

# Lessons from the Review of Health and Social Innovations in the Coronavirus (COVID-19) Pandemic Response

Independent Evaluation Group | March 29, 2022

How is the World Bank developing and supporting innovations to respond to the coronavirus (COVID-19) pandemic? The Independent Evaluation Group (IEG) team collected and reviewed innovations promising new approaches and practices reported by World Bank operational teams supporting COVID-19 responses in country. The objective was to understand how the World Bank is innovating to support learning during implementation and to disseminate examples that could be more systematically built on to improve country systems and preparedness.

## Methodology

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More than 350 innovations were captured in more than 100 countries:

- » **Innovations were identified in projects.** The portfolio review extracted innovations described in project documents and Implementation Status and Results Reports. This review identified 222 examples from 253 projects from 67 countries.
- » **Innovations were crowdsourced from World Bank task teams.** All Human Development Practice Group program leaders were invited to forward a questionnaire to task teams to capture new approaches being implemented in countries. The questionnaire asked for a description of the innovation, its significance, and the country or countries where it is being used. This process elicited 66 examples from 46 countries. Innovations were extracted from the 8 country case study analyses performed for the forthcoming IEG evaluation, *Early Evaluation of the World Bank's COVID-19 Response to Save Lives and Protect the Poor*.
- » **Innovations were identified by reviewing innovation stories published by Global Practices.** The team extracted relevant stories from presentations, Global Practice databases, and articles shared on the World Bank COVID-19 intranet sites (88 examples from 43 countries).

The team included examples of innovations if they reflected a new approach or practice in the country and if the World Bank had a defined role in designing or implementing the innovation. Innovations also needed to fall within the scope of the COVID-19 health and social response to be included. Each innovation was coded by the following: thematic area; actors involved in its implementation (com-

munity groups, health structures, local government, multisectoral team, schools, private sector, and nongovernmental organizations); whether the innovation addressed digitalization, gender, or monitoring and evaluation; and if it could be applied to support the restructuring of systems.

The method for sourcing innovations provides a representation of innovations supported by World Bank teams for COVID-19 response but has limitations. The innovations identified were self-selected by World Bank teams or have been chosen for inclusion in documents. As a result, the analysis may have missed innovations not reported by World Bank teams. First, what constitutes an innovation can be interpreted in different ways. Second, the descriptions of innovations in documents often lacked details, innovations were at different stages of planning and implementation, and—given the ongoing COVID-19 response—innovations continue to emerge. Third, the capture of information on innovations relied on a purposive sampling of task teams and self-reporting, and the use of these innovations to inform policy was often evolving. Moreover, the effectiveness of these innovations will need to be reviewed to inform expanded efforts to integrate them in country systems.

## Findings on Innovations

The analysis highlights recurring themes across countries and sectors, which suggests that knowledge sharing to expand new approaches is taking place and may offer solutions to restructure systems and support recovery. World Bank teams are trying new approaches and systems to improve service delivery. Three-quarters of the countries included in this evaluation has at least one innovation identified through this exercise. Box 1 highlights examples of innovations.

### **Box 1. Examples of Innovations in the World Bank's Coronavirus Pandemic Response**

#### **Cash Transfer**

In the Democratic Republic of Congo, the Contingency Emergency Response Component of the social protection operation provided a monthly \$25 benefit to 250,000 direct recipients in selected impoverished neighborhoods of Kinshasa. To overcome challenges in distributing the benefits, the project (i) used satellite imagery and geospatial analysis to identify coronavirus (COVID-19) pandemic hotspots; (ii) formed a new partnership with telecom operators to obtain anonymized subscriber lists mapped to these hotspots; (iii) filtered subscribers based on cell phone use patterns to identify eligible recipients; (iv) obtained consent and information through bulk SMS messages, robocalls, or field ambassadors; and (v) simplified the regulatory framework governing the opening of mobile money accounts

#### **Multisectoral Monitoring for Decision-Making**

In Peru and Colombia, the World Bank developed COVID-19 dashboards to monitor epidemiologic indicators, the status of the public health sector, and the preparedness of economic sectors to achieve safe reactivation. Data were collected from public sources, and data-sharing agreements were reached to add

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### Box 1. Examples of Innovations in the World Bank's Coronavirus Pandemic Response (cont.)

other data sources. The dashboards allow both decision makers and the public to monitor COVID-19 in real-time and at a disaggregated geographic level, which is valuable for subnational governments.

#### Addressing Gender-Based Violence

Gender-based violence (GBV) has surged in Kenya during COVID-19, with a 94 percent increase in cases between April and May 2020. Joint work between the Social Sustainability and Inclusion and the Health, Nutrition, and Population Global Practices seeks to enhance the quality and capacity of GBV services, with a focus on strengthening the following: health care providers to identify the risks and health consequences of GBV and to offer first-line support and medical treatment; the quality of GBV service delivery through improved data collection and analysis; health sector systems for GBV response; and safety of female frontline health workers.

*Source:* Independent Evaluation Group crowdsourcing survey, May 2021.

## Common Themes

Most innovations identified during COVID-19 relate to six common areas of country learning that facilitate crisis response. These areas describe findings on approaches taken by countries to support sectoral and multisectoral responses:

- » The expansion of systems to monitor the quality of health and disease-related services with health workers, local government, and communities supported crisis response.
- » The expansion of social registries and data analytics capacities supported systems in responsively expanding social protection benefits in an emergency.
- » The improved networks between parents and teachers, environmental conditions in schools, and capacities to accompany learning with digital resources (tv, radio, apps, and online) facilitated crisis response.
- » Building real-time data capacities in operations enabled local-level engagement to inform strategies and actions to reorient support.
- » Partnerships among multiple government sector line ministries with government and private sector actors enabled rapid efforts to expand digitalization of systems for crisis preparedness and more equitable access to services.

- » Strengthening structures for multisector coordination, such as One Health platforms and structures for planning by government and other stakeholders, facilitated emergency preparedness actions.

See table 1 for examples of innovations related to each finding.

## Coverage of Innovations

Across implementation countries, innovations have mainly supported social protection, child welfare, and critical health services, such as surveillance, implying that these were the most widely diffused. The distribution of innovations in the portfolio is consistent with the findings on innovations identified from other sources (figure 1); about 40 percent of the innovations address digitalization. Outside of social protection, most innovations that addressed gender gaps were related to the informal economy and citizen engagement. Social protection innovations systematically occur across all settings. Child welfare innovations are addressed across all settings. Surveillance and citizen engagement innovations occur across countries, but are more limited in International Development Association and fragile and conflict-affected situation countries. Country coordination innovations have mainly been implemented in International Development Association countries. Box 2 summarizes key findings on innovations and opportunities going forward.

### Box 2. Key Findings on Innovations

- » Most health innovations focused on critical health services (about 25 percent of all innovations across Global Practices). Examples relate to information management, early warning systems, and new approaches for reaching vaccine recipients.
- » Innovations in social protection and education were well integrated in the response (about 50 percent all innovations). Examples are digital payment systems and remote learning.
- » Most innovations aimed to strengthen systems (80 percent). This points to the importance of building on emergency innovations from the relief stage. In addition, more than 25 percent of the innovations focus primarily on institutional strengthening, particularly on multisectoral coordination and planning (16 percent) and health systems (6 percent). Few innovations focus on policy (2 percent).
- » The engagement of local government or communities cut across innovations. Although less than 10 percent of innovations focused primarily on these groups, most innovations supported systems and interventions to better engage local government and communities, such as in data monitoring.
- » Intersectorality and partnership was important across innovations. Sectors such as water, technology, and agriculture had important roles in health and social innovations, such as for facility sanitation, local water access, nutrition support, and monitoring of the virus causing the coronavirus (COVID-19) pandemic in the environment. Moreover, partnerships offered key expertise to expand innovations in areas where there is limited experience, such as psychosocial services innovations.

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## Box 2. Key Findings on Innovations (cont.)

### Future Opportunities

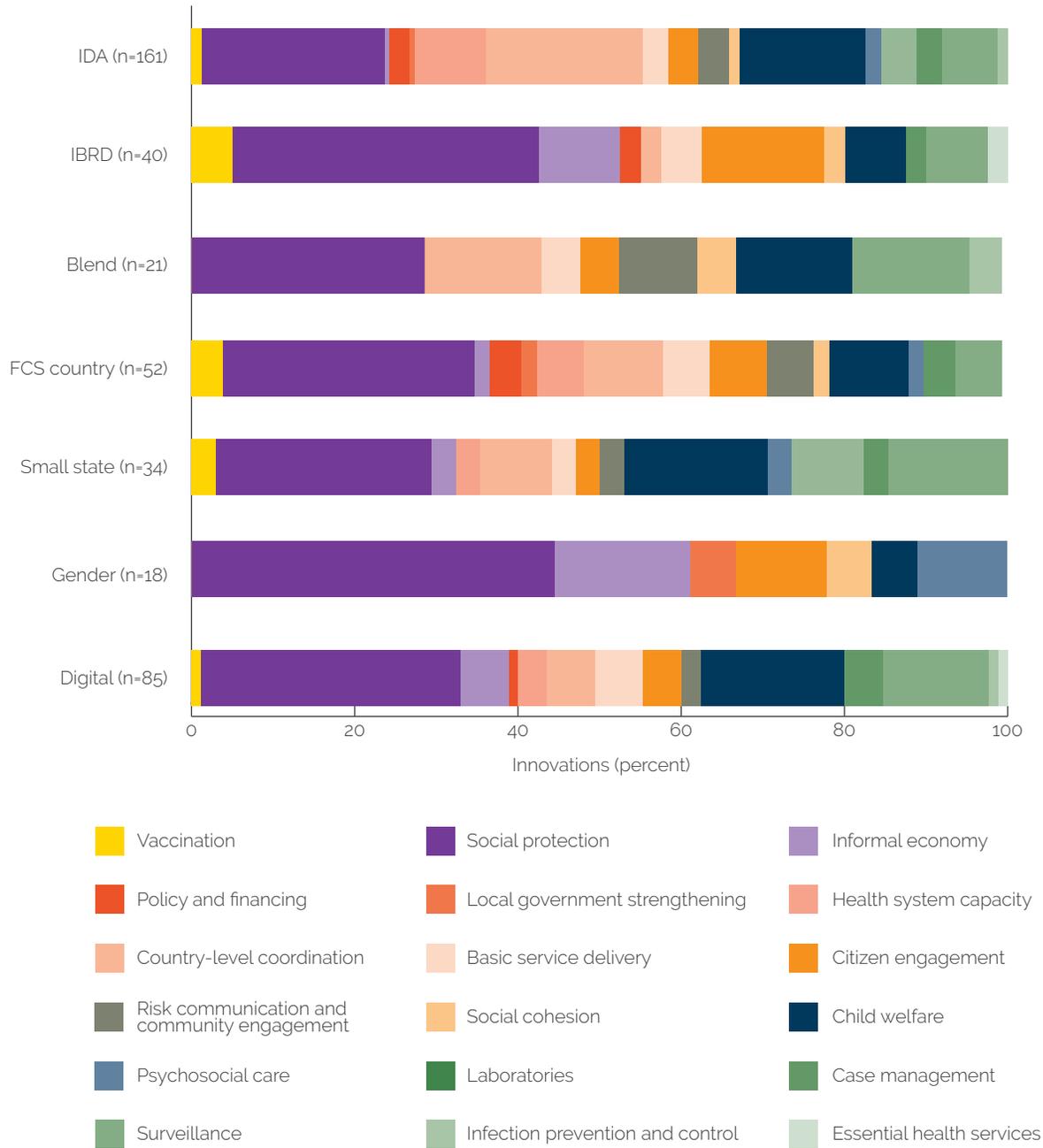
- » Innovations support women facing increasing challenges related to COVID-19 through applying enhanced targeting and inclusion mechanism across all sectors. About 10 percent of the innovations explicitly aimed to address gender disparities. For example, gender-based violence messaging has been included in all parts of the emergency response in the Solomon Islands. Further examples include financial inclusion, continuity of schooling, care for vulnerable mothers and children, and the equitable distribution of vaccines. Innovations for frontline health care workers, who are often women, have often focused on providing increased training and some additional forms of insurance. Yet there are few innovations that address health care worker burnout or stress.
- » The analysis highlights areas for further supporting innovations. Less than 5 percent of innovations are observed in areas of infection, prevention, and control; laboratories; and the informal sector. There are also few innovations (less than 5 percent) in essential health services, risk communication, psychosocial support, citizen engagement, and social cohesion, which are areas with evidence from past crises that stand out as gaps in the World Bank's response. Innovations to address misinformation are especially important. Emerging examples of innovations in these areas are seen in countries where there are preexisting systems or partner expertise to expand the innovation. For example, in the Philippines, work before COVID-19 to develop community-based crisis response systems supported social cohesion and resilience responses.

*Source:* Independent Evaluation Group

In countries where a large amount of the portfolio is reorientated to support COVID-19, the reorientation provided opportunities for innovation. Reorientation of the portfolio to include new COVID-19 support and adjust existing financing and knowledge work, facilitated innovation. Moreover, case studies show that these innovations often built on reforms already being supported by projects from before COVID-19. Africa and South Asia have the highest number of innovations, with an average of three per country, compared with two or less in other regions.

Countries with regional projects implemented innovations more frequently. Regional projects helped diffuse innovations, particularly in Africa. All countries with regional disease-focused projects had innovations identified by this review. Over 40 percent of innovations identified in the portfolio came from countries with regional projects.

Figure 1. Distribution of Innovations by Thematic Area in Portfolio (percent)



Source: Independent Evaluation Group portfolio.

Note: Groups reported in figure may overlap with each other; therefore, innovations may be counted more than once across groups, and their total may add up to more than 100 percent. N = 222 innovations.

Innovations benefited from foundational support to systems established before COVID-19 and from partners. For example, innovations within education benefited from technology partnerships developed before COVID-19, which were expanded. Innovations within social protection benefited from systems and digitalization work completed before COVID-19, which allowed countries to rapidly expand digital payment and social rosters. In countries where there was previous support to develop disease surveillance, these systems were elaborated to help respond to COVID-19.

### Box 3. Examples of Innovations in the Six Common Areas of Country Learning

**Finding 1:** Improved systems to monitor the quality of health and disease-related services with health workers, local government, and communities supported crisis response.

#### Expansion of health communication channels

- » In Kiribati, the World Bank's COVID-19 Emergency Response Project invested in information and communication technology to improve the timely flow of information and lay the foundation for telehealth services.
- » In Mali, a new, national, 24 hours a day, 7 days a week, call center dedicated to COVID-19 enables free calls and provides advice for implementing coronavirus-specific protocols.
- » In Peru, the World Bank supported policy actions to increase telemedicine availability in the basic health insurance plan.
- » In Lesotho, a phone-based app sends an SMS message to those who are vaccinated to collect feedback on the quality of care and track minor side effects that would otherwise not be reported.

#### Community Engagement in Surveillance

- » In Maldives, the COVID-19 public dashboard under the health ministry website provides information on the epidemiological situation. An epidemic monitoring score gives a composite score of five indicators for decision-making on restrictive measures.
- » In Senegal, community-based disease surveillance and multistakeholder engagement allow community health workers and volunteers to detect COVID-19 and report cases to health facilities and local government agencies. This includes community-based animal disease surveillance and strengthening of early warning networks for emergency reporting and feedback.
- » In Colombia, a COVID-19 Safe Economic Reactivation Dashboard provides decision makers with real-time information for 1,100 municipalities on key epidemiologic indicators. To date, the dashboard has over 15,000 unique users.

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### Box 3. Examples of Innovations in the Six Common Areas of Country Learning (cont.)

- » In Latin America, projects are tracking the presence of COVID-19 in wastewater. Wastewater-based epidemiology provides real-time information on the extent of the spread of the virus in any community, including asymptomatic cases. Each sample represents a large portion of the community, which is served by a sewerage network. This allows for rapid and cost-effective tracking of disease trends at the population level.

#### COVID-19 testing in remote areas

- » In Maldives, point-of-care rapid antigen testing for COVID-19 is being explored in scattered islands, followed by sample transport by drone to regional labs. Using drones for sample transport is flexible, fast, and less costly than using boats.

#### Vaccine monitoring

- » In Iraq, West Bank and Gaza, Lebanon, Libya, and Tunisia, a low-cost, just-in-time survey was deployed via a Facebook chatbot to understand attitudes toward vaccines among different social groups. To ensure a degree of national representativeness, the survey targeted clusters of individuals according to region, age, and gender.
- » In Malawi, the health ministry enhanced the One Health Surveillance Platform with an e-vaccination module that is interoperable with the health management information system for real-time COVID-19 vaccine monitoring.
- » In Tunisia, a fully digitalized information system is accessible from computers and tablets to deploy the COVID-19 vaccine. The system covers registration, supplies at vaccination sites and medical stores, and adverse effects from vaccination.

**Finding 2:** The expansion of social registries and data analytics capacities supported systems in responsively expanding social protection benefits in an emergency.

#### Expansion of digital payments

- » In Ghana, the Livelihood Empowerment Against Poverty Program used electronic benefit transfer cards to deliver payment from automatic teller machines. A top-up benefit helps defray the transport costs to banks.
- » In Mozambique, the government adopted measures to implement know-your-client banking regulations among the impoverished and vulnerable. The central bank and telecommunications agency issued comfort letters for financial agencies and digital payment providers to open basic accounts for social assistance beneficiaries; 970,000 individuals were covered.

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### Box 3. Examples of Innovations in the Six Common Areas of Country Learning (cont.)

#### Expansion of social registries by improving data analytics

- » In Ecuador, the social registry for emergency cash transfer now uses machine learning models and big data analytics. Census and administrative data on household income and geospatial locations from the electricity company and electoral records identified 100,000 potential new beneficiaries.
- » In Nigeria, a rapid response registry expanded the national social assistance program to urban and peri-urban centers. The registry uses satellite imagery for poverty maps and algorithms to identify patterns of wealth.
- » In Peru, the increase in the number of beneficiaries necessitated a joint effort among four institutions to integrate household databases into the existing social registry. The new National Household Registry links to the national identity card. The number of individuals covered by the registry increased from about 25 million to about 33 million.
- » In Togo, machine learning algorithms predicted consumption for 5.7 million individuals (70 percent of the population) using satellite imagery, mobile phone data, and nationally representative household consumption data. Through these algorithms, 57,000 informal sector workers were prioritized for cash transfers from November 2020 to March 2021.

#### Responsive Cash-for-work

- » In the Central African Republic, in record time, a cash-for-work program in the country produced more than 2.4 million masks and provided livelihoods to 18,000 recruited tailors and 300 contracted local firms.
- » In Indonesia, national slum upgrading program resources are being reallocated to scale up cash-for-work in 1,000 communities; this will generate 2 million estimated workdays and expand water supply, sanitation, and hygiene efforts.
- » In Rwanda, the government offers labor-constrained households caring for children a more flexible, year-round, public work schedule by identifying "shovel-ready" projects now in high demand. The projects can be undertaken while complying with social distancing requirements, including work that can be done digitally or service work.

**Finding 3:** Improved networks to parents and teachers, environment conditions in schools, and capacities to use digital resources (tv, radio, apps, and online) to accompany learning facilitated crisis response.

#### Continuing early childhood development

- » In Ecuador, the Ministry of Social and Economic Inclusion shifted early childhood development services to a virtual modality. Interventions include sending text messages to caregivers of children under three years of age to encourage improved health and nutrition.

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### **Box 3.** Examples of Innovations in the Six Common Areas of Country Learning (cont.)

- » In Mexico, new early childhood development television scripts were elaborated during the school closures and broadcast through public television and the Secretary of Public Education's YouTube channel.

#### Remote learning during school closures

- » In Moldova, the Ministry of Education, Culture and Research expanded access to the internet by distributing for home use 10,000 laptop computers purchased with funds from the Moldova Education Reform Project.
- » In Nigeria, Edo State government adapted its flagship EdoBest Program to a home-based version, EdoBest@Home, which incorporates digital self-study packages distributed through apps with zero data internet access.
- » In Turkey, the education sector developed a mobile app to support the participation of students with special needs.
- » In Rwanda, the COVID-19 project supported by the Global Partnership for Education developed remote approaches for continued learning, including broadcasting lessons on the radio and promoting alternative audio-visual materials. The project includes using free SMS messages.
- » In Sri Lanka, the education project supported distance education through television, radio, and on-line means when schools closed. When schools partially reopened, a combination of face-to-face and distance education continued.

#### Parent engagement

- » In Djibouti, a partnership between the ministry of education and the network of parent associations in communities was established to support home-based learning.
- » In Uganda, SMS communication with parents is part of the remote learning support to households with children.

#### Remote coaching and training of teachers

- » In Cambodia and India, instructional videos, conference calls, and social media supplement coaching services for teachers. Rural teachers receive video lessons on teaching culturally relevant, curricula-aligned content.
- » In Lebanon, the World Bank team supports the remote coaching of teachers in grades 4–8 as well as remote classroom observation. If this model works, the Ministry of Education plans to expand and mainstream this support to teachers of all grades.

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### Box 3. Examples of Innovations in the Six Common Areas of Country Learning (cont.)

- » In Zambia, remote trainings reinforce teachers' education. For instance, teachers and ministry representatives, divided into WhatsApp training groups based on their geography, are training to become expert trainers.

#### Sanitation in schools and communities

- » In Angola, school communities are being trained in soap production as a cleaning and sanitary measure. The Minister of Education implemented this initiative in 13,000 primary schools in 2021.
- » In Uganda, grants to improve the sanitation and environment in schools and a quality checklist are important to ensure a safe environment for students.

**Finding 4:** Building real-time data capacities in operations to enabled local-level engagement to inform strategies and actions to reorient support.

#### Real-time monitoring of COVID-19

- » In Cambodia, Myanmar, and other countries with high mobile phone coverage, high-frequency phone surveys are providing rapid, real-time data and evidence on the socioeconomic impact of COVID-19 to inform World Bank responses.

#### Remote supervision of projects

- » In Honduras, the Corredor Seco Food Security project is piloting remote supervision of field activities amid COVID-19. It participates in a regional pilot initiative, funded by the region and supported by the Latin America and the Caribbean remote supervision working group, to help the project deploy remote supervision tools.
- » In Mexico, Nicaragua, and other countries, Geo-Enabling Monitoring and Supervision (GEMS) was introduced as a project supervision and monitoring tool for continuous engagement with communities and project supervision. The governments undertook the capacity-building program on GEMS and internalized the technology tools for monitoring. For example, in Uganda, GEMS is used for real-time project monitoring of support to schools and community groups to promote nutrition. In Mali, GEMS served as a platform for third-party monitoring in conflict affected remote areas.

#### Linking surveillance data to decision-making

- » In Fiji, the Ministry of Health and Medical Services improved communication and data reporting systems with frontline health workers and health facilities and internet connectivity for case reporting and public health surveillance across health facilities.
- » In Indonesia, a strengthened tracker-based surveillance system incorporates lessons from the COVID-19 experience, and an independent verification agency is required to confirm the improvements to surveillance.

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### Box 3. Examples of Innovations in the Six Common Areas of Country Learning (cont.)

- » In Rwanda, surveillance data are being used to produce digital maps that visualize the spread of the virus in real time.

**Finding 5:** Partnerships among multiple government sector line ministries and private sector actors enabled rapid efforts to expand digitalization of systems for crisis preparedness and a more equitable access to services.

Partnering with the private sector and nongovernmental organizations for social protection

- » In Belize, cash transfers are delivered in partnership with the national bank and telecommunications company. Beneficiaries are notified of the funds by SMS message, and they collect their payment through a network of agents.
- » In Bolivia, Sintesis, a payment platform that interoperates with 65 financial institutions, allowed the government to add 400 payment points during the COVID-19 emergency, including through mobile banks for isolated areas.
- » In Togo, the new Novissi program helps citizens who lost their income and were pushed into poverty by the pandemic. The government partnered with the University of California and nonprofit GiveDirectly to prioritize those most in need through the use of satellite imagery, mobile phone data, and nationally representative household consumption data.

Partnerships to improve access to digital learning

- » In Colombia, the ministries responsible for digitalization and education partnered to provide teachers, parents, and students access to a free learning portal with educational resources, which are complemented by educational programs on television and radio.
- » In Peru, with support from the Ministry of Transport and Communications, the four major private telecommunication operators agreed to a zero data rate for students and teachers to access the educational digital platform. The Ministry of Education partnered with Microsoft and Amazon Web Services to host the platform. In addition, regional and local education units developed partnerships with over 1,100 local radio stations to reach remote communities.

**Finding 6:** Strengthening structures for multisector coordination, such as One Health platforms and other structures for planning by government and other stakeholders, facilitated emergency preparedness actions.

Government structures for coordination of crisis

- » In Haiti, the government created a multisectoral commission to coordinate the COVID-19 response, integrating mechanisms for civil society and the private sector to contribute to and discuss emergency preparedness actions. The Ministry of Public Health and Population is also establishing crisis cells within its departments.

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**Box 3. Examples of Innovations in the Six Common Areas of Country Learning (cont.)**

- » In Honduras, the new Ministry of Disaster Risk Management and National Contingencies was upgraded to the Ministry for Disaster Risk Management to provide a platform and legal framework for enhancing interministerial coordination.
- » In Senegal, the World Bank supports One Health, a multisectoral approach to COVID-19 that coordinates human health and animal health surveillance and disease prevention. This approach involves the Ministry of Health and Social Action in a leadership position as well as the Ministry of Livestock and Animal Production, the Ministry of Agriculture and Rural Equipment, the Ministry of Environment and Sustainable Development, and the Ministry of Water and Sanitation.

*Source:* Independent Evaluation Group.

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