In August 2022 an on-sight review verified AFROHUN's actual practices in accordance with its written policies and procedures and the status of policy related recommendations. As a result, the Transition Award (TA) was fully executed, indicating a general achievement of the minimum requirements.

Building Organizational Capacities

In another activity, strengthening staff capacities and improving organizational systems continued as the network pursued its sustainability goals. Staff, at the regional and country secretariats, were trained in project management (AFR Activity 3.2.3) through six virtual sessions between November 2021 and February 2022. Our Head Grants and Resource Mobilization,

benefited from a one to one coaching and was trained on using specific tools for partnership development.

Partnership Development and Engagements

Network partnership development and funding diversification for institutional sustainability remained a focus area for Year 3 (AFR Activity 3.3.3). Utilizing the good partnering practice knowledge and tools, we streamlined processes for effective donor engagement, the partnership strategy, Annex 3 of the Business Plan was updated. Working with the Global Team, the Secretariat developed packages such as pitch decks, capability statements, fliers, these are useful tools and are being used for different donor and partner engagements.

Additionally, partnership and grant writing meetings (AFR 3.3.4) were held in Year 3 with both funding and implementing partners including: German Agency for International Cooperation (GIZ) and a cooperative agreement is in final stages for an initial funding of Euro 160,000 over two years; Malteser International, a Memorandum of Understanding (MoU) was signed with funding of USD 65,000 for OH training in DRC (Democratic Republic of the Congo). Partnership meetings with ICF Incorporated, Research Triangle International (RTI), and Bixal Global Health were held between April and September 2022 in pursuance of the Localizing Global Health Security (LGHS) grant as a consortium. Two in-person grant writing workshops (February, May 2022) and several work sessions were held for the AFROHUN TA, the USD 4,981,319 award was fully executed in September 2022. Several additional grant funding through country missions (Cote d'voire,

Cameroon, DRC) to about USD I million were secured. As part of a consortium, a grant proposal to a USAID Development Innovation Venture (DIV) https://www.usaid.gov/div was submitted to build on the Infectious Disease Research Collaboration (IDRC) gender and vaccine development work. During the SEAOHUN conference, lessons were picked and connections on how to engage private sector shared. Partnerships with private sector will be followed up in Year 4.

AFROHUN Network Visibility

Following the assessment conducted in Year 2, a communications expert was commissioned to facilitate the process of reviewing and re-shaping AFROHUN's Communications and Visibility Strategy which is ongoing (AFR Activity 3.2.4). This will support the process of repositioning the network and guide the production of communications and visibility products and templates. The final strategy and guidelines will be disseminated and made functional in Year 4.

Furthermore, partnership development and engagement materials have been produced (AFR Activity 3.3.5). These include a 4-pager, taking a snapshot view of the network's current status, a poster presented at the SEAOHUN 2022 International Conference in Bangkok, a video version of the 4-pager information, two newsletter editions (generated from approved Semi Annual Report and Annual Report content).

AFROHUN Revenue Generating Streams

Our team supported the launch of a feebased continuing professional development course in Tanzania in September 2022. This pilot course, under the revenue generation efforts (AFR Activity 3.4.4), attracted multidisciplinary participants representing private and public sectors in Tanzania and Rwanda. This course will be used as a model and will be replicated in other AFROHUN countries.



LESSONS LEARNED

Program evaluation for participant buy-in and relevance

AFROHUN ran two successful vCOP. In order to keep the momentum and keep the community engaged, there is need to reevaluate the activity in order to adapt it to the participant's need and inform the next steps.

The relevance of a crosscountry OH research agenda

The research agenda development process indicated lack of OH research agenda for Africa. Therefore this process provides an opportunity for the network to engage in the development of cross-country OH research work on the common themes that were identified and will benefit a wider community beyond the network.

Pursuing institutional sustainability through proactive approaches

Traditionally, AFROHUN has been relying on solicited funding through Request for Proposals (RFAs) as the only strategy for resource mobilization. The network started to diversify approaches by systematically reaching out to funding partners. We are trying a more proactive approach to engage with different funding partners, such as development agencies or private sector, to going after solicitated funding. This, however, requires profiling potential funders, building relations with them through sharing network stories of change, and engaging them with clear asks that aligns their interests to AFROHUN's interests.



NEXT STEPS

Year 4 will build on the lessons learned from the e-learning vCOP ECHO sessions and findings from evaluation for faculty, students, and institutional leads to inform the scope and content of the subsequent vCOP sessions.

The regional Secretariat will avail the draft research agenda to expert reviewers, including the Global Team, to input, before validation by the country and regional stakeholders and, approval by the Board and Leadership Summit. The network's OH research funded by the OHW-NG project shall be based on this agenda. Mobilization for additional research areas, both at the country and regional level shall be undertaken to support the network's research efforts. The regional Secretariat's plan for resource mapping around the identified research themes

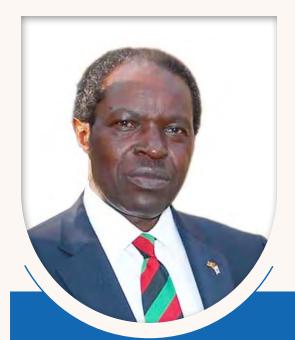
shall be implemented in Year 4, under the leadership of the Academy's R&E TWG.

The feedback that was received during the students symposium event, which included a short survey, will feed into further workforce development engagements for both the pre-service and in-service beneficiaries of the students clubs and other OH capacity building initiatives by AFROHUN, under the leadership of the Academy Student One Health Innovation Club (SOHIC) TWG.

Using the experiences learned in Year 3 on proactive approaches, revenue generation models, AFROHUN is going to enhance its product development for visibility to potential funding partners and continue to reach out to them, including private sector players.







PROFESSOR WILLIAM BAZEYO

Job Title

AFROHUN Chief Executive Officer

Professional Credentials

MBChB, M.Med (OM), PhD

Role within the OHW-NG Project

Provides overall oversight to the Secretariat and implementation of the OHW-NG project

Affiliation

Africa One Health University Network

"

"We got the urge of people joining AFROHUN and we said let's admit them such that they benefit from the ongoing projects. So, we admitted more institutions. We are now more relevant to Africa, and we can challenge these epidemics and pandemics".



Individual's Impact

Prof. William Bazeyo is the founding Dean of the One Health Central and Eastern Africa (now Africa One Health University Network (AFROHUN). As a Public Health physician, he has been in the lead of transformative thinking; moving from managing emergencies from a purely Public Health perspective to taking on a OH approach. Under his leadership as AFROHUN CEO, the network has grown from six countries to ten, with

more applying to join. The network is now regarded as principal thought leader in OH on the continent and globally. Prof. William Bazeyo is a recipient of the Tufts University 2021 class of Honorary degrees in recognition of his leadership in OH innovations research. He is widely published in government circles in the region for his engagements on OH and global health issues.

AFR SEC 1: AFROHUN Secretariat's OH Champion - Professor William Bazeyo. Photo source: AFROHUN Secretariat.

SUCCESS STORY





Reaping the Benefits of Focused Investment in Knowledge Management at AFROHUN

AFROHUN has over the years been working on the process of streamlining and strengthening its Knowledge Management (KM) function. This stimulated commitment from the AFROHUN governing bodies to provide stronger leadership for KM. To guide this endeavor, a KM strategy was developed.

In Year 3, the KM strategy was disseminated and socialized with all key internal AFROHUN audiences. These included the AFROHUN Board, Leadership Summit, the Secretariat and country teams. As a result;

- 1) The Board and Leadership Summit committed to provide all necessary support to the KM function to ensure its growth.
- 2) Country teams are now implementing country-specific KM action plans such as developing products and building capacity at local level.

AFROHUN held a two-day write shop where country teams drafted success stories arising from work that has been done over the years, including beyond the OHW-NG project. From this process, the Secretariat facilitated the development of five success stories that are now ready for dissemination and will be part of the packages for partnership engagement and visibility efforts..



AFR SEC 2: AFROHUN Kenya Country Manager presenting his success story during the Knowledge Management peer review session. Photo source: AFROHUN Secretariat.



AFR SEC3: Knowledge management expert listening to plenary discussions during the Knowledge Management write shop in Dakar, Senegal. Photo source: AFROHUN Secretariat.

In addition, AFROHUN also built capacity for Cameroon through a write-shop to generate KM products that included; eight success stories and three manuscripts.

The key success for AFROHUN in terms of KM is that the process has been a participatory one, involving all staff, management and governance structures, and has to-date generated various knowledge products, and more are underway.

"We have come far in terms of building this capacity, from skepticism to hesitancy to now full-on enthusiasm about knowledge management and its benefits. We thank the OHW-NG Global team for the support they have deployed to bring us to this point. We are especially keen to utilize KM tactics and strategies that can help position us well as thought-leaders in One Health in Africa and globally. Through a strong knowledge management function, we hope to set the agenda for One Health workforce development in the world. We are not yet there but we can smell the prize," Ms. Milly Nattimba- AFROHUN Secretariat.

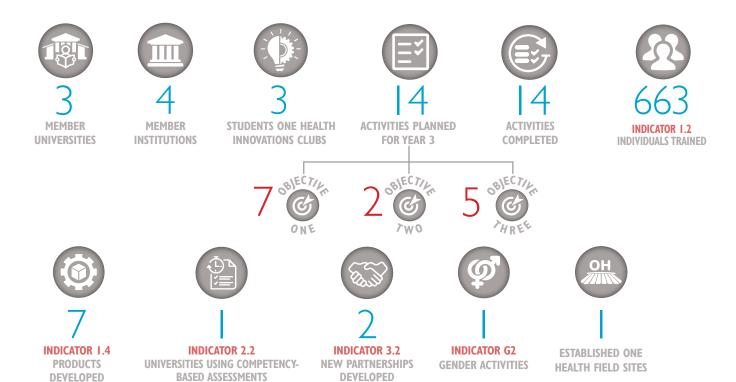


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CAMEROON



Dashboard Overview of Year 3





HIGHLIGHTS

- ⇒ Trained 72 faculty from 5 public and private Cameroonian Universities on One Health (OH) and its core competencies (April 2022).
- → Organized the Global Health Case Competition (GHCC) attended by twelve teams from 3 member Universities (June 2022).
- → Contributed to the capacity building of future faculty of University of Buea, Master's level Wildlife Medicine program (February - September 2022).
- → Developed a small grants research program which enabled students to learn by working through collaboration (January - September 2022).
- Supported National One Health platform to organize a GHCC for women working with civil society organizations across Cameroon, culminating into the creation of a OH network of Cameroonian civil society (November 2021).

ACTIVITIES



OBJECTIVE I

Training and Empowerment

AFROHUN Cameroon conducted three sessions of the GHCC on Infectious Diseases, the OH Concept, and Outbreak Management (emergent threats) to enhance students' competencies in communication, community engagement and problem-solving skills, as well as stimulating interest in creating institutional OH Clubs (CRN Activity 1.2.4). AFROHUN Cameroon also continued to enhance students' understanding of government systems, policies, and priorities in relation to management of epidemic prone diseases in Cameroon prior to inservice deployment, thus addressing core competency needs related to OH. In June 2022, twelve teams from three member Universities (University of Montagne (UdM), University of Ngaoundere (UN), University of Buea (UB)) participated in the first round of the GHCC. To promote gender balance, at least two females were required in each of the five person teams. Four teams from two member Universities

qualified for the second round of the competition. In July 2022, two of the four teams qualified for the third and final round of the competition.

Seven multidisciplinary teams of three students each were selected for the small grants research program which aimed at promoting interdisciplinary, inter-sectoral research and collaboration (CRN Activity I.3.3). Four universities participated in this competition, namely UdM (2 teams), UN (2 teams), UB (2 teams), and a team from University of Yaounde I (UYI) (January - September 2022).

In addition to the student focused trainings and activities, AFROHUN Cameroon also trained ten faculty members on wildlife medicine and wildlife surveillance to enhance capacities of Cameroonian universities (CRN Activity 1.3.4). The participants were drawn from University of Bamenda, UdM, UN and UB.



CRN 1: Winning team of GHCC 2022 in Cameroon. Photo Source: AFROHUN Cameroon.



OBJECTIVE 2

The OH concept was born out of a recognition of the opportunities for protecting public health through policies and actions to prevent and control zoonotic pathogens in animal populations at the human/ animal/ environmental interface. AFROHUN Cameroon conducted an assessment of faculty competencies on RCCE. The results indicated that 100% faculty plan to introduce RCCE into their university field program. In another activity, we trained faculty from UN, UdM, UYI, Catholic University of Central Africa (UCAC), and Protestant University of Central Africa (UPAC) on the "One Health" concept and OH core competences to strengthen their capacity (CRN Activity 2.3.4). Both in-person and online trainings were conducted. In-person trainings took place at UdM, Ecole Vétérinaire de Ngaounderé, and Protestant University of Central Africa (UPAC). Online sessions were utilized to review topics and train participants on OH core competencies, Gender, Leadership and Communication. Overall, 72 faculty (53 males and 19 females) were trained.



CRN 2: Participants posing for a photo during the OH concepts and core competencies workshop held at UdM. Photo Source: AFROHUN Cameroon.



OBJECTIVE 3

AFROHUN Cameroon attended various meetings organized by partners including USAID and the USAID Mission in Cameroon. The meetings were an opportunity to share progress and best practices as well as a networking and partnership building platform.

In Year 3, the AFROHUN Cameroon Thematic Lead for curriculum development also participated in a communication training organized by the US Embassy in Yaounde. We also supported two faculty, a Thematic Lead and Activity Lead to participate in a symposium organized by the Cameroon Academy of science where AFROHUN Cameroon presented experiences on e-learning.

As part of expanding the network base, AFROHUN Cameroon supported the National

Programme for the Control and Prevention of Emerging and Re-emerging Zoonoses (PNPLZER) which is the National One Health Platform to organize a three-day OH GHCC for civil society organizations on OH and Food Security. Six teams from women civil society organizations participated. AFROHUN Cameroon and PNPLZER constituted the jury for the competition. This support culminated into the creation of a OH network of Cameroonian civil society.



CRN 3: Team lead receiving a trophy on behalf of the best GHCC women group. Photo Source: AFROHUN Cameroon.

AFROHUN Cameroon also constituted a team of faculty from various institutions including UN, UdM, UYI, UCAC, UB, University of Dschang and Research Institute of Agriculture and Development (IRAD) to develop grant proposals (CRN Activity 3.1.6). A series of virtual meetings were held that focused on developing grant proposals on Rabies, COVID-19, Tuberculosis and Monkeypox. The proposals will be used to respond to funding calls as they become available.

Building on partnerships efforts, AFROHUN Cameroon developed new partnerships with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and UPAC. Together with GIZ, AFROHUN Cameroon played a key technical role in organizing and facilitating the launch of the GIZ OH Prevention and Pandemic programme. This collaboration enhanced visibility of AFROHUN Cameroon's work around OH. With UPAC, we collaborated to hold an in person OH Core Competence training for faculty. In this partnership UPAC mobilized resources such as logistics used during the training, meeting room facilities for common purposes thus contributing to achievements.



LESSONS LEARNED

Engagement of E-learning Options at the University Level

Since 2020, AFROHUN Cameroon has launched activities aimed at strengthening e-learning knowledge and capacity of faculty in 14 Cameroon universities (both public and private). Todate, Cameroon has about 30 e-learning champions who launched a virtual Community of Practice (vCOP) in September 2022 on e-learning to boost the number of instructors and provide ongoing support to the student community. The quick move to e-learning helped to continue supporting capacity building activities.

Following the recommendations of the 2017 Joint External Evaluation (JEE)

conducted in Cameroon to strengthen wildlife monitoring by providing quality personnel in the field, AFROHUN Cameroon developed a Master's program in 2019 with the aim of training a critical mass of Cameroonians in the field of wildlife monitoring. In 2022, the Master's program was approved and will be launched at UB in 2023; 10 faculty were trained to run this program. This activity was the result of an institutional commitment from UB. This commitment has accelerated the desire to continue to innovate around OH and to promote opportunities it presents.



NEXT STEPS

In Year 4, in collaboration with partners of the USAID Global Health Security Agenda (GHSA), AFROHUN-Cameroon will support the UB in launching its AMR Masters program and work with Medicines, Technologies and Pharmaceutical Program (MTaps) to provide online teaching options and use a hybrid approach to instruction. AFROHUN Cameroon will also continue to provide technical support for building the capacity of wildlife monitoring staff in practical skills, and in active, passive and syndromic monitoring.









PROF HALLE-EKANE EDIE GREGORY

Job Title

Professor and Dean

Professional Credentials

MBBS; MD; PGD Reproductive Health; FWACS

Role within the OHW-NG Project

Dean at AFROHUN member institution (Faculty of Health sciences)

Affiliation

UB, Cameroon

"The flame produced by a Bunsen Burner (holistic approach), the tripod of a Bunsen Burner (human, animal and environment factors responsible for diseases) will definitely have a more impactful outcome than if they played complementary roles. The burning flame could be likened to ONE HEATH and the tripod to factors that could cause diseases."



INDIVIDUAL'S IMPACT

As focal point under OHCEA (now AFROHUN) for 3 years and subsequently a Dean of Faculty of Health Sciences for 2 years, Prof. Halle has actively been involved in coordinating and supervising projects of OHW-NG. Furthermore, he participated in drafting and implementation the Master Programs on AMR and Veterinary Field epidemiology. Though quite challenging, it has been interesting and impactful for him to work with both national and

international stakeholders to spread the OH concept in disease management. Prof. Halle's fervent wish is the integration of the One Health concept in various curricula. His support will enable Cameroon to become an African leader in integrating OH into its national animal and human health systems.

CRN 4: Cameroon's OH Champion - Prof Halle-Ekane Edie Gregory. Photo source: AFROHUN Cameroon.

SUCCESS STORY





Enhancing the Understanding of Public Health through a Multidisciplinary Approach

Over the past two years, AFROHUN Cameroon institutionalized a small grants program to promote interdisciplinary, inter-sectoral research and collaboration across seven universities. This grant scheme targeted undergraduate and postgraduate student research teams consisting at least three different disciplines. One of the key eligibility criteria was the multidisciplinary student teams and mentors, while ensuring gender considerations. The grants program enabled students to learn by working through collaboration in multidisciplinary teams.

"I have always been in my comfort zone until this adventure with my fellow students from other fields. I was able to learn from others and understood that alone, it is difficult for me to solve a scientific problem effectively. My wish is that AFROHUN Cameroon continues to give this opportunity to students to learn in a practical way the unique skills of collaboration, coordination, ethics and communication." MEGUE KENMOE Paule, a Biologist and former student at UdM.

Since 2021, two rounds of small grants have been awarded to 18 students (10 females, 8 males). The disciplines involved included veterinary medicine (6); animal sciences (3); human medicine (5) and environmental sciences (4). This research activity allowed students to conduct field investigations and laboratory analyses on various OH topics such as antimicrobial residues from local fish farming system in Cameroon or studying the genetic diversity of Cryptosporydium species in children, neonatal calves, and environmental water sources in the southwest region of the country. Experience gained through the grant program has greatly influenced the beneficiaries while carrying out their duties.

"As chair of the SOHICs at UdM, and recipient of one of the small grants, I have come to appreciate the need to collaborate with students from other disciplines to answer complex research questions. This experience has greatly influenced the way I work in my current position." Élise Djien, Former UdM SOHIC President.



SUPPLEMENTAL FUNDING: American Rescue Plan Act - Cameroon RCCE

Risk Communication and Community Engagement for COVID-19 at Universities

Activity Description

The COVID-19 pandemic disrupted in-person learning, advocacy, and community engagement in Cameroon. Thus, there was a need to improve COVID-19 information sharing within the university network and neighboring communities including traders, farmers, shopkeepers, families of the university communities, and herders. As a contribution towards improving risk communication in the country, AFROHUN Cameroon carried out the following RCCE activities:

- ⇒ Training SOHIC and other university clubs on COVID-19 RCCE, including addressing misinformation and sharing accurate information on COVID-19 risk reduction measures (including vaccination) within the university and surrounding communities.
- → Further strengthen the current university capacity in e-learning for improving virtual instruction capabilities and engaging the university community to enhance awareness on COVID-19 risk reduction measures.
- → Training journalists on RCCE for improved reporting on COVID-19, and designing appropriate communication and engagement activities for community empowerment to uptake vaccination.
- Support AFROHUN to participate in COVID-19 stakeholder coordination meetings.



CRN 5: RCCE training of journalist and university communicators. Photo Source: AFROHUN Cameroon.

Highlights

- → Modified COVID-19 messages developed under Tranche 3 to include communication tools bearing COVID-19 messages were developed.
- Radio and TV messages were also shared with the university communities. and that included vaccination targeting ,
- Trained 198 SOHIC members and other clubs at four universities on RCCE
- ⇒ Trained 25 journalists on RCCE to ensure improved reporting on COVID-19.
- 110 SOHIC members from UdM and University of Douala sensitized 2,157 individuals in communities surrounding their university environments on COVID-19 vaccination awareness.
- ➡ Built capacity of 34 champions on practical sessions in e-learning techniques which included, setting up an online course while respecting the principles of pedagogy and carrying out evaluation of online teaching.



CRN 6: Practical e-learning training organize by AFROHUN Cameroon. Photo Source: AFROHUN Cameroon.



CRN 7: Facilitators for the e-learning session in Ngaoundere prepare the innovative scenario. Photo Source: AFROHUN Cameroon.



SUCCESS STORY

Managing COVID-19 misinformation through strengthening risk communication among journalists in Cameroon

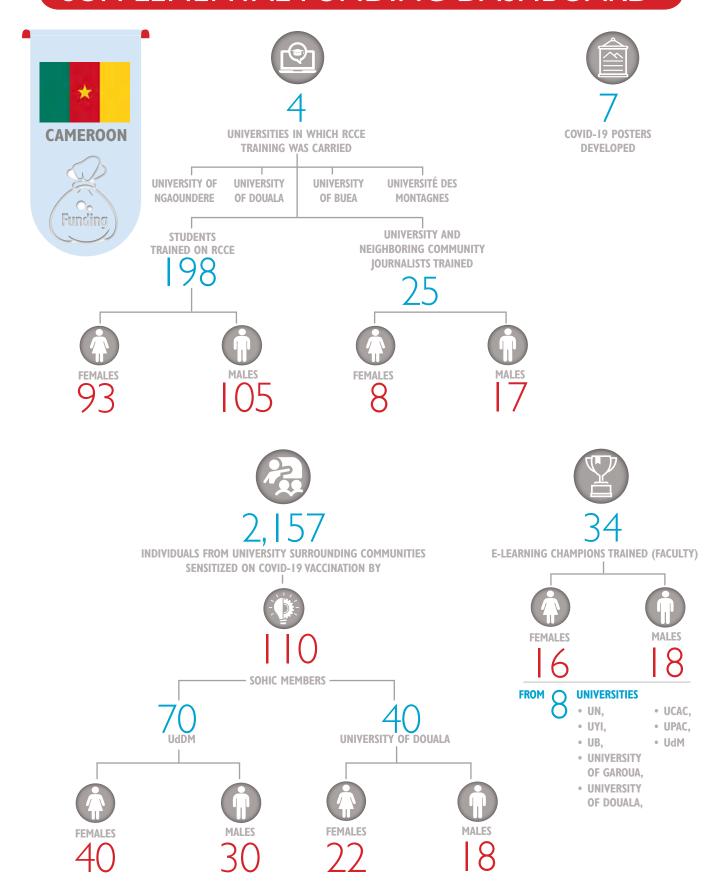
With funding from the ARPA, AFROHUN Cameroon helped journalists better communicate on COVID-19 through a training on RCCE. Risk communication is not taught in journalism and mass communication schools, creating a gap in understanding of how to frame messages by journalists during crises like the COVID-19 pandemic.

AFROHUN Cameroon therefore designed a training for journalists to support building capacity in this area. In times of new epidemics or pandemics like COVID-19, people need timely, accurate, up-to-date health information they can trust. The media and journalists are usually the first and most accessible source of such information. However, journalists are rarely trained in RCCE. A total of 25 (8 females, 17 males) journalists of university campus radio stations and public health communicators benefited from the training which was conducted by AFROHUN in collaboration with the National One Health Platform. The participants gained skills in improved reporting on COVID-19 and vaccine uptake, increase efficiency and minimize misinformation and rumors during the pandemic.

Some of the journalists have applied the knowledge learned, as seen in their articles, radio editions and television spots. The collaboration between journalists and public health communicators was strengthened, recognizing ways they might help each other in their communication efforts.

"One of the things I learned from this training was how to use the immense possibilities of new technologies to keep up with the topics I cover as a journalist. Being able to provide accurate information is a constant challenge for the journalist, and the RCCE training has equipped me to meet this challenge. I have also mastered the OH approach - having to look at the problem of zoonoses and their treatment in a holistic manner," Jean AMOUGOU, community journalist.

SUPPLEMENTAL FUNDING DASHBOARD





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CÔTE D'IVOIRE



Dashboard Overview of Year 3









HIGHLIGHTS

- □ In collaboration with USAID partner Breakthrough Action (BA), AFROHUN CDI trained and sensitized 357 students from 3 universities in Korhogo, Bouaké and Yamoussokro through a communication campaign on the One Health (OH) concept, Rabies, Antimicrobial Resistance (AMR) and COVID -19 (November -December 2021).
- → AFROHUN CDI in collaboration with the OH platform and other Global Health Security Agenda (GHSA) partners, organized the commemoration of OH Day held at Université Felix Houphouet Boigny (UFHB) (November 2021).
- Trained 29 faculty and Deans from UFHB and Université Nandjui Abrougoua (UNA) and from two training structures for health workers: Institut National de Formation des agents de la santé (INFAS)

- and L'Institut National de Formation Professionnelle Agricole (INFPA) on the OH approach (January 2022).
- → Supported 13 administrative officers in charge of human resources from key ministries involved in OH to validate the report on human and infrastructural resources available in the public sector (March 2022).
- Final year students (141) from INFAS, Unité de Formation et de Recherche des Sciences Médicales (UFR SM) and INFPA benefited from a face-to-face and online training on certification for rabies control using modules on the Global Alliance for Rabies Control (GARC) educational platform (May 2022).
- ➡ Established two Student One Health Innovation Clubs (SOHICs) at UFHB (August 2022) and at UNA (September 2022).

ACTIVITIES



OBJECTIVE I

A validation workshop of the situation analysis of OH trainings was conducted by AFROHUN CDI and results indicated the need for inclusion of OH modules in the University Curricula (CDI Activity 1.1.5). The results informed a sensitization and training workshop for Deans and faculty (CDI Activity 1.2.4). With the support of experts from UC Davis, a training

workshop was held in January 2022 for 29 people (faculty, Deans, and representatives of key OH departments) from UFHB and UNA. The training focused on the history of the OH approach, systems thinking, problem-based learning, and the involvement of multisectoral and multidisciplinary resources in the management of public health events.



CD 1: Participants during the OH training for university faculty. Photo Source: AFROHUN Côte d'Ivoire.

AFROHUN CDI launched two SOHICs in UFHB and UNA. Prior to the establishment, online and face-to-face engagement meetings with Deans, faculty and student leadership were held to introduce the OH approach. Thereafter, a one-day meeting involving 30 students per university was held. Collaboration with these student clubs will allow for more extensive participation of students in activities for promotion of OH in our universities.



CD 2: Students attending the installation of SOHIC at Université Felix Houphouet Boigny. Photo source: AFROHUN Côte d'Ivoire.



CD 3: SOHIC members posing for a photo during the installation of SOHIC at Université Nandjui Abrougoua. Photo source: AFROHUN Côte d'Ivoire.



OBJECTIVE 2

AFROHUN CDI conducted a workshop to validate the results of human and infrastructural resources mapping exercise that was held in Year 2. The validation workshop engaged 13 administrative officers in charge of human resources from key ministries involved in OH (CDI. 2.3.5). Following the data validation workshop, a comprehensive report was produced and 100 copies of the report were

distributed among various stakeholders. The information generated, informed the mapping of all human and infrastructural resources involved in the One Health approach. These results indicated a total of 49,645 active agents, 1,690 trainers, and 18,408 students spread across the human, animal and environmental health sectors for all key ministries.



OBJECTIVE 3

AFROHUN CDI participated in two workshops (CDI 3.2.3) organized by the national OH Platform. One workshop was aimed at evaluating the planning and performance of the OH Platform and the minimum capacities of the International Health Regulations (IHR), which indicated an increase in both organizational capacity and performance. This workshop also focused on finalizing the annual report on the IHR capacities. The second workshop evaluated the performance and operationalization of the National Health Security Action Plan (PANSS) and preparation of the OH platform activities report (June 2022). The operationalization of the platform ensures the use of tools to make it functional, namely the OH-APP tool, the State Party Self-Assessment Annual Report (e-SPAR) tool, PANSS,

and the annual report on the capacities of the International Health Regulations (IHR 2005).

AFROHUN CDI also participated in the commemoration of the OH Day (CDI 3.2.4) at UFHB with the central theme "Health security in Côte d'Ivoire depends on the availability and competence of human resources trained according to the OH approach." The university was chosen to sensitize faculty on the OH concept and to integrate the OHW-NG project at the member university level. AFROHUN CDI in collaboration with the OH platform and other Global Health Security Agenda (GHSA) partners supported 93 participants (13 of whom were faculty) to attend the commemoration.



LESSONS LEARNED

Good practices in organizing a workshop during COVID-19: CDI Experience

In January 2022, when we organized the training workshop for university faculty on the OH approach, Côte d'Ivoire was experiencing a third wave of COVID-19. AFROHUN CDI therefore had to identify a training site that complies with safety regulations. AFROHUN CDI sourced a large training site and personal protection equipment for each participant. This method was adopted by other institutions to ensure continuity of work within stringent but protective COVID-19 situations. The Secretary General of the University Presidency congratulated AFROHUN CDI on this achievement.

Peer-to-peer information

AFROHUN CDI experienced difficulties with getting students to join SOHICs this year. This challenge took the identification of a committee to spearhead and conduct sensitization to create awareness and buy in. Utilization of WhatsApp groups further helped to ensure outreach and constant communciation among the students. More than 60 students were enrolled as a result of these efforts.



NEXT STEPS

AFROHUN CDI will continue to be integrated in the UFHB and utilize the leadership and volunteer faculty to create ownership of project activities to enhance adoption of OH modules in teaching and continous capacity building for SOHICs will be provided.

The CDI AFROHUN team will also continue to leverage partnerships within the different ministries and the OH Platform to set up a human resource Groupe Technique de Travail (GTT) within the coordination of the OH platform. This group is an organ of the platform.









KOUASSI YAO MATHIAS

Job Title

Chief of the Division of Occupational Health (University hospital of Angré-Abidjan).

Professional Credentials

Professor in Occupational Health, Researcher

Role within the OHW-NG Project

Thematic Lead - One Health Human Resources Reinforcement

Affiliation

Medical school (UFR Sciences Médicales) at University Felix Houphouet-Boigny - Abidjan, Côte D'Ivoire.

"One Health offers great opportunities for operational research partnerships in collaboration with and communication across various disciplines and sectors. One Health must help reduce social and economic costs and add value to health services, community development, the local economy and environmental preservation. I am committed to helping realize all these opportunities with the entire One Health team".



INDIVIDUAL'S IMPACT

Professor KOUASSI is a Thematic Lead for the strengthening OH human resources area. He was a key player in realizing the OH human resources mapping, preparation of data collection documents, orientation of survey teams, data validation, and conducting the final data validation workshop. He is a resource person in the development of the Competency Based Education (CBE) pedagogical strategy in the institution. On a daily basis, he demonstrates his commitment and availability for the promotion of OH. After his participation in the OHW-NG CBE workshop held in Kampala, Uganda, he took the initiative of contacting volunteer faculty to implement OH, eventually establishing OH educational units in conjunction with the university.

CD 4: Côte d'Ivoire's OH Champion - Kouassi Yao Mathias. Photo source: AFROHUN Côte d'Ivoire.

SUCCESS STORY





Building students' capacity for rabies prevention

In September 2022, during his internship in a hospital in Abidjan, Mr. Assouan Michel applied the knowledge gained from the rabies training to provide appropriate care and guidance that saved a life of a patient bitten by an unknown dog. Mr. Assouan is a 7th year medical student of the Unité de Formation et Recherche Sciences Médicales (UFR-SM) at Université Felix Houphouët Boigny (UFHB). He participated in a rabies training organized for graduating students by AFROHUN CDI under the OHW-NG project.

Three training sessions were held in May 2022 at the Faculty of Medicine, UFHB, the National Institute of Training of Health Workers (INFAS) and the School of Specialization in Livestock and Meat Trades of Bingerville (ESEMVB). Professors from the Faculty of Medicine and the School of Para-veterinary facilitated the training. They encouraged the students to reach out to parents, relatives, and friends to take their dogs for vaccination to avoid being

infected with rabies. The instructors also emphasized the measures that doctors should take following exposure to a bite or scratch by a dog or cat such as, taking a patient to a specialized service facility for post-exposure management in case of rabies. The Director of Veterinary Services created a WhatsApp group for students to continue

sharing and discussing about rabies.

After the workshop, Mr. Assouan took up the initiative to sensitize his parents, neighbours and friends about rabies and its prevention. Following his advice, the parents had their two dogs vaccinated against rabies at a private animal clinic in Abidjan. They did not wait for free vaccination services neither did some of his neighbours and friends.

Mr. Assouan was among the 141 students awarded with certificates following the knowledge and skills gained from training on rabies prevention.

"The training on rabies is very important because it allowed me to maybe save the life of this patient. In the service where I was that day, I was the only one who knew the protocol for follow-up of a person bitten by a dog. So, I shared the training link with medical students that were together with me on internship that had not participated in the rabies training." Mr. Assouan Michel, student UFR-SM UFHB.



CD 5: Assoua Michel addressing students. Photo Source: AFROHUN Côte d'Ivoire.



SUPPLEMENTAL FUNDING: ARPA Cote d'Ivoire COVID_19 vaccination

Reducing COVID-19 morbidity and mortality through accelerated equitable access to vaccines

Activity Description

Vaccination is one of the most effective ways to reduce the spread of COVID-19. To limit transmission and reduce morbidity and mortality from COVID-19, Côte d'Ivoire has decided to adopt vaccination as a means of preventing the pandemic. Since the launch of the COVID-19 vaccination program, there has been some vaccine hesitancy at the university, especially among teaching staff. The American Act (ARPA)program Rescue Plan supports two objectives: (i) to accelerate widespread and equitable access to safe and effective COVID-19 vaccine delivery and (ii) to reduce COVID-19 morbidity and mortality, mitigate transmission, and strengthen health systems, particularly to prevent, detect, and respond to pandemic threats. In collaboration with key partners (Ministry of Health, Ministry of Education, UFHB, Université Nangui Ambrogoua (UNA), Institut National de Formation des Agents de Santé, and École Nationale de Statistiques Appliquées), AFROHUN CDI is working with professional and student associations of the university community, to conduct awareness and training activities to increase the rate of immunization in the university campuses through the

Highlights

ARPA project.

- ➡ Engaged 50 university staff and 32 students and over 2,400 people from neighboring communities through COVID-19 vaccination awareness campains.
- → Trained 307 students

- and instructors from the target structures of UFHB, the National Institute of Social Training, the School of Livestock and Meat Trades of Bingerville (ESEMVB) and UNA on COVID-19 epidemiology, the value of vaccination, community involvement in COVID-19 vaccination and communication tools.
- Supported the launch of the awareness and vaccination campaign for university communities and, initiated vaccination at 4 sites namely: UFHB, INFS (Institut national de formation Sociale), Ecole d'élevage de Bingerville and Ecole d'agricole de Bingerville.
- → Vaccinated 278 students, faculty and, administrative and technical staff from the different target structures at UFHB and UNA.
- Conducted a survey covering 338 faculty, students, associations and unions, and technical / administrative staff to better understand the reasons behind the low vaccination rate among university communities.



CD 6: Launch of COVID-19 awareness and vaccination activities under the ARPA project. Photo Source: AFROHUN Côte d'Ivoire.

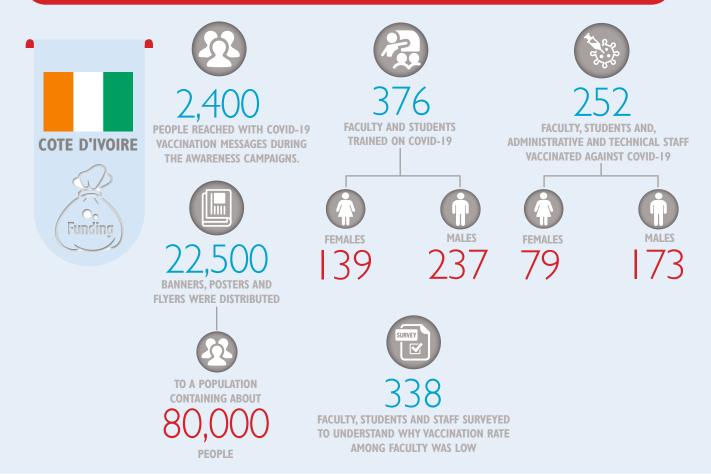


SUCCESS STORY

There has been some reluctance among a portion of the Ivorian population, particularly among health personnel and university communities to be vaccinated against COVID-19. This reluctance has been largely due to the ongoing public misconceptions about the quality and safety of COVID-19 vaccines. Such was the case with Ms. Christelle Elodie Ballo, the head of communications at UFHB. Ms. Ballo was afraid to get vaccinated against COVID-19 because of what she heard about COVID-19 vaccine safety. Luckily, her opinion changed when she attended a one day workshop that was held to sensitize and create awarenes about COVID-19 vaccination for university staff and students. The workshop covered topics on the epidemiology of COVID-19, vaccination against COVID-19 and care of COVID-19 patients. After the training, Ms. Ballo sought for vaccination services and was vaccinated against COVID-19 within the university site. She is among the 278 students, faculty and university administrative and technical staff that were vaccinated against COVID-19 following the sensitization meetings held in UFHB and UNA.

"I accepted to takeup the vaccine because of the reassurance I received during the workshop. The presentations made by the speakers reassured me especially to takeup the Johnson & Johnson vaccine that required me to only take one dose to be protected," Ms. Christelle Elodie Ballo, Communications In-charge, Office of UFHB president.

SUPPLEMENTAL FUNDING DASHBOARD





DRC



Dashboard Overview of Year 3



MEMBER UNIVERSITIES



MEMBER INSTITUTIONS



STUDENTS ONE HEALTH INNOVATIONS CLUBS



ACTIVITIES PLANNED FOR YEAR 3



ACTIVITIES COMPLETED











INDICATOR 1.4
PRODUCTS
DEVELOPED



INDICATOR 3.2
NEW PARTNERSHIPS
DEVELOPED



INDICATOR G2
GENDER ACTIVITIES



2 BLISHE

ESTABLISHED ONE HEALTH FIELD SITES



HIGHLIGHTS

- → The territory administrators training module developed by AFROHUN DRC was reviewed and validated by the government, represented by the Ministry of Interior (February 2022).
- ➡ Evaluated, reviewed and updated the Infectious Disease Management (IDM) and Antimicrobial Resistance (AMR) module to train a new cohort of 66 students in Kinshasa and Lubumbashi (June 2022).
- Engaged Student One Health Innovation Club (SOHIC) members from University of Kinshasa (UNIKIN)

- and University of Lubumbashi (UNILU) in a rabies sensitization and vaccination campaign (April 2022).
- ⇒ Strengthened One Health (OH) Clubs in member universities, through conferences in four universities (UNIKIN, UNILU, Catholic University of Graben, Institute of Medical Techniques in Bukavu (November 2021 - June 2022).
- ➡ Established a new partnership with Malteser International to train a cohort of 56 OH professionals in Ituri and Bas-Uélé provinces (June 2022).

ACTIVITIES



OBJECTIVE I

During Year 3, AFROHUN DRC supported a multidisciplinary group of experts to review and update the territorial administrators training module developed in 2016. This review helped to update the content and to add modules on Risk Communication for Community Engagement (RCCE) and Gender, based on lessons learned during the COVID-19 pandemic. The final product was validated by the government and will be integrated into the territorial administrators training curriculum for sustainability (CD Activity 1.1.5).

During the same period, infectious disease management alumni were engaged in the evaluation of the Infectious Disease and AMR training module (CD Activity 2.1.7) and their feedbacks used to review and update the module (CD Activity 1.1.6). The reviewed module was used to train a new cohort of 66 students (30 females and 36 males) in Kinshasa and Lubumbashi (CD Activity 1.3.3).

Existing SOHIC members were trained on rabies and participated in a rabies awareness and vaccination campaign in Kinshasa and Lubumbashi. A total of 300 unvaccinated dogs were vaccinated (CD Activity 1.4.2).



DRC 1: SOHIC member during the rabies sensitization campaign in Kindele, Kinshasa. Photo source: AFROHUN DRC.



DRC 2: Students posing with the Dean of Kinshasa School of Public Health and the AFROHUN DRC Country Manager ahead of the field outreach. Photo source: AFROHUN DRC.



DRC 3: Dog registration by a SOHIC member ahead of the vaccination exercise. Photo source: AFROHUN DRC.

To strengthen SOHICs in member universities and create new SOHICS, AFROHUN DRC organized five conferences that engaged more than 400 students. Topics related to AMR and Emerging Zoonosis were covered (CD Activity 1.4.3). In the same reporting period, four in-service professionals conversation spaces were established for OH awareness, online and in-person conferences organized covering AMR, Ebola, and Monkeypox, with up to 600 attendees (CD Activity 1.4.4). Lastly, the National One Health Strategic Plan developed during Year 2 with technical support from AFROHUN was launched by the government during Year 3 (CD Activity 1.5.1).



OBJECTIVE 2

Using an online survey, alumni trained from 2016 to 2019 evaluated the IDM and AMR modules. Gaps such as risk communication for community engagement, gender, and infection prevention and control were identified. Findings from this evaluation were used to guide the review and update of the Infectious Disease and AMR training module as mentioned above (CD Activity 2.1.7).



OBJECTIVE 3

Quarterly performance review meetings were organized involving all the AFROHUN DRC stakeholders, including Deans, Thematic Leads, Activity Leads, the OH platform, and partners (CD Activity 3.1.5). The review highlighted lessons learned and areas for improvement. The same stakeholders were also engaged during the Year 4 work planning meetings that supported the development of the AFROHUN DRC Year 4 work plan (CD Activity 3.1.6).



LESSONS LEARNED

A new partnership established for successful implementation of OH activities at the subnational level

During Year 2, the AFROHUN DRC team participated in the partnership engagement training organized by the Global Consortium. The knowledge acquired during the training helped the team to engage Malteser International, a German international Non Governmental Organization (NGO), in activities conducted in two provinces in the Northeastern part of DRC. On their request, AFROHUN DRC made a presentation highlighting the work done in the country and potential areas of collaboration. Following the presentation,

discussions were initiated and an MoU was signed between the two organizations Through these engagements, USD 65,000 was mobilized for training 56 OH professionals in Buta and Mahagi where Malteser International is implementing a transboundary OH surveillance project. After this training, two OH committees were established in Buta and Mahagi to support the implementation of the project. Given that DRC is a huge country, there is a great need to have trained OH professionals at national and subnational levels.



NEXT STEPS

Workforce capacity development is an important component of the National One Health Strategic Plan that was developed during Year 2 with support from the Global Consortium and local experts and launched in Year 3. AFROHUN DRC will build on this Strategic Plan objective to train in-service professionals and pre-service students to support the implementation of the fiveyear plan. The training modules reviewed during Year 3, such as the territorial administrators training module, will be used to conduct a Training of Trainers (TOTs) at the national level. This is critical as this module will be integrated into the territorial administrators training curriculum. SOHICs will be involved during the outreach activities.

Partnerships created since Year 2 with Malteser International, Food and Agricultural Organization (FAO), and Breakthrough Action improved activity implementation and AFROHUN visibility at the country level. These partnerships will be strengthened and new partnerships created for successful implementation of OH activities.





ONE HEALTH CHAMPION





DÉSIRÉ MASHINDA KULIMBA

Job Title

Professor of Epidemiology and Dean of the Kinshasa School of Public Health

Professional Credentials MD, MPH, PhD

1 10, 1 11 11, 1 110

Role within the OHW-NG Project

Dean of AFROHUN member institution

Affiliation

University of Kinshasa

"The challenges we are facing today, such as emerging and reemerging infectious diseases, and AMR can't be addressed by one sector. Public health professionals need to be equipped with OH competencies to manage public health events using a multisectoral approach. The School of Public Health has incorporated OH competencies in the training curriculum to prepare the future workforce."



Individual's Impact

Prof. Mashinda, as the Dean of the School of Public Health, a member institution of the network, has provided leadership and support during activity implementation. He was part of OHW-NG activities implemented in Kinshasa including work planning to ensure that all activities are implemented as planned. He has supported partnership engagement activities by participation in meetings organized with stakeholders. As a result, a MOU was signed with a non-profit humanitarian agency, Malteser International. Under his leadership, OH is being integrated in the training curriculum of the school.

DRC 4: DRC's OH Champion - Désiré Mashinda Kulimba. Photo source: AFROHUN DRC.

SUCCESS STORY





Using Multidisciplinary Students for a Rabies Sensitization and Vaccination Campaign

Rabies is one of the priority zoonotic diseases in DRC. The 2030 Rabies Elimination Plan, whose implementation is led by the Rabies Technical Working Group of the National One Health Platform, outlines actions toward rabies elimination in DRC including community sensitization and rabies vaccination campaigns. To contribute to this goal, AFROHUN DRC supports students to engage in community rabies awareness and vaccination outreach. Learning from previous activities, this year's rabies outreach had a few changes. After undertaking an online rabies training, students from different disciplines attended an in-person oneday training, where they were exposed to rabies epidemiology, symptoms, post

exposure prophylaxis, and prevention strategies including risk communication and community engagement. They also practiced community entry and designing communication messages and before their deployment. These sessions strengthened the students' understanding of rabies and activity planning. The 5 I students who participated in the two-day event came from the faculties of Medicine, Veterinary Medicine, Social Sciences, Communications, and Environmental Sciences.

On day I, students conducted a sensitization campaign, reaching 5000 community members in Kinshasa and Lubumbashi. Each group of students was supervised by a veterinary officer and a faculty member.



DRC 5: SOHIC members during rabies sensitization campaign conducted on the World Rabies elimination Day. Photo source: AFROHUN DRC

On day 2, the Rabies Technical Working Group provided vaccines that were administered by veterinary officers supported by students to vaccinate up to 400 dogs.



DRC 6: SOHIC final year student Biaba observing the dog vaccination demonstration by Dr Serge Lwange - Animal health officer for Mont-Ngafula. Photo source: AFROHUN DRC.

Through this activity students improved their knowledge of rabies and learnt community engagement strategies and multidisciplinary collaboration.

"With a social science background this activity helped me to learn about rabies and to understand my role toward rabies elimination. I was thinking that this is only for veterinarians but now I understand that without community engagement it's very difficult to achieve rabies elimination in DRC. As a social scientist, I have the right knowledge to help with the community engagement with such activities." **Prisca Kabangu, a Social Science student.**

"Despite my knowledge of rabies, it was not clear to me how a multidisciplinary approach can be useful for rabies elimination. Through this activity I was able to see that in action." **Love Biaba, a** Veterinary Medicine student.



SUPPLEMENTAL FUNDING: DRC KSPH MPH Scholarships

Strengthening the pipeline of DRC One Health professionals

Activity Description

During Year 2, the USAID health office in DRC engaged AFROHUN and the OHW-NG Global Consortium to assist the Kinshasa School of Public Health (KSPH), an AFROHUN member institution, with the administration of their scholarship program and integration of OH into the program's curriculum. The objective of this program is to strengthen the pipeline of OH professionals in DRC. Under this program which targets in-service professionals working within the Ministry of Health & Ministry of Animal Health, full scholarships for Master of Public Health (MPH) at KSPH for over a period of 3 years were planned for 60 students. The DRC AFROHUN country office worked closely with KSPH's leadership and supported the program's administration to recruit the two cohorts of 30 scholarship recipients each year.

In Year 3, the second cohort of 30 scholarship recipients, (19 male and 11 females) were selected. It was however noted that only 26% of the total applicants were female, hence the need to conduct a study to understand barriers to access to higher education. It was noted that the major barriers were mainly sociocultural norms limiting access to higher education in DRC. This study provided an in-depth understanding of factors associated to gender inequality in access the MPH program.

Highlights

- The first cohort of 30 students recruited in Year 2 of the OHW-NG project completed their studies. Eight of them successfully defended their dissertations in June 2022 and the remaining will do so in December 2022.
- → The second cohort of 30 students recruited in Year 3 of the OHW-NG project completed their first semester and are now studying the second semester modules.
- The KSPH financial management team received field support from the regional Secretariat on programmatic management of the MPH scholarship regarding requirements of a yellow book audit which is a comprehensive audit that entailed checking the program's compliance with organizational and donor policies and standard operating procedures. Yellow book audit recommendations were addressed and staff capacity built in that regard. One Health competencies have been integrated in the KSPH reviewed curriculum after a three-day face to face follow-up workshop for 25 faculty including heads of departments and Deans.
- → A gender gap study was conducted to understand the gender gap in access to higher education at the Kinshasa School of Public Health. Socio-economic and cultural factors were identified as the major barriers to access to master's level education by women.



SUCCESS STORY

Understanding gender gaps in access to higher education

During Year 2, the USAID health office in DRC engaged AFROHUN and the OHW-NG Global Consortium to assist the KSPH, an AFROHUN member institution, with the administration of their scholarship program and integration of OH into the program's curriculum. The objective of this program is to strengthen the pipeline of Oh professionals in DRC. The program targeted in-service professionals working within the Ministry of Health & Ministry of Animal Health.

In Year 3, AFROHUN DRC worked closely with KSPH's leadership to support the program's administration in recruiting the second cohort of 30 scholarship recipients (19 male and 11 females). Unfortunately, with only 26% of the applicants being female, this gender imbalance needed to be addressed. Every year, the school receives less than 30% of its applications from women. By 2021, KSPH had trained more than 1,450 MPH students, of which only 261 were female while 1,189 were male. However, there was lack of data to explain gender gaps in enrollment, recruitment, and selection of candidates. We therefore conducted a study to identify the gender barriers to access to higher education. A mixed method study complemented by document review was conducted.

The study provided an in-depth understanding of the factors associated with gender gaps relating to access to higher education in general and the MPH program at KSPH in particular. It was noted that the major barriers were socioeconomic and cultural factors in nature. Most of the women who were interested in applying for the MPH program faced financial challenges; negative/prohibitive family/cultural influence and unawareness

about the existence of the USAID-funded scholarships, among other factors. The understanding of these factors will guide the development of mitigation strategies going forward..

Below we share insights from the study participants on key factors identified.

"The family does not favor the woman to do higher education especially when she is not married, because the priority of the family is marriage and the surroundings also obstruct as well as society which says that the woman is weak even if she studies she will not do anything with it," said a female participant during the focus group discussion.

"The husband or fiancé is also a big obstacle especially if he knows that after studies the wife will have a higher level of education than him. Culture also an obstacle," said a male participant during the focus group discussion.

"Marriage is the first obstacle, especially if you have children. It is not easy for the husband to let you go but also the distance especially for women in the provinces, not to mention the in-laws that intoxicate {influence} the husband," said a female participant during the focus group discussion.

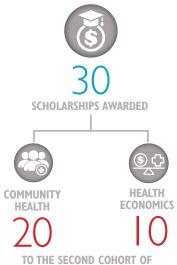
One of the successful candidates of the program, Mayala Masiala Viviane, a medical doctor in the Health Economics track working with KSPH in the department of Management, suggests that a lot needs to be done to encourage women to take up the program.

"We should encourage women to apply. It is not easy when one has children and other commitments at home to take on such trainings. But if the woman has the will and determination, it is possible to make it. This {scholarship} opportunity was good because it took good care of us. Me, I am married since 3 years ago and I have a child of 2 years but I have the determination to study. Even when you are in class there are (people at home) calling you. But you have to have the will to continue," **Dr. Mayala Masiala Viviane,** medical doctor.

It became clear that there is need to create awareness about the scholarship program to reach the intended beneficiaries. "A real problem of communicating on the existence of the scholarship, almost all women doctors in my area don't have this information," said a male participant during the focus group discussion.

SUPPLEMENTAL FUNDING DASHBOARD





STUDENTS.



74

STUDENTS FROM THE FIRST COHORT SUCCESSFULLY COMPLETED THEIR STUDIES AND GRADUATED

THE REMAINING STUDENTS WILL GRADUATE
AFTER SUCCESSFULLY FULFILLING ALL THE
COMPLETION REQUIREMENTS THAT INCLUDE
PASSING ASSESSMENTS AND DEFENDING THEIR
DISSERTATIONS.

ETHIOPIA



Dashboard Overview of Year 3







5 MEMBER INSTITUTIONS



STUDENTS
ONE HEALTH
INNOVATIONS CLUBS



ACTIVITIES PLANNED FOR YEAR 3



ACTIVITIES COMPLETED



INDICATOR 1.2
INDIVIDUALS TRAINED



ESTABLISHED ONE HEALTH FIELD SITES









HIGHLIGHTS

- ⇒ Trained 35 students from Jimma University and Akililu Lemma Institute of Pathobiology in Infectious Disease Management (IDM) with the purpose of producing professionals that are able to identify and manage infectious diseases using a One Health (OH) approach (May - June 2022).
- Conducted a training for 58 in-service professionals from Jimma and Addis Ababa on OH Risk Analysis for inservice personnel and faculty members, enhancing multidisciplinary capacity in risk identification, assessment, management and communication on OH problems (May June 2022).
- Supported 20 faculty members from Jimma University and Akililu Lemma Institute of Pathobiology to attend a cross-country virtual training workshop on grant proposal & concept note

- development designed to build faculty capacity in developing multidisciplinary and winning grant proposals (April 2022).
- → Held virtual and physical grant proposal writing meetings for 29 faculty from Jimma University which resulted in the development of five grant proposals for submission to funding agencies (April September 2022)
- Supported 164 students from Jimma, Mekelle and Addis Ababa Universities to participate in Ethiopian Students One Health Innovative Club (ESOHIC) seminars and panel discussions on OH (October 2021 - September 2022).
- → AFROHUN Ethiopia in partnership with University of Bologna, Italy and other two Ethiopian universities won two capacity building projects from Italy (November 2021).

ACTIVITIES



OBJECTIVE I

Thirty five final year students (40% female) from Jimma and Addis Ababa Universities representing the disciplines of veterinary and human medicine, nursing, public health, environment, biology, and animal science were trained in IDM (ET Activity 1.1.5). The training covered concepts including: OH fundamentals, infectious disease epidemiology and multidisciplinary approach in IDM, the global burden of disease, outbreak investigation, gender, infection control, leadership, risk communication and systems thinking. Teaching modalities included problem based learning and simulation exercises.



ET 1: Students and trainers pose for a photo during the IDM training in AAU. Photo Source: AFROHUN Ethiopia.



ET 2: IDM training in Addis Ababa University. Photo Source: AFROHUN Ethiopia.

Under ET Activity I.I.6, 58 participants from the Ministry of Agriculture, Ministry of Health(MoH), Ministry of Environment, the disaster risk management office, government officials, and members of academic staff from Jimma and Addis Ababa universities participated in a training on risk management and communication. The training equipped the academic staff and government sector office professionals with knowledge and skills on risk communication, risk assessment and risk management, and skills in conducting multidisciplinary research.

A virtual training workshop was organized by four AFROHUN member countries (Ethiopia, Kenya, Senegal and Rwanda) (ET Activity 1.3.3) on grant proposal development. This enhanced the skills of 20 faculty from Jimma and Addis Ababa Universities. Furthermore, 29 faculty from Jimma University participated in five virtual sessions and a five day in person grant proposal writing workshop in which five grant proposals focusing on AMR, climate change, stray dog management, Brucellosis, and livestock banking through OH approach were developed.



ET 3: Participants pose for a photo with the president and vice president of Jimma University during the grant proposal development workshop in Jimma. Photo Source: AFROHUN Ethiopia.



ET 4: Group work during proposal development workshop. Photo Source: AFROHUN Ethiopia.



OBJECTIVE 3

Quarterly performance review meetings were organized involving AFROHUN Ethiopia stakeholders including university Deans, Thematic Leads, Activity Leads, OH platform representatives, and program partners. The reviews highlighted lessons learnt and areas for improvement. The same stakeholders were also engaged during the Year 4 work planning meetings that supported the development of the AFROHUN Ethiopia Year 4 work plan (ET Activity 3.2.4).



ET 5: Country Manager with Jimma University, College of Agriculture and Veterinary Medicine Deans after the Year 4 work plan meeting. Photo Source: AFROHUN Ethiopia.

In addition, meetings were held with the President and Vice President of Jimma University to lobby for financial and technical support towards AFROHUN's activities and will be followed up in the upcoming year. AFROHUN Ethiopia leadership also participated in various Global Health Security Agenda (GHSA), USAID mission, and National OH Partner meetings, and OH Steering Committee activities, where they presented on progress as well as used these meetings to strengthen partnerships and collaboration.



ET 6: Country Manager presenting at GHSA partners meeting. Photo Source: AFROHUN Ethiopia.

AFROHUN Ethiopia team together with the Jimma University senior leadership including the President, Vice President and Research Director visited the Koyesha Hydroelectric Dam. With more than 5000 workers, the contingent visited the dam to conduct a fact finding mission to design a potential OH development and intervention project. AFROHUN Ethiopia was tasked to develop a proposal for OH interventions in the area. This will be followed up in the upcoming year.

During the reporting period, AFROHUN maintained student engagement through the national level SOHIC known as the ESOHIC. A series of virtual sensitization events namely; seminars, panel discussions, and information dissemination of OH information were conducted via social

media for AFROHUN member and nonmember university students across Ethiopia.

As a result, more than 10,000 people were reached with the presentations and articles through social media platforms.

Under the partnerships efforts, AFROHUN Ethiopia participated in a regional planning meeting for the One Planet Education - Transdisciplinary Initiative (I HOPE-TDI) Africa Consortium which was held in February 2022. The aim of the meeting was to initiate and establish an Africa regional consortium of I HOPE; AFROHUN was included as partner of the global initiative of I HOPE. Further to this initiative, AFROHUN Ethiopia held follow up meetings with I HOPE to discuss areas for potential partnership and collaboration.



LESSONS LEARNED

Nurturing new partnerships for more activity implementation

Due to the current political unrest in the country, AFROHUN Ethiopia had limited funding to implement Year 3 activities. Thus, resource mobilization and partnership mapping were conducted, and new partners were engaged. As a result, AFROHUN Ethiopia, Vets for Africa and University of Bologna developed a joint proposal that was awarded 44,000 Euros from the Italian government. Aimed at

implementing capacity building trainings in Ethiopia and Italy, to date 170 experts have participated in online trainings and three Ethiopian experts traveled to Italy for training. In light of this success, we learned that additional efforts while nurturing new partnerships with various stakeholders is required in order to continue addressing OH funding gaps and leverage synergies across partners.



NEXT STEPS

AFROHUN Ethiopia will continue to support the SOHICs and to utilize virtual options for wider reach. AFROHUN Ethiopia plans to undertake an alumni survey for professionals who participated in the OH risk analysis training to assess the relevance of the training provided and to inform future capacity building efforts. Our team will continue efforts geared towards enhancing partnerships and collaboration with potential funders and implementing partners.



ONE HEALTH CHAMPION





PROF. SEID TIKU MERETA

Job Title

Research and Postgraduate Coordinator

Professional Credentials

Professor in Ecology and Environmental Health

Role within the OHW-NG Project

Thematic and Activity Lead (OH Risk Analysis and Grant Proposal Writing)

Affiliation

Jimma University



"Ecosystem management is the principal strategy that prevents nature's revenge and attains optimal health for humans and animals"



Individual's Impact

Prof. Seid has been working as a Thematic and Activity Lead for OH risk analysis training and grant proposal writing for the last seven years. He played an active role during the development of the OH risk analysis training module and its delivery at Jimma and Addis Ababa universities. Additionally, he also played a key role in the assessment of national OH workforce core competencies and OH coordinating entities in Ethiopia.

ET 7: Ethiopia's OH Champion - Prof. Seid Tiku Mereta. Photo source: AFROHUN Ethiopia.

SUCCESS STORY





Spreading the One Health Concept through Expanding Student One Health Innovation Clubs in Ethiopia

To keep students virtually engaged in One Health (OH) activities during the COVID-19 pandemic, SOHIC members from Jimma and Mekelle Universities established a single, country wide, SOHIC called the Ethiopian Student One Health Innovation Club (ESOHIC). ESOHIC fosters peer mentorship and learning in the field of OH. AFROHUN Ethiopia supported ESOHIC and opened a free virtual OH advocacy and sensitization training program to multidisciplinary students from Jimma & Mekelle Universities. The students gained knowledge about OH concepts and practical engagements skills. They used this platform to spread the OH concept across Ethiopian universities which attracted requests from nonmember university students to participate in AFROHUN One Health activities.

In Year 3 of the OHW-NG project, ESOHIC successfully organized bimonthly OH sessions entitled "One Health Advocacy, Incubation and Sensitization Events" for all Ethiopian students. The program called upon all passionate professionals and skilled students to share knowledge and experience in OH with ESOHIC members. The sessions attracted students and experts from

more than twelve universities, three ministerial offices and the private sector. The webinar presentation and discussion materials shared with all club members and the public through ESOHIC social media platforms reached more than 10,000 beneficiaries. Following the advocacy and sensitization events, two non AFROHUN member Universities namely University of Gonder and Samara University, officially established the One Health Students Clubs. Three other universities have initiated the process of establishing clubs in their respective universities.

"I have great appreciation for your motivation to promote OH. This platform seems a very energetic group that should be used as a vehicle for proper dissemination of information & awareness raising on the concept OH approach to wider community," Dr. Darsema Gulima, Senior Advisor, One Health Prevent Epidemic Team, Resolve to Save Lives, Ethiopian Public Health Institute.

The future of ESOHIC is bright!
Awareness about OH throughout
Ethiopia will be achieved with support
and close collaboration among Ethiopian
universities.



KENYA



Dashboard Overview of Year 3



MFMBFR UNIVERSITIES



MFMBFR INSTITUTIONS



STUDENTS ONE HEALTH INNOVATIONS CLUBS



ACTIVITIES PLANNED FOR YEAR 3



ACTIVITIES COMPLETED



INDICATOR 1.2 INDIVIDUALS TRAINED



INDICATOR 1.4 PRODUCTS

DEVELOPED









INDICATOR 2.2

UNIVERSITIES USING COMPETENCY-**BASED ASSESSMENTS**



INDICATOR 3.2 NEW PARTNERSHIPS

DEVELOPED



INDICATOR G2 GENDER ACTIVITIES



ESTABLISHED ONE

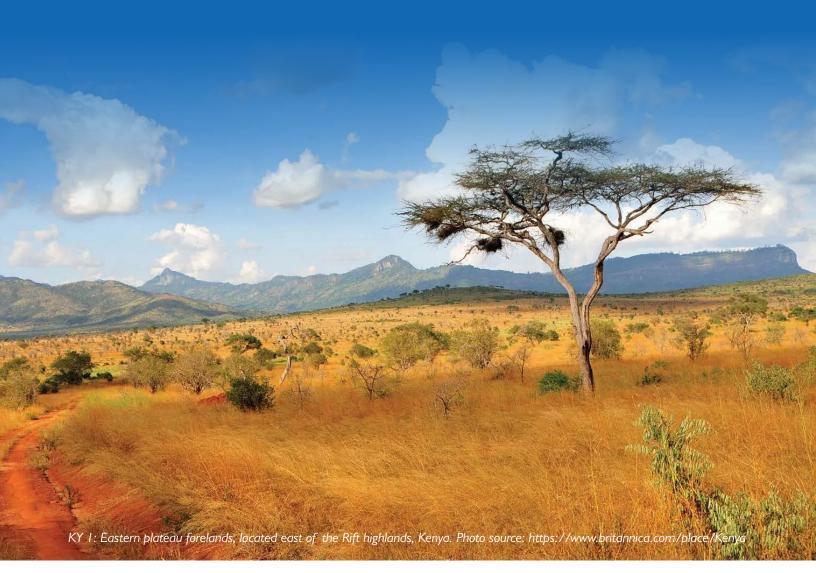
HEALTH FIELD SITES



HIGHLIGHTS

- The Master of Science (MSc) in Infectious Disease and Global Health (IDGH) was officially launched by the Deputy Vice Chancellor (DVC) Moi University, Sir Prof Ambrose Kiprop, representing the Vice Chancellor (September 2022).
- Conducted Antimicrobial Resistance (AMR) and Food Security Extension for Community Healthcare Outcomes (ECHO) series to sensitize pre-service and in-service professionals with appropriate skills to address complex One Health (OH) challenges (October 2021 - June 2022).
- ⇒ Engaged 106 Student One Health Innovation Club (SOHIC) officials and members from the 2 member Universities in 4 outreach activities. where students demonstrated their OH leadership and competency skills through leading the events (October 2021 - September 2022).
- Supported 10 faculty to develop 8 manuscripts for publication in peer reviewed journals (March 2022).
- ⇒ In partnership with Farming Systems Kenya, 3 faculty members from the 2 member Universities trained primary

- school teachers and members of a youth group on OH to promote science communication and trans-disciplinarity, and equipping the community with necessary skills and knowledge to take ownership of challenges using the OH approach (February 2022).
- ➡ Engaged in redesigning the One Health Field Experience to incorporate new ideas and address measures for sustainability of the program (March 2022).
- → The draft OH policy brief developed in Year 2 was validated and approved for presentation to the government to inform policy (February 2022).
- → Multidisciplinary pre-service and in-service professionals including faculty participated in an online training for frontline workers on digital communication tools and applications (August September 2022).
- ⇒ Built capacity of 29 participants from Siaya County in implementation and institutionalization of the OH approach at the sub-national level (March 2022).



ACTIVITIES



OBJECTIVE I

AFROHUN Kenya launched the MSc IDGH curriculum (KY Activity 1.1.5) after a six year long journey that was officiated by the DVC of Moi University and attended by the OHW-NG consortium, AFROHUN network, Food and Agricultural Organization (FAO) Kenya, World Health Organization (WHO) Kenya, Global Health Security Agenda (GHSA) partners and professional regulatory bodies among others. Three full scholarships were awarded for the program courtesy of Prof Mining, a faculty member from the Moi University School of Medicine, through the European Union (EU) funded Partnering for Health professional training in African universities (P4PHT-II) project.



KY 2: The chief guest, Sir Prof Ambrose Kiprop, DVC Moi University (7L), Principal College of Health Sciences-MU (6L), Dean School of Public Health-MU (5L), representatives from FVM(3R) and FHS(4R) UoN and other distinguished invited guests after the unveiling of the mockup and official launch of the MSc IDGH. Photo source: AFROHUN Kenya.



KY 3: The chief guest Sir Prof Ambrose Kiprop preparing to cut the ribbon for unveiling the mockup and official launch of the MSc IDGH. Photo source: AFROHUN Kenya.



KY 4: Prof M. Nangami, Dean, School of Public Health-Moi University, making her closing remarks following the official launch of the MSc IDGH. Photo source: AFROHUN Kenya.

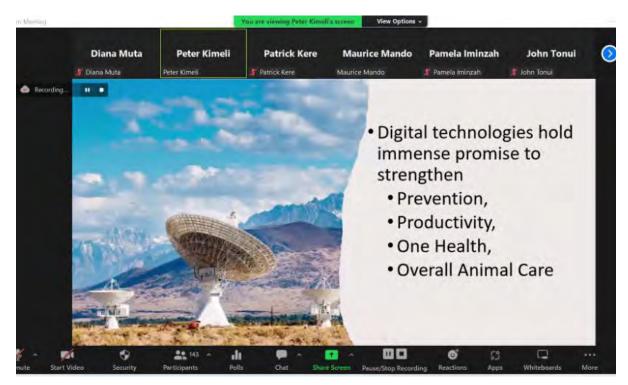
AFROHUN Kenya in collaboration with the American Society for Microbiology and the ECHO team, equipped approximately 192 multidisciplinary pre-service and in-service professionals, drawn from within and beyond Kenya, with appropriate skills and knowledge to address the complex AMR challenge (October-December 2021), and included case presentations, didactic sessions and plenary discussions. The AFROHUN Kenya team conducted a second ECHO series on food security and gender which attracted a total of 148 participants.

Under faculty mentorship, SOHIC members equipped 1,200 primary school children and 3,500 community members with information on OH topics including rabies, environmental management and conservation, waste management and segregation, and hand hygiene among others (KY Activity 1.2.5). Additionally, over 500 dogs and cats were vaccinated against rabies and I 35 pets were surgically sterilized. Furthermore, and a total of 55 SOHIC students participated in an outbreak simulation exercise and journal club activities which were coordinated in collaboration with Food and Agricultural Organization Emergency Centre for Transboundary Animal Diseases (FAO-ECTAD) Kenya team.

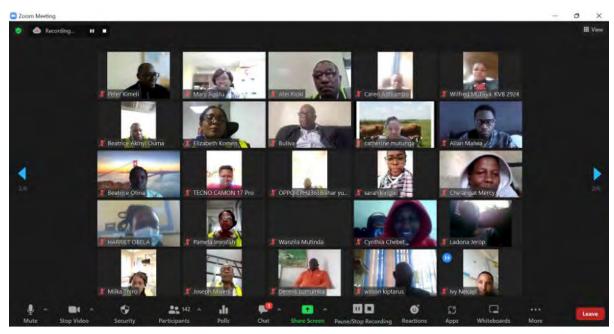
AFROHUN Kenya conducted a manuscript development workshop (KY Activity 1.2.6), where faculty generated eight manuscripts for submission to peer reviewed journals. In a bid to promote OH knowledge to nontraditional disciplines and to the community, 19 participants including ten primary school teachers, a Ministry of Education official, three community youth group members, a local administration chief and four members

of a local NGO learned about OH and were equipped with skills to share OH knowledge in their spaces and communities (KY Activity 1.3.4). AFROHUN Kenya also engaged five faculty from the two member Universities in updating the Kenya One Health Field Experience (KY Activity 1.4.2) to make it more robust, incorporate new ideas and address measures for sustainability of the program. This was done drawing lessons learnt over the last five years. GHSA partners from COREGroup, Kenya Red Cross Society and FAO joined the AFROHUN team in the activity, and met their costs for the event. Dr. Jennie Lane also joined the meeting, representing the OHW-NG global consortium.

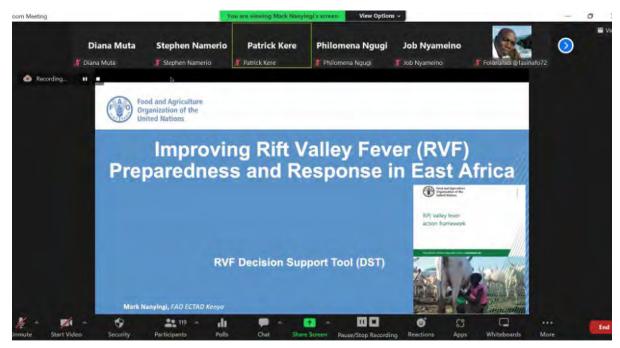
AFROHUN Kenya also sought to influence policy and engaged the national government and other stakeholders (KY Activity 1.5.3), who validated the OH Policy brief developed in Year 2, for submission to the government. Piloting of the short course for frontline workers developed in Year 2 was done (KY Activity 1.3.3) where, 402 multidisciplinary pre-service and in-service professionals including faculty were in attendance. The online training on digital communication tools and applications was accredited for Continuing Professional Development (CPD) by the Kenya Veterinary Board (19 CPD) points), Environment Institute of Kenya (25 CPD points) and the Public Health Officers and Technicians Council. Majority of the participants (95.1%) indicated that the training was useful in providing information needed to effectively participate in digital communications for improved healthcare delivery.



KY 5: Presentation on Data Types, Sources and Animal Health Informatics, by Dr. Peter Kimeli (UoN-FVM), during the frontline workers training on Digital Communication Tools and Applications. Photo source: AFROHUN Kenya.



KY 6: Multidisciplinary participants during the frontline workers training on Digital Communication Tools and Applications. Kenya Veterinary Board (represented in the photo) supervised the training for award of CPD. Photo source: AFROHUN Kenya.



KY 7: Case Presentation on Rift Valley Fever Decision Support Tool by Dr. Mark Nanyingi (FAO ECTAD Kenya) showing practical application of Digital Communication Tools during the frontline workers training. Photo source: AFROHUN Kenya.

The development of a newsletter (KY Activity 1.2.7), was one of the channels AFROHUN Kenya aimed to utilize for information dissemination.



KY 8: First issue of the AFROHUN Kenya newsletter. Photo source: AFROHUN Kenya.



OBJECTIVE 2

Building on the collaboration initiated in Year 2, AFROHUN Kenya engaged in building the capacity of the County of Siaya OH (KY Activity 2.3.4) where 29 individuals from the Executive and Assembly Committees participated in a three-day training, officiated by the Clerk of the Assembly. This training was designed to help institutionalize a OH approach at the sub-national government level. The County co-sponsored the training, providing meeting allowances for the participants and contributing to transportation costs for AFROHUN Kenya students to attend an outreach activity at Jaramogi Oginga Odinga University of Science and Technology (JOOUST). In addition, an alumni engagement strategy was developed (KY Activity 2.1.7) building on the alumni tracking exercise conducted in Year 2. The strategy will guide the development of robust alumni engagements with AFROHUN Kenya.



OBJECTIVE 3

AFROHUN Kenya developed stakeholder profiles and a partnering agreement template that will be used to engage partners and promote organizational and network strengthening (KY Activity 3.3.3). AFROHUN Kenya engaged with the Animal Health Technicians and Technologists Association of Kenya (AHTTAK) and identified areas of collaboration including capacity building of veterinary paraprofessionals, to create a future generation workforce that is able to respond to emerging complex health challenges. One of the areas identified by AHTTAK for collaboration with AFROHUN Kenya was on digital skills for veterinary professionals, from which their members were invited to an online training on digital communication tools and applications, thereby contributing to the achievements realized. Research on OH was identified as a priority (KY 3.2.3). All these documents are expected to be living documents that will be updated regularly and implemented as per partner engagements. Quarterly performance review meetings were held and the Year 4 work plan was also developed (KY Activities 3.2.4 and 3.2.5).



LESSONS LEARNED

Maximizing Impact: Stakeholder Mapping and Synergy

As part of its strategic direction, AFROHUN seeks to leverage partnerships in response to complex OH challenges. To effectively venture into this new space, AFROHUN Kenya sought out a partner with more experience working in and promoting initiatives within primary education. Farming Systems Kenya (FSK), led by their executive director, collaborated in the planning of the scheduled training and introduced AFROHUN Kenya to its network. This new partnership resulted in a successful event, where ten primary school teachers, a Ministry of Education official, three community youth group members, a local administration chief and four members of FSK learned about OH. Within a couple of weeks, the participants reached out to more members in their spaces and the communities as they committed to sharing their achievements through a communication platform established at the training. We have learned the importance of stakeholder mapping and engagement for OH impact.

Carving out a niche: demand meets supply

In Year I, AFROHUN Kenya set out to determine the unmet needs of frontline workers for effective pandemic preparedness and response. One of the areas that was highlighted during the training needs assessment was the use of digital tools and applications. A short course with four modules was later developed in Year 2 and piloted in Year 3. There was overwhelming response to the pilot phase of the course, which was CPD accredited by three professional bodies, and which focused on digital communication tools and applications. The majority of the 402 multidisciplinary frontline workers, faculty and final year students in attendance were in agreement that the training was timely, useful and served to create new awareness in them. Participants appreciated the case studies presented, in addition to general acknowledgements of what other disciplines were doing in the digital space. With the pilot phase of implementation of the short course done, the experience and lessons learned will inform future front line worker trainings.



NEXT STEPS

Following the development of manuscripts, AFROHUN Kenya together with the faculty, will identify potential journals and submit the manuscripts for publication to showcase impact and improve visibility. AFROHUN Kenya will build on the alumni engagement strategy developed in the first half of Year 3, exploring areas of implementation that are low resource and/ or not capital intensive. This will promote the involvement of alumni in activities, enhance brand visibility, foster communities of practice and increase sustainability of programs.

AFROHUN Kenya also plans to utilize the partnering agreement template developed in Year 3, and will intentionally seek to engage partners in mutually beneficial relationships. This will further contribute to organizational and network strengthening.

Using the already developed platforms and resources, AFROHUN Kenya will continue capacity building efforts for multidisciplinary pre-service and in-service professionals.



ONE HEALTH CHAMPION





TEQUIERO ABUOM OKUMU

Job Title Veterinarian

Professional Credentials BVM. MSc. PhD

Role within the OHW-NG Project

Thematic Lead for Curriculum, course strengthening, program development & delivery

Affiliation

University of Nairobi, Faculty of Veterinary Medicine



"Knowledge is a garden; a self-sustaining system that thrives depending on how it is nurtured."



Individual's Impact

As the thematic workstream lead, Dr. Abuom successfully led and coordinated the launch of the AFROHUN Kenya One Health ECHO series, a first of its kind within the country and the region.

The first series focused on AMR and OH, ran over eight sessions from July 2021 to December 2021 and had 308 participants in attendance. This series was also accredited for Continuous Professional Development (CPD) points by the Environment Institute of Kenya (EIK), who awarded 5CPD points per session.

Dr. Abuom actively participated in the preparation and delivery of case presentations which were critical for session discussions.

KY 9: Kenya's OH Champion - Tequiero Abuom Okumu. Photo source: AFROHUN Kenya.

SUCCESS STORY





The Elite Athlete Mindset: The Discipline to Get it Done

The mood was celebratory, the ambience set, the tape ready, and the atmosphere was expectant with anticipation. This scene was reminiscent of when the elite athlete Eliud Kipchoge, from Uasin Gishu County, Kenya, broke his own marathon record by running under two hours at the 2022 Berlin Marathon. However, this was the setting of the launch of the MSc Infectious Disease and Global Health (IDGH) by Moi University, which was done on 29th September 2022, at the Eka Hotel, Eldoret, in Uasin Gishu County.

This concluded an exercise whose journey began under USAID funded One Health Workforce project support and the stewardship of AFROHUN Kenya team, previously One Health Central and Eastern Africa Kenya.

After inception in 2016, University of Nairobi and Moi University jointly developed the MSc IDGH program, that is unique in Kenya and beyond. The process involved conducting a needs assessment, benchmarking both regionally and internationally, stakeholder workshops and the Universities and Commission of University Education (CUE) approval processes.

Various literature suggests that a winning mindset, the mindset of an elite athlete, possesses certain characteristics including persistence, patience, and optimism, tightly knit in discipline. It took these and a whole lot more to overcome the challenges and obstacles that lay in the path of the MSc IDGH launch.

Over seventy invited guests who joined physically and online witnessed the celebration. The Moi University Deputy Vice Chancellor (DVC), Sir Prof. Ambrose Kiprop, representing the Vice Chancellor graced the event. Other representation recorded include USAID, OHW-NG Consortium, AFROHUN network, Government of Kenya, University of Nairobi, Food and Agriculture Organization (FAO) Kenya, World Health Organization (WHO) Kenya, COREGroup, Kenya Red Cross Society (KRCS), Institute of Primate Research (IPR) - the Smithsonian Institute, professional regulatory bodies including Public Health Officers and Technicians Council, Kenya Wildlife Services, Africa Population and Health Research Center, AFROHUN Kenya Student One Health Innovation Club members and alumni among others.

The program received three fully funded scholarships for students, courtesy of Prof. Simeon Mining of Moi University School of Medicine, through the EU funded Partnering for Health professional training in African universities (P4PHT-II) project.

The conference room burst out in celebration minutes after 5pm EAT, when the ceremonial tape revealing the curriculum mock-up was cut by the DVC, marking the official launch of the program. Participants agreed that this was a memorable event that ushered in a timely curriculum and program.

"The program has come at the right time, considering the fact that the world currently faces a lot of challenges with pandemics. I think this program is timely, very very timely," **Dr. Carol Sawe**, department of Human Nutrition, Moi University.

"It is a good and timely investment in human capital development. In the context of global interconnectedness, the epidemiological transition, marked for Africa by the double burden of communicable and non-communicable diseases, and the global devastation of the COVID-19 pandemic, Kenya, and indeed the world needs this graduate programme." **Professor Blessing Mberu,** Head of Population Dynamics and Urbanization, African Population and Health Research Center, Nairobi, Kenya.



KY 10: Group photo of the chief guest with the principal College of Health Sciences-MU, Dean, School of Public Health-MU, representatives from FVM and FHS-UoN, AFROHUN Kenya County office team, and the CoD and faculty of the department of Epidemiology and Biostatistics, SPH, MU where the MSc IDGH will be housed. Photo source: AFROHUN Kenya.

Photo Collage

Official launch of MSc Infectious disease and Global Health Academic Program. Photos source: AFROHUN Kenya.



















RWANDA



Dashboard Overview of Year 3



MFMRFR UNIVERSITIES



MEMBER INSTITUTIONS



STUDENTS ONE **HEALTH INNOVATIONS** CLUBS



ACTIVITIES PLANNED FOR YEAR 3



ACTIVITIES





INDICATOR 1.2 INDIVIDUALS TRAINED



INDICATOR 1.4 PRODUCTS

DEVELOPED









INDICATOR 3.2 NEW PARTNERSHIPS DEVELOPED



ESTABLISHED ONE HEALTH FIELD SITES



HIGHLIGHTS

- Ten faculty from University of Rwanda (UR) and University of Global Health Equity (UGHE) participated in a cross country grant writing training (May -June 2022).
- Trained 40 Student One Health Innovations Club (SOHIC) members during the One Health (OH) Field Experiential Learning (FEL) to identify existing OH challenges (June 2022).
- → Held a mini conference after the OH FEL that attracted more than 100 university students and faculty (August 2022).
- Organized a national Global Health Case Competition (GHCC) as a means to train students on critical thinking, disease epidemiology, and other disease dynamics (February 2022).

ACTIVITIES



OBJECTIVE I

To strengthen capacity for grant writing, ten faculty from UR and UGHE and members from four AFROHUN member countries (Kenya, Ethiopia, Senegal and Rwanda) participated in a training with technical support from the Global and local expert teams (RW Activity 1.2.4). The training aimed at improving the grant writing skills of the team and provided an opportunity to create cross country writing teams that would collaborate and develop joint grant proposals.

Using a multidisciplinary approach, 40 students participated in FEL in Kayonza District. This site was chosen because it is one of the established demonstration site, and is an arid place with severe water shortage. The challenges identified included tsetse fly infestation, and rift valley fever as well as lack of protective gear for the miners in the area. Students identified and reported on health issues, prioritized the challenges together with community members and developed interventions using locally available resources (RW Activity I.4.3). Interventions included designing information posters and disseminating this information at the district in collaboration with the health promotion and disease prevention officer. The participation of the district official in this activity provided an opportunity for partnership between the universities and local government. Reports and posters were developed by students and faculty mentors as a result of this activity.



RW 1: Students constructing shelters for child headed families in the community. Photo Source: AFROHUN Rwanda.



RW 2: Students sensitizing cattle farmers about Rift Valley Fever during the field Experiential learning. Photo Source: AFROHUN Rwanda.



RW 3: Students taking part in vaccinating animals against Rift Valley Fever. Photo Source: AFROHUN Rwanda.

A one-day mini conference (RW Activity I.4.4) following a field experiential learning activity was held in August 2022 attracting over 100 university students and faculty. Students shared their experiences, OH cases scenarios observed and suggested interventions. In addition, panel discussions were organized under three themes: "Advancing the OH Response to Antimicrobial Resistance (AMR)"; "Zoonotic Disease Surveillance and Control using the OH Approach", and "The Role of pre-service (students) and in-service workforce (employed) in OH". The discussions were an additional opportunity to raise student awareness about OH challenges, the need for multidisciplinary and collaborative effort and the capacity needed to effectively respond to OH challenges.



RW 4: Students' community participating at the mini conference. Photo Source: AFROHUN Rwanda.



RW 5: Panelists at the mini conference. Photo Source: AFROHUN Rwanda.

A national GHCC was organized by AFROHUN Rwanda (RW Activity 1.4.5) and used to train students on critical thinking, disease epidemiology, and other disease dynamics. AFROHUN Rwanda assigned university teams to compete among themselves through debates and detemine the winning team at each University campus. The winning team from each campus then competed at the national level to determine the overall winner. Final competitions were presided over by a team of adjudicators from the Ministry of Health and from the National Drug and Food Authority.

AFROHUN Rwanda continued to support national efforts in the fight against COVID-19 in the community (RW Activity 1.5.4) and provided an opportunity for students to practice Risk Communication and Community Engagement (RCCE) regarding zoonotic threats. Six teams of SOHIC members engaged communities around their respective campuses for a period of two days, equipping them with knowledge about the pandemic, and how to avoid infection and spread of the virus. Social distancing, personal hygiene and behavior change were among the topics discussed with community members. One of the major challenges the students faced in their campaign was countering the belief among less educated community members that the pandemic is a disease of the affluent only, or that youth have total immunity to the disease. An estimated 1,800 people were reached through these community engagement activities.



RW 6: SOHIC members taking part in COVID-19 awareness in Huye 2 community. Photo Source: AFROHUN Rwanda.



OBJECTIVE 2

AFROHUN Rwanda supported the regulatory councils, namely, the Medical and Dental Council, National Council of Nurses and Midwives, Allied Health Professional Council, National Pharmacy Council and the Rwanda Council of Veterinary Doctors, to strengthen Continuous Professional Development (CPD) Curricula (RW Activity 2.3.4) through identifying and documenting gaps in the curricula on OH competencies. A total of 19 participants were trained in OH competencies in March 2022. A post training survey showed that of all the modules taught, principles and concepts of OH was the most prioritized by the participants. AFROHUN was requested by the regulatory councils to apply for accreditation as a CPD provider, thus opening the door to strengthening and

concretizing partnerships, and potentially creating an opportunity for revenue generation for AFROHUN Rwanda in future.

AFROHUN Rwanda organized a oneday workshop (RW Activity 2.1.7) in Kigali for UR alumni to share a proposed alumni engagement framework, update the SOHIC alumni database, initiate discussions around creating an alumni association for continuity, and discuss mentorship opportunities for continuing SOHIC members. The 20 participants that attended held discussions around establishment and functionality of a SOHIC Alumni association. A caretaker management committee was elected to spearhead establishment of this association, plan alumni meetings and agree mentorship modalities.



OBJECTIVE 3

AFROHUN Rwanda management team and the Dean of UR participated in a stakeholder meeting organized by Ministry of Health (May 2022). The meeting was aimed at reviewing the Prime Minister's instructions on establishing OH Multisectoral Coordination Mechanism and determining its mission, organization and functioning. The platform had not been functional for a long time due to lack of a legal instrument establishing it. This meeting was therefore a stepping stone for operationalization of the platform.

Additionally, AFROHUN Rwanda developed partnership with Kitabi Integrated Regional Polytechnic Center, a regional center of the Rwanda Polytechnic which offers courses that are important to OH e.g. Forest and Environment Resource Management and Tourism. Through the existing AFROHUN mechanism of setting up SOHICs, a OH student club was established in the institution that is aimed at building capacity of the future OH workforce. Under this arrangement, registered SOHIC members benefit from OH field experiential learnings, OH trainings, outreach activities and wider networking facilities. Plans to strengthen this collaboration in other fields of mutual interest as may be identified are underway.



LESSONS LEARNED

The Value of Partnerships in Field Experiential Learning Activities

AFROHUN Rwanda's implementation of FEL and involvement of district personnel have demonstrated the added value of partnerships with government officials. AFROHUN Rwanda involved district health officers in mobilizing the community, facilitating interactions between students and farmers, or providing information and data on prevailing animal and human diseases among other services. The district staff's involvement and facilitation of student activities in the field made the community entry and learning process easy and more productive. In addition,

intentional involvement of the district personnel provided a link between decision-makers at district level and the students, which helped students advance their recommendations.

Partnerships for CPD development Enhances Visibility

The second lesson learnt in partnership was our involvement with Professional Councils CPD programs, through which AFROHUN Rwanda hopes to gain a new status as CPD provider. This is a direct way for AFROHUN to advance the OH agenda and to generate some revenue for some of its programs.



NEXT STEPS

AFROHUN Rwanda will actively continue to engage with the professional councils to collaboratively develop a robust CPD training program that includes OH competencies. We will also develop a training of trainers (TOT) program for in-service professionals to strengthen the councils training capacity moving forward.





ONE HEALTH CHAMPION





DR EMMANUEL IRIMASO

Job Title

Head of Department Veterinary Medicine

Professional Credentials

Veterinarian

Role within the OHW-NG Project

SOHIC mentor and Activity Lead for One Health FEL and Infectious Disease Management activities.

Affiliation

University of Rwanda



"Being healthy and safe requires every discipline's contribution. I like the One Health approach because it is everyone's call to address complex problems"



Individual's Impact

Over the years, Dr Irimaso has shown great passion for OH and keen interest in transmitting the same passion to SOHICs through OH related activities. He regularly initiates and takes lead in students' OH mentorship. Some specific examples include coaching the winner of the 2022 edition of the Country Global Health Case Competition. He regularly organizes and facilitates students OH Field Experiential Learning at demonstration sites, leads

the development of OH case studies and facilitates students to analyze such case scenarios using the OH approach. Dr Irimaso has also been trained in and is conversant with CEB. All the above examples and much more make him an all-round OH Champion, an important attribute in the development of Rwandan OHW-NG professionals.

RW 7: Rwanda's OH Champion - Emmanuel Irimaso. Photo source: AFROHUN Rwanda.

SUCCESS STORY





Student's Experience in the Demonstration Site Field Experiential Learning

Sandra Makaka, a third-year student of Environmental Studies at the UR was among the lucky students who joined the Year 3 Field Experiential Learning (FEL). The program offers multidisciplinary students the chance to uncover health issues in a specific region in Rwanda. This year, the activity took place in Rwinkwavu where students learned about waterborne diseases and human-animal interaction through water sources, and interacted with the general community, farmers, and their animals. The site is also close to the Akagera National Park making it an excellent study point for ecosystem and wildlife.

As an Environmental Science student,
Sandra learnt how to apply OH concepts in
her area of practice. She identified health
issues in collaboration with the community
and fellow students as part of a learning
process. The first lesson Sandra learned
from the field experience was that
cooperation and teamwork yielded
the best community health solutions.
Sandra improved her problemsolving skills and understood to
importance of communicating with
the community.

"Participation in the demo site activity improved my appreciation of the One Health concept through interaction with multidisciplinary colleagues. I was also able to actively engage in disease outbreak responses," Sandra, an Environmental Science student at University of Rwanda.

Together with her fellow students, Ms. Sandra raised awareness about the danger of waterborne diseases, encouraging the community to find a more viable alternative source of drinking water. Additionally, Sandra had the opportunity to immunize cattle and goats against Rift Valley Fever and, educate the community about the prevention and control of the disease.

Additionally, Sandra and her fellow students also had an opportunity to forge strong friendship with farmers and provided them with tsetse fly traps to help fight the flies that are vectors to Trypanosomiasis, a chronic disease among the farmers' cattle.

"Getting rid of tsetse fly will increase our milk production and improve the health of our cows. Although not all farmers got traps, we are happy with the students' voluntary initiative to provide us with traps." Jackline, a farmer in Kagyeyo area bordering Akagera National Park



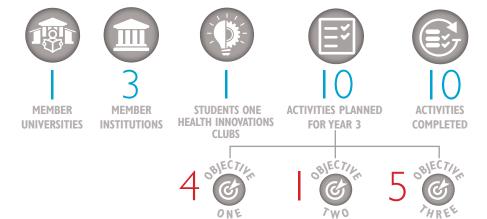
RW 8: Students setting up and demonstrating the functioning of tsetse traps. These traps were donated by students to farmers. Photo Source: AFROHUN Rwanda.



SENEGAL



Dashboard Overview of Year 3











INDICATOR G2
GENDER ACTIVITIES



HIGHLIGHTS

- ⇒ Trained 66 Student One Health Innovations Club (SOHIC) members from 6 public Universities on Risk Communication, thereby enhancing the effectiveness of club activities, as well as their professional knowledge (March 2022).
- → Provided an online training to I 2 small grants recipients and 6 scholarship beneficiaries on multidisciplinary research, scientific writing and policy-brief & fact-sheet development (April 2022).
- Identified Field Experiential Learning (FEL) sites following two experience-sharing meetings held with support of the Global Consortium (Rx OH Program) and

- AFROHUN Kenya (July 2022).
- → Conducted an alumni tracking activity that attracted 88 alumni respondents, of which 75 (85%) indicated that the trainings offered were beneficial (September 2022).
- Conducted a cross country grant writing training together with AFROHUN Ethiopia, Kenya, and Rwanda that benefited 17 faculty from Senegal (January - June 2022).
- Submitted a concept to the World Health Organization/ Research and Training in Tropical Diseases (WHO/TDR) program for funding (July 2022).

ACTIVITIES



OBJECTIVE I

Training and research are a high priority for AFROHUN Senegal. In Year 3, AFROHUN Senegal awarded six scholarships to four Masters and two PhD students. In addition, two small grants were awarded to two multidisciplinary teams comprised of 12 recipients, to conduct research using a collaborative approach. To enable the small grants and scholarship recipients become more efficient, three trainings were organized that focused on methods for multidisciplinary research, scientific writing and policy-brief and fact-sheet

development.

AFROHUN Senegal, with support of the Global Consortium (Rx OH Program) and AFROHUN Kenya organized two experience-sharing meetings, during which the Rx OH and the AFROHUN Kenya teams oriented Senegal on the key steps of the experiential learning training, objectives and activities, as well as tips for success. AFROHUN Senegal was able to identify sites for experiential learning and field visits were conducted in July 2022.



SN 1: Identification of field experiential learning sites: Eco guard explaining the issue of marine erosion at Park National de la Langue de Barbarie. Photo Source: AFROHUN Senegal.



SN 2: Identification of field experiential learning sites: Actions initiated around the Gueumbeul wildlife reserve against plastic pollution. Photo Source: AFROHUN Senegal.



SN 3: Identification of field experiential learning sites: Meeting with the women community leader in a village close to the Gueumbeul wildlife reserve. Photo Source: AFROHUN Senegal.

SOHICs contribute to preparing students to better facilitate implementation of One Health (OH) activities that impact their communities. In Year 3, AFROHUN Senegal, in collaboration with Breakthrough Action (BA) and Service National de l'Education pour la Santé (SNEIPS), trained 66 students from six Senegalese public universities on risk Communication. This training was conducted online to allow participants from multiple universities to participate. This training focused on fundamentals of risk communication, internal communication, transboundary communication, importance of gender, culture and ethics in communication, rumor management, and principles for emergency intervention planification during outbreaks.



OBJECTIVE 2

Since 2016, AFROHUN Senegal has been conducting trainings, providing scholarships and small grants to various beneficiaries. In order to assess the impact over the years, alumni tracking was conducted in Year 3. An online survey was conducted among all the alumni. A total of 88 alumni responded to the questionnaire, among whom 33% of the respondents were female. Overall, 75 (85%) indicated that the trainings offered by AFROHUN were helpful in their career. Development of Knowledge Management (KM) products from these activities will be finalized in Year 4.



OBJECTIVE 3

AFROHUN Senegal, in collaboration with other country chapters (Ethiopia, Kenya and Rwanda) organized cross-country grant writing training which involved 7 faculty. Among those who benefited from the training, six faculty were involved in a bi-modal workshop where a concept note was developed and submitted for funding.

AFROHUN Senegal also engaged chapter members in writing a paper for publication. The paper was developed from results of the Continuous Professional Development (CPD) conducted in Year 2 (SN activity I I7) and is under review at Elsevier Journal (Science in One Health).



LESSONS LEARNED

Online training for SOHICs on risk communication (SN Activity 127) and grant writing workshops (SN Activity 323) allowed AFROHUN Senegal to reach a large audience from different disciplines and locations/countries.

The trainings covered;

- i) fundamentals of grants writing
- ii) context and justification of a grant
- iii) grant objectives and activities, and
- iv) proposal finalization and submission.



NEXT STEPS

AFROHUN Senegal will continue to design and implement FEL activities and refine priority research areas in collaboration with the global consortium.





ONE HEALTH CHAMPION





FATIMATA NIANG-DIOP

lob Title

Lecturer of Biodiversity

Professional Credentials

Doctorate in Environmental Sciences

Role within the OHW-NG Project

Thematic Lead: Scholarships, Grant awards & Research

Affiliation

Institute of Environmental Sciences, Faculty of Sciences and Technics, Cheikh Anta Diop University of Dakar, Senegal.

"I am optimistic that the One Health approach will continue to increase but, my biggest concern is that most projects are shortterm, while research questions require long-term efforts to solve them."

"Ecosystems have degraded dramatically and [this trend] is likely to continue. We need to understand what changes are occurring and how those influence health risks. So, my hope is to build leadership and creating incentives and resources to continue fostering the development of research in ecosystem health."



Individual's Impact

Dr. Fatimata Niang-Diop is a lecturer at the Institute of Environmental Sciences focusing mainly on biodiversity and is very active in all AFROHUN related activities. She was a focal point during the One Health Workforce project and is a Thematic Lead under the One Health Workforce-Next Generation project. She puts substantial effort into helping students and early career researchers envision research activities, encouraging them to operationalize collaboration and

multidisciplinary research. Dr. Niang-Diop is also working with AFROHUN Senegal to obtain additional resources to sustain research activities. Her involvement is very valuable at national level where she leads small awards and scholarships activities as well as at regional level (AFROHUN network) where she is the co-chair of the Research Technical Working Group and provides strategic direction and technical advice.

SN 4: Senegal's OH Champion - Fatimata Niang-Diop. Photo Source: AFROHUN Senegal.

SUCCESS STORY



Strengthening capacity of Senegalese early career researchers in One Health research through small grants program

AFROHUN Senegal provides small grants to early career teams of researchers on annual basis. This support framework is a boon to young researchers given the limited financial resources for research in Senegal. During the grant program, recipients under go trainings on multidisciplinary research methodology and scientific writing to strengthen their skills in OH approach and to allow the research teams successfully complete their research projects. Mr. Mouhamadou Moustapha SOW was one of the OHW-NG project small grants program beneficiaries under the second cohort. Currently, this young researcher, is a PhD student who is applying the skills he gained from the grants program to carryout his duties in a Antimicrobial resistance (AMR) project under the National Institute of Agricultural Research.

"Small grants were the trigger for an awareness of the role that we must play as students wishing to continue in research in order to provide solutions to the problems of zoonoses and AMR. Currently I have started my PhD and intend to capitalize the skills received during the research trainings from AFROHUN Senegal to carry out my work," declared Mouhamadou Moustapha SOW, PhD student at Université Cheikh Anta Diop (UCAD).

Mr. Sow and his research team worked on the research topic 'Analysis of the risk of dissemination of Avian Flu in Senegal'. He appreciated the opportunity which allowed him to participate in conducting studies that address complex public health threats using a OH approach and to collaborate with different disciplines.

"This initiative of AFROHUN Senegal is an opportunity for us young researchers, which allows us to work on OH related public health issues within multidisciplinary research teams in order to propose sustainable solutions," Mouhamadou Moustapha SOW, PhD student at UCAD.



SN 5: Mr. Sow conducting a Knowledge, Attitudes and Practices survey under the 2021 small grants program. Photo Source: AFROHUN Senegal.

Following the successful completion of the research taken under the small grant award, Mr. Sow and team had a chance to share their project results during the 2022 national OH platform Research and Development workshop that focused on zoonotic diseases and AMR. The team also developed a draft article that is awaiting submission to a peer reviewed journal.

"My team and I were able to produce an article, which is not yet published; but we hope it will be the case soon," Mouhamadou Moustapha SOW, PhD student at UCAD.

These small grants program impacted the career pathway of Mr. Sow and seven other early career researchers by creating collaboration opportunities for them



SN 6: Boabab trees silhoutted against the setting sun, Senegal. Photo Source: https://www.radiopopolare.it/il-baobab-albero-simbolo-del-senegal/

TANZANIA



Dashboard Overview of Year 3





INDICATOR 1.4 **PRODUCTS DEVELOPED**



NEW PARTNERSHIPS DEVELOPED

HIGHLIGHTS

- ⇒ Nineteen (19) participants from colleges under the Ministry of Health and the National Council for Technical Education (NACTE) the regulatory body for curricula, developed the One Health (OH) integrated curricula for three diploma and certificate levels (November 2021).
- ⇒ Built capacity of 28 tutors from 14 diploma and certificate level institutions on how to deliver OH integrated curricula (February 2022).
- → Integrated OH content into National Technical Awards (NTA) levels 4, 5 and 6 curricula of Clinical Medicine, Nursing and Midwifery; Environmental Health and Medical Laboratory in collaboration with the Ministry of Health (MOH) in order to

facilitate approval by the National Council for Technical Education (NACTE) (August 2022).

INDIVIDUALS TRAINED

- Trained 20 professionals in both public and private institutions using a OH Continuous Professional Development (CPD) course curriculum jointly developed by the AFROHUN Tanzania and the professional councils. This was conducted as a pilot to kick start future CPD trainings under accredited universities as providers (March 2022).
- Supported 9 professionals to attended a fee-based OH CPD course which was organized by Muhimbili Universitiy of Health and Allied Sciences (MUHAS). (September 2022).

ACTIVITIES



OBJECTIVE I

AFROHUN Tanzania held a workshop in Bagamoyo to integrate OH content into the diploma and certificate training programs curricula (Activity TZ 1.1.6). This activity focused on newly identified diploma programs that were left out during the initial phase of content integration. OH content was incorporated into the diploma and certificate level curricula for Clinical Dentistry programs as well as the revised format of the Environmental Health and Medical Laboratory Certificate and Diploma curricula. The five-day workshop involved 19 participants; eight from diploma and certificate colleges, two participants from MOH, one participant from NACTE, three facilitators from MUHAS and two from Sokoine University of Agriculture (SUA), one Activity Lead, and two administrators. Participants were tasked with integrating the OH content into their curricula. The product of this activity was a draft curricula at the diploma and certificate levels for the three programs. The drafts were then submitted to MOH for validation and subsequent

approval (November 2021).

In another activity, 28 diploma and certificate level tutors from 14 colleges were trained on OH approaches using OH materials which had been incorporated in the diploma and certificate level curricula. (Activity TZ 1.3.3). The four-day training of trainers (TOT) workshop was organized in Dodoma in December 2021 and two participants (one male and one female) were invited from each of the diploma and certificate training institutions to attend the workshop. The training was facilitated by seven experts from MUHAS and SUA. This activity allowed the 28 tutors to demonstrate their capacity in delivery of OH integrated curricula to students in their respective institutions. Since 2020, we have trained 60 (or about 86%) of existing colleges. In the near future, we aim at covering 100% of the colleges with at least two faculty/staff trained. Teaching OH in these colleges is expected to be routine when the integrated curriculum is approved and rolled out nationally.



TZ 1: Participants pose for a group photo during the training on Developing capacity of faculty to deliver OH integrated curricula. Photo Source: AFROHUN Tanzania.



TZ 2: Workshop participants listening to a presentation. Photo Source: AFROHUN Tanzania.

Management and Development for Health (MDH) provided support for the integration of OH content into NTA levels 4, 5 and 6 curricula of Clinical Medicine, Nursing and Midwifery; Environmental Health and Medical Laboratory in collaboration with the MOH in order to facilitate approval by NACTE (August 2022). This activity was attended by 15 participants from the MOH and six facilitators. These curricula will be validated by NACTE and approved by the MOH for national rollout.

AFROHUN Tanzania made a showcase presentation about its flagship activity on Student Service and Learning Model (SSLM) to create awareness. The model is designed to engage students in mass dog vaccination campaigns in Tanzania to help meet the Global Rabies Elimination Goal by 2030. This model is expected to support rabies elimination activities in Tanzania.



OBJECTIVE 2

AFROHUN Tanzania piloted the OH training CPD course among in-service personnel at district level and members of professional councils (Activity TZ 2.3.4). The workshop attracted a total of 20 participants and covered OH competencies that included: leadership, emerging and re-emerging pandemic threats, Antimicrobial resistance (AMR), overview of OH concepts and practices, systems thinking and OH, team building and conflict management and resolution in OH, risk assessment, communication and management, disaster preparedness and response, structure of the OH coordination desk and role of stakeholders and field visits. It is expected to run on a yearly basis by the two partner universities which have been accredited to run it for the next ten years. Furthermore, the course will constitute an income generating aspect for the accredited universities. This activity will have a significant impact when more professionals enroll and obtain credit points for their licensure.

Following the successful pilot, AFROHUN Tanzania with support from AFROHUN

secretariat conducted a fee based OH CPD course. The five-day stand-alone short course which was advertised online and directly to professional councils for one month, covered important OH competencies, including leadership skills, emerging and re-emerging infectious diseases and AMR among others. Organized by MUHAS, it attracted nine multidisciplinary in-service professionals. The course enabled the professionals to gain CPD credits for licensure. AFROHUN Tanzania plans to use these professionals as ambassadors for future calls for the course. Additionally, two participants from Rwanda Council of Veterinary Doctors and faculty from University of Rwanda also attended the course to observe and learn from members of professional councils in Tanzania about the process of involving councils in establishing OH CPD courses to enable them to run a similar course in Rwanda. Therefore, this course will be used as a model and the lessons learned from the process shall inform future CPD courses including its replication in other AFROHUN countries starting with Rwanda.



OBJECTIVE 3

Thirty AFROHUN Tanzania stakeholders engaged in quarterly performance review meetings. The reviews evaluated performance during year 3 including flagship activities, the thematic workstream approach and adherence to the activity implementation schedule. The same stakeholders were also engaged during the Year 4 work planning meetings that supported the development of the AFROHUN Tanzania Year 4 work plan

The Country Manager attended various stakeholder meetings during Year 3 (Activity TZ 3.2.3). The monthly GHSA partner and other national level meetings included the following:

- ⇒ Refinement of the OH Strategic Plan for 2021-2026 for Tanzania mainland. This meeting was attended by more than 30 participants who developed a plan currently awaiting approval.
- National validation meeting to align the National OH Strategy with that of the East African Community (November 2021).
- Launch of the Brucella Study for Tanzania and Rwanda (BRU-STAR), where the two countries will collaborate in studies to estimate the prevalence and map the distribution and molecular epidemiology of Brucella strains circulating in humans and animals in Tanzania and Rwanda (December 2021).

- → An expert meeting to pilot the OH Monitoring Tool (OHMT) in Tanzania to assess progress made so far. Meeting attendees conducted a preliminary country assessment and collected information from relevant sectors and disciplines at all levels of OH implementation.
- → Meeting with the technical working group (TWG) on International Health Regulations (IHR) to assess progress in its implementation.
- ➡ Global Health Security Agenda (GHSA) partner meetings where updates on project activities and lessons learned were shared. Quarterly status reports/minutes that highlight partners' activities success stories and challenges were developed.

In addition, AFROHUN Tanzania was officially registered as a Non-Governmental Organization (NGO) in Tanzania in February 2022 for a ten-year period. This official registration is an opportunity for AFROHUN Tanzania to mobilize resources as part of its sustainability strategy to continue OH work in the region. This milestone paves the way for future OH activities in Tanzania, and the AFROHUN sustainability sub-committee will be engaged to assist with the formulation of strategies for sustainability



LESSONS LEARNED

Mobilizing Students to implement Rabies Vaccination Campaigns; the Tanzania Experience

In Tanzania, there are inadequate human resources in the districts to vaccinate animals against life threatening diseases such as Rabies. However, students from universities and other training colleges are well trained in different disciplines and constitute a ready pool of individuals that can be called upon for disease control/ eradication efforts in communities. Students from these institutions can be mobilized to participate in implementing such campaigns at a low cost compared to utilizing regular employees. To leverage this student resource, AFROHUN Tanzania utilized its recognition by the Prime Minister's Office (PMO) which houses the One Health Coordination Desk under the Department of Disaster Management to support students' assistance during rabies vaccination campaigns. While providing an essential service to communities, this strategy also provided invaluable field experience for students in OH competencies. Challenges encountered included inadequate financial resources to support student participation and difficulties in procuring rabies vaccines for the campaigns. However, collaboration with Food and Agricultural Organization (FAO) to procure vaccines was a helpful action. We learned that to continuously leverage the low-cost student resource in such activities, funding support is required for greater impact. To address this need, negotiations are ongoing with the

President's Office Regional Administration and Local government (PO-RALG) and the Ministry of Livestock and Fisheries (MOLF) to provide financial support to students as well as transportation to the field on a regular basis through internally generated funds.

Implementation of the first revenue generating OH CPD course

AFROHUN Tanzania successfully implemented the first revenue generating OH CPD course at MUHAS (September 2022) which was designed for members of professional councils and in-service personnel. This was a result of efforts put into involving Tanzanian professional councils in the development and first pilot of the OH CPD training held in March 2022. MUHAS and SUA have been accredited to run this course and award certificates while the councils will be offering the required credit points for licensure after attending the course. While over 30 individuals applied to the course, only nine attended the training. A significant number of participants could not attend the training due to short notice and the fact that many government departments did not have a budget line for supporting participation. The lesson learned is the need to run advertisements for the course early enough to provide adequate time for applicants to plan to attend, and ensure a wider reach including government and non-governmental organizations as well as various online avenues. AFROHUN Tanzania also plans to engage the pioneer participants as ambassadors for future calls.





NEXT STEPS

AFROHUN Tanzania will continue to build on collaborative efforts with government and other stakeholders to build an effective OH workforce in Tanzania and to support student participation in rabies vaccination activities. In Year 4, we plan to finalize approval of the diploma and certificate curricula and roll out nationally.

A TOT for the same colleges will be conducted to enhance their ability to

deliver the integrated curricula when the approved is introduced. The fee based OH CPD course will continue to be held on a yearly basis alternating between MUHAS and SUA. Enrollment and course planning processes will be implemented in a timely manner utilizing alumni as course ambassadors; efforts to lobby and collaborate with ministries and NGOs will be emphasized.



ONE HEALTH CHAMPION





SALMA ABDI MAHMOUD

Job Title

Lecturer, SOHIC Coordinator

Professional Credentials

MD, Mmed, PhD

Role within the OHW-NG Project

SOHIC Coordinator at State University of Zanzibar (SUZA)

Affiliation

School of Health and Medical Sciences, The State University of Zanzibar

"To have an economically strong nation, we need intensive investment in the One Health workforce for productivity, critical thinking, and sustainability. Universities are the ideal place for such investment."



Individual's Impact

As an active coordinator of SOHIC at the School of Health and Medical Sciences, Dr. Salma has sensitized students to join the OH Club in their studentship. Through club mobilization, Dr. Salma together with SOHIC members have conducted outreach programs to support

local communities in understanding the OH approach to solving complex health problems. At the university level, she hopes to build capacity and sensitize graduates as the future OH workforce for a healthy nation.

TZ 4: Tanzania's OH Champion - Dr. Salma Abdi Mahmoud. Photo source: AFROHUN Tanzania.

SUCCESS STORY





Fee Based OH Continuing Professional Development (CPD) Course in Tanzania: Participant's Experience

Dr. Onesmo Peter Mandike is a Veterinary Officer working in the Department of Agriculture, Livestock and Fisheries at Arusha City Council in Tanzania. To continue practicing in 2022, Dr. Mandike needed to renew his practice license by gaining Continuing Professional Development (CPD) credits. His search for an opportunity to renew his practicing license was futile until he came across AFROHUN's September 2022 advert inviting applications for a OH CPD short course for in-service professionals.

The OH CPD course is a five day stand-alone short course on OH which enables in-service professionals to gain CPD credits for licensure. In 2021, AFROHUN Tanzania in collaboration with five professional councils, developed the course with support from USAID. The course covers important OH competencies, including leadership skills, emerging and re-emerging infectious diseases and AMR among others.

Filled with excitement, Dr. Mandike applied for the course and was recruited. Dr. Mandike, together with eight professionals from human health, animal health, forestry and environment disciplines, gained knowledge on OH through the CPD short course. When asked if he had heard about OH.

Dr. Mandike said, "The first time I heard about One Health was during the course".

When asked what he would do with the knowledge and skills gained during the course he said, he would encourage his peers to join future courses so that the OH workforce in Tanzania is strengthened.

With gladness, Dr. Mandike received a certificate for course completion which he can use to attain the required credits from the Veterinary Council. Dr. Mandike finally made the following statement regarding the usefulness of the course.

"The One Health CPD course is a very useful program, not only for improving participants' knowledge and skills but also for preparing a strong One Health workforce for Tanzania as a country."

Onesmo Peter Mandike

When Dr. Mandike returns to his home institution in Arusha, he will submit this certificate to the Veterinary Council of Tanzania (VCT) to receive 15 CPD credits which he accrued from this course. However, he still needs another 15 CPD credits to obtain his full license to practice for the year 2022/2023 cycle. When he was asked how he would obtain the rest of the 15 credit points he mentioned that he was planning to attend the Tanzania Veterinary Association Scientific Conference in November 2022 which also offers 15 CPD credits. So, Dr. Mandike is convinced that he will complete his credit points for this year.



UGANDA



Dashboard Overview of Year 3



MEMBER UNIVERSITIES



MEMBER



STUDENTS ONE HEALTH **INNOVATIONS CLUBS**



ACTIVITIES PLANNED

FOR YEAR 3



ACTIVITIES COMPLETED



INDICATOR 1.2 INDIVIDUALS TRAINED



INDICATOR 1.4 **PRODUCTS DEVELOPED**





















ESTABLISHED ONE HEALTH FIELD SITES



INDICATOR 2.2 UNIVERSITIES USING COMPETENCY-BASED ASSESSMENTS



NEW PARTNERSHIPS DEVELOPED



HIGHLIGHTS

- Trained faculty and community/field supervisors on mentoring/overseeing undergraduate students during community placements. (November - December 2021)
- Trained staff from districts of Buikwe, Luwero and Kayunga on One Health (OH) concepts, Risk Communication, Outbreak Investigation and Emergency Response and developed annual OH workplans for funding by partners and the government of Uganda. (July - August 2022)
- ⇒ AFROHUN Uganda built capacity in detection, prevention and control of infectious disease outbreaks of zoonotic nature for 70 multidisciplinary students. (April - May 2022)
- → Conducted placement of 31 students in three different demo sites in Kampala and Lira for two weeks to identify community challenges and implement cost effective OH

- interventions. (May June 2022)
- Trained six graduate fellows in Infectious Disease Management, and hosted them at government and non government agencies. (May - August 2022)
- Developed and shared two manuscripts and OH practitioner strategy for review among stakeholders. (November 2021 - September 2022)
- ⇒ AFROHUN Uganda developed and submitted two grant proposals to World Health Organization Reasearch & Training in Tropical Diseases (WHO-TDR) and the National Institute of Health (NIH). (September 2021 - August 2022)
- Developed partnerships and shared best practices with partners during GHSA meetings, workshops and the USAID mission in Uganda. (October 2021 - September 2022)

ACTIVITIES



OBJECTIVE I

Every year, over 500 undergraduate students from the faculty of Medicine, laboratory technologists, pharmacists, nurses, medical doctors conduct outreaches via community placements to address challenges such as malaria, and diarrhea among others.



UG 1: MakSOHIC with community members posing for a photo after sensitizing them on AMR. Photo Source: AFROHUN Uganda.



UG 2: FEL members teaching food venders on the importance of good sanitation and the dangers of too much exposure to heat in Kalerwe/Katanga. Photo Source: AFROHUN Uganda.

In Year 3, AFROHUN Uganda conducted a training (UG Activity I.3.3) for a multi-disciplinary team of 45 community/field supervisors and faculty mentors (24 female and 21 male). The training equipped mentors with knowledge and skills to effectively supervise undergraduate students during their community placements. The training covered: OH concept, infectious diseases, investigation and response, gender, culture, ethics and community engagement. Participants were drawn from diverse disciplines, including: medicine, agriculture, education, and public/environment health, whereas faculty supervisors were drawn from Mbarara University of Science and Technology (MUST).



UG 3: Assoc. Prof Joseph Ngonzi giving remarks during the field supervisors training in Bushenyi district. Photo Source: AFROHUN Uganda.

To contribute to the decentralization of OH at sub national levels and meet the Joint External Evaluation (JEE) commitments made regarding having this concept decentralized in 50 districts by 2024, AFROHUN Uganda trained 45 professionals from three districts (15 in each district) on OH (UG Activity 1.3.4). Participants were drawn from the District Health Office, District Production office, District Veterinary office, District Education office, Community Development Office, Chief Executive Office, Political Offices such as (Resident District Commissioner's Office). The training covered OH concepts, risk communication, outbreak investigation and emergency response. Participants developed annual OH work plans after the training to guide future implementation.

To further develop the Ugandan workforce capacity in management of infectious diseases, AFROHUN Uganda organized a multidiciplinary training on Infectious Disease Management for participants from both public and private institutions (Makerere University, Lira University and Uganda Christian University (UCU)). The selection process aimed to include participants from various disciplines including animal human health, environmental, information technology

and humanities. Out of the 70 participants, 31 applied the knowledge and skills gained by supporting community interventions such as waste management at abattoirs in Kampala and Wakiso districts (UG Activity 1.4.2).



UG 4: The manager of the Kalerwe abattoir briefing FEL students on how the activities are carried out around the abattoir. Photo Source: AFROHUN Uganda.



UG 5: FEL members teach the abattoir workers on advantages and disadvantages of keeping their workstation clean. Photo Source: AFROHUN Uganda.

Six graduate fellows were placed at different host sites for two months including National One Health Platform, Pathogen Economy Bureau - State House Uganda, Ministry of Health (MoH) - Health promotion and Education department, Infectious Disease Institute (UG Activity 1.4.4). During their placement, fellows participated in OH research activities, field activities, outbreak response activities, and writing various knowledge management products as required by the host institutions. This supported skills improvement efforts and strengthened AFROHUN's partnership with the host institutions.



OBJECTIVE 2

Following the organization's emphasis on increasing visibility and contribution to the OH knowledge base, AFROHUN Uganda developed two manuscripts (UG Activity 2.1.7) which have been submitted to peer reviewed journals and are awaiting publication. These are:

- □ "Surveillance of COVID-19 Prevention and Standard Operating Procedures for Re-Opening Schools in Uganda: A Qualitative Survey" submitted to Frontiers in Public Health, section Occupational Health.
- ⇒ "Safety, Knowledge, Attitudes, and Adherence relating to COVID-19 and its prevention measures in High-risk Districts of Uganda".

Our team drafted a strategy defining a OH practitioner which is awaiting validation and roll out to the relevant sectors (UG Activity 2.3.4). The strategy stipulates the roles and responsibilities of a OH practitioner, the competencies and skills required to execute their roles and will be utilized by all OH sector players to plan capacity building interventions and identify areas of collaboration. This work was done in consultation with stakeholders including academia (Makerere University, MUST), Africa Field Epidemiology Network, MoH, Ministry of Agriculture, Animal Industry and Fisheries, National One Health Platform among others.



OBJECTIVE 3

Quarterly performance reviews were conducted to share progress, challenges and identify improvement actions. The reviews were conducted with the participation of the Deans and faculty involved with AFROHUN Uganda. It was an opportunity for the country team to course correct and share achievements. The team also participated in the Year 4 workplan development.

Lastly, two grant proposals were developed, one for WHO-TDR (jointly with University of Nairobi, Daktari East Africa and Makerere University) and NIH planning grant for capacity building in Infectious Diseases (jointly with UC Davis, MUST and Makerere University) between September 2021 - August 2022. The proposal development process enabled the team appreciate the value of joint and multidisciplinary effort in grant writing. The grant proposals were submitted awaiting feedback from the respective donor institutions.



LESSONS LEARNED

Transformation of technical reports into publishable materials; Our story our experience

Since the inception of the OHW-NG project, AFROHUN Uganda has conducted research, trainings and innovations which needed to be developed further into publishable material. As a result, we constituted a team of subject matter experts in scientific writing who supported the review process and provided feedback. This experience taught us the importance of working directly through write shops with Thematic and Activity Leads who are corresponding authors to ensure a more participatory process and timely production of deliverables.



NEXT STEPS

AFROHUN Uganda will build on existing partnerships at national and sub-national level to implement planned activities in line with the National Operation Plan in Year 4. We will engage stakeholders to validate and roll out the strategy on the OH Practitioner in Uganda, support capacity building among in-service cadres, evaluate the Uganda One Health Institute to assess possibilities of generating business ideas from the activities implemented under the institute.

In addition, we will support the coordination and response to outbreaks and emergencies of zoonotic nature while building capacity for pre-service cadres from various disciplines.

AFROHUN Uganda will also develop grant proposals as a resource mobilization strategy, and develop knowledge management products to contribute to the body of evidence and increased visibility.



ONE HEALTH CHAMPION





LUCIA RUVARASHE NDANGA

Job Title

Law Student

Professional Credentials

Vice Chair, World Association of Girl Guides and Girl Scouts Africa Region

Role within the OHW-NG Project

President - Makerere University Students One Health Innovations Club (MAKSOHIC)

Affiliation

Makerere University

"One Health is diverse, I have learnt to appreciate the role of every discipline in this approach. As a law student, I am able to now relate how laws and policies can best be incorporated in the One Health approach to achieve the best results".



Individual's Impact

Lucia Ruvarashe Ndanga is an alumnus of the Uganda One Health Institute - Field Experiential Learning (FEL), cohort 2021. She was key in leading a Sexual Reproductive Health Awareness Project for Youth in Katanga and, drafted and contributed to the annual strategic plan of MAKSOHIC.

As the 2021/2022 MAKSOHIC President, Lucia reinstated regular weekly meetings following the COVID-19 lockdowns in Kampala, Uganda. These meetings were aimed at strengthening coordination of clubs across the university, and improving

community outreach. In addition, the club members were avenues for putting together materials for distribution to communities during awareness campaigns. During her presidency, 40 new SOHIC club members across different disciplines in Makerere University were recruited and trained.

Additionally, as a result of her good planning skills, 250 lives of young people and community members were reached during an Antimicrobial Resistance awareness outreach held in Nakulabye and Katanga.

UG 6: Uganda's OH Champion - Lucia Ruvarashe Ndanga. Photo source: AFROHUN Uganda.

SUCCESS STORY





Impact of One Health Trainings among District One Health Teams in Buikwe District.

AFROHUN Uganda supported the decentralization of OH at sub-national level between July and August 2022 in Buikwe, Kayunga and Luwero districts. In Districts (Buikwe), all district office departments were mobilized by the Chief Administrative Officer (CAO) to attend the weeks training in OH.

Mr. Mutiri David Oundo was among the district staff members selected for training. Mr. Mutiri is the Inspector of Schools in Buikwe district where he has worked for over 3 years. His responsibilities include development and distribution of Information, Education and Communication (IEC) materials, and monitoring schools' compliance and adherences, especially during the COVID-19 pandemic.

Mr. Mutiri felt that the education department was independent from other departments within the district. Under his department, materials would be developed and distributed to schools with limited or no consultation/input from the other relevant sectors. During the COVID-19 pandemic, all sectors were required to come together and plan for the district but most importantly to prepare for safe re-opening of all learning institutions in Uganda. This posed as a great challenge for Mr.

Mutiri as the departments preferred to work independently. However, with perseverance, Mr. Mutiri coordinated the development of the district OH annual workplan and budget thus exercising the skills and competencies gained during the training.

"We had challenges bringing on board all actors to plan and execute the post-COVID-19 recovery for the district, but this training has helped us plan more effectively and in a coordinated manner," Mr. Mutiri David Oundo.

Mr. Mutiri was among the 22 participants who were taken through the various modules including OH concepts, risk communication, outbreak investigation and emergency response, biorisk management, among others.

"The training has changed my perspective towards the other departments. I now appreciate the role of other sectors/ departments and the community members in response to infectious diseases. Have been encountering challenges to understand certain technical terms used by the medical practitioners but now I appreciate them and have learnt to use them from time to time." Mr. Mitiri David Oundo





For More Information about AFROHUN

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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 One Health Workforce Next Generation implementing partners (AFROHUN) and do not necessarily reflect the views of USAID or the United States Government.

















ONE HEALTH WOORKFORCE NEXT GENERATION: SOUTHEAST ASIA

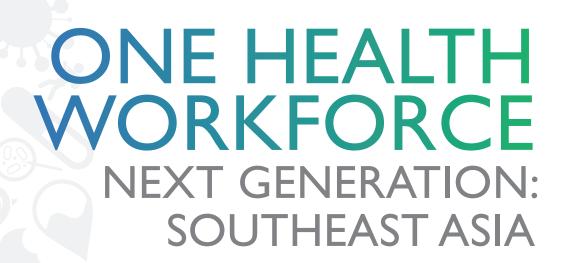
YEAR 3 ANNUAL REPORT October 2021 – September 2022

Health ference

, Thailand







YEAR 3 ANNUAL REPORT October 2021 – September 2022



This publication was prepared by the Southeast Asia One Health University Network headquartered at Chiangmai City, Chiangmai Province, Thailand.

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

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(Cover page) Photo credit: SEAOHUN

INTRODUCTION

The USAID One Health Workforce – Next Generation (OHW-NG) Project (October 2019 – September 2024) seeks to empower the regional-level and country-level One Health University Networks to provide meaningful ways for developing and strengthening the One Health workforce pipeline and strengthening the competencies of pre-service and in-service professionals by leveraging the expertise and experiences of universities across Southeast Asia. To this end, the project activities contribute to three broad objectives: workforce empowerment, workforce assessment and tracking, and organizational sustainability.

As a hallmark achievement this year, SEAOHUN, in collaboration with our country networks and other partners, organized the SEAOHUN 2022 International Conference, our first big gathering of the OHW-NG project, at the Grand Richmond Hotel, Thailand from 5 to 7 September 2022. The conference convened more than 300 delegates from over 30 countries to share their development efforts, research, and advocacy in the areas of One Health education, policy and partnership, lessons from the COVID-19 pandemic, and antimicrobial resistance. As zoonotic disease spillovers are inevitable, One Health education and research in



highlighted the critical need for sustained engagement with universities, who are uniquely positioned to integrate collaborative One Health approaches and core competencies in preservice education and in-service training programs from national to regional and global levels.

In addition, Year 3 (October 2021 – September 2022) was a transition year as SEAOHUN's organizational capacities met the requirements to receive direct funding from USAID starting in Year 4. Our ability to manage the direct funding from USAID will increase our competitiveness in seeking other opportunities to sustain the network in the long term. Moreover, Year 3 marked the 10th anniversary of SEAOHUN. The achievements gained over the decade could not have happened without our partners and supporters. SEAOHUN thanks the Global OHW-NG Consortium who has been providing us with invaluable assistance in shaping the project's interventions to raise capacities of the One Health workforce in the region and the capacity of SEAOHUN to manage funding from multiple projects. We also thank all our partners who support our programs at regional and country levels. We especially thank the United States Agency for International Development for its continued support for strengthening One Health workforce and institutionalizing One Health into university offerings, and thank Chevron for supporting us in strengthening One Health education at all levels in Southeast Asia and beyond.

A regional network like SEAOHUN is as strong as our county networks. SEAOHUN and our One Health University Networks in Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, and Vietnam look forward to working together with our partners to develop a resilient and competent One Health workforce with the right skills set and mindset to address global health challenges.

Vipat Kuruchittham Executive Director, SEAOHUN

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ACRONYMS

AMR Antimicrobial Resistance

CAMBOHUN Cambodia One Health University Network

COVID-19 Coronavirus Disease 2019

INDOHUN Indonesia One Health University Network

LAOHUN Lao One Health University Network

MMOHUN Myanmar One Health University Network

Moecrt Ministry of Education, Culture, Research, and Technology (Indonesia)

MyOHUN Malaysia One Health University Network

NCO National Coordinating Office

OHCC One Health Collaborating Center

OHS One Health Site

OHSC One Health Student Club

OHW-NG One Health Workforce - Next Generation

PhiloHUN Philippine One Health University Network

SEAOHUN Southeast Asia One Health University Network

THOHUN Thailand One Health University Network

USAID United States Agency for International Development

VOHUN Vietnam One Health University Network

One Health Workforce - Next Generation Project: Achievements for Year 3







SEAOHUN

SOUTHEAST ASIA ONE HEALTH UNIVERSITY NETWORK

ABOUT SEAOHUN

- The Southeast Asia One Health University Network is a leading regional network of universities collaborating to strengthen One Health workforce capacity and build the next generation of One Health professionals who help prevent, detect, and respond to infectious disease threats.
- Our mission: to develop a resilient and competent One Health workforce by leveraging education, research, and training provided by Member Universities in Southeast Asia.
- Our vision: a regional network of universities in Southeast Asia generating social and intellectual excellence on One Health.
- Eight country networks: Cambodia (CAMBOHUN), Indonesia (INDOHUN), Lao PDR (LAOHUN), Malaysia (MyOHUN), Myanmar (MMOHUN), the Philippines (PhilOHUN), Thailand (THOHUN), and Viet Nam (VOHUN).
- Build Immunity for Humanity: The SEAOHUN Secretariat represents the Network at global and regional meetings to advocate for the role of universities to help solve complex One Health challenges and work in synergy with other development partners.
- Established in 2011.
- Visit our website at www.seaohun.org.

NETWORK OVERVIEW



8 Countries



99 Member Universities



1,341
Participants in One Health
Student Club



90 Activities Conducted in Year 3

Highlights

- SEAOHUN hosted the 2022 SEAOHUN International Conference, with over 300 participants from 34 countries in attendance; 5-7 September 2022, Nonthaburi, Thailand.
- The 2022 SEAOHUN Partnership Meeting held 8 September 2022 in Nonthaburi, Thailand drew 89 current and potential partners.
- SEAOHUN welcomed as a new member of the Global Health Security Agenda, October 2021.
- 10 scholarships awarded to early career professionals from member countries to pursue Master's Degrees in One Health disciplines.
- SEAOHUN supported eight fellows at seven host organizations in six countries.
- 29 students joined SEAOHUN Student Journal Club Webinar: Gender in One Health on 26 March 2022.
- 41 participants from student teams of eight member countries joined the SEAOHUN 2022 Student Summit held at Kasetsart University, Kamphaeng Saen, Thailand, on 3-5 September 2022.
- "Communicating the Impact of AMR through Art" webinar held on 21 September 2022 to share ideas on effective communication of One Health research findings.
- Recipients of SEAOHUN Year 2 small grants (13 projects) completed activities and submitted their output and deliverables to SEAOHUN Secretariat.
- For project Year 3, the regional Small Grants Program gave a total of 12 awards; three projects were finished in this period.



1,928
Individuals Trained in One Health Topics



35 Scholarships and Fellowships Awarded



14
Partnerships
Developed



146
Informational Products
Developed

Activities

OBJECTIVE I

One Health capacity building in pre-service and in-service health professionals

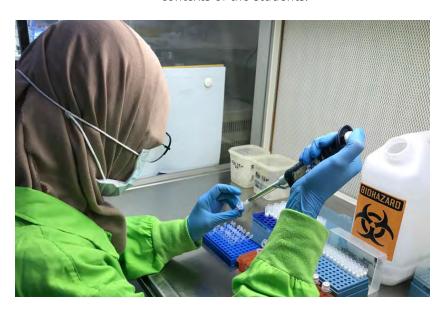
SEAOHUN awarded ten scholarships to successful applicants from Cambodia, Indonesia, Malaysia, Myanmar, and Viet Nam. These scholarships aim to develop the One Health workforce by supporting early career professionals in areas including public health, epidemiology, medical science research, veterinary science, and primary health care management. Through their studies, scholars gained post-graduate level knowledge in One Health related subjects and research competencies that will help build their careers in One Health related fields. After graduation, the scholars are expected to work in multidisciplinary settings of academic institutions, government, and international organizations to prevent, detect and respond to infectious disease threats and other public health issues.

SEAOHUN continues its Regional Fellowship Program in Year 3, providing ongoing learning for early and mid-career professionals with prior experience or training in One Health. This program enables participating professionals to integrate

their existing One Health knowledge and skills with new skills gained from their work at a host institute. SEAOHUN has partnered with a number of institutions, government agencies, and international policy-making organizations in Southeast Asia to match the partner institute's needs with the training needs of the prospective fellow. In Year 3, SEAOHUN provided fellowship awards to eight fellows at seven host institutes in six countries. The host organizations are the FAO representation office in Cambodia, the School of Veterinary Medicine and Biomedical Sciences and the Primate Research Center of Bogor Agricultural University in Indonesia, the Lao-Oxford-Mahosot Hospital-Wellcome Trust Research Unit in Lao PDR, the Institute for Medical Research in Malaysia, the Tropical Disease Research Center, Khon Kaen University in Thailand, and the International Livestock Research Institute in Vietnam. Ms. Vilaiphone Phomsisavath, one of this year's fellows, submitted an abstract and was subsequently selected to present at the 7th World One Health Congress in Singapore.

Strengthening networking, technical knowledge and communication skills among the future generation of One Health professionals

SEAOHUN started its first Student Journal Club webinar with the topic of "Gender in One Health" on 26 March 2022, which coincided with the celebration of International Women's Day. A total of 29 students from ten countries joined the webinar, including student volunteers from Indonesia, Malaysia, Thailand and Viet Nam who assisted in organizing and facilitating. This includes seven student volunteers from Indonesia, Malaysia, Thailand and Viet Nam assisted in organization and facilitating the webinar. Students had the opportunity to learn from their peers, exploring together One Health related literature and research articles. During the Student Journal Club webinar, students discussed articles about integrating gender into disease outbreak preparedness and response, bringing up ideas and solutions to solve the problem in the respective country contexts of the students.



SEAOHUN Fellow Dinda Nur Hidayah preparing polymerase chain action samples at the host institution, Primate Research Center of IPB` University in Indonesia, to contribute to research on Orthopoxvirus detection. Photo source: Dinda Nur Hidayah

Kasetsart University, in collaboration with Thailand One Health University Network and the SEAOHUN Secretariat, hosted the SEAOHUN 2022 Student Summit on 3-5 September 2022. With the theme of "Fostering One Health Leaders", the summit brought together a total of 41 participants (34 students and seven faculty advisors) of different One Health disciplines from Cambodia, Indonesia, Laos, Malaysia, Philippines, Taiwan, Thailand, and Viet Nam, including the winners from the 2021 SEAOHUN Regional Student Competition. In addition, the summit featured interactive learning in the classroom, field visits to local aquaculture and plant farms, and the opportunity to learn and expand the students' One Health knowledge and skills while building friendships and strengthening their professional networks.

SEAOHUN kicked off the 2022 Regional Students Competition, which aims to strengthen students' knowledge and skills in risk communication and creativity related to One Health. The theme for 2022 is "Communicating antimicrobial resistance (AMR) through Art". The competition was announced on 21 September 2022, and the students were invited to form two-member. cross-disciplinary teams and challenged to create visual art to communicate the theme to a non-scientific community. Following the competition's announcement, the SEAOHUN Secretariat hosted a webinar "Communicating the Impact of AMR through Art" on 26 September 2022. In this webinar, experts from the OHW-NG Global Consortium shared technical background information on AMR along with information and ideas on communicating scientific facts and research findings through art.

Leveraging One Health research and training through the regional Small Grants Program

The SEAOHUN Small Grants Program, launched in July 2020, supports in-service health professionals and faculty members to develop innovative research and training addressing complex One Health challenges. Since the program's start, SEAOHUN has supported a total of 33 small grants. including 12 in six countries in 2022 (Year 3), covering curriculum development, scientific research, and training in One Health. As in previous years, the design and roll-out of the 2022 program was done in partnership with a number of partners, including the FAO Regional Office for Asia and the Pacific, the ASEAN Plus Three Field Epidemiology Training Network, the Regional Field Epidemiology Training Program for Veterinarians, and member Universities.

To illustrate possible achievements under these grants, one team led by Dr. Nur Juliani Shafie of set up a website¹ providing updates on their research and other key information as part of their project's goal of knowledge transfer and collaborative networking on building resilience against leptospirosis. Under the SEAOHUN 2022 Small Grants Program, different types of One Health Research Activities, promotion of One Health concepts, COVID-19 research, and epidemiology assessment ultimately helped raise the capacity of One Health professionals. Read more in our **Success Story**.

OBJECTIVE 2

The Secretariat is supporting the efforts for promoting competency-based approaches to One Health education. Two staff members attended the SEAOHUN Competency-based Education Workshop held in Bangkok, Thailand on 24 to 27 May 2022. Spearheaded by the Objective 2 Lead and co-organized with the SEAOHUN Secretariat, the workshop-cum-Training of Trainers enabled representatives from seven country networks to draw up their respective draft action plans for similar workshops and promote the application of the concept. The Secretariat is working closely with respective country networks and the Objective 2 team to establish a competency-based education and assessment virtual community of practice in OHW-NG Y4. This communty of practice will provide opportunity for faculty members from different SEAOHUN universities to share their experiences, successes and challenges in implementing One Health competency-based education



Delegates to the SEAOHUN 2022 Student Summit visit an orchid farm to learn One Health aspects of horticulture. Photo credit: SEAOHUN

¹ project lepto.com

in their respective curricula and training programs. The Secretariat is working closely with respective country networks and the Objective 2 team to establish a competency-based education and assessment virtual community of practice in OHW-NG Y4. This community of practice will provide opportunity for faculty members from different SEAOHUN universities to share their experiences, successes and challenges in implementing One Health competency-based education in their respective curricula and training programs.

OBJECTIVE 3

SEAOHUN joins the GHSA

At the beginning of the project year, the SEAOHUN was honored with acceptance among the countries and organizations of the Global Health Security Agenda. Read more in our Success Story in the OHW-NG Project Year 3 Semi-Annual Report 2021-2022.



Photo: Dr. Woutrina Smith presenting at the SEAOHUN 2022 International Conference in Thailand. Photo credit: SEAOHUN

SEAOHUN catalyzes exchange and collaboration with series of events in September 2022

SEAOHUN organized a series of events in September 2022, attracting One Health professionals from around the world. The signature event, the 2022 SEAOHUN International Conference, provided a focus for the Student Summit, field site visits. and academic-public-private partnership meeting. To kick off the SEAOHUN 2022 International Conference, participants had the opportunity to visit the Thailand Ministry of Public Health and a Lyle's flying fox site in Chonburi province. The visit to the MoPH allowed participants to visit the Emergency Operations Center which is the command center for monitoring outbreaks and managing responses and listen to insights and lessons of Thailand's detection, prevention, response, and control of the COVID-19 pandemic. In addition, visitors to Chonburi had the opportunity to listen to experts on Nipah virus which is found in Lyle's flying foxes and see demonstrations of how urine from the flying fox is safely collected.

The SFAOHUN 2022 International Conference brought together practitioners, researchers, policy makers, students, and other to stakeholders for over two days to share knowledge and expertise on specific One Health challenges and approaches used to combat emerging health threats. The conference focused on four tracks: One Health Education, Policy Gaps and Partnership Needs in One Health, Lessons Learned from the COVID-19 pandemic, and Combating Antimicrobial Resistance using One Health Approach. The conference included remarks by Dr. Dennis Carroll, who delivered an inspirational keynote address about the urgency of multisectoral response to address the overall health and wellbeing of humans, animals, and our shared

environments, which are interconnected by collaborative One Health approach. Three plenary sessions included: innovations to stop future pandemics; Three plenary sessions included: innovations to stop future pandemics; catalyzing One Health citizens of the future; and combating a silent pandemic: antimicrobial resistance, which were conducted by distinguished One Health experts. The conference highlights included in-depth oral and poster presentations provided by selected One Health University Network faculty, scientific researchers, and students.

After the conference, SEAOHUN convened a day-long One Health partnership workshop with 89 educators, researchers, and practitioners to explore areas for collaboration across academic, public, and private sectors. Participants helped conduct a modified gap analysis on topics including: One Health education and training, One Health research, surveillance and laboratory capacity, and surge capacity, with the overall goal of identifying ways to establish and strengthen partnerships between universities and public and private sector partners. This included:

- 1. building the business case and value proposition of One Health.
- 2. translating One Health research into policy and action,
- 3. continuing professional development for in-service personnel,
- 4. providing risk communication training for university students,

- 5. broadening One Health surveillance and
- 6. climate change research for One Health.

Lessons Learned

Increase and intensify engagement of students

For pre-service support, it is important to strengthen engagement and coordination of SEAOHUN's activities to maximize impact. For instance, SEAOHUN could only do one student webinar during the reporting period. More student turnout and networking among students can be anticipated if webinars are done regularly, thus raising visibility of and interest in our work. This, in turn, could create better turnout for other student engagement work, such as the annual regional competition and utilizing normal channels, such as dissemination through partners and social media channels.

Diversify SEAOHUN's partners for the Fellowship Program

While SEAOHUN's Fellowship Program has successfully enhanced professionals' knowledge and skills, partnerships can be further diversified to better leverage private sector resources and expertise to enhance the program.

Leverage events such as international conferences as a source of revenue

The SEAOHUN 2022 International Conference was regarded as a success and beneficial to the participants. There is substantial opportunity to leverage this kind of event to generate income in the future. For the

next conference, SEAOHUN will do further analysis of earning potential from such an event to develop a pricing plan for potential participants, in addition to identifying potential sponsors earlier.

Next Steps

The SEAOHUN Secretariat's USAID Transition Award was approved with a start date of 1 October 2022. SEAOHUN's four flagship programs will continue though some of the work will be phased out from OHW-NG (e.g., scholarships), immediately shifted to the Transition Award (e.g. student engagement), and in the case of the Small Grants Program, both projects will support this.

The 2022 Regional Students Competition is anticipated to be completed in November 2022, there will be up to two winning teams per country for two art categories. The competition is planned to wrap up with the winner announced during the World Antimicrobial Awareness Week (18-24 November 2022).

In Year 4, the SEAOHUN Secretariat plans to continue to provide scholarships to graduate students for their master's degree studies. The Regional Student Competition will continue in 2023 with more innovative and engaging ways for the students to communicate One Health issues to the public. In addition to these two programs, three new student-related activities will be introduced under the Transition Award.

SEAOHUN will continue its Small Grants
Program where the Transition Award
will support projects focused on AMR or
COVID-19 and OHW-NG will support all other
One Health-related topics. The SEAOHUN
Fellowship program will continue engaging
suitable institutes that could host potential
fellows from member countries.

Important Links

Regional Programs

- Small grants: https://www.seaohun.org/ small-grants
- Fellowship: https://www.seaohun.org/ fellowship
- Scholarships: https://www.seaohun.org/ scholarship
- Student Engagement: https://www.seaohun.org/student-engagement
- SEAOHUN 2022 International Conference: https://bit.ly/2022ConferencePost



Pre-conference site visit demonstrates safe collection techniques of pooled urine samples of the Lyle's flying fox (Pteropus lylei) at Wat Luang Phrommawat, Chonburi, Thailand. Photo credit: SEAOHUN

Success Story

SEAOHUN Fellowship Program: Introduction of Lawa Model through integrated One Health Approach

The SEAOHUN Fellowship Program promotes the integration of One Health knowledge, skill, and experiences for fellows at leading academic and research institutions, government agencies, international organizations, or international nongovernmental organizations in Southeast Asia. In 2022, the SEAOHUN fellowship program selected eight fellows to gain hands-on experience at seven host institutes in six countries.

Photo: Collecting samples from cats at Lawa Lake, Thailand. Photo source: Shih Keng Loong

Dr. Shih Keng Loong is a researcher who has studied infectious diseases, particularly vector-borne and zoonotic diseases, for over 10 years. Leveraging his prior research and experience, he was motivated to utilize a fellowship opportunity to learn more about parasitology and specific techniques, such as specimen collection, to support research analysis. Dr. Keng was selected for a SEAOHUN fellowship at the Tropical Disease Research Centre (TDRC) with the Faculty of Medicine at Khon Kaen University in Thailand from March to July 2022.

During his fellowship, he was introduced to the Lawa Model, an integrated One Health approach for controlling *Opisthorchis viverrini*, commonly known as the Southeast Asian liver fluke. He had the opportunity to visit villages around the Lawa Lake region in the Khon Kaen Province, Thailand, where the liver fluke is endemic. While there, he witnessed the socio-economic activities of the communities living there that increased the risks of infection.

Dr. Keng gained new experiences, such as conducting field sample collection of water and mud from Lawa Lake, as well as fecal samples from cats and dogs in the area. These samples were analyzed in the laboratory, and the findings were presented to the TDRC Team that is planning to publish the results. At the end of the fellowship, Dr. Keng became more familiar with parasitology and gained practical experience in conducting new laboratory techniques and engaging communities for field research. Dr. Keng hopes to publish the research he helped conduct during the fellowship in addition to returning to his research institute in Malaysia where he can use the techniques he learned in his ongoing work in microbiology.



I began the fellowship program with only a very general grasp on the major topic of parasitology. The very reason I selected TDRC as the place for my SEAOHUN Fellowship training was that I wanted to learn more on parasitology. I am glad and thankful to SEAOHUN for this opportunity, as I believe I have gained not only knowledge but also practical experience in the laboratory, field, and community. In my view, it was through practical experience that I realised and appreciated the efforts of the TDRC team in reducing the incidences of liver fluke infections among the communities living in the Greater Mekong Subregion.

- Dr. Shih Keng Loong

SOUTHEAST ASIA ONE HEALTH UNIVERSITY NETWORK MEMBERS

LAOHUN

Champasack University
National University of Laos
Savannakhet University
Souphanouvong University
University of Health Sciences, Lao PDR

MMOHUN

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

INDOHUN

Airlangga University **Andalas University** Bogor Agriculture University* Brawijaya University Cendrawasih University Diponegoro University Gadiah 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

THOHUN

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



VOHUN

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

CAMBOHUN

Kampong Cham National Institute of Agriculture Prek Leap National Institute of Agriculture Royal University of Agriculture Royal University of Phnom Penh University of Health Sciences, Cambodia

Benguet Cavite Sta Central L Central N Pampang Partido S Universit Universit Visayas S West Visa

PhilOHUN

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

MyOHUN

University of Cyberjaya
International Islamic University Malaysia
International Medical University Malaysia
Management and Science University
Royal College of Surgeons in Ireland &
University College Dublin Malaysia Campus

Universiti Kebangsaan Malaysia*

Universiti Malaya

Universiti Malaysia Kelantan

Universiti Malaysia Sabah

Universiti Malaysia Sarawak

Universiti Malaysia Terengganu

Universiti Putra Malaysia*

Universiti Sains Islam Malaysia

Universiti Sains Malaysia

Universiti Sultan Zainal Abidin

Universiti Teknologi MARA

Universiti Tunku Abdul Rahman

*Founding Universities







CAMBOHUN

CAMBODIA ONE HEALTH UNIVERSITY NETWORK

NETWORK OVERVIEW



5Member
Universities



6 Faculties



1 Small Grant Awarded



41Individuals Trained in One Health Topics

ABOUT CAMBOHUN

- CAMBOHUN is established to prepare a future-ready workforce capable of working across different disciplines to address these complex health challenges.
- Mission: To develop a sustainable network of One Health professionals with cross-sectoral expertise to understand and address public health threats.
- Vision: A network of universities with multi-disciplinary and cross-sectoral professionals collaborating together to minimize One Health threats in Cambodia.
- Established in 2019.
- Visit our website at www.cambohun.org.

Highlights

- One Health student field trip, 26-28 March 2022.
- CAMBOHUN small grant awarded and completed, 30 March-28 September 2022.
- Training on Participatory Epidemiology, 3-4 May 2022.
- Training on Competency-based Education; 24-27 May 2022, Bangkok, Thailand.
- One Health internship, 1-31 August 2022.
- Activities of One Health Student Club, 30 September 2022.
- Participation at SEAOHUN 2022 International Conference, 6-9 September 2022.

Activities

OBJECTIVE I

Small Grant Program for in-service professionals

The CAMBOHUN Small Grant awardee. Limkhuoch Hov, led a team of researchers who conducted a study of farmers' knowledge of, attitudes towards, and practices for reducing the incidence of avian influenza (AI). The study was held at the site where the first outbreak occurred in Trapeang Russey Village, Jayo Commune, Chamkar Leu District, Kampong Cham Province. The researchers found that misunderstanding of biosecurity measures required for raising poultry at a household level, transportation, agriculture tools, and livelihood activities are the factors that make poultry more susceptible to AI. The study went as planned; 60 farmers, One Health volunteers, three village animal health workers, three village chiefs, and one commune chief participated. In addition, 15 students learned how to use participatory

epidemiology tools to gather observations in the community.

Enhancing capacities of pre-service and in-service professionals on participatory epidemiology

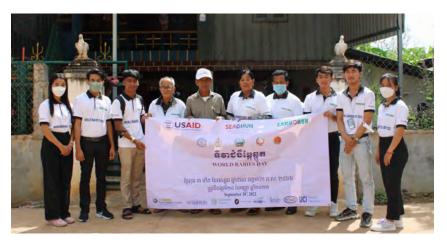
Participatory epidemiology Master Trainers conducted cascade workshops in 2019 and 2021, and this year led a refresher workshop with a field practice. Target participants were alumni from the previous batches of training, plus additional participants from new CAMBOHUN member universities. The workshop was conducted in Phnom Penh from 3 to 4 May 2022. On the first day, the trainers gave an overview of the participatory epidemiology concept and its tools. They devoted time to a practical session at the Central Market on the second day. In the wet market section of the Central Market, where live animals can be purchased and processed for human consumption, trainees were

divided into three groups, each responsible for studying a topic such as antimicrobial resistance, zoonotic disease, and waste handling.

One Health Experiential Learning

The CAMBOHUN National Coordination Office (NCO) organized a field trip to Kep Province from 26 to 28 March 2022 to engage students in One Health and stimulate the establishment of One Health Student Clubs in their respective universities. The activity attracted 20 students and five faculty members from all member universities of the Network. The field trip provided students and faculty members opportunities to:

- practice identifying One Health issues and proposing solutions;
- 2. exchange knowledge and skills in One Health and its approach among faculties and students;
- 3. improve One Health knowledge and communication skills; and
- 4. engage the students for One Health Student Club establishment.



CAMBOHUN students organized awareness raising events in Kandal province for World Rabies Day 2022. Photo source: CAMBOHUN

Hands-on practical experience in One Health

The Student Internship Program was created to enable students (pre-service health professionals) from member universities to gain hands-on experience with local institutions. Two students were placed at Agronomes et Vétérinaires Sans Frontières for one month (1 to 31 August 2022). During the internship, the students learned how the One Health approach applied to integrated farming systems while having the chance to practice arranging the farming system. They also supported volunteers from Canada in developing the guideline for setting up a One Health demonstration site. Read more in our **Success Story**.

Promote One Health in the community

Students from multiple disciplines and universities established a One Health Student Club in March 2022. The students elected their club officials, and its seven members together planned activities to raise awareness of rabies with the communities of Kandal province and also to celebrate World Rabies Day. The CAMBOHUN officer, District Vice Director, Commune Chief, Village Chief, Director of the Health Center, and villagers attended the event held on 30 September 2022. Since this was the first activity conducted by the student club, the members were very committed to organizing virtual training, working for months to successfully design and launch this inaugural activity.

OBJECTIVE 2

Three faculty members from CAMBOHUN universities network participated in the Training of Trainers (TOT) workshop on the implementation of Competency-based Education (CBE) in Bangkok, Thailand, from 24 to 27 May 2022. The goal of this TOT was



Image source: CAMBOHUN

to demonstrate the use of active learning strategies, simulation exercises, and practical guides to implement a standardized competency framework and evaluation approach in their respective universities' education and training programs. As a result, the three trained faculty members from CAMBOHUN will take this knowledge and skills to implement CBE among member Universities in the next project year's work plan.

OBJECTIVE 3

CAMBOHUN Board Meeting

The CAMBOHUN Board conducted their meetings twice this past year. At the first meeting, the CAMBOHUN Coordinator presented the achievements of CAMBOHUN in Year 2 and first quarter activities from Year 3. For the second meeting, the Coordinator presented the achievements of the remaining three quarters. The Board

Members from five member Universities discussed the implementation of the Year 3 work plan and planned for the OHW-NG Project Year 4 work plan. They also discussed the CAMBOHUN structure and announced the addition of two new University members.

SEAOHUN 2022 International Conference

CAMBOHUN nominated the delegates of CAMBOHUN, faculty members and students of member universities who participated in the 2022 SEAOHUN International Conference in Nonthaburi, Thailand, from 6 to 7 September 2022. At the conference, four researchers and students of member universities of CAMBOHUN presented their research.

In addition, five faculty advisors and students of CAMBOHUN University members participated in the SEAOHUN 2022 Student Summit on the theme "Fostering One Health Leader". This student summit was held in Thailand from 3-5 September 2022.

Lessons Learned

Improving communications and coordination with national and international NGOs, government stakeholders, and other institutions

Among the eight project activities this year, there were six activities that CAMBOHUN itself launched that needed effort and coordination with other institutions and stakeholders. We involved these partners and stakeholders in each of our activities, and they sometimes acted as co-hosts for their event as well. This year, CAMBOHUN planned and completed most activities as scheduled, except for the student internship. We could not reach our internship program goal due to the great effort required to coordinate with other institutions. We also realized that we needed to develop a process for coordinating and selecting students.

Next Steps

Strengthen network sustainability through collaborations

CAMBOHUN is looking opportunities to build the Network's organizational and human resource capacities, especially to increase knowledge on sustainable actions for the Network for the Network in the context of One Health.

Enhance workforce knowledge of and skills in One Health

CAMBOHUN will award more research grants to member universities, Cambodia Applied Veterinary Epidemiology Training, and the Field Epidemiology Training Program to conduct innovative field research, curriculum development, and training implementation. Each research project will address One Health issues in Cambodia as well as for the young researchers to gain practical experience in applying One Health approach. This will help improve our current and future workforce knowledge and skills by developing and providing various One Health training programs and events.

Success Story

CAMBOHUN internship builds One Health skills

The Cambodia One Health University Network (CAMBOHUN) organizes the Student Internship Program that enables students (pre-service health professionals) from member Universities to gain hands-on experience with local institutions tackling One Health issues. The internship allows students to gain exposure to One Health and aims to motivate them to pursue their careers in One Health-related disciplines.

CAMBOHUN developed an internship opportunity with the Agronomes et Vétérinaires Sans Frontières (AVSF) for one student from the Royal University of Agriculture and one student from Kampong Cham National Institute of Agriculture. During this month-long internship, the interns contributed to developing guidelines for a One Health demonstration site at a farm. The guidelines they helped to create outline how to apply the One Health concept and its approach to the farming system. The two interns visited a farm where

The internship at AVSF provided me with a lot of knowledge and skills related to the One Health concept and its approach, communication, and teamwork. I learned how the One Health approach is applied in the community at the demonstration site program, about successful One Health programs from other countries shared by the AVSF network, and on applying system thinking to real One Health challenges to solve them. Through this internship, I am confident enough to share the knowledge and skills I gained with my friends and other students and be able to apply the One Health approach to my upcoming job.

> Lim Chhavkheang, a selected student for the internship program from Royal University of Agriculture

a demonstration site is located in Ratanak Mondol District, Battambang Province, to observe how they plan to apply One Health guidelines. Finally, they joined a seminar where they listened to presentations on how the demonstration site works and benefits the community and on relevant topics such as antimicrobial resistance, zoonotic disease, and agro-ecology related to One Health practice in agriculture.





As an undergraduate student, joining the internship program is one of social involvement and real practice. This program provided me with a lot of ideas and knowledge related to One Health that can be applied in agriculture, as my future career area.

> Ms. Chhorn Rina, One Health Intern from Kampong Cham National Institute of Agriculture



Ms. Chhorn Rina and Mr. Lim Chhaykheang practice applying One Health to support an integrated farming system Photo source: CAMBOHUN







INDOHUN

INDONESIA ONE HEALTH UNIVERSITY NETWORK

NETWORK OVERVIEW



20Member
Universities



6 One Health Collaborating Centers



20 Internships Placement



197
Participants in One Health
Student Clubs



34 Faculties



12 Laboratories



183Individuals Trained ir
One Health Topics

ABOUT INDOHUN

- INDOHUN is a network of Indonesian higher education institutions promoting collaboration in human, animal and environmental health sectors in Indonesia.
- INDOHUN established One Health Collaborating Centers, each hosted by a member University, to support One Health activities across the world's most populous and ethnically diverse archipelago.
- LESS ME, MORE WE: We believe that we can accomplish more amazing things by doing the work in collaboration.
- Mission: We build institutional and individual capacities, advocate for collaboration-supportive policies, conduct research and community outreach, and offer a platform for addressing regional and global One Health issues.
- Established in 2012.
- Visit our webpage at www.indohun.org.

Highlights

- INDOHUN developed and contributed three One Health modules on the Indonesian government's online learning program called SPADA.
- INDOHUN hosted training sessions for university students to develop One Health core competencies before they enter into *Kampus Mengajar* activities as volunteer teaching assistants.
- Five One Health Student Club modules were developed based on each club's unique and local approach.
- 97 lecturers and 40 students received practical training to develop and strengthen communication skills through One Health Communication Training in 3 different batches, August-September 2022.
- Thousands of students were exposed to One Health concepts and multi-disciplinary collaborative approaches via a guest lecture series at five different universities, July-September 2022.
- 26 lecturers participated in a grant writing workshop on 17 September 2022.
- INDOHUN's One Health Young Leaders internship program placed 20 students and received an excellent response from external parties, June-September 2022.

Activities

Objective I

Support the Government of Indonesia's priority program for education

Kampus Merdeka (Learning Policy) is a program designed by the Indonesian Ministry of Education Culture, Research, and Technology (MoECRT), which provides university students with the opportunity to hone their skills and abilities for career preparation through real-world practical experience. It is the Ministry's top priority and has several implementing programs such as Kampus Mengajar (Teaching Campus), Student Exchanges, Certified Internships and Independent Study. INDOHUN continues to emphasize the value of a One Health approach by enriching the Kampus Mengajar's preparation training for students who will serve as volunteer

teaching assistants. To do so, INDOHUN delivers materials on valuable One Health skills such as multidisciplinary coordination, communication, and collaboration, along with health promotion and health education. These materials are essential to build students' knowledge, skills, and abilities, enabling them to excel during their tenure in the *Kampus Mengajar* program, and further apply these skills towards their professional development and career placement. The preparation training is joined virtually by thousands of third year university students from health-related disciplines.

INDOHUN contributed three One Health modules into the Ministry's official online learning platform called *Sistem Pembelajaran Daring* (SPADA). This is an

effort to promote One Health information that can be accessed publicly by students. This activity was featured in the INDOHUN Success Story in the OHW-NG Project Year 3 Semi-Annual Report.

Provide standardized learning materials and guidance in One Health training for students

INDOHUN's One Health Student Club modules are teaching and training materials, packaged systematically and comprising a suite of learning experiences planned and designed to help students master specific learning objectives. Each module was developed by the respective One Health Collaborating Center (OHCC) teams and local experts from the faculties of veterinary medicine, human medicine, and public health from the university that manages the Center. Six topics from One Health's core and technical competencies are included in the modules: the One Health Concept; System Thinking, Fundamentals of Infectious Diseases; Behavior Changes; Collaboration and Partnership; and Leadership in One Health. Standard content across modules are based on guidelines on One Health skills and competencies that INDOHUN developed for the Emerging Pandemics and Threats Project 2. OHCC Udayana refreshed the modules that were originally developed in OHW-NG Project Year 1 for their One Health Student Club. They made several changes by adding details to case studies to improve the available modules.

Improving One Health capacity through unique teaching and training experiences

INDOHUN continuously promotes One Health concept through unique and customized teaching methods and training events. This year, in addition to training university students, INDOHUN also targeted university lecturers to improve their capacity to teach One Health. From July to September 2022,

INDOHUN hosted six different series of One Health guest lecturer collaborating events, both inperson and virtually, with university partners across Indonesia. The guest lecture series, opened to interested faculty members and students, aimed to enhance the knowledge of the One Health concept, One Health core competencies, and its application in different areas of study.

INDOHUN targeted university students and lecturers for practical training in One Health communication. Participants increased their knowledge and skills of communication using the One Health approach and had a chance to write and develop their own articles with guidance and facilitation from a relevant subject matter expert. In total, three batches of events were hosted, both inperson and virtually, with good impressions expressed by the participants in the feedback survey.

INDOHUN, in collaboration with the Directorate of Human Resources within MoECRT, successfully conducted a workshop session to strengthen faculty professionals' capacity for collaborative and multi-sectoral grant writing, particularly across One Health-related sectors. This day-long workshop provided information from the One Health approach, as well as economic, social, and communication perspectives. In total, 26 lecturers from INDOHUN university partners were briefed on how to develop concrete ideas for grants. This workshop was conducted on 17 September 2022 in Jakarta.

One Health Young Leadership Internship Program

INDOHUN's One Health Young Leadership internship program is one of the multisectoral workforce strategies to prepare the young workforce. This activity allows students to learn, explore, and exercise One Health's core competencies in a real-world, hands-on environment while earning official

credential recognition. This year, 20 students from different disciplines were selected from six universities in Indonesia to participate in the program. As a result of successful implementation during OHW-NG Year 3, this program will continue into project Year 4 with support from the MoECRT. Recently, INDOHUN strengthened the program partnership by signing a Memorandum of Understanding with the Faculty of Public Health, University of Indonesia as a demonstrated commitment to continue to implement the OHYL internship program. Read more in our **Success Story**.

Objective 2

Two INDOHUN faculty members and one INDOHUN NCO staff member attended the Competency-based Education Workshop in Bangkok, Thailand from 24 to 27 May 2022. They participated actively in the workshops and drafted an action plan to promote this approach with faculty of member Universities.

Objective 3

Expanding One Health Collaborating Centers

Following a comprehensive assessment process during OHW-NG Year 3, INDOHUN. with support of the MoECRT, successfully expanded the University's establishment of a OHCC to improve coverage of the country's large and diverse geography. Each of INDOHUN's OHCCs has a unique, regionallytailored approach, informed by the One Health core competencies, to become a collaborative center that is equipped to address emerging infectious diseases and other complex health challenges. The newly established IPB OHCC will play a role in Global Health 'Agromaritime', a term purposefully utilized to recognize the interconnection and interdependence between natural resource management on land and in our oceans.

Memorandum of Agreement with the MoECRT

INDOHUN continues to maintain and strengthen the collaboration with MoECRT through the signing of a Memorandum of Agreement to formalize the Ministry's recognition of INDOHUN. The Ministry agrees to provide administrative support for three years to facilitate capacity development activities for higher education institutions to improve the human resources and management of health and science laboratories. In this way, INDOHUN expects more sustained support for the OHW-NG Project activities.



Stakeholder One Health training in Papua conducted by the Cendrawasih University One Health Collaborating Center, Horison Abepura Hotel, 22 September 2022. Photo credit: INDOHUN

Lessons Learned

Maintaining Strong Partnership with Government of Indonesia

The OHW-NG Project also aims to fill the gap of One Health workforce empowerment in Indonesia. Through the years, INDOHUN closely collaborated with the MoECRT, the Ministry of Health (MoH), and other relevant ministries. Maintaining close collaboration within the Government of Indonesia helps the overall project to get full governmental support and keep on target at the university level. INDOHUN also continues to collaborate with other Global Health Security partners in Indonesia to maintain multisectoral collaboration to address complex health challenges.

Next Steps

Following outbreaks of COVID-19 and footand-mouth disease in Indonesia, the MoECRT and MoH signed a Memorandum of Agreement to increase surge capacity and improve capabilities of veterinary faculty and students. INDOHUN is considered a strategic partner that covers both higher education and the One Health scope to achieve the joint agreement goals. Thus, INDOHUN will develop a program to achieve sustainability by collaborating with MoECRT to achieve their long-term goals, along with INDOHUN's primary objective to develop and strengthen a national One Health workforce, especially at university level. In the next project year, INDOHUN plans to develop both strategic and organizational sustainability plans to be presented as a value proposition to the MoECRT along with request to the ministry to provide funding support to sustain the network. In parallel, INDOHUN will continue to demonstrate the network's value addition to the MoECRT with the aim to continue as a trusted and well-established organizational partner.

Important Links

INDOHUN videos for SPADA (in Bahasa Indonesia)

- One Health Definitions: https://www. youtube.com/watch?v=Kg4-kcVDnSA
- Importance of One Health: https://www. youtube.com/watch?v=yFpj4MuHLmM
- Transdisciplinarity of One Health: https://www.youtube.com/ watch?v=VHIEuE0WONE
- Basic Concepts of Public Health: https:// www.youtube.com/watch?v=f_3n-y3aJ54
- Environment and Human Interactions: https://www.youtube.com/ watch?v=CnGBclD2je4
- Zoonotic Diseases: https://www.youtube. com/watch?v=YGxZ185y8AU)
- Prevention and control of zoonotic diseases in the livestock industry: https://www.youtube.com/ watch?v=TAeku_DM1Kg

Success Story

Supporting Indonesia's Education Program through a One Health Young Leaders Internship Program for University Students

INDOHUN, in collaboration with the Faculty of Public Health Universitas Indonesia and with generous support from MoECRT and USAID, officially introduced the One Health Young Leaders (OHYL) internship program. OHYL aims to help students improve and strengthen their One Health skills by allowing them to learn and explore One Health core competencies in a real-world, hands-on environment while earning official credential recognition. Internships can play an important role in



Internship at INDOHUN provides opportunities to learn applying One Health analysis to real-world cases. Image source: INDOHUN

providing students with these skills, as well as allowing them to develop real world experience that will support them as they transition into their careers. This prepares future leaders by teaching an understanding of three core values: multisectoral collaboration, training and empowerment, and national and international development.

During the program, 20 students from six universities spent four months, equivalent to 20 academic credits or 900 hours of study, working full-time in their internships. These academic credits were officially endorsed by MoECRT, which allowed students to officially transfer them to their universities.

As a result of the OHYL program, the interns were able to better understand and implement One Health concepts; improve their competencies and skills, specifically in terms of collaborating in a multisectoral setting; better understand how to implement activities related to One Health in the form of training, webinars, and workshops which help empower One Health professionals; and develop the practical knowledge for effective collaboration, leadership, and diplomacy in international health development settings. The program has the potential to improve the education of pre-service professionals to better contribute as they enter careers in the One Health workforce.





During my internship program at INDOHUN, I got a lot of experience that I couldn't get anywhere else. I learned a lot about One Health and the importance of this approach in dealing with problems related to Zoonoses. Apart from knowing the theory, I also experienced the implementation of One Health which was carried out by the five One Health Collaborating Centers in Indonesia. The professional work atmosphere at INDOHUN also gives me a real picture of the world of work that I will live in after graduating from college. I also made many new friends from various universities in Indonesia and was able to exchange experiences with them. Internship at INDOHUN was very fun and also beneficial for me!

- Nur Annisa Sophianingrum, Environmental Health, University of Indonesia (One Health Collaboration Center Empowerment Division)







LAOHUN

LAO ONE HEALTH UNIVERSITY NETWORK

NETWORK OVERVIEW



5Member
Universities



18 Faculties



5 Activities Implemented



25 Individuals Trained in One Health Topics

ABOUT LAOHUN

- LAOHUN collaborates with University Members to promote the One Health concept, its core and technical competencies, and to address complex challenges at the interface of human, animal and environmental health.
- Let's work together to build the next generation of One Health Workforce."
- Mission: To develop university network capacity to promote One Health awareness, knowledge, and practice through expansion of universities, network strengthening, and advancement of the One Health workforce.
- Vision: A collaborative network of universities fostering multi-sectoral effort for a One Health workforce and policy development.
- Established in 2018.
- Visit our website at www.laohun.org.

Highlights

- O Participatory epidemiology training with field experience benefits 25 lecturers; 4-7 April 2022, Vientiane.
- One Health Student Club awareness raising events held at three member Universities.
- Fifty undergraduate students take a One Health field trip to Bolikhamxay; 18-19 August 2022.
- LAOHUN Board Meeting held on 30 August 2022 in Vientiane.

Activities

OBJECTIVE I

Participatory Epidemiology Training with Field Experience

Participatory epidemiology is the use of participatory approaches and methods to actively include the data, knowledge and perspectives of the concerned populations with those of public health professionals, veterinarians, government officials, and other local stakeholders. LAOHUN organized a four-day training course at the Dongdok Campus of the National University of Laos to promote this approach and its qualitative methods derived from participatory appraisal to help improve the context, accuracy and interpretation of quantitative epidemiological studies. LAOHUN invited as participants 25 lecturers in animal health, human health, environmental health and other disciplines from among its member Universities. The course ran from 4 to 7 April 2022, and included lectures by Dr. Andrew Corwin and other experts who provided guidance and shared their experience with area mapping, conducting

semi-structured interviews and focus group discussions, and participatory appraisal tools. The participants practiced using the tools on Day 4 in the surrounding rural villages of Paksab Mai and Narphok in Xaythany district, Vientiane. Read more in our **Success Story**.

LAOHUN promotes One Health Student Clubs

LAOHUN organized three events to promote interest in and establishment of One Health Student Clubs. The first event was held at the National University of Laos on 2 August 2022, the second at the University of Health Sciences on 8 August 2022, and the third event at Souphanouvong University on 10 August 2022. The events featured short seminars, training games to promote cross-sector thinking, and collaboration to understand health issues from a One Health perspective.



Students at the "One Health Student Club" event in National University of Laos. Photo credit: LAOHUN

Field trip engaged students in One Health

Students in undergraduate-level courses that are part of the One Health disciplines need opportunities to observe and discuss with members of at-risk communities to identify health challenges and potential solutions. To meet this need, LAOHUN organized a One Health field trip to Paksan district of Bolikhamxay to explore One Health issues related to food safety. Fifty students and 15 lecturers from the founding universities members. University of Health Science and National University of Laos, were in Bolikhamxay from 18 to 19 August 2022 to collect information for a food safety risk assessment. They were divided in groups to separately conduct area surveys and interviews at an animal farm, slaughterhouse, fresh market, and households. The students regrouped on the second day to compile their findings and discuss possible solutions to the One Health issues they identified.

OBJECTIVE 2

The Competency-based Education Workshop held in Bangkok, Thailand from 24 to 27 May 2022 had two participants from LAOHUN universities. They actively participated in discussions, provided context on One Health education in Lao PDR, and drafted an action plan for raising capacity in the competency-based approach to higher learning.

OBJECTIVE 3

LAOHUN held a Board meeting on 30
August 2022 at Family Boutique Hotel in
Vientiane. Thirty-five participants attended
consisting of members of the LAOHUN Board
and representatives of the five member
Universities, government institutions, and
the USAID Mission in Laos. Participants
reviewed the terms of reference for the
Board, discussed the achievements in
this year, and identified the next steps to
prepare for Year 4. The Board also agreed to
register LAOHUN with the government as an
organization with its own identity and bank
account.

Earlier this project year, LAOHUN held a Board meeting on 10 December 2021; this was reported in the *OHW-NG Year 3 Semi-Annual Report*.

Lessons Learned

The participatory epidemiology training was a good opportunity to expand our network to include more health professionals of the country, and to discuss possible collaboration in research using the approach and tools gained during the course. Participants still need opportunities to practice sharing and learning from a group of professionals of diverse background.

LAOHUN organized our first student field trip at the province level, and it was a very good chance of students and faculty members from to explore One Health issues at community level. We realized it is a good opportunity for students from different fields of study to work together as a group, and for sharing ideas and experience on One Health issues observed in the community visited. The most benefit was for team building and improving communication skills of the students could share during field work.

Next Steps

LAOHUN will continue promoting the One Health Student Club, and organizing activities for students such as field trips that highlight other issues of One Health at community level.

More training of trainers workshops will be organized on One Health competencies to support capacity development of the relevant faculties in the member Universities.

LAOHUN will register the network with the government as a step towards its stability, and to enable opening of an institutional bank account.

Important Links

- Participatory epidemiology training post: http://bit.ly/3WjPVyx
- One Health student field trip Facebook post: http://bit.ly/3PrO60j



LAOHUN Board met in Vientiane on 30 August 2022 to review the achievements in Year 3 and prepare for Year 4 of the OHW-NG Project. Photo credit: LAOHUN



LAOHUN faculty members practice participatory area mapping in Vientiane, 7 July 2022. Photo credit: LAOHUN

Success Story

Faculty Members Practice Participatory Epidemiology in the Field

The One Health approach is new for many university faculty in Lao PDR, even for those coming from member Universities of the Lao One Health University Network (LAOHUN). Teaching and research faculty can still benefit from an opportunity to learn how to observe, analyze, and discuss complex health challenges using an interdisciplinary lens. Because experiential training can be a useful method to demonstrate the value of collaborative One Health approaches to address complex health challenges, LAOHUN organized a four-day Participatory Epidemiology training from 4 to 7 April 2022 at the Dongdok campus of the National University of Laos.

Participatory epidemiology is a set of participatory approaches and methods that are applied to understanding the patterns of disease in communities. The approach is intended to be inclusive of the perspectives of the members of the community at risk, of different health disciplines from the animal, human and environmental sectors, and of other stakeholders from the local government and private sector.

The training was supported by USAID's OHW-NG project and included 25 participants from animal health and human health disciplines, mostly lecturers from LAOHUN member Universities. The training reviewed theories and approaches in epidemiology for the first three days. The resource persons included experts from LAOHUN universities, with some sessions on the fundamentals of epidemiology and managing pandemics delivered by Dr. Andrew Corwin and other lecturers from the Global Health Unit of Thammasat University in Thailand. During the didactic (lecture) sessions, participants had opportunities to brainstorm how to apply participatory tools to gain the real-world context of epidemiological data and gather additional qualitative inputs that would ultimately improve the accuracy of the data analysis and interpretation.

On the fourth day participants had site visits to Paksab Mai and Narphok in Xaythany district, Vientiane. This field experience was an opportunity to apply the tools learned in the didactic sessions. Participants created area maps, held focus group discussions with local leaders, conducted semi-structured interviews with community residents, and applied the seasonal calendar and participatory ranking tools.

As both this type of training and One Health are still relatively new to the participants, they initially had difficulty sharing ideas and developing a common understanding. By the end of the four-day training most participants expressed that their understanding of participatory epidemiology was improved and are now aware of the skills and practice required to fully utilize these as functional tools. They also recommended that when the training is repeated for other lecturers and health professionals, more days could be given for the field visit because it was quite helpful to raise awareness of and skill in participatory epidemiology and One Health.



Faculty members from LAOHUN practice participatory tools in Xanthany district of Vientiane. Photo credit: LAOHUN









NETWORK OVERVIEW



17 Member Universities



19 Activities Implemented



557Individuals Trained in One Health Topics



20 Faculties



16 Small Grants Program



81Participants in One
Health Student Clubs

ABOUT MYOHUN

- MyOHUN is the network that forges working partnerships between veterinary, medical, biological and environmental professionals of Malaysia for One Health.
- Mission: To link and enable universities, government and relevant agencies to generate social and intellectual capital on One Health against infectious and zoonotic diseases.
- Vision: A network of social and intellectual excellence on One Health against infectious and zoonotic diseases of national and global concern.
- Established in 2012.
- Visit our website at www.myohun.com.

Highlights

- MyOHUN organized and delivered the "Empowering Women and Leadership in One Health" workshop, 23-26 July 2022, Cameron Highlands.
- The National Avian Influenza Simulation Exercise was executed for the first time in the Sarawak state by The Ministry of Health in collaboration with MyOHUN and the Department of Veterinary Services, 26-28 July 2022.
- MyOHUN's 'Malaysia Youth One Health Challenge 2022' had 240 students from vocational schools, community colleges, and polytechnic institutions, across four states who produced 80 innovations / prototypes to help control infectious disease outbreaks.
- More than 400 students and academicians benefited from the One Health Student Club Grants and Booster Grants for One Health Teaching and Learning Activities.
- One Health Field Epidemiology Training successfully attracted 35 participants from different fields, including the Health Director of Sabah State Health Department and veterinary medicine, wildlife, and environmental health experts.

Activities

OBJECTIVE I

The Malaysia Ministry of Health, in collaboration with MyOHUN and the Department of Veterinary Services (DVS), organized the National Avian Influenza Field Simulation Exercise from 26 to 28 July 2022 in Sibu, Sarawak with more than 200 officers, health practitioners, and academicians actively participating in the simulation exercise. Module Simulation Exercise for Management of Highly Pathogenic Avian Influenza was launched during this activity which is accessible online.

In creating a better prepared Malaysia One Health workforce for managing disease outbreaks, MyOHUN implemented two key activities this year. The first was the One Health Field Epidemiology Training program, conducted from 9 to 12 May 2022 in Selangor, which attracted mid-level managers from human, animal and environmental health sectors that encompassed essential One

Health competencies essential for field epidemiology and surveillance of infectious diseases. Second was the "Dissecting One Health Core and Technical Competencies during Outbreak Response" brainstorming meeting held from 16 to 19 August 2022 in Penang. Participants included professionals from health sectors, ministries, universities, and other relevant agencies; they were engaged in guided discussions on strategies, prevention, and control of zoonotic disease through the lens of One Health.

MyOHUN organized a workshop on Empowering Women and Leadership on One Health with the support and encouragement from the Orang Asli Development Agency. A diverse group of 37 students from different universities took part in this workshop which focused on the importance of gender equality and awareness in One Health. This unique workshop provided an opportunity to interact with the villagers and observe the lifestyle and culture of the Semai tribe in Malaysia's Cameron Highlands.

A Tabletop Simulation Exercise for Postgraduate Students provided a platform for future One Health workforce members to be empowered with the important elements of managing emerging and zoonotic diseases that are common in this region. Acknowledging the benefits of learning in realistic outdoor settings, the In-Situ One Health Problem Based Learning course materials for 'Ecosystem' Health and Zoonoses' were utilized. Several course enhancements injected into the case study examples to improve the learning experience of the students while ensuring the implementation of One Health. The two activities utilized cases and scenarios aligned with important One Health core and technical competencies, thereby promoting active and rewarding learning processes.

The Malaysian Youth One Health Challenge was a virtual competition organized to introduce, promote, and increase the knowledge of One Health among students



Training the Trainers for "ONE HEALTH AMR PUBLIC AWARENESS 2022," 30 August 2022, Kuala Lumpur. Photo credit: MYOHUN

from vocational schools, community colleges, and polytechnic institutions. The competition began on 17 June 2022 with a series of online training sessions for prospective participants comprising students and teachers. On 2 September 2022, the winner of this competition was announced. Video presentations for 80 innovation prototypes were submitted for review, showing the tremendous support from vocational and polytechnic students towards this competition and the openness in implementing One Health in their innovation. Read more in our **Success Story**.

From 15 until 18 August 2022, more than 34 undergraduate students joined an exciting, four-day One Health Young Leaders and Communicators program conducted at Raia Hotel, Penang. The program provided participants with leadership skills and communications techniques, which will be useful as they embark along their respective career paths. As important as leadership and communication skills are for the future workforce, they are also imperative for inservice professionals to master the same set of skills at a more advanced level. MyOHUN organized the One Health Leadership Training for Mid-Level Executives held at Hatten Hotel, Melaka, which was attended by 17 in-service workforce participants from the DVS, the National Public Health Laboratory Malaysia, and public universities in Malaysia.

One Health Student Clubs under MyOHUN comprise more than 400 participants from various disciplines among MyOHUN University members, namely Universiti Kebangsaan Malaysia (UKM), Universiti Malaysia Kelantan, Universiti Putra Malaysia (UPM), Universiti Sains Islam Malaysia (USIM), and Universiti Sains Malaysia. The clubs organized a wide range of activities, from seminars to community outreach events, to spread awareness and foster the spirit of One Health.

During OHW-NG Year 3, six booster grants for One Health teaching and learning activities were awarded to member institutions. Successful grant, recipients were able to conduct various activities incorporating One Health concepts into the subjects taught within the semester. Selected projects included:

- "Zoonosis Field Trip" at Kuala Tahan National Park, Kampung Sungai Tiang, Jerantut, Pahang from 13 to 16 June 2022, consisted of students from USIM.
- 2. "PBL In Situ: Sungai Lembing", Kuantan, Pahang, was held from 23 to 24 July 2022 and attended by dentistry students from International Islamic University Malaysia (IIUM).
- 3. "Community-based Learning: Rabies Prevention Campaign Among School Children" at Sekolah Kebangsaan Sri Serdang was held on 30 August 2022 and consisted of 210 primary school students aged ten years old and students facilitators from UPM.
- 4. "In-Situ PBL & Book Writing Retreat: Kembara Silaturahim & Jelajah Alam 2.0" at Kampung Baru Pulau Keladi, Pahang, from 28 to 29 May 2022, participated by 12 students from IIUM.
- 5. "Wash Hands & Save Lives" at Rumah Anak Yatim & Miskin Jalinan Kasih, Selangor, consisting of 40 students and 32 children from UKM on 25 August 2022.
- 6. "Pro-Kasih, Community Outreach Program" at Sekolah Kebangsaan Desa Tasik, Kuala Lumpur, participated by 11 teachers and 142 students on 1 September 2022, focusing on the welfare and issues regarding stray animals.

OBJECTIVE 2

MyOHUN had two participants at the Competency-based Education workshop held 24 to 27 May 2022 in Bangkok, Thailand. They shared how they designed and conducted simulation-based learning activity for a combined joint exercise for medical, public health, and veterinary medical students. At the end of the workshop, they had an initial action plan for raising the adoption of competency-based education by MyOHUN universities.

OBJECTIVE 3

MyOHUN took several important steps towards organizational sustainability by organizing a Strategic Planning meeting held from 14 to 16 January 2022. The MyOHUN National Coordinating Office (NCO) was able to present updates on the OHW-NG Project,



Photo credit: Dr. Norul Hernani Abd Latif, IIUM

along with the MyOHUN work plan for Year 3. The meeting and group discussion amounted to a detailed presentation of each project on programs and outcomes intended.

MyOHUN NCO management is now accredited under the ISO 9001:2015 Certification that provides international recognition of the NCO's ability to help promote the network's future sustainability, and secure future financial aid through standard practices.

MyOHUN's Annual Meeting, which was held from 25 to 28 September 2022, gathered representatives from MyOHUN member institutions to share, gain feedback, and suggestions on the activities done this year. Moving forward, the meeting connects MyOHUN members to strategize essential programs and activities for Year 4, injecting a more meaningful outcome.

MyOHUN continued to forge and enhance partnerships from other United States government agencies including Sandia National Laboratories and the United States Defense Threat Reduction Agency. We collaborated on the Biological Threat Reduction Program Malaysia – Building Capacity on Biorisk Management that provided training for researchers, academic staff, and students on MyOHUN, to receive appropriate training that will allow the safe handling of pathogenic organisms while protecting the community and preventing the release of the organisms outside of the laboratory. Such efforts are examples of how the network leverages our institutional experience.

Lessons Learned

Strengthening One Health knowledge among healthcare workforces

Based on the series of activities conducted by MyOHUN during the first three years of the OHW-NG Project, MyOHUN prioritizes strengthening technical and competency-based knowledge and skill sets of One Health among professionals. Hence, the focus on the training program that prepares the Malaysia One Health workforce to detect, prevent and respond to emerging diseases through knowledge sharing, networking, and collaboration across disciplines should be of the greatest importance.

MyOHUN website and social media updated

MyOHUN envisions a pronounced online presence through the official website and various social media platforms for the network. The contents and appearance of the website and social media channels were updated to better promote MyOHUN network's vision and mission for One Health workforce development, raise visibility for its members, broadcast accomplishments and disseminate its products and training offerings. All the activities and training conducted have already been reported on the MyOHUN website and social media.

Next Steps

Provide technical support and facilitation for sustainability planning

In ensuring the network's sustainability, building MyOHUN One Health Foundation and MyOHUN One Health Academy into existence has been the exclusive goal to attract more networking opportunities and collaborations. MyOHUN will continue to pursue improvement of the network's management, structure, membership, and workforce capacity by engaging with more partners in private sectors and international organizations.

Important Links

- Simulation Exercise Module: http://bit.ly/3V2Hp5O
- MyOHUN One Health Challenge: https://www.facebook.com/ OneHealthChallenge/



UKM medical students at laboratory stations to examine mosquitoes (vectors) responsible for different types of infectious disease during a training workshop organized by the OHSC in Pahang, 28 May 2022. Photo credit: MyOHUN



Sample submissions of innovations into the MyOHUN One Health Challenge by students in post-secondary learning institutions (see Success Story). Image source: MyOHUN

Success Story

Positive Exposure to One Health for Students from Vocational School, Community College, and Polytechnic Institutions

The Malaysian Youth One Health Challenge is an online innovation competition to introduce and promote One Health among students from vocational schools, community colleges, and polytechnic institutions. Students aged 16 to 22 years were tasked to develop innovations and pitch prototypes of ideas for control of disease outbreaks to assist in epidemic management that aligns with the One Health concept and approaches.

This challenge aims to foster the interest of Malaysian youth in One Health while at the same time applying and sharpening their knowledge and skills in science, technology, and innovation. With 45,480 views of posts about the competition on across social media platforms, the event is a demonstrated means to capture the attention of youths and other community members from across the country. This is also an effective method for introducing One Health oriented ideas and concepts across a broad audience, which helps increase the visibility of MyOHUN to non-traditional One Health audiences in the country.

This program successfully showcased brilliant ideas among the participants, which were translated into prototypes. Enthusiasm and positive competitive spirit among the youths was palpable and they were eager to learn and courageous enough to take up the challenge: no small feat given they had yet to be exposed to the basic concepts of pathogens and infectious diseases. Despite being the first time for a majority of them to hear about 'One Health,' or 'zoonoses' and other technical jargon introduced during the training session, they bravely endured the tasks with the help and guidance from their dedicated teachers. The students were inspirational in their enthusiasm, creativity, and commitment to create better, healthier communities, as demonstrated through 80 prototypes developed and presented.

"Personally, I think innovation challenges like this expose and train students to take care of their health during a pandemic while realizing the importance of physical and mental health. I also think that this program, at the very least, helps students to clearly understand disease transmission and ways to prevent or control this transmission," said Nur Aleena Kartinie, a student from Polytechnic Sultan Haji Ahmad Shah, Pahang.

In supporting professional development and finding solutions via multidisciplinary collaboration, participants need to understand the value proposition of multidisciplinary One Health approaches to address complex challenges at the interface of humans, animals and our shared environments. Participating in this challenge not only exposes youth learners to the essence of collaboration and teamwork but shows them how to act as catalysts of change for creating a culture of One Health in their institutions. The bold ideas presented by the younger generation signal hope as they take a phase over in leading the nation, one step at a time.



This program has a positive impact on not only students but also teachers. Through the implementation of One Health in their innovation and going through hours of researching and reading, knowledge gained through the process is invaluable. Learning and researching about diseases, it is safe to say that prevention is better than cure," said Ts. Mohd Rohaize Ahmad, Kolej Vokasional Batu Pahat, Johor.

- Ts . Mohd Rohaize Ahmad, Kolej Vokasional Batu Pahat, Johor







MMOHUN

MYANMAR ONE HEALTH UNIVERSITY NETWORK

NETWORK OVERVIEW



3 Member Universities



8 Faculties



3 Small Grants Awarded

ABOUT MMOHUN

- MMOHUN joined SEAOHUN to promote knowledge exchange and capacity building in One Health among human, animal, and environmental health professionals in Myanmar.
- Mission: To develop a resilient and competent One Health workforce by leveraging education, research, and training excellence provided by member Universities.
- Established in 2019.
- Visit our webpage at www.seaohun.org/mmohun.

Highlights

- Two local small grants were awarded to the teams led by Dr. Thant Syn Htoo from University of Medicine 1 and the team led by Professor Hlaing Hlaing Myint from University of Veterinary Science.
- One Regional Small Grant was contributed to the team led by Dr. May Soe Aung from University of Medicine 1.

Activities

Promoting veterinarian responses to neglected zoonotic diseases with the local Small Grant program

Under the local Small Grant program supported by MMOHUN in collaboration with SEAOHUN Secretariat, the project named "Serological Investigation on Coxeilla brunetii infection (O fever) in domestic cattle and goats in the areas of Nay Pyi Taw" was implemented during the period of 1 May to 30 September 2022. The project was led by Dr. Hlaing Hlaing Myint, Head of the Department of Medicine, University of Veterinary Science, Yezin with four team members. As a part of the project, the initial workshop was conducted successfully with the participation of students from the University of Veterinary Science and staff members from the Livestock Breeding and Veterinary Department Myanmar on 9 May 2022. During the workshop, the knowledge exchange about Coxiella burnetii infection and methods of sample collection with safety precautions were discussed. As a result, the workshop provided the positive feedback to the team and the students were motivated to participate in the project.



Survey with goat farmers. Photo source: Hlaing Hlaing Myint

Analyzing the factors contributing to COVID-19 patients in new Yangon general hospital

The project team led by Dr. Thant Syn Htoo, assistant lecturer from Department of Medicine, University of Medicine 1, Yangon was awarded a local Small Grant from MMOHUN in this reporting year. The project team consisted of one faculty member from University of Public Health, Yangon and two faculty members form University of Medicine 1, Yangon. As a new emerging and highly transmissible disease, the project team members were keen to identify the demographic characteristics and contributing factors towards COVID-19 patients in New Yangon General Hospital. The findings of the project will support the better decision making in managing COVID-19 patients in the hospital.

Providing support to the regional Small Grants program in assessing food hygiene practices among food handlers in Yangon

The project team led by Dr. May Soe Aung, Associate Professor of University of Medicine 1 received one of the regional Small Grants from MMOHUN in collaboration with SEAOHUN Secretariat to conduct research on antimicrobial resistance of *Staphylococcus aureus* and food hygiene practices in Yangon market food stall. The project commenced in the fourth week of May 2022 after the advocacy meeting with the Department of Human Resources, Ministry of Health, Nay Pyi Taw. The project proposal was submitted to the Ministry of Health Institutional Review Board for ethical research practice review

and approval process. The advocacy meeting with local stakeholders from the Yangon City Development Committee was held to obtain market research in the selected 17 markets. The findings from the project will provide pragmatic guidelines to be applied by the food handlers in the market to minimize and prevent food-borne infections.

Lessons Learned

Despite COVID-19 restrictions and political crisis across the country, MMOHUN maintains collaboration with SEAOHUN Secretariat and the networks to enhance One Health Workforce in the region. Better understanding of the rules and regulation of the national institutional review board will be required for the future implementation.

Next Steps

MMOHUN will continue to engage the One Health Workforce by promoting and raising awareness of One Health by the targeted community and by supporting the potentials One Health professionals to conduct early detection, surveillance, and research. In addition, MMOHUN will continue to contribute One Health activities in the local and regional networks.









PhilOHUN

PHILIPPINE ONE HEALTH UNIVERSITY NETWORK

NETWORK OVERVIEW



11Member Universities



3 Activities Implemented



19 Faculties



334 Individuals Trained in One Health Topics

ABOUT PhilOHUN

- PhilOHUN is an organized network of Philippine universities that aims to develop the next generation of skillful and competent members of the One Health workforce in the Philippine setting.
- Mission: To build a strong and sustainable One Health university network that collaborates across sectors to improve health for all.
- Vision: To be the leading network advocating expertise through One Health initiatives to improve health for all.
- Established in 2019.
- Visit our webpage at www.philohun.org.

Highlights

- Three hundred and thirty-four volunteer community health workers and local government officials from four municipalities joined a One Health training workshop, 30 September 1 October 2022, Camarines Sur.
- Key PhilOHUN members gave radio interviews over different talk shows to raise public understanding of One Health challenges such as antimicrobials in animal feed.

Activities

Objective I

By leveraging opportunities from the OHW-NG Project, PhilOHUN supports efforts to increase knowledge and awareness on One Health in the Philippines. This was done primarily through community-level training among frontline volunteer health workers and via discussions about One Health on radio programs.

PhilOHUN partnered with the ParSU Futures Thinking Group of Partido State University, and four municipal governments in Camarines Sur province for a community-level training activity on One Health. A two-day training workshop was conducted among 334 barangay or community health workers and local government officials from 30 September 2022 to 1 October 2022. The training provided an introduction to One Health concepts and approaches including: zoonotic diseases, antimicrobial resistance, environmental and ecosystem health, and data science. Among the 269 trainees who responded to the post-event survey, about 30% indicated they have familiarity with One Health concepts and approaches before the start of the training, and this rate increased 86% of respondents after the workshop concluded. A majority (>50%) learned the most from the following topics: 1) Introduction to One Health; 2) One Health and Antimicrobial Resistance; and 3) Introduction to Ecosystem Health. In



PhilOHUN's Dr. Neil Tanquilut was interviewed over DWIZ. Image credit: PhilOHUN.

addition, 58% of the barangay health workers in attendance wanted to be called "One Health workers" in the future, signifying their desire to become advocates of One Health in the community. Read more about this in the PhilOHUN's **Success Story**.

Five radio interviews were held to help raise awareness on One Health among the public. The topics discussed were: 1) implications of the use and misuse of antimicrobials on animal feed, 26 February 2022; 2) One Health and zoonosis - COVID-19 and rabies, 3 April 2022; 3) One Health and zoonotic diseases - avian influenza, African swine fever, 14 June 2022; 4) arsenic in lake water, 29 June 2022; and 5) COVID-19 in the Philippines, 6 July 2022. The experts interviewed were PhilOHUN faculty members from the University of the

Philippines Los Baños, University of the Philippines Manila, and Pampanga State Agricultural University. of the Philippines Los Baños, University of the Philippines Manila, and Pampanga State Agricultural University.

Other efforts in raising One Health awareness included publication of a newspaper article on antimicrobial use and misuse and antimicrobial resistance in the Philippine Star, a national print and digital newspaper in the Philippines.

OBJECTIVE 2

Three PhilOHUN faculty members attended the Competency-based Education Workshop in Bangkok, Thailand from 24 to 27 May 2022. They contributed to the development of an action plan for promoting competency-based One Health education.

OBJECTIVE 3

PhilOHUN website

The PhilOHUN website was designed to represent the identity of the organization and to disseminate information on network activities. The website will improve PhilOHUN's brand and communication strategy through visibility and transparency

by presenting culminated activities, published resources, and open activities and grants. The establishment of the PhilOHUN website not only promotes and showcases the organization through the Internet, but it also systematizes the operations and communications backend of the organization through acquisition of an official PhilOHUN email address. This is key for proper management of communications and documents for proper archiving and continuity of the organization.

Lessons Learned

The importance of efficiency during setbacks and delays

Some activities were delayed because of the ongoing campaign for the local and national elections. This impressed upon us the importance of being efficient and using the available time to make additional preparations for smooth implementation of the activities once conditions were more favorable.



Barangay Health Workers and local government officials are trained in One Health, 30 September 2022, Camarines Sur. Photo credit: PhilOHUN

Using recent health and health-related events for One Health discussions.

Discussions held during the radio interviews and the community-level training were anchored on recent health events that would be relevant to stakeholders at sub-national and community levels. We believe that by doing so, the lessons on One Health would be more relatable and salient to our audiences since they would be able to connect these with their day-to-day experiences.

Partnership and collaboration.

We attribute the success of the community-level training to our partnership with the ParSU Futures Thinking Group of Partido State University and the local government units of Sagñay, Goa, Tigaon and San Jose, Camarines Sur. Their active support ensured that the participants were able to attend the training, and that the logistical, technical and administrative needs of the event were met. Looking to the future events, PhiloHUN is committed to similar partnerships with local governments and facilitating transdisciplinary dialogue involving our member Universities and other stakeholders would be key to address complex and dynamic One Health challenges and issues.

Maximizing available social media platforms.

Posts on the PhilOHUN website were promoted on the PhilOHUN Facebook page, and member Universities were also encouraged to share these posts on their respective social media platforms. We believe that this network-wide dissemination increases exposure and potential engagement with the PhilOHUN website.

Next Steps

PhilOHUN plans to conduct more training workshops on One Health targeting students, faculty members, and professionals, and to engage in capacity-building sessions on skills related to proposal development and project management, competency-based education, and policy-writing. We expect that these skills will support our members and stakeholders to design, implement and sustain One Health training and empowerment initiatives. The organization will also further equip the website as a tool for the promotion of past, current, and future activities of PhilOHUN, and as a learning resource for One Health education in the Philippines.

PhilOHUN will be able to further develop the One Health modules for use in training and education among different audiences, increasing its ability to effectively educate on the One Health approach. We look forward to identifying potential partners and collaborators and strengthening capacities for One Health research, education, and legislation. The PhilOHUN website will continue to help disseminate and promote information about current and future projects by PhilOHUN, and will be an access point for learning resources on One Health.

Important Links

- "Antibiotics use, misuse and overuse,"
 by Michael Tee; The Philippine Star, 6
 March 2022: http://bit.ly/3HPnkNk
- PhilOHUN Brings One Health to the Radio: https://www.philohun.org/post/ philohun-brings-one-health-to-the-radio



Success Story

All rise, One Health Workers!

On paper, Barangay Health Workers (BHWs) are volunteer public health paraprofessionals serving at most local administrative level of government in the Philippines. They tend to wear three hats while they fulfill their roles: community organizer, educator, and primary healthcare service provider. Ultimately, BHWs serve the health needs of the people in their respective barangays, acting as a bridge between community members and the health system.

With this in mind, the Philippine One Health University Network (PhilOHUN) engaged nearly 400 BHWs, local government officials and local academicians of Partido State University in a two-day training activity providing an introduction to concepts on infectious disease management and ecosystem health. Training topics included an introduction to One Health concepts, multidisciplinary approaches to address complex health challenges, zoonotic diseases, data science, environmental and ecosystem health, and antimicrobial resistance. Trainees were highly engaged through question-and-answer exchanges, active discussions on rabies, COVID-19 protocols, and the importance of evidence-based policy formation and legislation. A key message weaved throughout the training was the critical role of BHWs in creating the most suitable health interventions for their communities. When armed with the lens of One Health, BHWs can provide the necessary insights that serve as the foundations where effective policies could be built.

Nearly half of the trainees were initially unsure of how knowledgeable they were on the concept of One Health. By the end of the training, a strong majority indicated they had increased their knowledge and understanding on One Health topics and collaborative approaches. About 56% of the BHWs in attendance also expressed wanting to be called "One Health workers", reflective of their desires to expand their role in contributing to both individual and community health.

This activity was made possible through the generous support of USAID through the One Health Workforce – Next Generation Project, and with the enthusiastic collaboration between PhiloHUN, the university, and the local governments of four municipalities in Camarines Sur. Through this training, we realized that our efforts should go beyond mere understanding, building upon the connections we make to inspire people to take up a new perspective that may be a vital step in achieving health for all.



I attended a seminar on Human and Ecosystem health at PSU. I learned a lot in that training specially about our Ecosystem which is the most important. I liked the topic on the environment and the animals the most. All topics were very nice. Being a Barangay Health Worker, I learned that Health is important in a community. Humans should be careful with animals with disease so that they don't contract such disease. We also have to take care of our environment because it's important to us since we live within it

- Lovilla Nate Tadeo (BHW of Brgy. San Isidro Poblacion, Goa, Camarines Sur)









THOHUN

THAILAND ONE HEALTH UNIVERSITY NETWORK

NETWORK OVERVIEW



11 Member Universities



10 Activities Implemented



84Participants in
One Health Student Clubs



70 Faculties



6 Scholarships Awarded



376Individuals Trained in One Health Topics

ABOUT THOHUN

- THOHUN focuses on pre-service workforce training and strengthening outbreak response capacity through cross-sector collaboration and using the One Health approach.
- Mission:
 - Build, develop, and expand One Health University Network of Thailand.
 - Support trans-disciplinary collaboration within and between universities and involved agencies.
 - Promote research employing One Health approach to promote the health of humans, animals and environment.
 - · Coordinate with other related One Health Networks in Southeast Asia.
- Vision: A strong, recognized, and sustainable One Health University Network throughout Thailand by 2025, with sustained engagement and partnerships, regional integration, and empowerment.
- Established in 2012.
- Visit our website at www.thohun.org

Highlights

- Eighty-four students from One Health Student Clubs participated in mangrove planting and mangrove forest cleaning, Bang Khun Tien mangrove forest learning center, Bangkok; 24 September 2022.
- Two hundred and twenty-six vocational education teachers participated in a workshop to develop training modules on One Health Core Competencies for COVID-19 prevention and control; 5-6 October 2022.
- Developed online learning materials and modules for the Village Health Volunteers on advocacy and response to emerging disease outbreaks.
- Recorded videos and developed online learning materials and modules for the blended THOHUN Environmental Learning Institute training course.
- Collaborated with SEAOHUN and a team from Kasetsart University to implement a field-based One Health training within the 2022 SEAOHUN International Student Summit; 3-5 September 2022, Nakhon Pathom province.
- THOHUN established a One Health Core Competencies integration working group.
- Successfully conducted six "One Health in the Virtual Park" sessions throughout 2022 with various topics regarding One Health, reaching an audience of 26,966 participants and high engagement of the general public.

Activities

Objective I

Student Clubs lead One Health activities

Members of Thai One Health Student Clubs (OHSCs) led multiple One Health activities that allowed students and participants from multiple disciplines to gain experience addressing human, animal, and environmental problems within communities in Thailand. A kickoff activity was held in Bangkok where 84 students from various disciplines in 11 Thai universities, six of which were THOHUN member universities, and various disciplines participated in mangrove planting, mangrove forest cleaning, and short seminars on One Health core competencies such as communication, informatics, and collaboration.

In addition, 29 students and current workforce personnel who already have advanced knowledge in food-, water-, and mosquito-borne diseases. took the THOHUN Environmental Learning Institute course (THOHUN-TELI) course to learn One Health issue identification, detection, and analysis. They were provided opportunities to learn through: 1) field-based experience in communities; and 2) a capstone project where the participants may design of social innovation-based solutions or interventions to solve complex health problems of the studied community.

THOHUN collaborated with a team from Kasetsart University to assist SEAOHUN with the design and implementation of fieldbased One Health competency development activities for the 2022 SEAOHUN International Student Summit

One Health Module Development

Two hundred and twenty-six vocational teachers contributed to developing training modules on One Health core competencies for COVID-19 prevention and control for vocational students and workers. Read more in our **Success Story**.

Online learning materials and modules for the Village Health Volunteers on advocacy and response to emerging disease outbreaks are being developed. Learning materials/tools and contents of four on-the-job training modules on advocacy and response to emerging infectious disease outbreaks were firstly developed to prepare the Village Health Volunteers (VHVs) to be prompt for outbreak of the COVID-19 and other EIDs.



COVID 19 risk communication training for health personnel. Photo credit: THOHUN

Fully community- and field-based training topics in the THOHUN-ELI short course have been adapted to offer various learners online, blended or field learning options by 2023.

COVID-19 risk communication e-learning modules for health officers and Village Health Volunteers

The COVID-19 pandemic has challenged governments' ability to communicate information with the public effectively, emphasizing the importance of risk communication in crisis situations. With USAID funding, THOHUN brought 37 educators from THOHUN member Universities, local school teachers, local health personnel, border and customs personnel, and Village Health Volunteers to Aranyaprathet and Mueang Sa Kaeo districts to train in risk communication strategies appropriate for COVID-19.

Trainees had an opportunity to visit communities where COVID-19 had a high rate of transmission to assess gaps in risk communication through the use of structured questionnaire surveys and community member interviews. They used participatory techniques whereby the local context and perceptions were analyzed to better understand the communities. The trainees then developed simple and digestible media such as a motto, video clips, and graphics in Thai and Cambodian languages for use by the studied communities.

This training improved risk communication capacities of health-related staff and strengthened collaboration and coordination of sectors and organizations in the border areas of Thailand to better address health threats. Furthermore, this training has the potential to be replicated and implemented in other border areas of the country.

Objective 2

Over the course of Year 3, THOHUN worked with the OHW-NG Global Team on Strategy 2.2, Competency-Based Education Development, in order to support One Health workforce assessment. Representatives from THOHUN were nominated to participate in the competencybased education workshop, which was held in Bangkok in May 2022. The representatives were lecturers from THOHUN member Universities who are knowledgeable and actively engaged in leading courses incorporating the One Health concept and approach. Through the workshop, they developed strategies that will allow them to share their knowledge and skills on competency-based education with other THOHUN University members.

Objective 3

Planning for sustainability

During Year 3, THOHUN initiated and trialed several strategies for organizational sustainability, including establishment of the One Health Core Competencies integration working group to define and pilot to sustain One Health education and training and foster utilization of existing core modules of Kasetsart University into the teaching/training system of University members in the year 2022.

Furthermore, to work towards network sustainability, the THOHUN Steering Committee approved the establishment of a sub-committee to execute plans for network sustainability.

To expand THOHUN's partnership on a global scale and strengthen capacity in One Health teaching, research, and community work, THOHUN granted six awards to faculty staff

and National Coordinating Office staff for participation in the SEAOHUN International Conference as well as other One Health events. Read more in our **Success Story**.

Increasing network visibility using risk communication and community engagement

THOHUN successfully conducted six virtual talk and debate show episodes of "One Health in the Park" to build a stronger connection with the Thai community and to increase the general public's appreciation for and understanding of how One Health relates to current health issues. Tracing its beginnings to the COVID-19 pandemic, "One Health in the Park" is hosted by experts, influencers, and stakeholders from various sectors and disciplines. Broadcasted live via THOHUN's Facebook page, audiences are effectively engaged through interaction with speakers in Q&A sessions. After each event, discussion points are captured as short videos and articles highlighting key information, and viewers are encouraged to watch the next sessions.

The six events had 26,966 virtual audience members and high engagement as represented by 1,039 reactions, comments, and shares. This activity has been shown to successfully increase THOHUN's visibility since 2021. The short video clips are posted on the network's YouTube channel.

Lessons Learned

Being agile in the face of changing situations will help adjust implementation of the project.

While COVID-19 has continued to make implementation of various One Health-related activities difficult due to restrictions and safety concerns for in-person participation, many activities could be conducted virtually. Most activity planning and preparations, such as creating posters, calls for participants, and development of online training modules could be completed by using an online meeting platform. This platform allows the network to share a variety of information and discuss as small groups in real-time with all participants. Virtual delivery might not be as effective for other activities that would benefit from or require interaction and onsite participation. Thus, THOHUN attempted to implement as many onsite activities as possible. Activities included piloting and evaluating rabies simulation and THOHUN-TELI, which requires simulating real-world response conditions, hands-on skill practices, and face-to-face working relationships. In spite of some unexpected and unavoidable circumstances, THOHUN was able to adapt and execute the activities with minimal impact on the program's outputs and outcomes.

Next Steps

THOHUN will continue to promote the One Health approach within Thai society. Our training and educational offerings will be expanded to youths, vocational students, current workers, and village health volunteers. THOHUN will develop a voluntary activity platform to support student-centered

activities, such as Thai OHSCs and One Health Ambassadors, that are engaging and sustainable. Lessons learned from the COVID-19 pandemic will be used as a guideline for developing educational materials and a platform entitled One Health Smart Lane, which will prepare the current and future workforce for both emerging health threats and pandemics alike.

THOHUN will continually develop, trial, and evaluate to improve the One Health Smart Lane e-learning blended platform. Providing basic and intermediate training adaptable for various learning levels, the platform is expected to be utilized THOHUN faculty members as well as integrated into the One Health Workforce Academies platform for broader beneficiaries. In addition, THOHUN will establish a sustainability committee and initiate sustainability plans for after the OHW-NG Project, which will develop business plans for networking, network governance, and financial sustainability, such as fundraising and seeking external funding agencies and collaborating partners.

Important Links

COVID-19 videos in Thai and Cambodian languages:

- http://bit.ly/3FY2p9F
- http://bit.ly/3W1ReCl7

"One Health in the Virtual Park" videos:

- PM 2.5: http://bit.ly/3jb14mQ
- COVID-19: http://bit.ly/3V4g8zS

Success Story

THOHUN development of One Health training modules for vocational students and workers

A critical method to slowing the transmission, and ultimately preventing an outbreak of COVID-19 is to equip the current and future workforce with the knowledge and skills required for disease recognition, self-protection, and prevention through improved post-secondary education. Vocational schools are a type of post-secondary education wherein students gain valuable skills directly related to job-specific requirements. While there are benefits to this type of education, most vocational education programs solely focus on technical knowledge. Health literacy and One Health core competencies like commununication, problem solving, and critical thinking are helpful skills for vocational students and workers to help prevent, detect, and respond to future disease threats and pandemics.

Since 2018, THOHUN has collaborated with the Thai Ministry of Education to define the needs and gaps, as well as seven One Health core competencies, for improving primary, secondary, and vocational school education. In Year 3, 226 vocational teachers from 118 schools collaborated to design and develop training modules to address the identified needs and gaps around

the One Health core competencies of Thai vocational students, focusing specifically on COVID-19 education. The modules they created are on the following topics: 1) One Health Concepts and Knowledge; 2) Culture and Ethics and Gender; 3) Planning and Management; 4) Systems Thinking; 5) Communications and Informatics; 6) Leadership; and 7) Collaboration and Partnership. Each module outline consists of learning outcomes, levels of competencies, topics, teaching methods and tools or materials, assessments, teaching duration, and responsible persons. These outlines were then assessed by peer reviewers and then revised.

The THOHUN National Coordinating Office plans to complete the contents of materials for these training modules, and then organize Training of Trainers workshops to pilot the modules in 2023. After that, they plan to integrate it into the vocational curriculum or expand the training platform to advocate for or train a larger group of vocational students in the future.





Vocational teachers who participated in the virtual workshop on the training module development. Image credit: THOHUN







VOHUN

VIETNAM ONE HEALTH UNIVERSITY NETWORK

NETWORK OVERVIEW



27 Member Universities



14 Activities Implemented



353 Individuals Trained in One Health Topics



10 One Health Field Sites Established



32 Faculties



15 Scholarships Awarded



979
Participants in
One Health Student Clubs

ABOUT VOHUN

- VOHUN leverages the training, education, research capacities of the university network to build the skills, knowledge and attitude base for One Health leaders.
- VOHUN establishes One Health Sites to serve as natural laboratories for students to practice techniques in data and risk communication with members of the studied community.
- Mission: To leverage the training, education, and research capacities of the university network to build the skills, knowledge and attitude base for OH leaders.
- Vision: Fostering sustainable transdisciplinary capacity building to respond to emerging and reemerging infectious and zoonotic diseases.
- Established in 2011.
- Visit our website at www.vohun.org.

Highlights

- Hue University of Agriculture and Forestry developed guidelines for animal research ethics.
- Conducted a training course in Hanoi on applying One Health approaches in disease surveillance for staff working at One Health sites, 4-5 May 2022.
- Organized a training course on One Health data analysis and interpretation for district health workers in Hai Phong, 2-3 lune 2022.
- Established two new One Health sites in Quang Ninh and Long An provinces.
- Organized a national One Health camp for students focusing on risk assessment of viral disease from wildlife species, Dong Nai province, 27-28 July 2022.
- Provided scholarships for 15 Vietnamese students enrolled in the International Master's of Public Health with a One Health focus track at the Hanoi Medical University.
- OVOHUN celebrated its 10th year anniversary with two important events: 1) a dialogue on One Health Policy and Education, held on 3 November 2022; and 2) a talk show on One Health career opportunities on 22 November 2022. Key findings and solutions discussed were captured in policy briefs.
- O VOHUN has admitted three new University members Dong A University, Hanoi University of Natural Resources and Environment, and Viet-Duc University.

Activities

Objective I

Developing curricular content to match One Health workforce needs

On 24 to 25 February 2022, with the technical support of two experts from the Global Consortium, the VOHUN National Coordination Office (NCO) coordinated a virtual meeting to update One Health modules for specific majors in 22 member Universities, with the participation of 89 lecturers. The workshop identified key One Health competencies which meet local needs, and participants from 17 universities signified their intention to update or develop new modules for their

respective disciplinary specializations. This engagement demonstrates that the workshop has given more impetus to network members to continuously improve curriculum through revising or building new One Health content.

A semi-virtual workshop was held from 13 to 14 September 2022 for 67 faculty participants from 21 universities to review training modules based on updated One Health competencies. During the workshop, the OHW-NG Global Consortium members provided feedback on the modules, and lecturers from member universities had a great opportunity to learn more about revising and developing One Health training modules.

Raising One Health workforce capacities

The VOHUN NCO provided support to the Hue University of Agriculture and Forestry to organize a virtual training course on ethical use of animals for scientific research purposes on 24 to 25 March 2022. Faculty members reviewed existing documents and developed the Ethical Guidelines for the Use of Animals in Research, which will be applied in all livestock and veterinary faculties in Viet Nam.

On 4 to 5 May 2002, the VOHUN NCO conducted a training course in Hanoi on applying One Health approaches in disease surveillance for 22 human health and animal health staff working at One Health sites (OHSs). Participants from human and animal health sectors had a chance to share their experiences in the application of indicatorbased surveillance, event-based surveillance, and community-based surveillance. Those from the human health sector gained a better understanding of the disease surveillance system in animal health in the country, and vice-versa for animal health professionals appreciating the International Health Regulations' integrated human disease surveillance and response system. This helps strengthen the collaboration between the two sectors in zoonotic disease surveillance.

From 2 to 3 June 2022 VOHUN conducted a training course on One Health data analysis in Hai Phong. Trainees included district human health and animal health workers from five nearby provinces. The training provided participants with knowledge and skills in data analysis and interpretation,

through practice with existing databases. After the course, the participants were confident that they could apply what they learned to analyze data to create disease surveillance reports. In addition, participants from the animal health sector gained a better understanding of the data requirements in the human health sector, and vice-versa, which helps further strengthen collaboration between the two sectors for disease surveillance reporting.

This year, five field-based learning courses were conducted at OHSs by eight VOHUN member Universities. Students applied skills in preparing data collection tools, conducting interviews and focus group discussions, analyzing data, and relaying feedback to stakeholders in the community. The field-based learning is not just a way of practicing, it is a way of working together to maximize the opportunity to apply what the students learn in a classroom environment in real-world settings.

The courses are: (1) One Health field-based training course for students in Quang Ninh focusing on pig-raising biosecurity practices and practicing sampling methods to detect African swine fever, implemented in March 2022 by Thai Nguyen University of Agriculture & Forestry and Hai Phong University of Medicine and Pharmacy; (2) Rabies Vaccination Program and Memorandum of Understanding Ceremony, conducted by the Nong Lam University and University of Medicine and Pharmacy at Ho Chi Minh City: (3) One Health collaboration between veterinary and human medicine for a disease prevention course organized for 60 students of the Vietnam National University of Agriculture; (4) One Health field-based training course for 94 public health students. medical staff, and veterinary staff in Vu Thu district, Thai Binh province, held by the Thai Binh University of Medicine and Pharmacy in June 2022; and (5) Parasitic helminths in dogs and zoonotic transmission to humans course for 45 students from Can Tho University.

Two new One Health Student Clubs (OHSCs) were established in OHW-NG Year 3, one for students of Thai Nguyen University of Agriculture and Forestry in collaboration with a private enterprise, the Thien Thuan Tuong company, and the other one for students of the Nong Lam University and University of Medicine and Pharmacy in Long An province.

Engaging the future One Health workforce

In December 2021, intending to promote the OHSC activities, the VOHUN NCO organized a workshop to orient and share activities for 2021 to 2022. After the event, 18 OHSCs submitted 66 proposed activities. During OHW-NG Year 3, VOHUN provided technical and financial support for 21 activities with the participation of 1,473 students and thousands of other individuals from surrounding communities

One highlight activity was the virtual talk show entitled "Wildlife Conservation and Health" which attracted 245 attendees, held on 3 March 2022 to commemorate World Wildlife Day. This talk show was initiated by VOHUN NCO in collaboration with MedInsight book publishers and aimed to: (1) raise awareness and engagement of One Health students in wildlife conservation, and (2) recognize the link between wildlife conservation and human and environmental health. Guest speakers came from the Convention on International Trade in Endangered Species of Wild Fauna and Flora Viet Nam, Worldwide Fund for Nature in Viet Nam, Save Vietnam Wildlife, Vietnam National University of Agriculture, and Nong Lam University.

Another highlight activity was organized for World Rabies Day on 25 September 2022, wherein 70 students from 5 One Health Student Clubs conducted simultaneous Rabies Risk Communication events in five communes of An Duong district, Hai Phong City. The events attracted 405 local leaders and villagers. Students gave presentations, distributed flyers, had Q&A exchanges with commune residents to increase general knowledge about rabies prevention, and performed comedies/plays and a flash mob dance, all to creatively relate the seriousness of rabies. Through these innovative risk communications techniques individuals who participated in the communication events would be better able to relate what they learned through within their families and communities.

From 27 to 28 July 2022, VOHUN NCO organized a national One Health Camp focusing on risk assessment of viral disease from wild animals for 47 students from member Universities in Tan Phu district, Dong Nai province. The main activities of the camp were risk assessment practices, synthesizing data, and presenting the results in workshop. Students had opportunities to visit several



National One Health Camp for students organized in Cat Tien National Park, Dong Nai Province; 27 July 2022. Photo credit: VOHUN

wildlife farms and wildlife rescue centers to learn firsthand about wildlife farming management practices. Before the main camp, students attended a three-day online training course to learn more about viral diseases from wild animals, risk assessment techniques for infectious diseases from wild animal farms, and zoonotic diseases. The participants of this event included lecturers of member Universities, representatives of Dong Nai Department of Agriculture and Rural Development, Tan Phu forest protection station, and VOHUN NCO.

Objective 2

Three VOHUN representatives attended the Competency-based Education Workshop held by the Global Team on 24 to 27 May 2022 in Bangkok, Thailand. They were interested in building upon their existing skills-building courses and field experience offered to students. During the workshop, they drafted an action plan to disseminate the highlights of the workshop and form a core group to support the adoption of this pedagogical approach.

From 16-18 August 2022, VOHUN conducted a semi-virtual Training of Trainers workshop on Knowledge Management for 113 faculty members from 24 VOHUN member Universities. The workshop aimed to improve the trainee's understanding of key concepts, principles, skills, and tools, and awareness of how to apply it in their daily work. The workshop also included representatives of SEAOHUN Secretariat, INDOHUN, and VOHUN NCO.

Objective 3

In November 2021, VOHUN celebrated the Network's 10th Anniversary with two semi-virtual events live-streamed via the Network's Facebook page: a One Health policy dialogue and One Health talk show. The policy dialogue focused on development of a One Health Workforce in Viet Nam and included representatives from multiple government ministries, professional associations, international organizations and VOHUN member Universities. The talk show event focused on career opportunities for current and future One Health professionals across the country.

The VOHUN Year 4 activity planning meeting was held in Da Nang on 20 and 21 July 2022, with 65 participants from 25 universities, USAID, and the U.S. Defense Threat Reduction Agency. During the meeting, VOHUN NCO presented proposed Year 4 activities and then representatives of member Universities divided into 5 groups to discuss and provide comments or other ideas to pre-finalize the workplan for Year 4.

The VOHUN annual meeting was conducted virtually on 22 and 23 September 2022, with participation of representatives from 25 member Universities and other NGO partners. The experiences, successes and lessons learned from the OHW-NG Project activities implemented in Year 3 were shared



VOHUN Year 4 activity planning meeting conducted in Da Nang, 20 July 2022. Photo credit: VOHUN

during this meeting. The meeting also provided an opportunity for VOHUN member Universities to be briefed on the main activities for Year 4.

VOHUN expanded its Network from 24 to 27 member Universities. The network added Dong A University, Hanoi University of Natural Resources and Environment, and Viet-Duc University based on the recommendations of their university leaders.

On 15 February 2022, VOHUN provided a presentation for the USAID Partners' Meeting.

Lessons Learned

The VOHUN NCO actively organized two important events in the context of the complicated developments of the COVID-19 pandemic (Policy Dialogue on developing OHW in Vietnam and a Student Talkshow on One Health career development opportunities) for VOHUN's 10th anniversary celebration. Organizing the events led to the development of two policy briefs. Recommendations for policy and practice are proposed together with specific solutions on adding a One Health-related competency framework for job positions in health care units and training courses. All guest speakers emphasized the roles of VOHUN member Universities in One Health workforce education, the importance of field-based learning, and the value of internship activities as practical ways for students to gain critical skills and explore their individual professional networks.

Two new OHSs were established with support from the private sector. One site was set up by the Thai Nguyen UAF in

collaboration with Thien Thuan Truong company. The other site was established in collaboration with the Faculty of Animal Husbandry and Veterinary Medicine - the Nong Lam University, the Faculty of Public Health - the University of Medicine and Pharmacy - Ho Chi Minh City, Boehringer Ingelheim Veterinary Medicine Company. and the local government. Both new sites are partially supported by private sector businesses. The linkage between universities and private sector is an important bridge in ensuring and improving the quality of student education and training, helping students prepare for future professional work, and to improve the quality of human resources of employers and enterprises. This collaboration expands our network connecting University members with the private sector, situating current and future generations of the One Health workforce within industry. The diversity of sites also contributes to the network's long-term sustainability.

Next Steps

Understanding the importance of sustaining our One Health university network, especially after the OHW-NG Project ends, VOHUN will design and conduct a survey to measure VOHUN's organizational health based on the partnership health check indicators of the practical guide to build high-impact multistakeholder partnerships for the Sustainable Development Goals. VOHUN will also develop a resource mobilization plan and organize a fundraising training course.

In addition, VOHUN will strengthen the capacity of human health and animal health staff at the newly-established OHSs by providing training courses which apply One Health Core Competencies, mentoring opportunities for students, and conducting

multi-disciplinary risk assessments in Hai Phong. Creating and adapting One Health modules and promoting private sector involvement in field-based learning will improve the quality of the current and future One Health workforce.

VOHUN will continue to encourage OHSs to hold inter-club activities such as seminars, competitions, field trips, and community outreach activities to generate linkages between different universities and disciplines across Viet Nam. VOHUN introduced updated One Health training programs through pre-service education and in-service training, field-based learning for students through OHSCs with mentoring support from local health staff, involvement of the private sector in establishing OHSCs. capacity building in disease surveillance, data analysis for health professionals at different levels, and competency-based education for lecturers and students.

All these elements combine to create a framework for increasing VOHUN's sustainability and, through it, strengthening Vietnam's One Health workforce skills and abilities to prevent, detect, and rapidly respond to complex challenges at the interface of human, animal and environmental health. VOHUN will improve current and future workforce knowledge and skills through continuous improvement and adaptation of One Health training programs focusing on field-based practices.

Important Links

- One Health Sites: https://vohun.org/en/ one-health-field-sites.html
- Policy brief: One Health Policy and Education: http://bit.ly/3Fyikdr
- Policy brief: Increasing practical experiences in One Health education: http://bit.ly/3Wk6ni4

Success Story

National One Health Student Camp 2022: Connect To Create the Future

The annual National One Health Camp, organized by Vietnam One Health University Network (VOHUN), is one of the most anticipated events of the year for undergraduate students in Viet Nam. VOHUN offers this unique activity to build field experience for the future One Health workforce. Conducted from 27 to 28 July 2022, this year's theme was "Risk Assessment of Infectious Diseases caused by Viruses from Wild Animals". The main objectives of the camp were to provide an opportunity for students to: (i) understand the importance of the One Health approaches in the prevention and control of human and animal diseases, and (ii) apply One Health core competencies in conducting risk assessment for viral diseases in wildlife species present in their community.

Locations for the One Health camp were carefully selected in five communities across Tan Phu district in Dong Nai province, where local wild animal farms are plentiful and wildlife disease surveillance projects are active. The program also included visits to Cat Tien National Park, a natural reserve protecting one of the largest primitive tropical forests in Viet Nam, along with tours of the Nature Museum and Wildlife Rescue Center. To ramp up to the camp, a three-day online training course was provided with important background information about viral diseases in wildlife species and technical guidance on how to conduct a risk assessment.

Students started their assessment by

visiting the local community and conducting interviews with health workers, veterinarians, environmental officers, breeders, and traders based on the plan they prepared. Some groups were taken to wild animal farms to interview breeders and observe the livestock waste treatment process, as well as to learn more about the breeding process. Students also had conversations with local community members about the risk of viral diseases from wild animals they were raising. Lecturers invited from member Universities guided students, gave feedback

on the reports, and selected the top-performing group.

The 47 participating students were divided into groups of mixed gender and academic majors. Mixing students from diverse backgrounds and disciplines helped facilitate the exchange of culture, knowledge, and skills, broadening their inter-personal and professional networks and preparing them for diverse perspectives they will face in their future careers.

Many students said their participation in the One Health camp was one of the most memorable events in their academic life because of the field experience that it provided, and new friendships they made with fellow campers. One of the reasons leading to the success of the National One Health Camp this year was the enthusiastic support and active participation of the local government representatives and community members. They each created favorable conditions for students and lecturers when working in the field, such as inviting local people to be interviewed and to participate in visiting the farms.



National One Health Camp for Students 2022
Photo credit: VOHUN



One Health Champions

Increasing knowledge of the interconnectedness of the health of people, animals, and the environment



ONE HEALTH CHAMPIONS



Limkhuoch Hov
One Health Champion,
CAMBOHUN

Lecturer, Department
of Animal Science and
Veterinary Medicine,
Kampong Cham National
Institute of Agriculture,
Cambodia

"One Health is a short word but it is very meaningful because it is a connecting link between human, animal and environmental spheres. We need professionals from differences sectors working together to prevent pandemics due to zoonotic diseases."

Limkhuoch Hov is an officer and a lecturer at the Department of Animal Science and Veterinary Medicine, Kampong Cham National Institute of Agriculture. She has been part of many research projects on topics related to One Health, which focus on zoonotic disease. She is specially trained in participatory epidemiology tools for collecting data related to One Health knowledge, attitudes, and practices. In early 2022, she led a research team from two different Cambodian institutes, namely Prek Leap National Institute of Agriculture and Kampong Cham National Institute of Agriculture, that received a CAMBOHUN Small Grant 2022 for studying the knowledge, attitudes and practices of famers with regards to avian influenza. Ms. Hov holds a Bachelor of Animal Science and Veterinary Medicine, Kampong Cham National Institute of Agriculture, Kampong Cham, Cambodia.



"The 3Cs (Communication, Coordination and Collaboration) are the keys to success for One Health. Most of the new emerging diseases are zoonoses; rapid detection and adequate response are urgently needed to stop the spread. Policy support to human resources in the human, animal and environmental health sectors is important, and the capacity and readiness to carry out the 3 Cs are key to success in controlling it."



Dr. Theodola Baning Rahayujati is INDOHUN's 2022 One Health champion. With more than 25 years of experience in disease surveillance, control, and outbreak investigation, she has a track record of success in managing outbreaks of zoonotic and vector-borne diseases, such as avian influenza, leptospirosis, anthrax, dengue fever, and chikungunya. Dr. Baning has served as spokesperson for the Kulon Progo District Covid-19 Task Force, and as Consultant Epidemiologist for the Ebola outbreak response in Sierra Leone from 2014 to 2015. Leveraging her background in working with health practitioners from various disciplines, Dr. Baning has led several international and national One Health programs, contributed to One Health conferences and training programs, and currently supports the Indonesia One Health University Network (INDOHUN) as a One Health National Trainer. In addition, Dr. Baning is one of the co-founders of the One Health Village established in Kulonprogo district, Yogyakarta. Together with INDOHUN, she developed the One Health Outbreak Investigation Training curriculum in 2017 adopted by the Ministry of Health and other partners for health workforce training. An alumnus of the Field Epidemiology Training Program (FETP), Dr. Baning is currently the Chair of the Yogyakarta Branch of the Indonesian Epidemiologist Association, Field Supervisor for FETP at Gadjah Mada University, and a reviewer of Gadjah Mada University's Journal of Public Health News and Respati Medical Journal of Respati University. She earned her degree in medicine from the University of Gadjah Mada.

FOR SOUTHEAST ASIA

"My favorite slogan is: 'Work together with the next generation to promote and enhance an appreciation for One Health."

Dr. Angkham Ounavong is the Deputy Director General of the Institute of Research and Education Development at the University of Health Sciences in Vientiane, Lao PDR. In addition to being a lecturer and public health researcher, he also serves as Vice-Chairman of the Lao One Health University Network and a member of the University's ethical research committee. He supervises medical students, graduate students, and medical residents and is also a thesis adviser for the area of preclinical science. Dr. Ounavong's research interests include the rational use of medicine and the tobacco control program. He was a co-investigator of the Global Youth Tobacco Survey in 2012 and 2013 of the World Health Organization Regional Office for the Western Pacific (WPRO-WHO). From 2000 to 2005, he was also a team member of the project for promoting Rational Use of Medicine of the Ministry of Health, supported by WPRO-WHO. Dr. Ounavong graduated as a medical doctor in 1991 from UHS, Lao PDR. He was awarded a scholarship by the German government to study for a Diploma of Epidemiology at the College of Public Health, University of the Philippines Manila from 1999 to 2000, and in 2003 he earned a Master's degree in Primary Health Care Management at the Asian Institute and Health Development, Mahidol University, Thailand.



Angkham OunavongOne Health Champion,

Deputy Director of Research and Education Development, Institute of Research and Education Development, University of Health Sciences, Lao PDR

"Ensuring a successful One Health future means investing in the generation who will carry that future. I believe our biggest opportunity to have a bright future is to tap into the next generation's drive and motivation. It is critical that we embrace and harness the youth's determination and guide it in the right direction so that our next generation of One Health leaders are prepared and able to lead when their time comes."

Dr. Mohd Faizal Bin Ghazali is an academician and researcher, currently working at Universiti Sultan Zainal Abidin as a Senior Lecturer, Deputy Director of the Centre of Farm Management, and Head of the School of Animal, Aquatic and Environmental Sciences. He was formerly the Deputy Director for the Institute of Agriculture and Food Industry Research from 2015-2017. He is a veterinarian by training, specializing in veterinary public health and production, and his research is mainly focused on antimicrobial resistance surveillance and disease biomarkers in animals. Dr. Faizal has been actively involved in MyOHUN activities since 2015 and is currently the One Health Young Leaders and Communication Project Leader. He has a keen interest in positive youth development for university students in Malaysia, and supports outreach projects that educate and promote awareness on zoonotic diseases in rural communities. Dr. Faizal earned his Doctor of Veterinary Medicine in 2009 from Universiti Putra Malaysia, and his doctoral degree in 2015 from the University of Glasgow, United Kingdom. He is an active member of the Royal Society of Biology, London, and board-certified as the Professional Technologist in Agrobased technology by the Malaysia Board of Technologists.



Mohd Faizal Bin Ghazali One Health Champion, MVOHIIN

Senior Lecturer, School of Animal Science, Faculty of Bioresources and Food Industry, Universiti Sultan Zainal Abidin, Malaysia



Mya Thandar
Health Champion, MMOHUN

Professor, Occupational
Environmental Health
Department, University of
Public Health, Myanmar

"My earnest intention as one working in the health sector is to apply the One Health approach to combat rampant global issues like antimicrobial resistance, emerging infectious diseases, and epidemics."

Dr. Mya Thandar is a professor from the Department of Occupational and Environmental Health, University of Public Health, Myanmar. She graduated from the University of Medicine (1), Yangon, and achieved a Doctoral degree (DPH) from Khon Kaen University, Thailand. In 22 years of service in the public health sector, she has taught and mentored medical students at the University of Medicine, MPH and PhD students at the University of Public Health, and health assistant students at the University of Community Health in different capacities. As an academician, she enthusiastically involves herself in capacity building of faculty members, as well as the students and improving the academic offerings by conducting trainings and workshops concerning One Health issues. In addition, she has been conducting research, especially in the field of occupational and environmental health and One Health. She is also interested in doing collaborative research with not only the local universities but international universities on One Health issues. She received a SEAOHUN small grant in 2020 for her proposal entitled "Antimicrobial resistance in wastewater of Yangon Region from the One Health perspective". She is also responsible for the University of Public Health Institutional Review Board as a secretary and the university's coordinator for MMOHUN.



John Vincent B. Fuentebella
One Health Champion,
PhilOHUN

Mayor of Sagñay
Municipality, Camarines Sur,
Philippines

"There are things that we need to do that only the government can implement when we talk about public health. These opportunities to have discussions with experts are important so that we can know what else needs to be done, what government interventions we can implement for the health of our locality. As Mayor, it is my obligation not just to be the head of government in my locality but also to lead an ongoing campaign for cultural change towards sustainability of community health and our environment."

Mayor John Vincent B. Fuentebella (or Jovi, as he is known to his peers) is the current mayor of Sagñay municipality, Camarines Sur. As mayor, he has been active in his duty of serving the people, particularly in ensuring the health of his community by supporting the implementation of initiatives such as: Public Health Standards during the Covid-19 pandemic, clean water and sanitation, measures against the spread of the African Swine Fever virus, and coastal resource management for sustainable fishing. His interest in One Health has moved him to partner with the Philippine One Health University Network (PhilOHUN) and Partido State University to organize and support a training workshop attended by nearly 400 barangay health workers and local government officials from the Partido district (to which the town of Sagñay belongs). He is currently in discussions with PhilOHUN and the Applied Microbiology for Health and Environment Research Group from the University of the Philippines Manila for a follow-up activity in 2023 on incorporating One Health in legislation.

"One Health and risk communication issues are what I am most passionate about in my work. Both of these areas require collaborative, multisectoral, complex, cross-disciplinary approaches, and involve multiple levels of governance, from local to global. Risk communication's purpose is to enable people at risk to make informed decisions to mitigate the effects of a disease outbreak, and take protective and preventive measures. If we apply One Health and risk communication ideas, we will achieve the goal of optimal health outcomes for humans, animals, and the environment."

Dr. Pahurat Kongmuang Taisuwan is the Director of the Secretariat Office of the Royal Development Projects Committee for the Department of Disease Control within the Ministry of Public Health of Thailand. She began working for the Department of Disease Control in 1993, where she focused on preparing for and responding to emerging infectious diseases. In 2013, Dr. Pahurat shifted to the Bureau of Risk Communication within the same department, where she established several training tools, procedures, and guidelines for risk communication to prevent One Health issues or emerging zoonotic diseases as well as public health crises. In 2018, Dr. Pahurat supported Thailand One Health University Network and Southeast Asia One Health University Network as a trainer in crisis risk communication regarding diseases that require a One Health approach, such as rabies, COVID-19, and leptospirosis. Dr. Pahurat collaborated on materials to support One Health workforce development in Thailand, including: Infodemics Risk Reduction and Decision-Making Tools for Proactive Communication and Engagement; the THOHUN International Short Course on Ecosystem Health; Student One Health Camp for Rabies Control; and engaging village health volunteers.





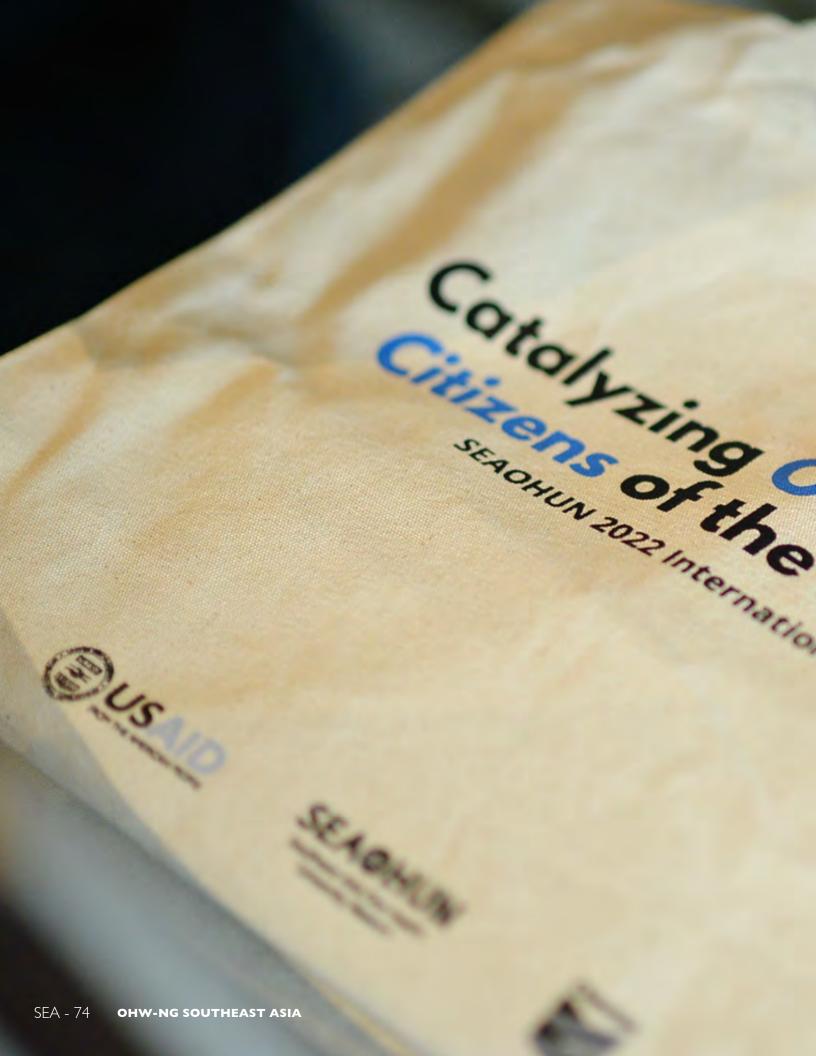
"I've truly enjoyed working with students to broaden their thinking about One Health. Human health is central and placed in a dynamic relation between animal health and the environment. There is a close connection between a clean environment, healthy animals, and safety for humans. The relationship between the three is inseparable. The notion of One Health promotes the link between environmental, animal, and human health. Without a healthy and sustainable environment, we will not be able to live a happy existence as humans."

Dr. Vo Thi Ngoc Bich is a senior researcher and lecturer specializing in Veterinary Medicine at the Vinh Long University of Technology Education, and has been an active member of the Vietnam One Health University Network since 2018. Currently she is in charge of advising the Vinh Long One Health Student Club, one of the most active clubs in the network, as they organize activities in a complex COVID-19 context to raise the awareness of students and the wider community about the critical need for multidisciplinary One Health approaches to address complex health challenges. She likes advising the club because she feels it is important to propagate the meaning of One Health, its approach and solutions, and integrate it into the youth's perception of a most beautiful life. Ms. Bich earned a Master's degree in Veterinary Medicine from Can Tho University. Her research interest is in biosecurity in veterinary medicine and safety and efficiency in livestock farming.



Vo Thi Ngoc Bich
One Health Champion,
VOHUN

Lecturer at the Vinh Long
University of Technology
Education, Viet Nam





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