

# Preparedness & Response

## ONE HEALTH IN ACTION



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# Preparedness and Response

The USAID-funded Preparedness & Response (P&R) project works in 16 countries in Africa and Southeast Asia to strengthen national systems, policies, and practices for the prevention, detection, and response to public health threats. P&R also provides One Health leadership at the regional and global level.

Increasing numbers and severity of infectious disease outbreaks over the last two decades, such as Ebola virus disease, Highly Pathogenic Avian Influenza, and Zika, have had profound impacts on human health, caused severe burdens on human livelihoods and economies, and posed global security threats. These major disease outbreaks have galvanized support to build national and global capacities in order to meet the requirements of the International Health Regulations (IHR-2005) and advance the Global Health Security Agenda (GHSA).

The One Health approach has emerged as a means to address these threats. One Health is an interdisciplinary, collaborative effort to attain optimal health for people, animals, and the environment. Working together, public health, veterinary medicine, and environmental science experts can better

prevent, detect, and respond to disease events.

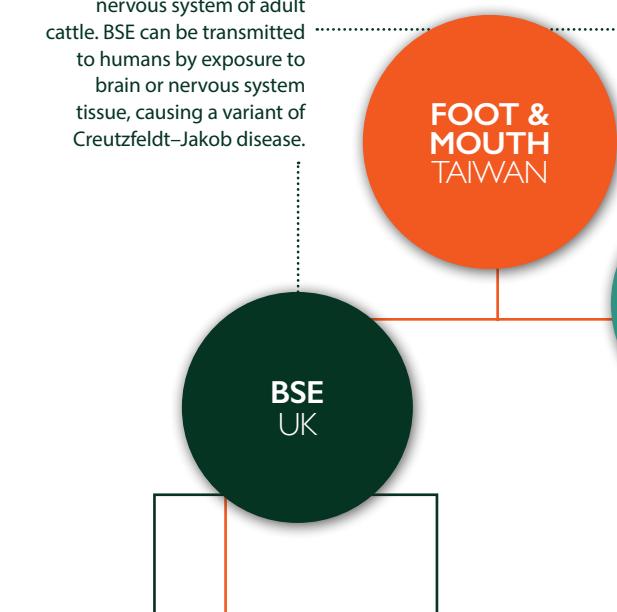
The Preparedness & Response project (P&R), part of a suite of projects funded under USAID's Emerging Pandemic Threats-2 (EPT-2) program, works in 16 countries in Africa and Southeast Asia to establish and strengthen multisectoral collaboration for preparedness and response to emerging disease threats. P&R accomplishes this by establishing or strengthening national One Health platforms, drawing on senior technical and administrative representatives from a broad range of sectors.

Outbreaks with the potential to become pandemics threaten global health and security, disrupt communities, and destroy lives. By building the platforms to coordinate not just response but also prevention, preparedness, and detection, P&R can help country governments minimize these threats, reduce costs, and save lives.

# Why One Health?

BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), better known as mad cow disease, is a fatal disease that affects the central nervous system of adult cattle. BSE can be transmitted to humans by exposure to brain or nervous system tissue, causing a variant of Creutzfeldt-Jakob disease.

SEVERE ACUTE RESPIRATORY SYNDROME (SARS) is a respiratory illness first discovered in people in parts of Asia, North America, and Europe in late 2002. More than 700 deaths were registered in the first outbreak alone.



## SELECT ZOONOTIC DISEASE OUTBREAKS, 1994 - TODAY

HIGHLY PATHOGENIC AVIAN INFLUENZA (HPAI), also known as bird flu, is a viral infection that can infect humans and animals. Estimates for global mortality rates differ, but among certain strains, such as H5N1, mortality rates have been estimated as high as 50 percent.

METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) is an antibiotic-resistant bacterium that causes infections in different parts of the body. According to the U.S. Centers for Disease Control and Prevention (CDC), at least 2 million people become infected with bacteria that are resistant to antibiotics and as many as 12,000 people die each year in the United States alone.

EBOLA VIRUS can cause a severe, often fatal illness that is transmitted from wild animals to humans. More than 11,000 people died in the 2014-2016 Ebola epidemic in West Africa.

## THE CONVERGENCE OF HUMAN AND ANIMAL HEALTH

Of every ten infectious diseases that are identified in humans, six are “zoonotic” diseases – diseases originating in animal populations. With ever-increasing human intrusion into natural ecosystems, the growing demand for animal-based food products, international trade, international travel, and other factors, human exposure to zoonotic diseases has never been higher.

Several countries have experienced zoonotic disease outbreaks that could have been prevented if they were promptly addressed through effective collaboration among the human, animal, and environmental health sectors.

Too often, however, sectors work in “silos.” Disease surveillance systems are often focused on humans while animal health systems lag behind, failing to respond to outbreaks until the human population is affected.

## THE ONE HEALTH APPROACH

The One Health approach is the interdisciplinary, collaborative effort to attain optimal health for humans, animals, and the environment. The value of the One Health approach to emerging pandemic threats is that human health, animal health, and environmental experts, working together, have the opportunity to prevent pandemic threats before they “spillover” into human populations, and an outbreak occurs.

The One Health approach calls for proactive multisectoral and interdisciplinary engagement across the human, animal (including wildlife), and environmental health sectors.

When institutionalized as a formal multisectoral coordination approach, One Health can promote prevention efforts and save time in detecting and responding to an outbreak.

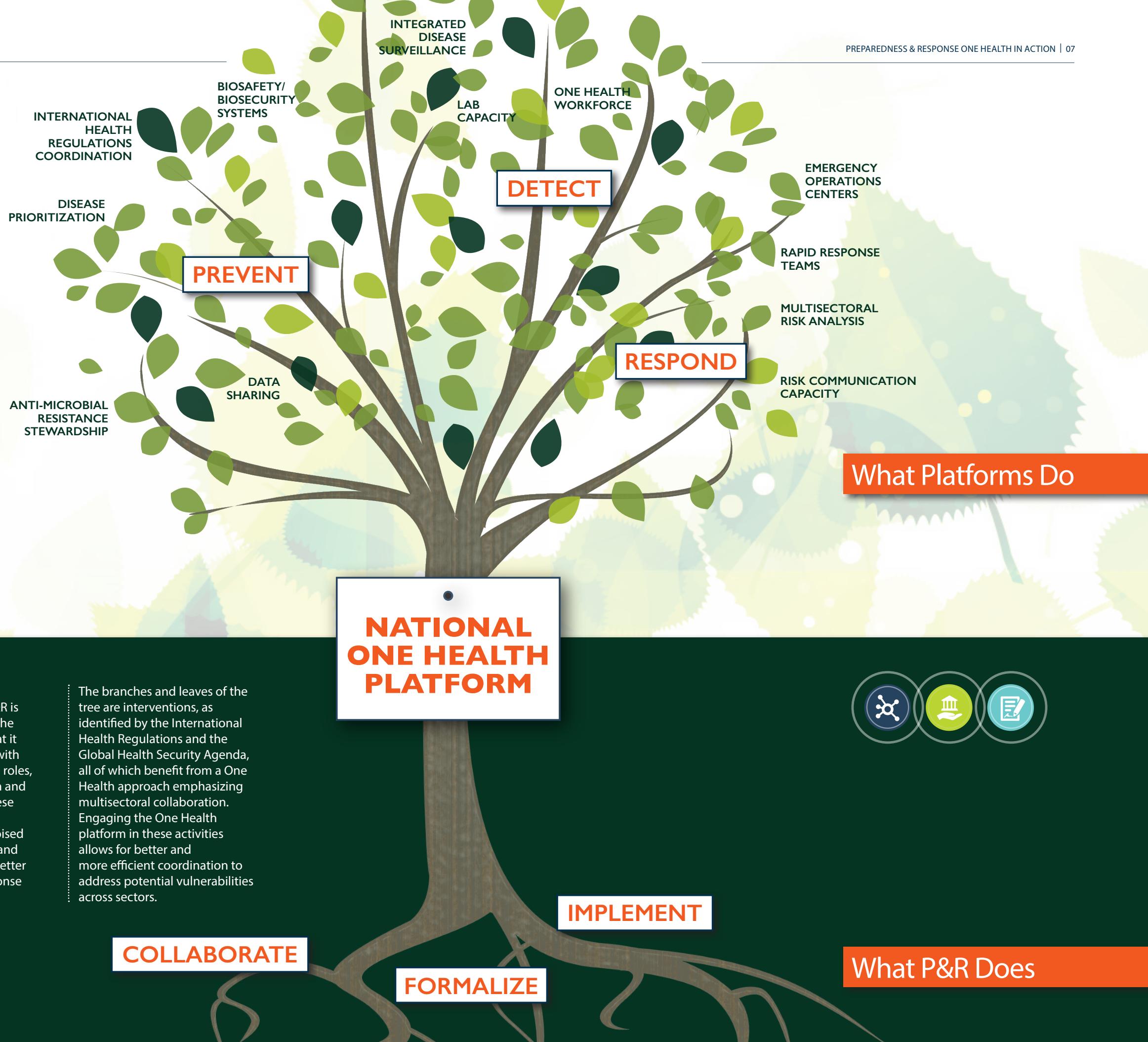
# The Power of Platforms

National One Health platforms are multisectoral coordination mechanisms designed to address emerging disease threats. At a minimum, they bring together public health, animal health, and environment/wildlife ministry representatives. Based on country context, they may also include other ministries, national laboratories, research institutes, universities, development partners, and non-governmental organizations.

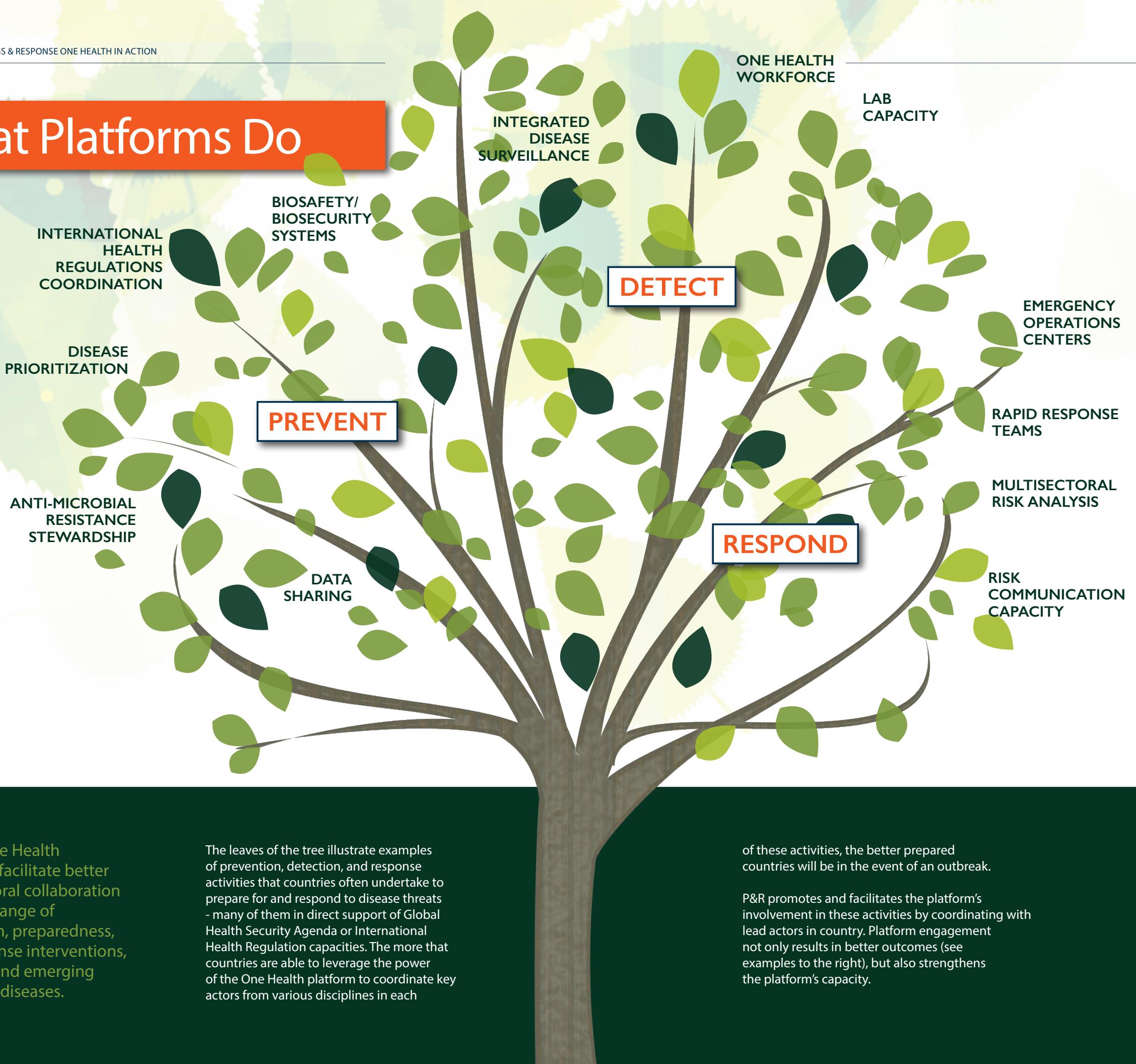
Many countries have brought different sectors together to coordinate responses to a specific disease outbreak or other crisis, but typically the structures that result are temporary and become inactive once that crisis is over. P&R is helping build sustainable multisectoral platforms that strengthen not only outbreak response, but also prevention, preparedness, and timely detection.

If we think of a national One Health platform as a tree, P&R is strengthening the roots, or the platform's foundation, so that it can be sustained over time with clear institutional mandates, roles, and commitments of human and financial resources. Once these multisectoral platforms are institutionalized, they are poised to prevent, prepare, detect, and respond to disease threats better and faster than ad-hoc response efforts.

The branches and leaves of the tree are interventions, as identified by the International Health Regulations and the Global Health Security Agenda, all of which benefit from a One Health approach emphasizing multisectoral collaboration. Engaging the One Health platform in these activities allows for better and more efficient coordination to address potential vulnerabilities across sectors.



# What Platforms Do



Strong One Health platforms facilitate better multisectoral collaboration in a wide range of prevention, preparedness, and response interventions, even beyond emerging infectious diseases.

## PREVENT

In coordination with the U.S. Centers for Disease Control and Prevention (CDC) and other U.S. Government and Global Health Security Agenda partners, P&R has mobilized platforms in Cameroon, Côte d'Ivoire, Ethiopia, Vietnam, Rwanda, and Uganda to organize multisectoral tabletop simulation exercises or conduct zoonotic disease prioritization. These efforts support the sharing of institutional and technical protocols and tools for disease surveillance, reporting, and outbreak response, and encourage ongoing collaboration. P&R has supported platforms in Uganda, Kenya, Cameroon, and Bangladesh to incorporate public health threats beyond emerging infectious disease, like antimicrobial resistance, into preparedness planning.

## DETECT

One Health platforms are well placed to contribute to integrated disease surveillance and response by convening regular meetings to share and review surveillance data across sectors, providing relevant information on the One Health approach, and facilitating multisectoral coordination. In Liberia, the nascent platform supported revisions to the country's technical guidelines so that animal diseases and die-offs are recognized as public health issues.

## RESPOND

One Health platforms in Cameroon and Sierra Leone, with the support of P&R, CDC, and other EPT-2 partners, have been working with emergency operations centers in their countries to identify areas of multisectoral collaboration for preparedness and response. During several outbreaks of avian flu over the past two years, governments in Uganda, Cameroon, and Bangladesh were able to launch a rapid and effective multisectoral response by turning to their recently established One Health platforms for leadership and coordination.



# What P&R Does

P&R draws on local technical expertise, global health standards, strong core partnerships, and the values of the One Health approach to support platforms with a range of activities. The role, mandate, and strategy of each country's platform will vary from one country to another, but the challenges and core elements of strengthening a One Health platform remain consistent.

## COLLABORATE

### MAP ONE HEALTH STAKEHOLDERS

Stakeholder mapping outlines the network of One Health actors, their role, relative interest and influence, and resources (technical and financial) for One Health. Mapping these stakeholders helps platforms to target the right people, mobilize resources, and strengthen coordination and collaboration.

### ORGANIZE ONE HEALTH SENSITIZATION

One Health sensitization activities (e.g. workshops, case studies, technical briefs) targeting ministry officials, policymakers, and global health security partners emphasize the value of adopting a multisectoral approach – including human health, animal health, and environmental experts – to infectious disease prevention, preparedness, detection, and response.

### FACILITATE MULTISTAKEHOLDER COORDINATION MEETINGS

Multistakeholder meetings - including those that specifically support the global health security agenda - catalyze coordination and foster sustained collaboration among sectors by improving information sharing and identifying mechanisms and tools for using the One Health approach in preparedness and response.

## FORMALIZE

### DEFINE PLATFORM ROLES AND RESPONSIBILITIES

Clear terms of reference detailing the roles and responsibilities for each component of the One Health platform (e.g. steering committee, technical working groups) and for the individuals involved are critical to guide the governance and operations of the platform.

### DEVELOP ORGANIZATIONAL STRUCTURE

An organizational structure includes an organogram and defines how roles, decision-making power, and responsibilities are assigned, controlled, and coordinated, and how information flows both internally and externally.

### ENHANCE LEADERSHIP CAPACITY

Leading for Change workshops strengthen the leadership skills of One Health platform members so they can build a collaborative culture where stakeholders share responsibility for greater effectiveness in the prevention, detection, and response to outbreaks.

### LAUNCH PLATFORMS

The official launch of a national One Health platform is a high-level government event signaling formal government buy-in. Senior government officials from the host country and the U.S. embassy often attend as well as representatives from civil society and the media.

## IMPLEMENT

### REVIEW, UPDATE, OR DEVELOP NATIONAL ONE HEALTH STRATEGIC PLANS

National One Health strategic plans formalize a country's multisectoral collaboration strategy in preparing for and responding to disease threats using best practices from across the globe.

### CONDUCT PREPAREDNESS AND RESPONSE SIMULATIONS

Tabletop simulation exercises bring key actors together to test preparedness and response plans for effective detection, prevention, and response to disease events of either endemic or unknown etiology.

### FACILITATE AFTER-ACTION REVIEW

After-action reviews are facilitated learning exercises following a completed outbreak response. When led by the One Health platform, the after-action review can identify gaps in multisectoral collaboration to inform improvements to future prevention, preparedness, detection, and response efforts.

### CONDUCT PRIORITIZATION OF ZOONOTIC DISEASES

Zoonotic disease prioritization is a process (coordinated in collaboration with the CDC) of identifying emerging or endemic diseases of greatest concern. Through dialogue with multisectoral country stakeholders, partners present recommendations and solutions for improving prevention, detection, and response for prioritized diseases.

### DEVELOP OR REVIEW GUIDELINES, STANDARD OPERATING PROCEDURES (SOPs), AND PROTOCOLS

Integrating One Health into guidelines, SOPs, or protocols enhances multisectoral collaboration in preparedness and response activities, resulting in more efficient and timely responses to public health events.

### REVIEW, UPDATE, OR DEVELOP NATIONAL PREPAREDNESS AND RESPONSE PLANS

National preparedness and response plans describe the process, roles, and responsibilities of multisectoral actors in preparing for and responding to public health events at the national and subnational levels. They are central to institutionalizing a One Health approach.

### PROVIDE TECHNICAL ASSISTANCE FOR OUTBREAK RESPONSE

A disease outbreak of public health importance, although an unfortunate event, provides a special real-life opportunity for the One Health platform to facilitate coordination, collaboration, and communication across its stakeholders.

### SUPPORT PLATFORM ONE HEALTH IMPLEMENTATION

One Health platforms can be leveraged by a wide variety of partners to better implement multisectoral One Health activities, reinforcing the value and sustainability of the platform. Many of these activities contribute directly to the Global Health Security Agenda and International Health Regulations results including improving anti-microbial resistance stewardship, facilitating data sharing, building lab capacity, enhancing integrated disease surveillance, strengthening emergency operations centers, or strengthening rapid response teams.

## ENABLING ENVIRONMENT

### SUPPORT ONE HEALTH POLICY ADVOCACY

Policy advocacy garners buy-in and support of key policymakers to enact or favor a particular One Health policy position, approach, or intervention.

### ENGAGE PRIVATE SECTOR STAKEHOLDERS

Strategic engagements with the private sector support national governments in goal setting and planning for mutually beneficial preparedness and response. One Health platforms can work with the private sector to enhance surveillance, mobilize resources, and strengthen response capacity.

### SUPPORT GENDER INTEGRATION

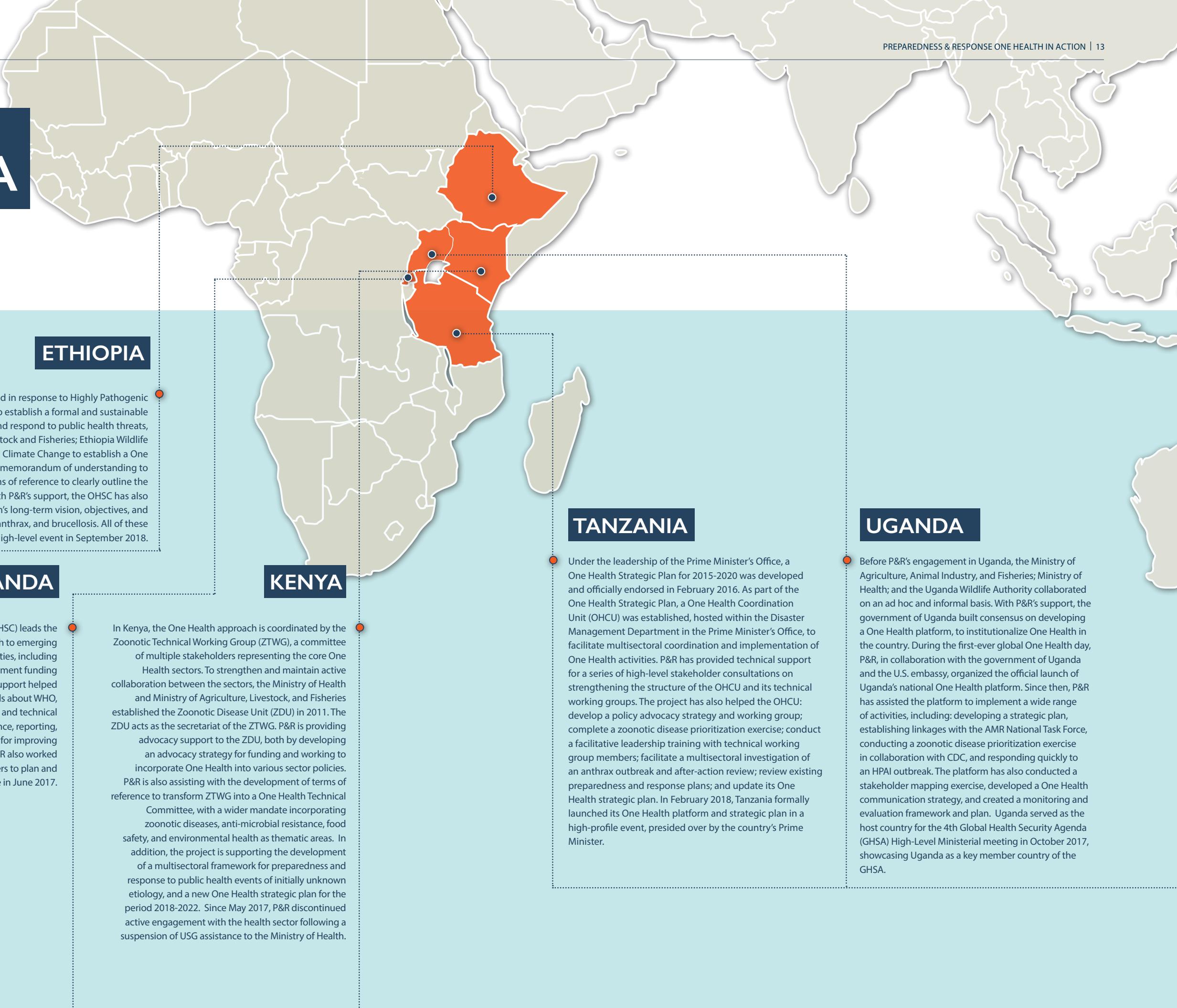
Gender integration efforts identify and address gender factors that may be relevant to disease emergence, amplification, and spread as well as to the composition and operations of the One Health platform.

### MOBILIZE TECHNICAL AND FINANCIAL RESOURCES

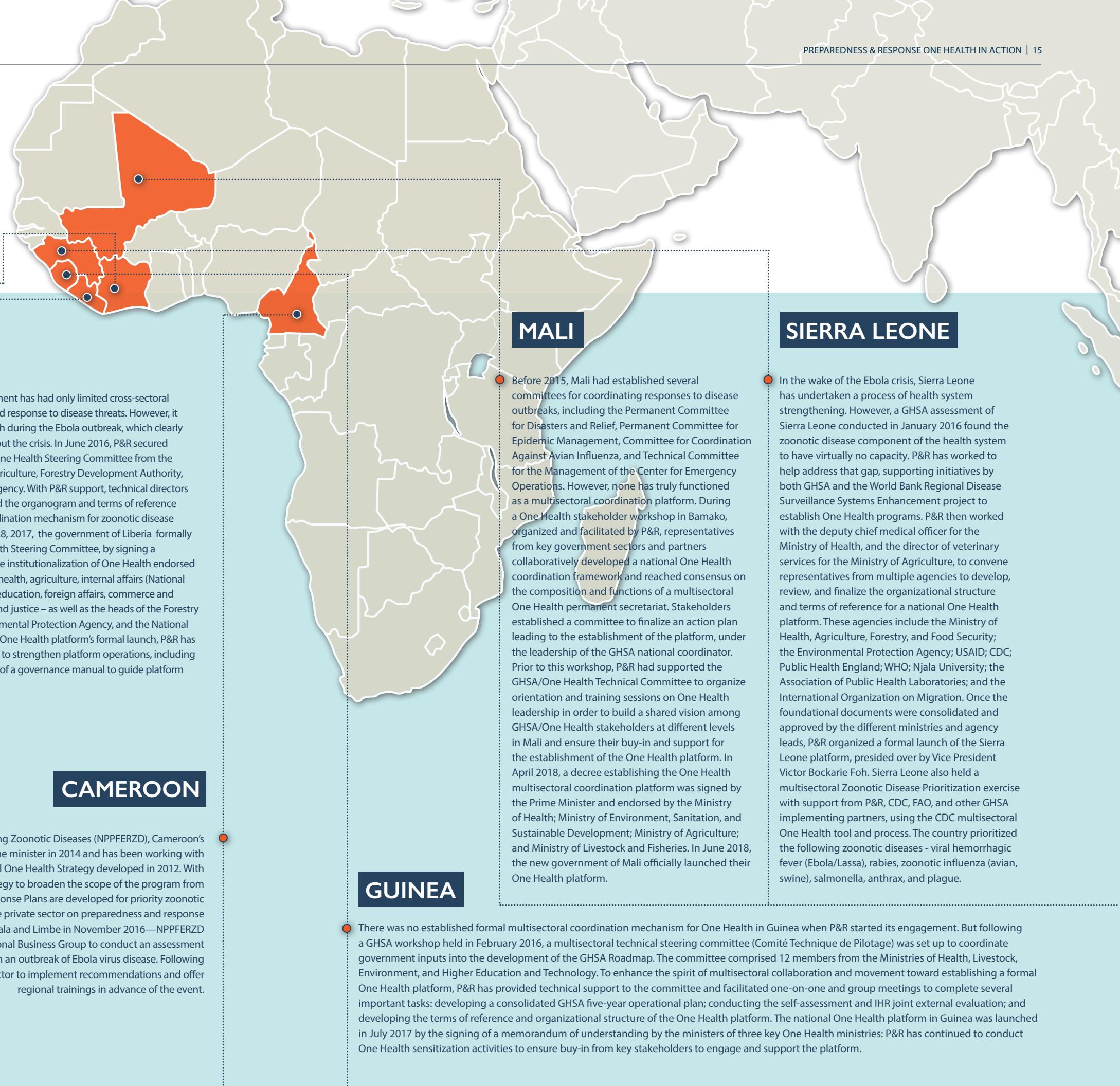
Resource mobilization includes assessing resource needs, identifying possible solutions, and carrying out advocacy and communication strategies. Resource mobilization also involves making better use of, and maximizing, existing resources.

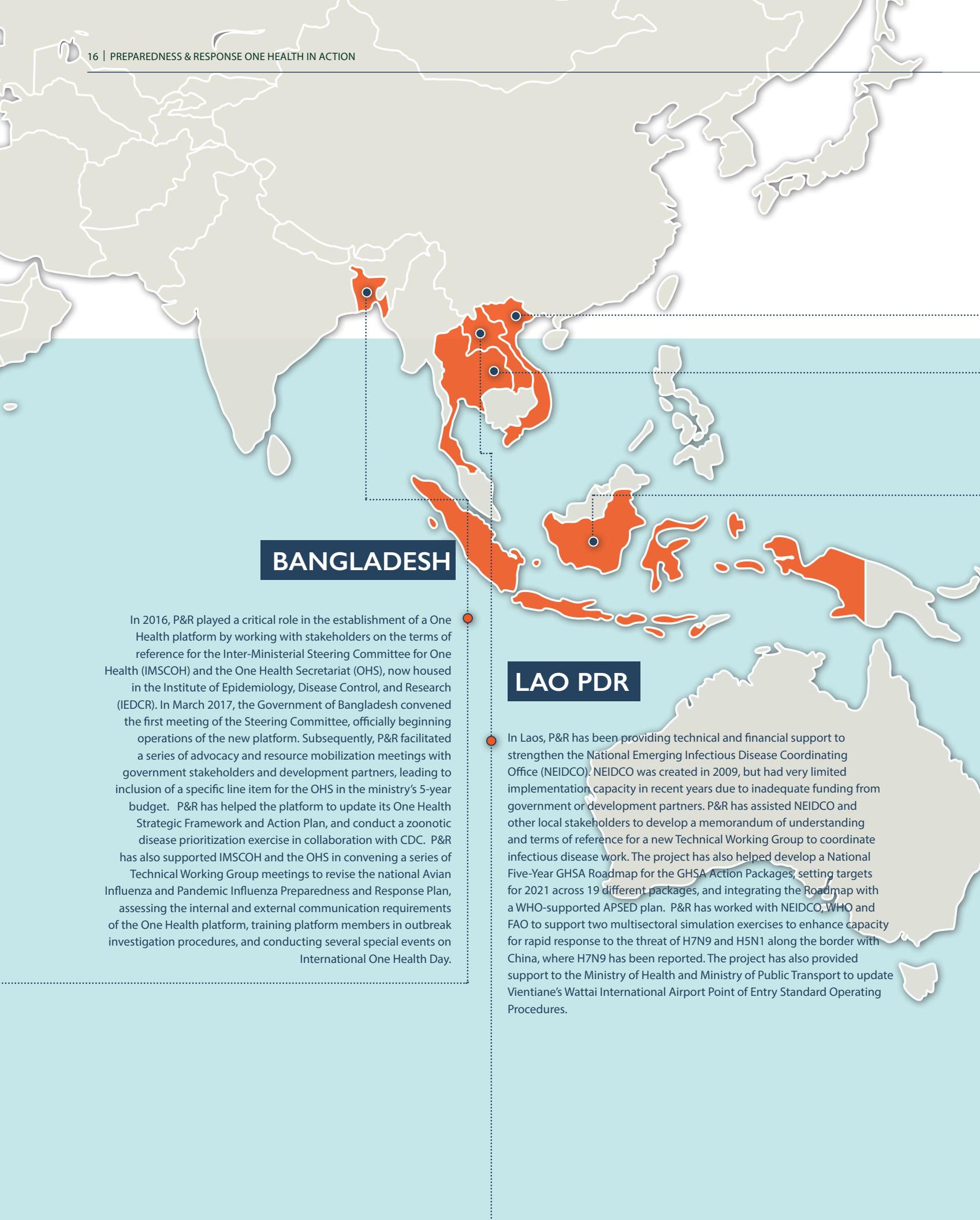


## WHERE P&R WORKS EAST AFRICA



# WHERE P&R WORKS WEST AND CENTRAL AFRICA





## WHERE P&R WORKS SOUTHEAST ASIA

### BANGLADESH

In 2016, P&R played a critical role in the establishment of a One Health platform by working with stakeholders on the terms of reference for the Inter-Ministerial Steering Committee for One Health (IMSCOH) and the One Health Secretariat (OHS), now housed in the Institute of Epidemiology, Disease Control, and Research (IEDCR). In March 2017, the Government of Bangladesh convened the first meeting of the Steering Committee, officially beginning operations of the new platform. Subsequently, P&R facilitated a series of advocacy and resource mobilization meetings with government stakeholders and development partners, leading to inclusion of a specific line item for the OHS in the ministry's 5-year budget. P&R has helped the platform to update its One Health Strategic Framework and Action Plan, and conduct a zoonotic disease prioritization exercise in collaboration with CDC. P&R has also supported IMSCOH and the OHS in convening a series of Technical Working Group meetings to revise the national Avian Influenza and Pandemic Influenza Preparedness and Response Plan, assessing the internal and external communication requirements of the One Health platform, training platform members in outbreak investigation procedures, and conducting several special events on International One Health Day.

### LAO PDR

In Laos, P&R has been providing technical and financial support to strengthen the National Emerging Infectious Disease Coordinating Office (NEIDCO). NEIDCO was created in 2009, but had very limited implementation capacity in recent years due to inadequate funding from government or development partners. P&R has assisted NEIDCO and other local stakeholders to develop a memorandum of understanding and terms of reference for a new Technical Working Group to coordinate infectious disease work. The project has also helped develop a National Five-Year GHSA Roadmap for the GHSA Action Packages, setting targets for 2021 across 19 different packages, and integrating the Roadmap with a WHO-supported APSED plan. P&R has worked with NEIDCO, WHO and FAO to support two multisectoral simulation exercises to enhance capacity for rapid response to the threat of H7N9 and H5N1 along the border with China, where H7N9 has been reported. The project has also provided support to the Ministry of Health and Ministry of Public Transport to update Vientiane's Wattai International Airport Point of Entry Standard Operating Procedures.

### INDONESIA

Indonesia's One Health platform—the National Commission for Zoonoses Control (KOMNAS KNPZ)—was established by a presidential regulation in 2011 within the Coordinating Ministry for Human Development and Cultural Affairs (Kemenko PMK). KOMNAS was dissolved at the end of 2017, however, and P&R has been helping Kemenko PMK develop a transition strategy to a new coordinating mechanism. P&R has provided technical inputs and coordination support for a series of multisectoral consultations on the transition strategy, the structure, and the terms of reference for a new coordinating mechanism, which is expected to receive presidential approval in late 2018. P&R has also been a key partner to Kemenko PMK in its development of a set of standard guidelines, officially endorsed and launched in February 2018, for provincial-level One Health coordination in both outbreak and pre-outbreak situations. To promote the sustainability and reach of these guidelines, P&R successfully partnered with the Australia-Indonesia Partnership for Emerging Infectious Diseases (AIP-EID) to roll them out to all 34 provinces of Indonesia. P&R is also contributing to the development of the country's Sistem Informasi Zoonosis dan Epidemi (SIZE) guidelines for risk mapping, information sharing, and decision-making.

### VIETNAM

P&R collaborates closely in Vietnam with the One Health Partnership (OHP), which has served under the Ministry of Agriculture and Rural Development as the secretariat and donor coordination mechanism for One Health in the country for more than 10 years, particularly supporting OHP's operations for six months in 2016, while it awaited a new grant from the USAID mission. P&R also worked with OHP to help launch Vietnam's new five-year strategic plan for One Health, and most recently provided technical support to OHP and partner ministries to develop a results framework and M&E plan for the strategic plan. Most of P&R's other activities have supported the implementation of the Government of Vietnam's Circular 16, their joint guidelines from the Ministry of Health and the Ministry of Agriculture and Rural Development for coordinated prevention and control of zoonotic diseases. These activities included a simulation workshop in Quang Nam Province to strengthen collaboration in surveillance, outbreak investigation, and response to rabies. In addition, P&R has collaborated with WHO and FAO in organizing a series of technical working group meetings to review and update the H7N9 preparedness plans of the Ministry of Health and Ministry of Agriculture.

### THAILAND

Thailand has the region's most developed platform, with an organizational structure supported by a new law on emerging infectious diseases (2016), coordination mechanisms at both national and provincial levels funded by the government, a memorandum of understanding with support from seven ministries updated in 2016; and a recently completed new five-year strategic plan. The secretariat for the platform—the One Health Coordination Unit (OHCU)—sits in the Bureau of Communicable Diseases of the Ministry of Public Health. P&R has provided a modest amount of technical support to the country's OHCU, helping to organize a tabletop exercise on avian influenza, engage the wildlife sector in greater participation in One Health activities; plan provincial models of One Health implementation; and most recently train a group of new One Health leaders from the platform's constituent ministries in facilitative leadership skills.

# How P&R Works

P&R strongly believes that solid partnerships are essential in achieving One Health. Building new relationships with local, national, regional, and international partners will bring new perspectives and knowledge to achieving One Health goals.

As part of a suite of projects funded under USAID's EPT-2 program, P&R works directly with its EPT-2 partners: PREDICT-2, One Health Workforce, and FAO.

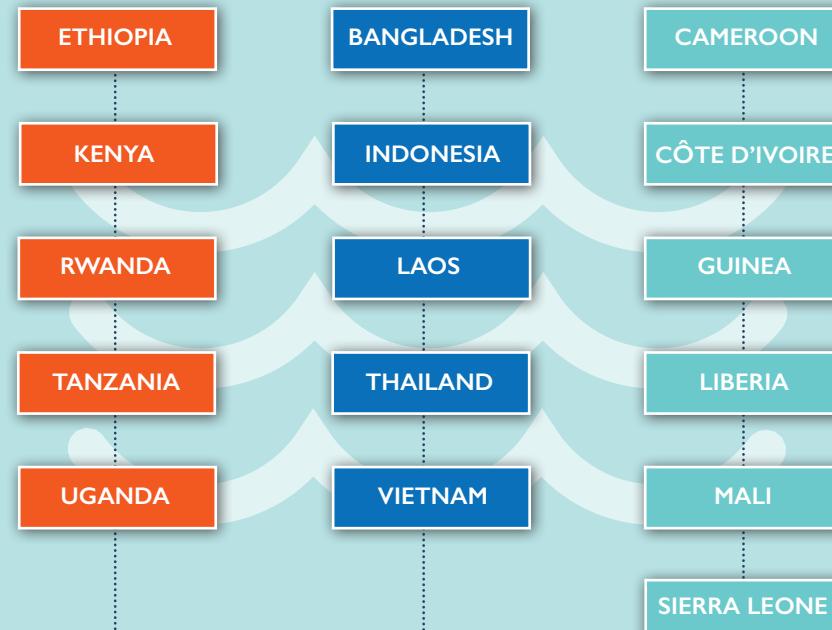
P&R also works with a broad range of governmental and non-governmental organizations locally, regionally, and internationally, working in collaboration with the CDC, the WHO, and the World Bank, as well as other multilateral agencies and non-governmental organizations.

Many of P&R's achievements are made possible by the key relationships the project has developed and maintained with governments, donors, private-sector partners, and other stakeholders in project countries.



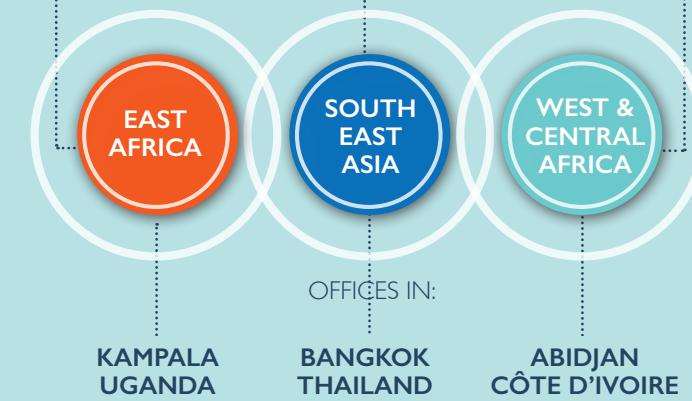
## NATIONAL PRESENCE

- Local experts
- Navigate complex local political dynamics by leveraging established relationships
- Customize solutions to maximize effectiveness and sustainability of national One Health platforms
- Coordinate national One Health and GHSA initiatives to increase impact and sustainability



## REGIONAL HUBS

- Regional experts
- Provide technical & operations support to country teams
- Leverage regional initiatives to increase country-level impact and sustainability



## GLOBAL LEADERSHIP

- International experts
- Ensure alignment with USAID/GHSA objectives
- Leverage global initiatives to increase development impact
- Ensure high quality standards and shared best practices



FOR MORE INFORMATION ABOUT P&R,  
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