

2021 ANNUAL REPORT

HEALTH EMERGENCY
PREPAREDNESS & RESPONSE
UMBRELLA PROGRAM

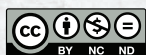
APRIL 2022

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Washington, D.C. 20433
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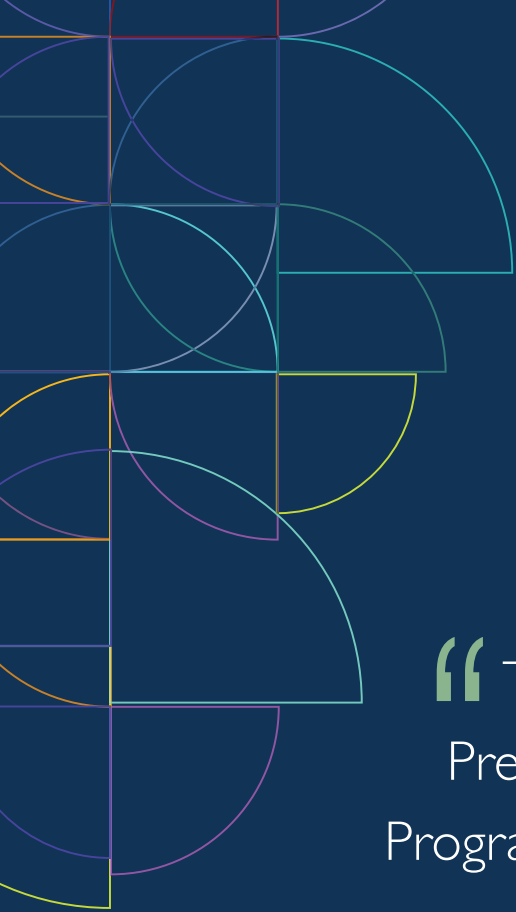
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Nursing staff at Tonga's largest hospital, Vaiola Hospital. Photo: Thomas Michael Perry / World Bank.

ACRONYMS

ACEGID	African Centre of Excellence for Genomics of Infectious Diseases
AF	Additional Financing
ASEAN	Association of Southeast Asian Nations
BETF	Bank-Executed Trust Fund
CDC	Centers for Disease Control and Prevention
CERI	Centre for Epidemic Response and Innovation
COVAX	COVID-19 Vaccines Global Access
COVID-19	Coronavirus Disease 2019
CRW	Crisis Response Window
DHIS2	District Health Information System version 2
EAP	East Asia and Pacific
ECSA	East, Central and Southern Africa
ESMAP	Energy Sector Management Assistance Program
ESMP	Environmental and Social Management Plan
ETU	Ebola Treatment Unit
GFDRR	Global Facility for Disaster Reduction and Recovery
GOI	Government of Indonesia
HEPR Program	Health Emergency Preparedness and Response (Umbrella) Program
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IPC	Infection Prevention and Control
Lao PDR	Lao People's Democratic Republic
MERS	Middle East Respiratory Syndrome
MOH	Ministry of Health
MPA	Multiphase Programmatic Approach
PCR	Polymerase Chain Reaction
PHRD	Policy and Human Resources Development Fund
PIU	Project Implementation Unit
PPE	Personal Protective Equipment
RETF	Recipient-Executed Trust Fund
SA	South Africa
SDTF	Single Donor Trust Fund
SOP	Standard Operating Procedure
SPAR	State-Party Self-Assessment Report
STP	São Tomé and Príncipe
TA	Technical Assistance
TF	Trust Fund
UN	United Nations
UNICEF	United Nations Children's Fund
WBG	World Bank Group
WHO	World Health Organization



“ The Health Emergency
Preparedness and Response
Program is an important tool that
expands the ability of the World
Bank and our partners to deliver
broad, fast action to support
low-income countries and the
most vulnerable communities,
including refugees ”

Mamta Murthi

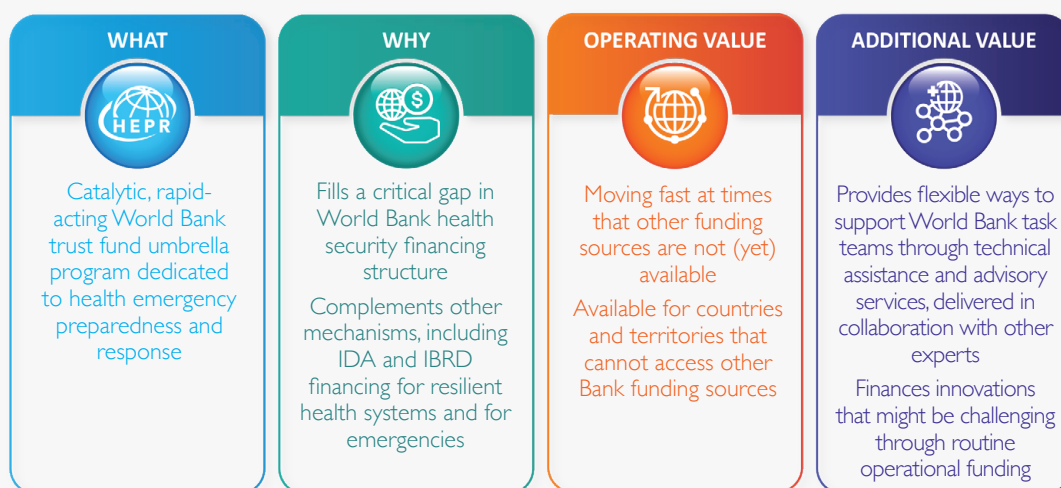
*World Bank Vice President for
Human Development
at the World Bank*

THE HEPR PROGRAM AT A GLANCE

WHAT THE HEPR PROGRAM IS

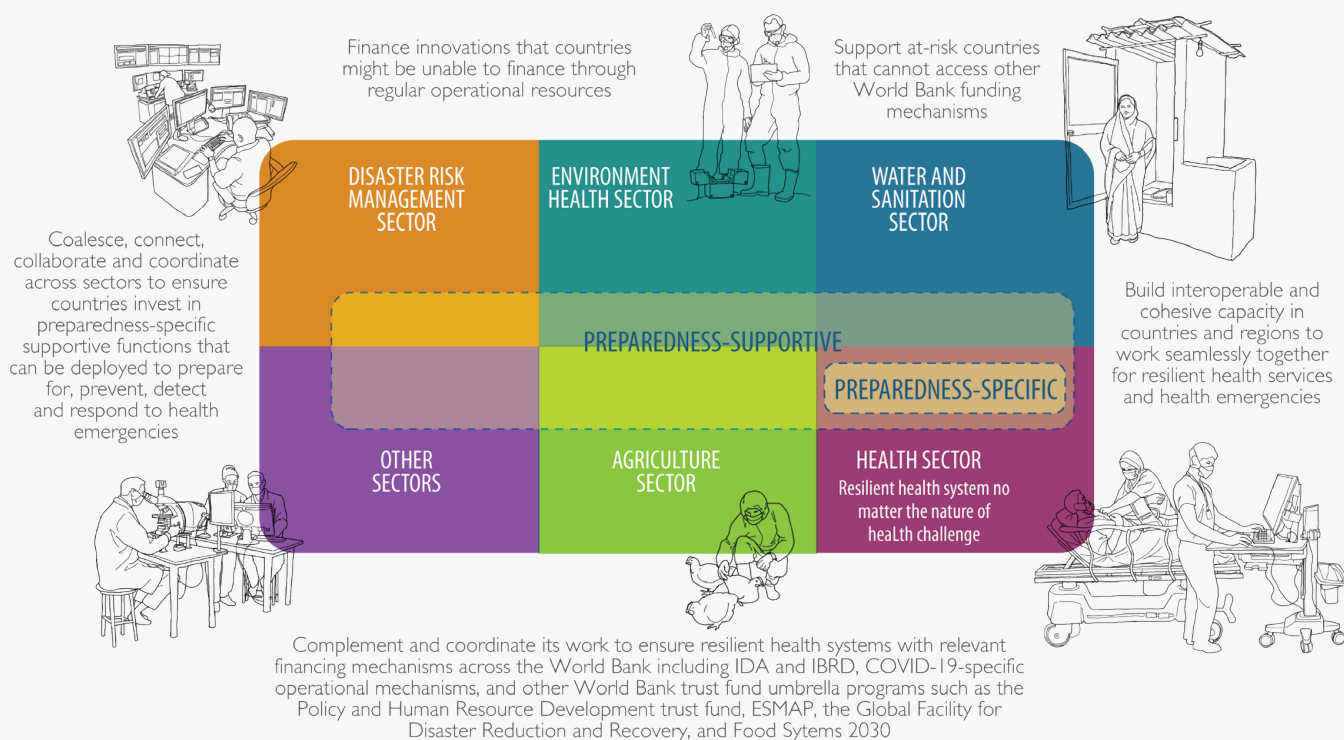
The Health Emergency Preparedness and Response Umbrella Program (HEPR Program) is the first and only World Bank trust fund mechanism exclusively dedicated to health emergency preparedness and response. With a mission to catalyze, complement, and connect, the HEPR Program provides financing to jump-start critical and innovative work so countries can act fast, spur innovation, and attract other funding.

FIGURE I HEPR PROGRAM WHAT AND WHY



One of the important features of the HEPR Program is its ability to finance efforts to bring together different sectors to work together on preparing for, preventing, detecting, and responding to health emergencies, irrespective of their nature. This suggests that countries need to focus on both preparedness-specific activities within the health sector (such as expanding surveillance efforts, practicing for emergencies, training health staff and developing contingency emergency plans, and strengthening laboratory networks) and preparedness-supportive activities in the health sector and other sectors (such as ensuring that essential health services are maintained and that surveillance, containment and response efforts in different sectors are cohesive, coordinated, collaborative, and conducive to action within countries and across their borders).

FIGURE 2 PREPAREDNESS-SPECIFIC AND PREPAREDNESS-SUPPORTIVE FUNCTIONS OF THE HEPR PROGRAM



WHY SUCH A PROGRAM

The COVID-19 pandemic demonstrated that many countries are ill-prepared to respond to disease outbreaks and other health emergencies; health emergency preparedness and response capacity must be dramatically improved as safeguards against future crises like infectious disease outbreaks and other kinds of health emergencies. As of 2019, approximately 55 percent of countries lacked the capacity to prevent or respond to health emergencies—a reality borne out in the COVID-19 pandemic. Similarly, the findings in the 2021 Global Health Security Index showed how intractable health emergency preparedness capacity gaps are:

- **79 percent of countries had not allocated domestic funds to health security** in the last 3 years
- **70 percent of countries showed insufficient health capacity** in clinics, hospitals, and community health centers
- **83 percent of countries had low to moderate levels of public confidence** in their government
- **Only 17 percent of countries had emergency preparedness and response plan** in place that included vulnerable populations

These gaps underscore the need for a major concerted effort to step up prevention and preparedness, especially for low and lower middle-income countries with weaker health systems, poor living conditions, and vulnerable populations. And while, even beginning in the early months of the pandemic, other World Bank mechanisms quickly acted to provide significant financing for COVID-19 emergency response, critical areas of countries' COVID-19 responses needed additional support; countries not eligible for other World Bank funding also needed support, as did country efforts to strengthen preparedness for future health emergencies. The HEPR Program was created to help address those gaps, catalyze innovation, and support countries to create a cohesive and interoperable system of preparedness for emergencies at country, regional, and global levels.

**WHO CAN
BENEFIT**

Given the public health imperative in any health emergency such as a pandemic or natural disaster to address the emergency comprehensively despite geographical borders, the HEPR Program casts a wide net: including not only countries eligible for World Bank funding (focusing primarily on countries eligible for International Development Association (IDA)), but also territories and support for efforts that help refugee populations.

Regional and global organizations working in health preparedness and response, including UN agencies and international relief organizations with emergency field response capacity, can also receive the HEPR Program grants to support eligible countries and territories.

**HOW IT
WORKS**

As a nimble program able to disburse funds earlier than typical crisis management sources of funds, the HEPR Program catalyzes health emergency preparedness and response at the country and regional levels: jump-starting critical and innovative work so countries can act fast, boost impact, and spur innovation.

FIGURE 3 HOW THE HEPR PROGRAM WORKS

Catalyzing and complementing health emergency preparedness and response



THE HEPR PROGRAM WORKS ACROSS TWO INTERCONNECTED PILLARS

HEALTH EMERGENCY PREPAREDNESS | Supporting countries and regions to prepare for how to best prevent, detect and be ready to respond to future health emergencies:

- Strengthening surveillance, including genomic surveillance, wastewater based surveillance, and 'infoveillance' (surveillance of mis- and disinformation trends that hamper countries' ability to respond to health emergencies)
- Digital public health and other digital innovations to improve coordination and cohesion for emergency preparedness

- Efforts to bring different sectors together to ensure cohesive environmental health, animal health, and human health approaches, under the umbrella of One Health (a World Bank policy commitment in IDA20)
- Assessment, planning, policies, simulation exercises, and other efforts to be better prepared
- Primary health care strengthening to ensure better future preparedness
- Regional cohesion, coordination, and collaboration

HEALTH EMERGENCY RESPONSE | Focused, to date, on COVID-19 emergency response, support includes addressing short-term, urgent needs when an emergency response needs to be mounted. It includes:

- Capacity building including training for healthcare workers
- Procurement of essential goods such as personal protective equipment, medical equipment, and consumables
- COVID-19 vaccine deployment, including training, procurement, planning support, and addressing vaccine hesitancy

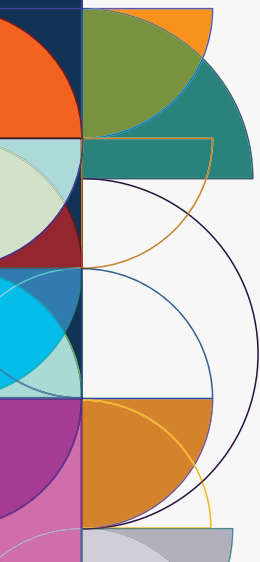
Both pillars focus strongly on financing provided directly to countries and regional initiatives. As needed, funding can also be provided to international and regional implementing partners to draw on their unique capacity and system strengthening, and emergency field response, capacities. To further enhance impact, the HEPR Program also offers Bank-provided technical assistance throughout the project life cycle from project design through implementation.

Collaboration is bedrock in the HEPR Program's approach. The HEPR Program closely coordinates with its work with other relevant financing mechanisms across the World Bank including operations financing through IDA, IBRD, and COVID-19-specific mechanisms, as well as other World Bank trust fund umbrella programs such as the Policy and Human Resource Development trust fund, Food Systems 2030, and the Global Facility for Disaster Reduction and Recovery.

OPERATIONS OVERVIEW

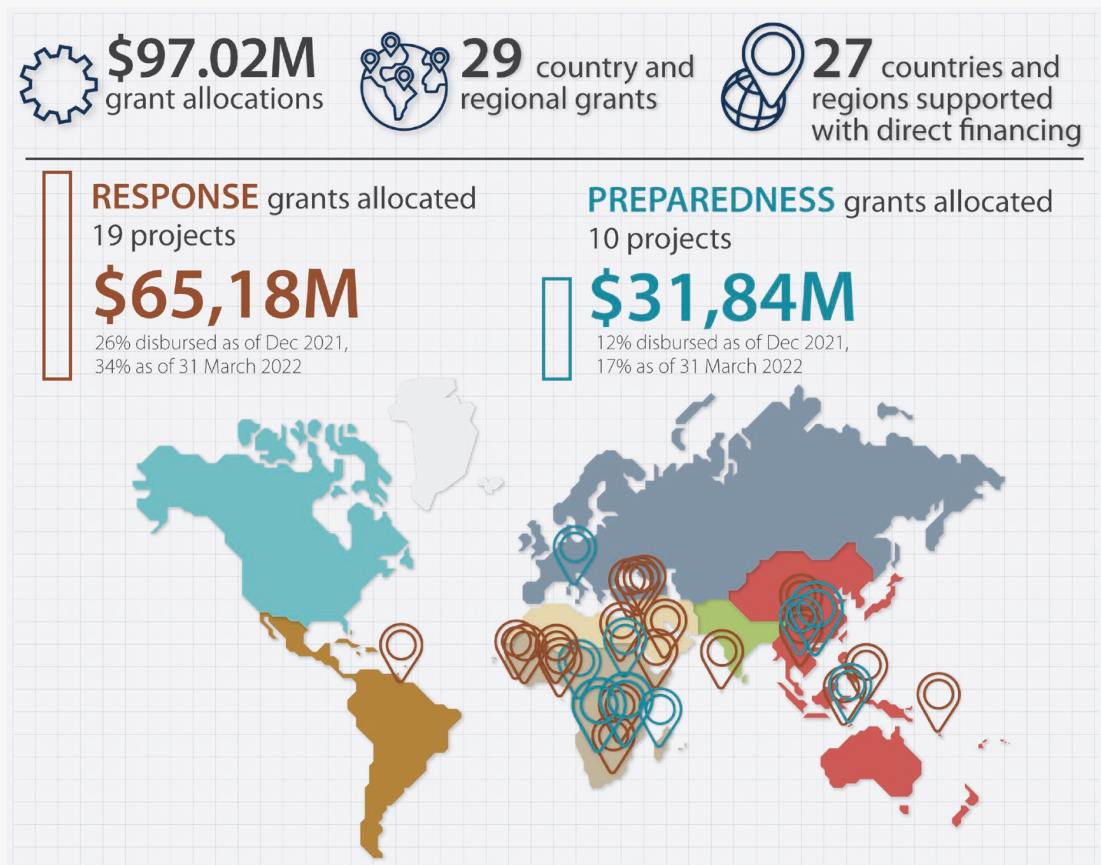
This report covers the initial phase of the HEPR Program's operations, from its inception in June, 2020 through December 31, 2021. With an active portfolio of over \$97 million covering 24 country-specific grants and three regional initiatives, the HEPR Program financing and technical assistance is helping countries address key gaps in their COVID-19 response and kick-start interventions to strengthen health emergency preparedness for the future.

The summary information provided below is explored in further detail in the next section and spotlight boxes on specific projects illustrating work across the geographic and thematic range of the HEPR Program portfolio.



Over and above the \$97 million to country and regional allocations for implementation by countries, regional and international organizations, \$6.5 million has also been allocated to support technical assistance, implementation, and design support for country and regional projects.

FIGURE 4 GRAPHIC BY THE NUMBERS



Note: Total number of grants is two more than sum of preparedness countries plus response countries supported, because two countries (Lao PDR and Timor Leste) have received separate grants for work in both pillars; M = millions..

CATALYZING ACTION, ATTRACTING ADDITIONAL INVESTMENT

Avoiding duplication and maximizing impact is essential and ensuring proposed HEPR Program activities are properly aligned with other World Bank financing is a requirement for every effort that is financed. Similarly, as part of realizing our mandate to catalyze, complement, and connect, we also focus on upstream support and piloting new approaches which, where proven effective, can attract other funding and be mainstreamed and scaled up using other Bank mechanisms. While the HEPR Program is still in its early stages, some investments are already demonstrating this catalytic incentive effect. For example, a \$3 million HEPR Program investment in the Solomon Islands catalyzed an added the same amount in country IDA financing for health emergency preparedness.



Nurse accessing COVID-19 vaccine dose from cold box, Lao PDR. Photo: World Bank.

OUR IMPACT

THE HEPR PROGRAM'S FIRST 18 MONTHS

Since its establishment in June 2020, HEPR Program financing has helped countries fill critical COVID-19 response gaps and focus on learning from COVID-19 to break the cycle of panic and neglect and help countries prepare for future health emergencies—internally and working across borders with regional neighbors. Projects that the HEPR Program has supported are operational in countries from Latin America and Africa, to the Middle East and the Asia-Pacific regions. The HEPR Program has provided critical, timely resources to countries and territories not eligible for other World Bank funding mechanisms, and supported countries in particular need of support based on their baseline levels of health emergency preparedness capacity as measured by their State-Party Self-Assessment Report (SPAR) scores. The HEPR Program has also financed efforts to focus on the “missing middle”—the realm of cross-border preparedness and regional collaborative efforts—recognizing that cohesive regional coordination is essential in our increasingly interconnected world..

PILLAR I: PREPAREDNESS

As an incentive for countries to invest in preparedness and to break the pattern of inaction when health emergencies abate, the HEPR Program provides standalone and co-financing grants (alongside IDA and IBRD financing) and related technical support. This is used to catalyze IDA and IBRD investments, as well as grant contributions from other trust fund umbrella programs, in preparedness-related activities.



Women involved in community meeting for disaster reconstruction, Yogyakarta, Indonesia. Photo: Nugroho

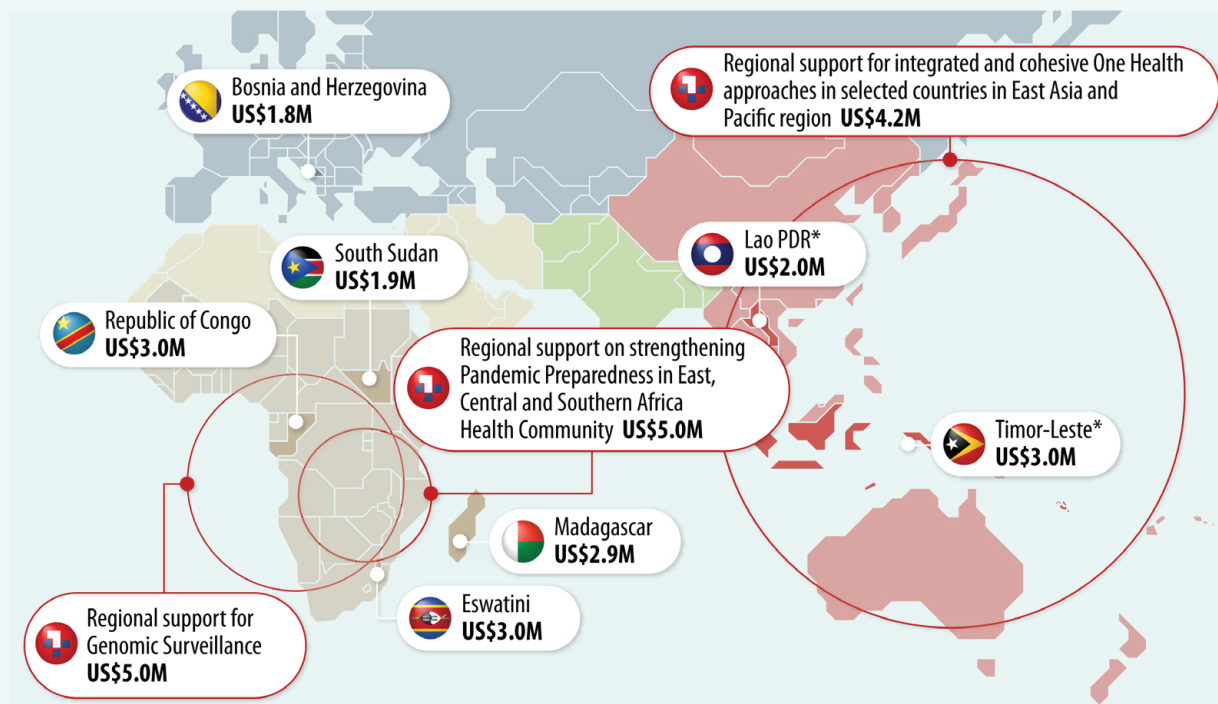
For IDA countries, HEPR Program support has complemented IDA19 funding allocations for health emergency preparedness and worked alongside the Policy and Human Resources Development fund to support program to support future preparedness. In the HEPR Program's first 18 months, grants announced under this pillar particularly focused on supporting countries and regional efforts to kick-start essential interventions to boost and fundamentally strengthen preparedness for future outbreaks and other health emergencies through efforts in a variety of priority investment areas, such as strengthening of surveillance efforts, simulation exercises, handling the excess healthcare waste management that emergencies tend to produce, digital public health, drone piloting, and training of health workers for better future preparedness.

Examples include:

- Funding to improve preparedness for future health emergencies in five IDA-eligible countries (Lao PDR, Madagascar, Republic of Congo, South Sudan, Timor Leste); support for two IBRD-eligible countries (Eswatini and Bosnia & Herzegovina) and a project by the East, Central and Southern Africa Health Community to help create cohesive regional (cross-border) coordination of health emergency preparedness efforts in Malawi, Mozambique, Rwanda, Tanzania, and Zambia.
- A health emergency preparedness grant in Eswatini enabling costing analytics to help target preparedness investments to maximize impact and plan simulation exercises; as well as surge analytics modeling in Madagascar that will help the country be better prepared for future emergencies.

FIGURE 5 PREPAREDNESS GRANT FUNDING

TOTAL PREPAREDNESS FUNDING TO DATE **US\$ 41.0 MILLION**



Note: * = Country also has received HEPR Program grant funding for response pillar activities.

SPOTLIGHT I

LAO PDR — STRENGTHENING HEALTH FACILITY WASTE MANAGEMENT
PREPAREDNESS FOR HEALTH EMERGENCIES

For health emergency preparedness, healthcare waste management is essential but often overlooked. Leveraging a \$2 million HEPR program grant, the government in Lao PDR is working to fill that gap. Despite having to deal with competing demands because of the emergency COVID-19 pandemic response, good progress was made in the first six months of the project. A detailed workplan has been developed through which valuable opportunities to discuss the state of health facility preparedness on waste management, emergency preparedness, and water and sanitation were provided, and analytical tools that will be crucial to enhancing the preparedness of the Lao PDR against future risks were introduced. Agreed-upon activities for 2022 include:

- Rapid capacity assessment of solid waste and wastewater treatment facilities at selected hospitals and quarantine facilities;
- Developing national guidelines and standard operating procedures (SOPs), conducting training on solid waste and wastewater management;
- Developing indexes and conducting hazard mapping to measure hospital preparedness and exposure against risks from pandemic and disasters triggered by natural disasters; and
- Estimate of water and sanitation resource needs for health emergencies.

The HEPR Program-supported preparedness work has also cultivated effective collaboration across other developing partners working on this topic including the World Health Organization, the Japan International Cooperation Agency, and UN-Habitat. Discussions are ongoing to further deepen the collaboration.



Inspecting a hazardous medical waste incinerator, Lao PDR. Photo: World Bank.

SPOTLIGHT 2 REGIONAL COLLABORATION IN SOUTHEAST ASIA AND AFRICA — SUPPORTING THE MISSING MIDDLE OF PREPAREDNESS

As COVID-19 has made clear, national boundaries are meaningless to viruses—this is ever more true in our increasingly crowded and interconnected world. To catch outbreaks before they spread unchecked, countries need systems that make it as easy for surveillance data and preparedness plans to move across borders as it is for viral pathogens to do so.

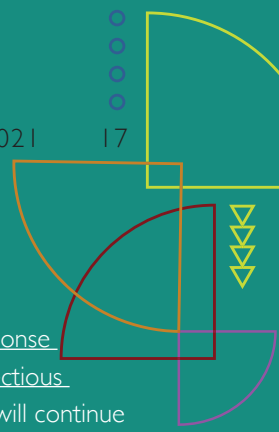
Yet, to date, the vast majority of the focus, and funding, for health emergency preparedness has been at the country level, and, to a somewhat lesser extent the global level – leaving few resources available for helping countries strengthen immediate cross-border collaboration. Two new HEPR Program grants are working support that missing middle.



Nurses listen during a training program. Photo: World Bank

In the East Asia and Pacific region, a World Bank team is using HEPR Program funding to help partners in Southeast Asia better map the status of One Health (efforts to coalesce human, animal, and environmental health) in the region and to partner with ASEAN and selected countries to design a regional, integrated approach to One Health. This approach was launched in October 2021. Since then, the team has mapped donor and project landscape and tailored its planned activities accordingly; started preparing the assessment report; worked with ASEAN counterparts to build buy-in and started ongoing discussions with candidate countries for the first phase of the project.

In Africa, the HEPR Program is supporting the East, Central and Southern Africa Health Community to improve cross-border coordination of health emergency preparedness efforts in Malawi, Mozambique, Rwanda, Tanzania, and Zambia, with support through which member countries select peers to serve as external assessors to carry out independent assessments of the countries' plans and capacities for health emergency preparedness and response.



The HEPR Program is also advancing the Africa region's genomics surveillance network, coordinated by the Africa CDC, through grant support for the Centre for Epidemic Response and Innovation in South Africa and the African Centre of Excellence for Genomics of Infectious Diseases (ACEGID). Genomics surveillance has been a game changer in COVID-19 and will continue to play an important role as part of a future global early warning system.

SPOTLIGHT 3 LAO PDR: EQUITABLE AND INCLUSIVE EXPANSION IN COVID-19 VACCINATION

Good progress has been seen in the Lao PDR COVID-19 response. With funding from the HEPR Program and other mechanisms, government partners implemented a robust roll-out of COVID-19 vaccine services that has increased equitable access through mobile vaccination services, house-to-house sensitization and immunization campaigns, and outreach sessions to reach priority, vulnerable populations such as the elderly, people with disabilities, and those living in hard-to-reach areas. Lao PDR has also enhanced its Health Management Information System efficiency by integrating the COVID-19 Vaccine Registry modules in the national health information platform—District Health Information Software version 2 (DHIS2). These efficient and timely data updates are augmented with close daily and weekly stakeholder coordination meetings at the national and sub-national levels. To date, 64 percent of the population have had at least one dose, 55 percent are fully vaccinated, and 5 percent have received boosters. Strong government leadership, dedication, and commitment of the health care workers at national and sub-national levels, engagement of village heads in community mobilization, close monitoring and coordination by multiple stakeholders, and sound coordination among development partners have been important in making good progress.



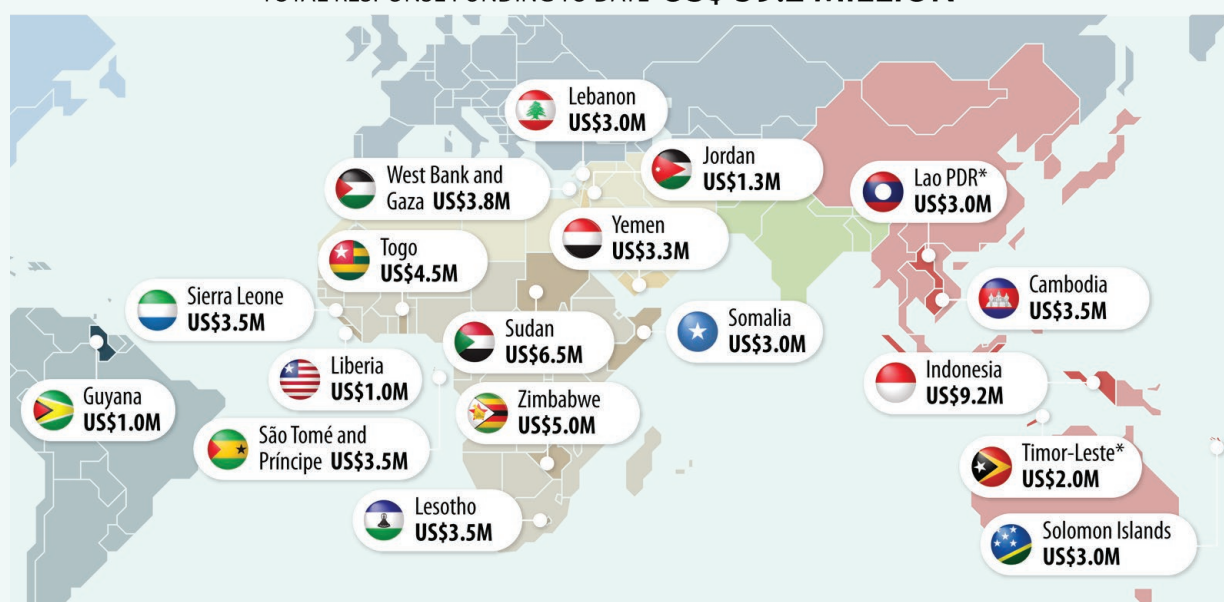
Nurse in PPE giving a vaccine in a village. Photo: World Bank.

**PILLAR 2:
HEALTH
EMERGENCY
RESPONSE**

Launched in early in the COVID-19 pandemic, the HEPR Program understands that while the work to strengthen preparedness for future health emergencies must start now, countries also face critical immediate gaps in their COVID-19 responses. The HEPR Program response pillar is designed to help countries address those urgent gaps, through standalone grants as well as co-financing to complement IDA and IBRD support for COVID-19 and other future health emergencies. Grant monies can also be used to support UN organizations and other international organizations to provide essential equipment and supplies and also provide technical assistance and service delivery to eligible countries and territories on: (i) country capacity to detect and respond to health emergencies; and (ii) country capacity to strengthening to mitigate the impact of health emergencies on a population's health.

FIGURE 6 RESPONSE GRANT FUNDING

TOTAL RESPONSE FUNDING TO DATE **US\$ 59.2 MILLION**



Note: * = Country also has received HEPR Program grant funding for preparedness pillar activities.

In the HEPR Program's first 18 months, response pillar support focused on helping countries fill their immediate unmet needs related to COVID-19, and in particular:

- Capacity building, including training for health care workers
- Procurement of essential goods such as PPE, equipment, and consumables; and
- COVID-19 vaccine preparation and deployment, including training, procurement, planning support, and addressing vaccine hesitancy

Examples include:

- Funding to support COVID-19 responses, particularly for vaccine planning and implementation in low-income IDA-eligible countries (Cambodia, Lesotho, São Tomé and Príncipe, Sierra Leone) and West Bank & Gaza and in two countries not eligible for IDA at the time of grant awarding (Sudan and Zimbabwe)
- Funding to support access to COVID-19 services for Syrian refugees and host communities in Lebanon and Jordan

SPOTLIGHT 4 LESOTHO — STRENGTHENING COMMUNITY-LEVEL RESPONSE, IMPROVING READINESS FOR VACCINE ROLL-OUT

Lesotho's COVID-19 response plan began early—in the first half of 2020; and in the ensuing 12 months the country made tremendous strides. However, as of early 2021, key gaps in case management and critical care remained, and new needs to vaccinate the population quickly were emerging. Additional financing was essential to acquire vaccine doses through the COVAX vaccine initiative and cover the costs of a successful vaccine campaign. With the funding streams from earlier in the pandemic nearing their end, the country needed access to financial support to get ready to deploy the COVID-19 vaccines as soon as they became available. After a careful analysis of all the opportunities and the most pressing unmet needs, planners from the Government of Lesotho worked with the World Bank country team to obtain support from the HEPR Program to address the critical gaps and provide game-changing improvements in both the country's ongoing COVID-19 response activities and in COVID-19 vaccine deployment.

The resulting plan swiftly moved from concept to approval of a \$3.5 million grant by the HEPR Program partnership council in June 2021. With the subsequent pre-implementation processes completed in just a few weeks, the government team and its partners quickly got to work, focused on four key areas:

- Scaling up and strengthening COVID-19 emergency response activities at the community level to enable better local surveillance, contact tracing, and management of quarantine and mild COVID-19 cases. This was a much-needed shift from a more costly, centralized, hospital-based approach that did not match the emerging epidemiological profile which showed most cases were asymptomatic or mild and be best handled via at-home or local case management.
- Decentralizing diagnostic and isolation services by equipping laboratories to test for COVID-19 at regional levels, establishing community isolation centers, and by training health workers to manage these.

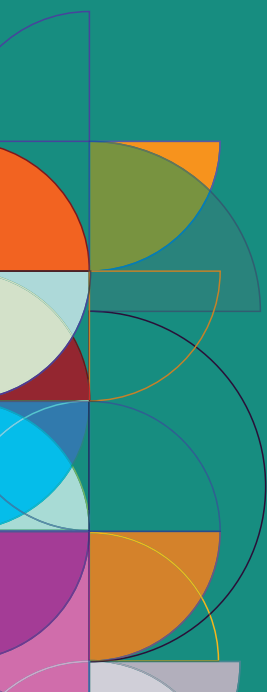


Nurses attending a medical surveillance training workshop in Lesotho. Photo: World Bank

- Protecting and equipping village health workers with appropriate equipment and supplies as well as supporting them to conduct surveillance, monitor quarantines and isolated suspected and confirmed cases in the community, and timely referral of serious cases requiring medical attention.
- Preparing for COVID-19 vaccine deployment, including cold chain support and vaccine distribution, training health care workers, planning for surveillance, service delivery and supervision, establishing systems to track adverse events post vaccination and number of people immunized, community-level social mobilization, and risk communication and community engagement of all stakeholders including the local chiefs.

Consistent with the HEPR Program focus on jump-starting critical interventions, the team moved quickly from planning to implementation of key steps so that by early 2022 its work had helped produce results across all areas of its workplan:

- **Planning for response and vaccine deployment.** The government prepared a COVID-19 response and mitigation plan and a National Vaccination Deployment plan (NDVP) using a bottom-up approach whereby the district level plans were compiled to develop the national level plan. In late 2021, a COVID-19 Intra-Action Review was carried out by the government to review the implementation of the COVID-19 response and vaccine deployment. Based on the findings, the government was in the process of revising the NDVP (expected to be completed by the first quarter of 2022).
- **Comprehensive IPC assessment.** Assessments were conducted in 23 hospitals and development of a monitoring framework was begun.
- **Critical care strategy.** Following analysis of hospital records and continuous quality monitoring and in-country assessments, a critical care strategy was developed, with strong collaboration involving the government and development partners, to improve the quality of care in hospitals and reduce mortality rates.
- **Protecting and equipping village health workers.** PPE was procured and distributed to health workers (e.g., 35,000 surgical gowns, over 500,000 masks, 4,724 thermal scanners, plus gloves and soap). Infection prevention and control (IPC) guidelines for different sectors were developed and all health workers trained.
- **Facilities.** Progress was made on several fronts: completed structural plans, bidding documents and environmental and social management plans (ESMPs) to create an intensive care unit at Berea hospital and to establish two oxygen plants in Machabeng and Mokhotlong hospitals. Related procurement processes were also underway and the Ministry of Health were finalizing procurement processes to engage a designer for laboratory, vaccine storage and Motebang renovations.
- **Surveillance system.** Ten surveillance officers and the rapid response teams were trained. Technical assistance was provided to strengthen the national surveillance system through mining analysis to identify barriers and challenges and propose suitable solutions including the use of appropriate digital health solutions.
- **Scaling up and strengthening community-level COVID-19 emergency response activities.** About 8,500 village health workers (VHWs) trained on basic COVID-19 information, COVID-19 surveillance (alerts identification, contact tracing), monitoring of asymptomatic patients at home, and COVID-19 vaccine education to address vaccine hesitancy.



- **Governance, risk communication, community engagement, and advocacy.** Several community engagement efforts were undertaken to engage the community-level stakeholders (including community leaders, district health management teams, principal chiefs, and district council secretaries) to create an enabling environment for community response efforts, and support VHWs in community level surveillance, community quarantine, and isolation of suspected and confirmed cases; 53 such COVID-19-related, community-level information and education sessions were organized. As a result of the increased community engagement efforts, Lesotho was able to address COVID-19 vaccine myths and misconceptions, accelerate its vaccination campaign, and increase vaccination coverage from 34 percent in November 2021 to 43 percent in January 2022.
- **Scaling up the vaccination campaigns.** To date, with three vaccination campaigns and 68 percent health workers trained in COVID-19 vaccination deployment, the vaccination coverage is 43 percent and 92 percent of the serious adverse events following immunization (AEFI) for COVID-19 have been investigated.
- **Monitoring and evaluation.** Nine district health information officers in eight districts trained to coordinate the data collection from all health facilities. Vaccine and case management data are collated into the DHIS2 COVAX system. In addition to district health information officers, child health officers, public nurses in health facilities, and other volunteers have also been trained.

SPOTLIGHT 5 INDONESIA — USING PROGRAM-FOR-RESULTS FINANCING TO SPUR QUICK AND EFFICIENT COVID-19 VACCINATIONS

With a population of over 270 million spread across a vast archipelago, Indonesia has had unique challenges to face during the ongoing pandemic. The \$ 9.9 million HEPR Program results-based grant contribution leverages financing from the World Bank and other partners in a strong multi-partner work that has led to a total \$ 1.75 billion in support of Indonesia's COVID-19 response, including vaccination. In particular, the associated umbrella single donor trust fund (SDTF) contributed to by the Government of Australia exemplifies the importance of collaboration and co-financing in this project.



COVID-19 vaccination activities at ITENAS campus Bandung, Indonesia. Photo: Dreamstime

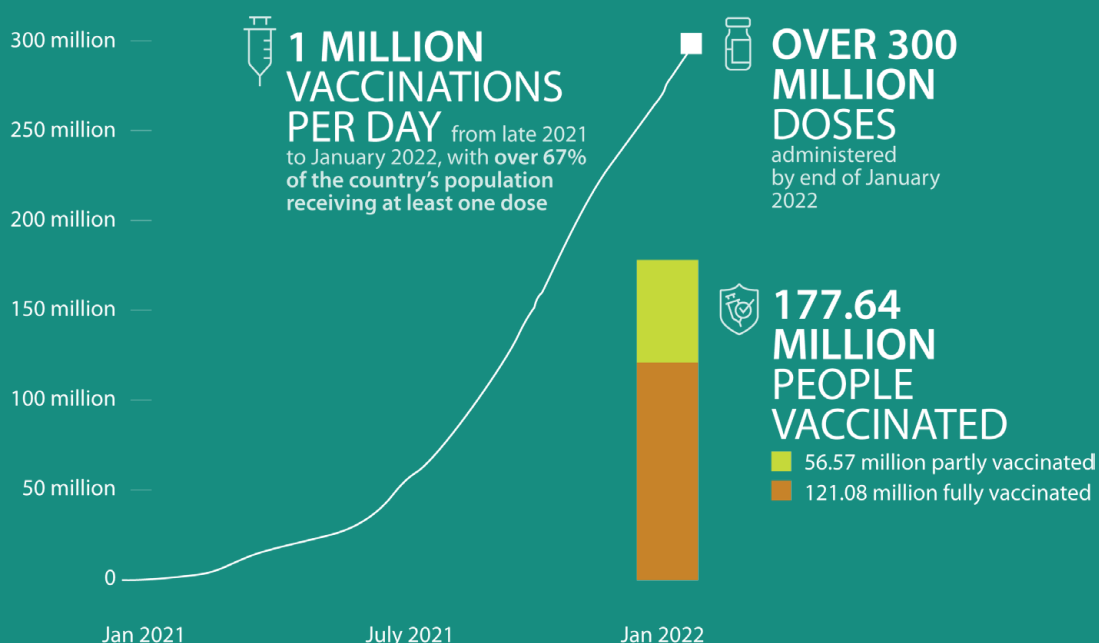
financing instrument, in which disbursement to recipients happens against the achievement of results. The Government of Indonesia (GOI) has achieved the first set of its targets for 2021, which have been verified, and the first tranche of disbursement from the HEPR Program funding is set for the first quarter of 2022. The program is also on track to achieve all its 2022 targets and to disburse fully per schedule.

Thanks to the HEPR Program co-financing in the COVID-19 response which is linked to key results in COVID-19 response and vaccination rollout, the GOI has been efficiently and effectively addressing the immediate problems caused by the pandemic by quickly strengthening its capacity and infrastructure. Vaccinations have picked up pace and have been consistently over 1 million vaccinations per day for several months in late 2021 and early 2022, achieving over 67 percent of the country's population having received at least one dose of COVID-19 vaccines by the end of January 2022. Indonesia strengthened its capacity to test for COVID-19 by creating a network of more than 900 new PCR testing labs and also undertaking regular genomic surveillance. Moreover, the country has created several thousand new critical and high care beds in existing medical facilities and has developed an equitable mobilization plan for mass vaccination that preserves a share of staffing to maintain essential non-COVID-19 health and nutrition services.

The government has also made significant progress in preparing for any future epidemics through capacity building and disease monitoring—the training of human resources for COVID-19 vaccine delivery or the implementation of a pharmacovigilance system to monitor adverse events related to COVID-19 vaccine are examples of this success.

Areas of improvement remain in the fight against COVID-19 and in preparedness for future outbreaks. The latest review of the program observed that data collection, analysis, and presentation for the GOI's response to COVID-19 can be enhanced. More systematic monitoring of protocols on safe management of vaccine and infection prevention, assessing of available personal protective equipment (PPE), and strengthening inclusiveness in vaccine delivery are being pursued as work in progress.

FIGURE 7 COVID-19 RESPONSE IN INDONESIA



SPOTLIGHT 6 GUYANA — KICK-STARTING THE JOURNEY TO MAKE ONE HEALTH A REALITY

With origins of many recent health emergencies lying in viruses that jumped from animals to humans living in close proximity, public health experts have repeatedly warned that breaking that cycle can only be accomplished by changing the way we think about health. This entails recognizing that human, animal, and environmental health are intimately intertwined, and the health of humans can only be understood and protected by an integrated “One Health” approach that monitors and addresses all three pillars as part of a common whole. In the face of new outbreaks from Ebola to MERS to COVID-19, One Health experts have cited the adoption of the One Health approach as key to avoid future repetitions of the horrors each has wrought. Yet One Health has yet to become common practice.

Leveraging a \$1 million HEPR Program grant provided as additional financing added to the pre-existing Guyana COVID-19 Emergency Response Project, government leaders and partners in Guyana are working to take the first, important steps to break that pattern of neglect and to make One Health part and parcel of how the country prepares for and responds to future outbreaks. Since the grant became effective in late September of 2021, the government and the World Bank, which is the only agency providing support to the government on this topic, have been assembling the multidisciplinary teams that will lead the work. They have also started developing the details of the scope of the work and how this can be integrated into ongoing processes within the relevant ministries. The government is already in setting up a new multisectoral National Committee on One Health and its members will receive training under the grant. A World Bank team implementation support mission was slated for early 2022 to further advance for implementation and there is hope that this work could serve as the basis for discussion of additional World Bank-financed investment in the future.



Free range poultry farmer. Photo: World Bank.

SPOTLIGHT 7 TOGO — TACKLING THE TWIN CHALLENGES OF VACCINE ACCESS AND HESITANCY

Leaders knew that securing COVID-19 vaccine doses was only the first many challenges standing between turning vaccines into vaccinations. But they also knew that acting quickly was essential. Two of the most pressing needs were creating the necessary cold chain infrastructure and conducting an accelerated vaccination campaign that affectively communicated key information and addressed people's concerns—in a country where a September 2021 survey found that 72 percent of respondents lacked confidence in the locally available vaccines.

The team used a \$4.5 million HEPR Program response pillar grant that became effective on June 30, 2021, to tackle both challenges. Between July and December, 27 percent of the planned activities were fully implemented. Progress included:

- Cold chain procurement started: 303 refrigerators (including 78 solar), 30 cubic meter cold rooms, a positive cold room, temperature monitoring equipment, and a refrigerated truck to be delivered by end-June.
- Support for COVID-19 vaccination monitoring and evaluation realized, including nationwide supervision of digitalized data management.



Medical sample analysis, Ilogo. Photo: World Bank.

HEPR Program support also funded a demand generation and risk communication campaign that supported an accelerated vaccination campaign held from November 22 to December 1 to boost stagnating vaccination coverage; 836,526 doses were administered throughout the country, or an average of 88,427 people vaccinated per day (compared to 5,346 people vaccinated daily before this campaign). As of December 31, vaccine coverage was 25 percent (1,020,272 people fully vaccinated/4,026,742 targeted people). Thanks to the HEPR Program contribution, 24 percent of new people were vaccinated in areas of COVID-19 vaccine resistance (exceeding the target of 22 percent), through support for the communication strategy and community awareness, as well as for quality management of adverse events following immunization (AEFI) aimed at strengthening confidence and managing false beliefs. This has resulted in improved acceptance and demand for COVID-19 vaccines by the targeted populations.

SPOTLIGHT 8 HEPR PROGRAM AND ESMAP WORKING TOGETHER TO DELIVER CLIMATE-FRIENDLY HEALTH SYSTEM RESILIENCE INVESTMENTS IN SÃO TOMÉ AND PRÍNCIPE AND IN ZIMBABWE

The Energy Sector Management Assistance Program (ESMAP) at the World Bank, Green Climate Fund (GCF), and the HEPR Program have banded together to support climate-friendly IDA investments in health emergency preparedness in São Tomé and Príncipe (STP) and in Zimbabwe. STP is using resources from IDA and both trust funds to finance climate-friendly investments to strengthen its cold chain as well as investing in its health facilities to support COVID-19 vaccinations. In two years, the Bank's engagement in STP's health sector has gone from zero to over \$17 million. The project's climate-friendly investments are helping to strengthen the cold chain with solar-powered refrigerators and solar panels for a vaccine storage warehouse. Health facility-level investments are strengthening resilience of the health system and providing training of health workers and laboratory technicians. The next phase of support will introduce electric vehicles and solar-powered solutions at the health care-facility level. In Zimbabwe, ESMAP and the HEPR Program are working together in a similar way to co-finance climate-friendly health system resiliency efforts through COVID-19 risk communications to address vaccine hesitancy; COVID-19 vaccine deployment, and climate-friendly investments in capacity building, goods, and climate-friendly cold chain equipment including cold boxes and solar direct drive refrigerators; transport including refrigerated trucks; and installation and maintenance of solar systems in health facilities. This focus on climate-friendly investments will ensure that in future, STP and Zimbabwe are better able to deliver other vaccination programs that require cold chain storage in an energy-efficient way.

PUI and World Bank Health Team receiving the vaccines. PUI: Volma Viana, Operations Officer; World Bank: Edgar Luis, Logistics and Supply Chain Consultant, Alvaro Andre, Human Development Consultant; and Benjamim Mutti, Health Economist

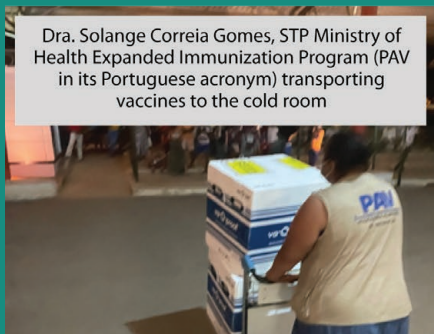


COVID-19 Vaccines arrive in São Tomé and Príncipe!

72,000 doses of Moderna vaccines financed by the World Bank (US\$764,000) through the STP COVID-19 Emergency Vaccination Project



Dra. Solange Correia Gomes, STP Ministry of Health Expanded Immunization Program (PAV in its Portuguese acronym) transporting vaccines to the cold room

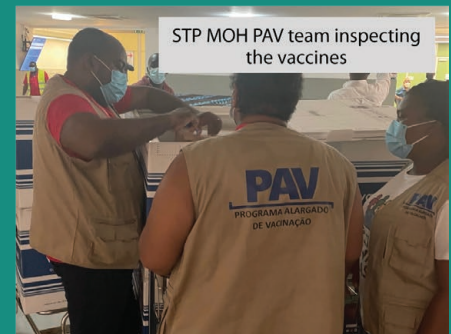


STP MOH PAV team inspecting the vaccines



Photo: montage: Carmen Carpio, World Bank.

STP MOH PAV team inspecting the vaccines



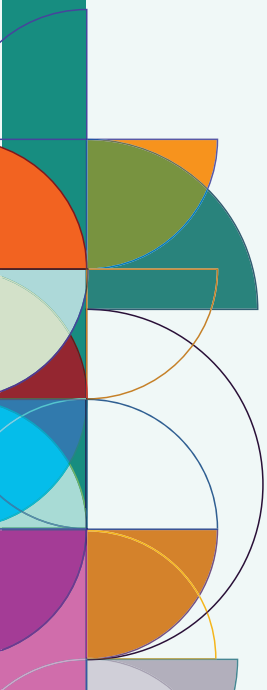
Note: MOH = Ministry of Health; PAV = Ministry of Health Expanded Immunization Program; PIU = Project Implementation Unit; STP = São Tomé and Príncipe.

Health emergency preparedness and response is an area with many actors and many needs. While attention and funding have risen due to COVID-19, needs still far outstrip available financing and ensuring that HEPR Program resources align with other Bank financing is essential. Thus, as noted in several of the spotlights above, the HEPR Program team works closely with potential grant recipients to ensure proposed activities align with, and appropriately leverage, other related Bank operations. To this end, the HEPR Program commonly focuses on upstream support and piloting new approaches which, where proven effective, can be mainstreamed and scaled up using other Bank mechanisms.

Similarly, coordination with other key World Bank-based trust funds such as the Policy and Human Resource Development trust fund and the Global Facility for Disaster Reduction and Recovery (GFDRR). For example, the HEPR Program and GFDRR each have a team member who sits on the other fund's review committee for funding proposals.

PARTNERSHIPS BEYOND THE WORLD BANK

The HEPR Program values and relies on active collaboration with partners including UN agencies and other international organizations whose expertise and operations are essential to achieving our shared goals of better health emergency preparedness and response for all. This is reflected in all we do, from our use of key knowledge products such as the World Health Organization's Joint External Evaluation (JEE) tool to our grant portfolio which includes a number of activities that involve UN partners as either implementing agencies or as valued counterparts in the field. Examples include work with UNICEF as an implementing agency in Cambodia, with WHO as implementing agency for work in South Sudan and Yemen, and coordination outreach work with UN and other partners in HEPR Program projects such as the regional One Health project in Southeast Asia and the preparedness activities in Lao PDR.



LOOKING AHEAD...

...GOING FORWARD

More than 18 months since the establishment of the HEPR Program and over two years into the COVID-19 pandemic, the imperative to continue the HEPR Program's work is clear and its urgency is increasing. Access to and uptake of COVID-19 vaccines remains uneven and far from complete. Resulting vulnerabilities, the continuing significant rates of new infections, and the risk of new variants all point to the need for countries to stay the course. Moreover, COVID-19 has laid bare serious gaps in health emergency preparedness at all levels.

Experience shows that tackling these challenges will and must be the work of many. Ongoing discussions within countries and in various global forums have the potential to create or improve structures, mechanisms, processes, and financing modalities that could significantly alter the landscape. It is critical that countries continue to press forward, making essential improvements to strengthen their preparedness to prevent, detect, and respond to health emergencies of all kinds.

EMERGING THEMES

The HEPR Program remains committed to supporting countries and regional collaborations in that work, taking an agile approach that allows the program to refine its approach based on real-time learning, including the following themes that have emerged from the work it has supported

- Cohesiveness counts. Strengthening collaboration at the regional level is essential, and yet often missing in current conversations on the future of health emergency preparedness and response.
- Funding, technical assistance for design and implementation, and evaluation, all need to go hand-in-hand, especially for innovations; this maximizes learning and implementation.
- Digital public health and setting up systems that are digital-first and digital-ready for future emergencies is a growing area in which support is needed.
- Whilst investing in the systems and governance is needed to prevent, detect, and respond to future health emergencies, investing in ways that create equity and trust is equally important. This requires working closely with communities.
- Maintaining and leveraging a variety of funding mechanisms is useful, when careful collaboration is undertaken and funds are used in ways that catalyze additional domestic, IDA and IBRD resources.
- Clarity of scope and purpose. It is essential that countries have a clear understanding of the essential components of countries' systems that need to improve, and that this is done using a comprehensive and integrated One Health perspective.
- Early financing, before emergencies arise, is essential.
- Mis- and dis-information were both more prevalence and pervasive during COVID-19 vaccination efforts than ever expected and will need careful proactive mis- and disinformation strategy management in the future in ways that go beyond typical risk communication.

- Surveillance innovations and collaborative intelligence will be essential for future efforts. This includes new types of global public goods.

**INCREASING
MOMENTUM**

Looking forward, the HEPR Program will increasingly focus on supporting and catalyzing preparedness at the country and regional levels. To help countries maximize gains, the HEPR Program envisages that its future areas of focus will include:

- Priority investments based on assessments of gaps and weaknesses
- Catalyzing critical innovation (e.g., genomic surveillance, wastewater-based epidemiology, digital public health, and cohesive One Health approaches)
- Strengthening cohesiveness, knowledge, and information sharing and collaboration through formal and informal regional mechanisms
- Digitalization of health emergency preparedness



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