

“It’s not about health, it’s about society”: A Qualitative Analysis of Multilateral Leaders’  
Perceptions of Opportunities and Challenges to Multisectoral Collaboration for Pandemic  
Prevention, Preparedness, Response, and Recovery

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**Abstract**

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**Background:** The COVID-19 pandemic affected all sectors of society. It demonstrated not only its multisectoral consequences but also the importance of and challenges to meaningfully incorporating sectors and stakeholders beyond human health, such as education, agriculture, animal health, and the environment, into pandemic preparedness, prevention, response, and recovery (3P2R). While it revealed systemic issues in 3P2R, it also presents an opportunity to reflect and reimagine a more multisectoral and collaborative global health security future.

**Methods:** This qualitative study used key informant interviews with leaders of multilateral institutions to elicit their perspectives and experiences related to lessons learned from the

pandemic and prior pandemics, the roles and responsibilities of different sectors for 3P2R, and opportunities for and challenges to multisectoral strategies for 3P2R. A total of 16 interviews were conducted with leaders representing the human health, animal health, agriculture, education, and environment sectors.

**Results:** The interviews revealed key insights related to: 1) lessons learned for 3P2R; 2) multisectoral roles and relationships; and 3) challenges, opportunities, and recommendations for multisectoral mechanisms. The interviews reveal the importance of prior experience, pre-existing relationships between sectors, leadership, pre-existing capacity of all sectors, and communication and trust for 3P2R. The interviews also reveal a disconnect between sectors in their understanding and perception of other sectoral counterparts, further contributing to difficulties establishing relationships across sectors. While participants had few concrete recommendations for a multisectoral mechanism, they pointed to the importance of creating a platform which would be politically empowered, integrated within existing systems, and adaptable to different types of health emergencies.

**Conclusion:** This study provides an intimate portrait of multilateral leaders' belief in the importance of growing from the successes and challenges revealed by the pandemic and their simultaneous fear that the world is intent on forgetting. These interviews reveal widespread agreement as to the importance of multisectoral collaboration but a dominating and persistent lack of clarity as to how to operationalize it within bureaucratic systems that do not reward nor encourage multisectoral relationships. Moving forward, we need to better understand what operationalizing multisectoral collaboration means if we are to make it a reality.

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## **Introduction**

The COVID-19 pandemic affected all sectors of society, from health and education to business, tourism, and travel. On March 11, 2020, the WHO declared COVID-19 a pandemic<sup>1</sup>. The pandemic revealed severe shortcomings in the implementation and scale-up of biomedical and socio-behavioral interventions both within and across countries, a lack of intersectoral preparedness, particularly as it relates to education and business, and the shortcomings of so-called “global solidarity”. While the pandemic exposed severe gaps in nations’ preparedness, response, and recovery infrastructures, it also encouraged a high level of adaptation and innovation in identification and sequencing of the causative agent and the development of biomedical interventions<sup>2-10</sup>. The pandemic’s unveiling of systemic issues in prevention, preparedness, response, and recovery (3P2R) presents an opportunity for nations and institutions to reflect and reimagine an equitable, multisectoral, and collaborative global health security future.

The pandemic has demonstrated not only its multisectoral consequences but also the importance of and challenges to meaningfully incorporating sectors and stakeholders beyond human health, such as education, agriculture, animal health, and the environment, into 3P2R. Appeals for multisectoral collaboration for 3P2R are not new. The International Health Regulations (revised in 2005) call for “the creation of multidisciplinary/multisectoral teams” in national pandemic preparedness plans, and following the Ebola outbreak that began in 2013, the Independent Panel on the Global Response to Ebola recommended the creation of a WHO Centre for Emergency Preparedness and Response with a multisectoral Board<sup>11,12</sup>. While we seem to understand the benefits of and need for multisectoral collaboration, there remain barriers to operationalizing these recommendations at the national and sub-national levels. With COVID-19, there are once again calls for multisectoral coordination and collaboration at national and international levels for pandemic preparedness and response. Member states

of the World Health Organization (WHO) are drafting and negotiating a Pandemic Accord to strengthen international, regional, and national efforts to prevent, prepare, and respond to future pandemics<sup>13</sup>. The inclusion and integration of multisectoral frameworks, including One Health principles and approaches, have been top of mind<sup>14-16</sup>. The recent failure to finalize a draft of the Pandemic Accord in time for the World Health Assembly points to the difficulties associated with developing and implementing multisectoral strategies<sup>17</sup>. In addition, in their Political Declaration on Pandemic Preparedness, Prevention, and Response, the United Nations General Assembly called for “the integration of a multisectoral approach towards pandemic prevention, preparedness, and response, given the multifaceted consequences of pandemics”<sup>18</sup>.

Multisectoral approaches are those that involve intentional collaboration among stakeholder groups and sectors to achieve better outcomes, including health outcomes. For the purposes of this study, a “sector” refers to “a part of an area of activity” linked to a particular discipline, such as education, agriculture, and human health<sup>19</sup>. A range of social, environmental, and political factors affect population and individual health. It is critical to engage sectors and stakeholders outside of the health sector in pandemic preparedness and response initiatives in recognition of the manifold interactions between health outcomes and the growing understanding of the role of zoonotic infections and climate change in the emergence of pathogens with pandemic potential, as well as the social determinants of health. However, both national governments and international actors have faced significant challenges implementing multisectoral mechanisms, including financial and political barriers that often make institutionalizing or formalizing multisectoral collaboration extremely difficult<sup>20-25</sup>.

COVID-19 will not be the last pandemic. Emerging infectious diseases with pandemic potential have increased in frequency over the past century, with current estimates showing about a 38% chance of experiencing a COVID-19-like pandemic within one’s lifetime<sup>26,27</sup>. Strategies for operationalizing recommendations for multisectoral action will be crucial in developing approaches to future pandemic prevention, preparedness, response, and recovery, particularly at national and sub-national levels. This study aims to elicit the perspectives and experiences of leaders from key multilateral institutions on

lessons learned from the COVID-19 pandemic as well as prior pandemics (e.g. HIV/AIDS, Zika, Ebola SARS) and the potential opportunities and challenges for multisectoral action for pandemic preparedness, prevention, response, and recovery at national and subnational levels.

This qualitative study focuses on major multilateral organizations, such as WHO, the World Bank, and the Food and Agriculture Organization (FAO), leading global efforts in sectors critical for 3P2R. For the purposes of this study, we use the following definition of multilateral organizations taken from the Kaiser Family Foundation:

*“Multilateral global health organizations are those jointly supported by multiple governments and, often, other partners (versus bilateral efforts, which are carried out on a country-to-country basis)<sup>28</sup>”*

Multilateral organizations not only provide financial and/or technical assistance to nations but also set norms, guidance, and policies for their respective sectors. As such, talking with high-level leaders from these organizations not only affords us the opportunity to speak with sectoral experts but also to understand how these different organizations are thinking about multisectoral collaboration. In addition, the international lens from which they work allows us to discuss trends across countries and across different outbreaks. Through interviews with these key leaders and representatives from multilateral organizations representing different sectors (agriculture, animal health, environment, education and human health), we aimed to identify opportunities and challenges for multi-sectoral engagement at national and sub-national levels.

## **Methods**

### *Study Design and Participants*

This qualitative study used individual in-depth key informant interviews (KIIs) with representatives of multilateral organizations representing the human health, animal health, agriculture, education, and

environment sectors to explore individual’s perceptions and experiences related to pandemic prevention, preparedness, response, and recovery, not only with COVID but also with prior public health emergencies, such as SARS, HIV/AIDS, Zika and Ebola. The interviews also explored participants’ thoughts related to the roles of health and non-health sectors during a pandemic and the opportunities and challenges for improving multisectoral collaboration and coordination at national and sub-national levels.

Using a purposive sampling strategy, the research team, which consisted of three investigators and six research assistants based at the University of Washington in Seattle and at the Universidad Peruana Cayetano Heredia in Lima, identified politically important cases for an interview, particularly individuals with prior experience, expertise, or involvement in the COVID-19 pandemic or previous pandemics<sup>29</sup>. The individuals interviewed are high-level professionals within their respective organizations and we used snowball sampling to further identify and connect with additional interviewees across sectors<sup>30</sup>. Because we were trying to reach high-level leaders at multilateral organizations, it was difficult to contact some of these individuals without a connection, making snowball sampling an appropriate and useful strategy for identifying potential interviewees.

The sampling frame for this study included high level leaders from multilateral organizations in key sectors who have played a role in the COVID-19 pandemic response in their respective organizations. For the purposes of this qualitative study, multilateral organizations within the sampling frame included agencies of the United Nations (e.g. World Health Organization (WHO), Food and Agriculture Organization (FAO), United Nations International Children’s Emergency Fund (UNICEF)), international development banks (e.g. the World Bank and International Monetary Fund (IMF)), multilateral funders (e.g. the Bill and Melinda Gates Foundation), and international financing organizations (e.g. the Global Fund to Fights AIDS, Tuberculosis, and Malaria). We conducted a total of 16 interviews. **Table 1** shows the breakdown of participants by sector and organization.

**Table 1: Study Participants by Sector**

Sector	Organization	# of
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		<b>Interviewees</b>
Human Health	World Health Organization (WHO)	5
	World Bank	1
	Bill & Melinda Gates Foundation	1
	Gavi, the Vaccine Alliance	1
	Global Fund to End AIDS, Tuberculosis, and Malaria	1
	U.S. President's Emergency Plan for AIDS Relief (PEPFAR)	1
Agriculture	Food and Agriculture Organization (FAO)	1
Animal Health	World Organization for Animal Health (WOAH)	1
Climate/ Environment	United Nations Environment Programme (UNEP)	1
	World Meteorological Organization (WMO)	1
Education	United Nations International Children's Emergency Fund (UNICEF)	1

### *Procedure*

The research team created a semi-structured interview guide for conducting the key informant interviews. The guide included questions in three primary domains: 1) what worked well and what did not work well for 3P2R; 2) roles of health and non-health sector leaders in 3P2R; and 3) opinions and recommendations related to key elements for the creation of a sustainable, multisectoral mechanism at national and sub-national levels for 3PR2. Sample questions from each of the three domains are provided in **Table 2**.

**Table 2: Sample Key Informant Interview Questions**

<b>Domain</b>	<b>Sample Questions</b>
Lessons learned for 3P2R	In the area of pandemic response and/or recovery, What do you think worked well in LMICs at the national and sub-national levels?

	What do you think were or are the barriers, gaps and/or needs in LMICs at the national and sub-national levels?
Roles for health and non-health sectors	<p>What kinds of roles do you think national leaders in the public and private health sectors in LMICs should have played in response to COVID? How does that align with what you observed?</p> <p>What roles do you think national health sector leaders in LMICs expected counterparts in your sector to play in the COVID response?</p>
Multisectoral Mechanism	Based on what you have said, <i>in LMICs</i> , what do you think would be the key elements for a sustainable, intersectoral mechanism to address these barriers or needs while maintaining and optimizing existing strengths for COVID and future pandemics

*Data Analysis*

The research team conducted a thematic analysis of the interview data to identify key themes arising in participants’ responses. The team used a combined deductive and inductive approach to code the interviews<sup>31,32</sup>. Using the three domains from the semi-structured interview guide (lessons learned, roles, and multisectoral strategies) as a baseline, the team used an inductive approach to identify additional salient themes and adjusted the themes as necessary throughout the coding process. To do this, the team read the transcripts to familiarize themselves with the data and drafted memos throughout this familiarization process to denote key ideas, themes, and patterns emerging from the initial readings. These memos provided the basis for the initial drafting of the codebook.

The codebook included each code, their brief and full definitions, guidelines for their application, instances of exclusion, and examples. After creating the initial codebook and iteratively refining the codebook, the team used ATLAS.ti 23 to code the transcripts<sup>33</sup>. We divided the transcripts among three coders and conducted an intercoder agreement (ICA) process to ensure common understanding and application of the codes<sup>34</sup>. To establish ICA, each coder independently coded the first transcript. The coders then reviewed one another’s coded transcripts to identify discrepancies in code application and interpretation. The team reviewed these differences and revised code definitions for clarity. The coders

then performed the same process on a second transcript to establish common understanding and interpretation of the codes and adjust any definitions or elements of the codebook for clarity. We divided the remaining 14 transcripts among the three coders who independently coded their assigned transcripts. Through this iterative coding process, the team identified and built out three main themes and 20 sub-themes.

### *Role of the Funding Source*

This is an unfunded study that was supported by the University of Washington Department of Global Health.

## **Results**

We grouped our themes into three predetermined categories: 1) lessons learned for 3P2R; 2) multisectoral roles relationships; and 3) challenges, opportunities, and recommendations for multisectoral mechanisms.

### Lessons Learned for 3P2R

#### *Prior Experience and Pre-Existing Capacity*

Participants noted that prior or ongoing experience with national or subnational epidemic response facilitated a better response to the COVID-19 pandemic. Prior responses prompted shifts in response systems, leading to improved preparedness for future epidemic responses. As one participant noted:

*“I think what worked well on pandemic response was the muscle memory, or the experience that many countries in the Global South had in dealing with epidemics. And I think that worked well, whether that was Ebola, whether it was something else; I think those reflexes helped.” (MLP05)*

The infrastructure countries have developed to respond to prior health emergencies or routine outbreaks provided a stronger foundation to respond and adapt to the pandemic. This “muscle memory” also proved important for multisectoral collaboration. Participants noted that pre-existing relationships with counterparts working in sectors beyond human health were crucial in facilitating multi-sectoral interactions during the response. As one participant stated,

*“Do the things you have to do during peacetime to work with others. Introduce yourselves, work across sectors, you know, work with finance, with different groupings, so that you know these people beforehand... I think it is extremely important that people get to know each other, get to know the work of each other, get to build the collaborations and the partnerships before a health emergency.” MLP 07*

Pre-existing relationships, whether formal (in the form of agreements or mechanisms) or informal, are critical for response. These pre-existing relationships serve to foster both inter-personal and inter-institutional trust, making it easier for sectors to coordinate and work with one another. According to participants, building up this “muscle memory” during “peacetime” is a critical component of pandemic preparedness. For example, some participants noted the investments of Kenya, Uganda, and Ghana in One Health mechanisms in response to previous outbreaks. These outbreaks spurred closer engagement between the animal health and human health sectors.

Participants also noted, though, that to exercise this “muscle memory” requires a degree of pre-existing capacities at the national and sectoral levels. For the health sector, participants noted the importance of the health workforce, diagnostic capabilities, access and availability of medical supplies and personal protective equipment (PPE), and the ability to scale-up. However, it wasn’t just about the health sector’s capacity to respond to the health needs of the response but also about the nation’s capacity to handle the economic and societal consequences of the pandemic as well as its ability to support the health sector. Several respondents noted the differential impacts of the pandemic in certain regions and the challenges associated with making decisions best fit for the context. As one participant shared,

*“[T]he economic impact of the COVID pandemic is actually much greater than the health impact in Africa, and the health impact is largely from the disruption of other services as opposed to directly attributable to COVID... even though there's guidance, you know, often people panic, right? And there's a lot of, you know, like, you know, close the gates - even if that's not epidemiologically sound thinking” - MLP 13*

Governments attempt to make the best decisions they can with the resources they have, but national capacity does not exist in a vacuum; it is affected by institutions and governments that may be beyond their span of control (e.g. vaccine access). Guidance provided from WHO to countries did not necessarily take into account these realities - providing guidance that was not necessarily fit to the context or implementable given the capacities and resources available to countries. The issues of pre-existing capacity were relevant to the interactions between sectors as well. While a sector may be able to fill in the gaps for the health sector at the beginning, there were issues with creating new gaps in capacity in those supporting sectors. As one participant from a non-health sector noted,

*“The risk is, of course, is that [testing human samples in veterinary labs] can only be a temporary fix... So you don't want all the resources being dedicated to the public health sector for too long, because then you might create another problem with food insecurity or something, because you have a deteriorating animal health situation as a result of not having the resources to do surveillance in animals” - MLP06*

Issues of insufficient capacity to respond, scale-up, and adapt to the pandemic were continually cited throughout the interviews. These issues were not limited to the health sector but spanned all sectors. As noted previously, when participants noted instances in which countries had stronger capacity, it was usually affiliated with strengthening efforts that had been undertaken following previous outbreaks, such

as SARS or Ebola, or ongoing efforts, for TB for example, that allowed for facilities and staff to be transitioned/adapted to the pandemic's needs.

### *Cycle of Panic and Neglect*

Participants expressed a “*fear of forgetting*” – a concern that governments are moving on too quickly from the pandemic without taking the necessary time and energy to meaningfully think about and act on the lessons learned for improved 3P2R. Many interviewees discussed the idea of “space”, “memory”, and issues with sustaining interest in pandemic prevention, preparedness, response, and recovery. As one participant commented:

*“...we have 0 interest right now in pandemic preparedness, and COVID, for that matter. You know, the fatigue of even talking about this is so tangible and in your face that there's no space. There's no space to discuss, there's no space for financing, because all the money that was used for COVID was pulled from somewhere else.” - MLP02*

Because prior experience with epidemic response, including adapting systems to align with lessons learned, was so crucial to some countries' responses to the COVID pandemic, there is widespread concern among the participants that the experience will not be used to strengthen 3P2R moving forward.

### *Leadership*

Participants noted the importance of national and sectoral level leadership for preparedness, prevention, response, and recovery. National leaders who listen to and promote science as well as elevate the importance of the response can not only facilitate a better adapted and informed response but also create an operating environment suitable for evidence-based policies. Leadership, when involved, also has the ability to convene high level bodies which lend legitimacy to the health sector. As one participant stated,

*“I think that was a... I guess what I want to say is, you can have all the preparedness in the world that you want, you can have a perfect plan, you can have perfect systems, and if you don't have leadership that is going to stand behind it and mobilize it and speak to it and ensure everyone is in their posts, then it's never gonna happen.” - MLP15*

Participants highlighted that leadership that embraces the science, supports public health and other sectoral professionals, and empowers public health professionals to provide guidance and implement policies is critical for 3P2R. Not only is leadership critical in leading a response to a health emergency, but it also has a role in sustaining interest and supporting future preparedness and prevention efforts.

#### *Communication, Trust, and Community Engagement*

Respondents consistently noted the importance of communication between national leaders and health sector leaders, between national and health sector leaders and the public, and between health and non-health sectors. As one participant aptly noted, *“if you don't get the communications right, and this is true with wealthy countries as well, everything kind of gets broken”* (MLP09). Participants noted that professional information was constantly at odds with misinformation throughout the pandemic. This contest - between different sources of information - proved difficult to handle. Participants noted this was a particular challenge in countries like Brazil, Tanzania, and the United States in which the health sector wrestled with national leaders which denied the pandemic or espoused misinformation.

In addition to widespread misinformation, participants noted that, in general, the health sector faced challenges in effectively communicating ambiguity and navigating shifts in the evidence base. As one participant shared,

*“And of course one of the things we've learned in a pandemic situation is even your best scientist in the world - the science changes during a pandemic, and therefore you have to educate people that I'm going to give you the best answer for what I know now, but I might say something different, you know, a week*

*from now, and that's okay. It's not because I lied to you or misled you or... It's because the, you know... the knowledge evolves. You know, at one point we don't think it's respiratory spread; it's respiratory spread. We don't think masks work; masks work. I mean, you know, and that information. So that's an absolutely critical one.” - MLP03*

Participants noted that these changes to guidance eroded trust between populations and their health sector leaders. Instead of seeing these updates as “*course correction[s] to be applauded*”, they were seen as an “*admission of failure*” (MLP02). Many participants cited the difficulties with communicating ambiguities and changing information to the population, but they also noted the importance of centering people in their communication and in their response. As one participant commented,

*“The virus is the problem, and people are the solution. You won't get anywhere in dealing with an outbreak of any kind if you treat people as though they're the problem.” (MLP04)*

There was a recognition among many interviewees that communities need to be at the center of the response. When governments build trust with communities, they create a foundation for trusting the health sector despite changing information or ambiguities. For example, one participant highlighted Thailand’s success in engaging and discussing with community leaders and civil society organizations throughout the pandemic. Community members “*felt that they were listened to, they felt that the government actually supported them,*” creating trust between community members and their government.

### Multi-sectoral Roles and Relationships

#### *The Roles of Health and Non-Health Sectors*

When asked about what the role of the health sector in a response should look like, respondents from both the health and non-health sector emphasized the importance of the health sector in providing

evidence-based guidance to policymakers and communicating guidance and new information to national leaders, non-health sector leaders, and the public. As one participant said,

*“...their job is to be the expert and at a time when information isn't so well worked out. So you know each different sector has a responsibility. The transport sector, the, you know, the immigration sector, the, you know... The agricultural sector. They all have roles to play, but the health expert has to be the one that says, you know, we think you wanna be in quarantine for 5 days, 10 days” - MLP03*

The health sector is expected to lead. However, respondents from the health sector discussed that while they are meant to lead the response, the ability for the health sector to perform its functions is dependent on the environment in which it operates. As noted previously, political leadership is critical to a response. If there is not a conducive political environment, one which values science, it is difficult for the health sector to lead. In addition, pre-existing capacity issues for the health sector can make it difficult to respond properly. Respondents noted the high expectations placed upon the health sector and the inability to always meet those expectations due to limitations in financing and the weaknesses of pre-existing health systems.

Respondents also emphasized that while the health sector should be the lead in a health response, the response requires the inclusion of all sectors, a whole of society approach. As one participant shared,

*“The greatest lesson of COVID was that it showed that health cannot do it alone. It's not about health, it's about society, it is about financing. It's about jobs. It's about so much more than health. And I think that that forced discussion moved the discussion from purely health issue to a whole of government issue” - MLP07*

Despite the perceived importance of multisectoral engagement and collaboration for the COVID-19 response, participants noted a number of difficulties engaging in multisectoral collaboration. Participants

in non-health sectors stressed the limits of their pre-existing resources. One interviewee from a non-health sector commented,

*“I think my experience is that the other agencies are less funded than public health, so you have a situation where they're covering a multitude of issues, and, therefore, their capacity to actually respond to a situation like this would have been exceedingly challenging... if you do not have the infrastructure and the people to actually manage that and to know what you're gonna do, you can't manage it, so it's not managed. And I think that is true globally.” MLP11*

Particularly in low and middle income contexts, participants noted how the pre-existing capacity of sectors outside of health, especially climate, environment, and animal health, limit their ability to engage in multisectoral activities. Participants also noted the potential negative political implications and perceptions of supporting efforts in other sectors during a pandemic. As one participant from a non-health sector aptly noted, *“How can we start testing animals when we're not testing enough?” (MLP06)*. In addition to existing capacities of non-health sectors, participants described the ways in which decentralized systems do not create incentives for collaboration. As one participant stated,

*“...devoting time and resource to those intersections is very difficult because you're not measured on how you support another agency, you're supported on how you deliver your own goals” - MLP01*

### *Role of Academia*

When asked about the role of academic institutions in 3P2R, participants noted their primary role as research institutions at the forefront of generating new knowledge about new pathogens. Secondly, participants mentioned academic institutions' role in training public health professionals in areas related not only to public health but also in leadership and communication. Participants noted universities and research institutions make valuable contributions by generating data, educating specialists in public

health, conducting scientific research, comprehending the intricacies of responding to pandemics, facilitating the exchange of knowledge, and providing guidance based on evidence to influence policy-making. As one participant shared, academic institutions are *"the foundation by which we build evidence-based guidance"* (MLP02).

The same challenges faced by health and non-health sectors, though, apply to academic institutions as well. Participants noted challenges such as communication between academic institutions and national political leadership, financing, and pre-existing capacity to perform research and training functions. As one participant commented,

*"What I see as a big challenge is the financing - that universities are not necessarily that nimble, because they run on a shoestring, especially for research."* - MLP15

Pre-existing conditions of universities, including their integration with decision making bodies and financing, affect their ability to devote resources rapidly to research or direct support for a response.

#### *Defining a Multisectoral Mechanism*

Participants across sectors agreed on the need for multisectoral action for pandemic prevention, preparedness, response and recovery. Perceptions about the shape that a multisectoral mechanism would and should take, though, were disparate across interviewees. In fact, many respondents seemed unsure how to best operationalize and sustain a multisectoral mechanism. One participant suggested creating an IHR coordinating body or something similar to a disease situation room to coordinate in the event of a health emergency. Another participant suggested creating a platform - similar to One Health platforms found in Ghana, Kenya, and Uganda - that would convene sectors in the event of a health emergency. One participant also suggested building pandemic prevention and preparedness into existing emergency and disaster management protocols and systems as opposed to creating a new bureaucratic body.

While there was disagreement on the specific aspects of a mechanism (e.g. structure, financing), participants noted specific traits that would help to make a multisectoral mechanism sustainable. The interviewees suggested mechanisms should be politically empowered, adaptable, and integrated. There was some agreement that a multisectoral mechanism would need political support at high levels so as to empower the body or the platform to make and implement informed decisions. As one participant noted,

*“If it's on the political agenda you'll get the participation in that mechanism, right?... But that depends on the degree of political leadership.” - MLP09*

As noted previously in relation to the broader importance of leadership to 3P2R, political leadership and political backing are integral to the effectiveness of a response. Being placed at a ministerial level lends authority and accountability to the mechanism. As the previously mentioned participant aptly added, *“if it doesn't have that political backing and political leadership, or the backing of those values, it's gonna be a little hobby” (MLP09)*. Participants highlighted the need for adaptable and integrated mechanisms which would not only enhance their sustainability but also their performance. Ideally, mechanisms would be able to adjust the sectors involved in order to respond to different types of health threats and would be built into existing governance systems as opposed to lying in an external institution. As one participant stated,

*“ I think just something that's adaptable, something that's simple and adaptable, and can respond to different threats. Often [there is] a tendency to kind of build some... bespoke mechanism for something or other than a few months later something else happens, so these cross government mechanisms that can respond to all hazards, I think that's more sustainable because it requires less investment than building one for pandemics, one for natural disasters, one for you know, really focusing on an all hazard approach” - MLP06*

While participants were able to identify some traits that would be useful for a mechanism to have, there were few clear recommendations or thoughts on how to sustain or fund a mechanism in the long-term.

## **Discussion**

This study explored the experiences and perspectives of professionals at key multilateral organizations to better understand how lessons learned from the pandemic and understandings of roles and responsibilities across sectors can inform thinking about multisectoral strategies. This study highlighted the importance of investing in pandemic preparedness and response during “peacetime” by building health system and non-health sector capacity, creating linkages and relationships across sectors, and building trust among sectors and between sectors and communities. While there is widespread consensus on the need for multisectoral collaboration, there remain challenges in how to operationalize and sustain a mechanism or platform to convene sectors to prevent and respond to health emergencies.

Pre-existing capacity, in every sector, was noted as a critical determinant of a sector’s ability to perform their sectoral responsibilities as well as any intersectoral activities needed for the response, suggesting investment in only one sector is insufficient to support multisectoral collaboration for 3P2R. This echoes the literature on lessons learned not only from the COVID-19 pandemic but also prior health emergencies such as HIV and Ebola<sup>3-6,12</sup>. In addition to building capacity, relationships between sectors need to be promoted and encouraged. Institutional siloing remains a persistent challenge to multisectoral collaboration. Sectors work within a defined and limited scope even if their work and the effects of their work are deeply intertwined with the work of other sectors. This institutional division not only fails to encourage or reward collaboration but it also further muddies the perceptions sectors have of their counterparts, resulting in misperceptions among sectors. These misperceptions, then, create an additional obstacle to creating and sustaining multisectoral relationships<sup>20-22,25</sup>. The interviews suggest there are conflicting perceptions of the expected roles of health and non-health sectors during a response. This goes

further than the need to define roles and responsibilities prior to a response and suggests the need to create meaningful relationships among sectoral counterparts to promote shared decision making.

Leadership, communication, and trust are critical both to 3P2R broadly and to multisectoral collaboration specifically. Leadership, communication, and trust have the ability to undermine a well-capacitated and resourced response if done poorly or, on the other hand, facilitate appropriate and effective use of limited resources and capacities if done properly. The importance of strong leadership - at the national and sectoral levels - as well as clear, consistent, and transparent, evidence-informed communication cannot be overstated. This is supported both by this study and the literature<sup>3-6,12,20-23,25</sup>. Leadership at the national level that creates an operating environment which not only supports a robust health sector response but also encourages and convenes other sectors to collaborate effectively is critical. National leaders have the power to sway national opinion about a pandemic response. A health sector can be terrifically capacitated, adaptable, and well-resourced, but if national leaders do not “buy-in” to the recommendations of their health sector counterparts, a response can go awry.

Risk communication during the pandemic was undoubtedly challenging for the health sector, both between the health sector and communities and between the health sector and other sectors. As the evidence base changes, so does what is communicated to communities and sectoral partners. Trust is a key component of communication during crises and is the foundation of risk communication. Literature from the COVID-19 pandemic and prior pandemics, including Ebola and avian influenza, notes the importance of active and collaborative engagement with communities for appropriate and context specific communication. Effective communication and collaboration with communities from the onset of an outbreak can help to build trust and facilitate positive reception of public health recommendations. This “two-way” dialogue is critical for building trust during an outbreak<sup>4-5,35-39</sup>. However, our participants also spoke to the importance of building trust during “peacetime” as you cannot rapidly deploy “trust” during an outbreak.

The interviews reflect how entangled sectors are despite institutional siloing. The interviews suggest there is widespread agreement about the need for a whole-of-society approach and extensive

multisectoral collaboration for 3P2R. This sentiment echoes those of Member States drafting the Pandemic Accord, the UN General Assembly's Declaration on Pandemic Preparedness, Prevention, and Response, the U.S.'s Global Health Security Strategy, the Africa CDC's Strategic Plan, and many other bodies that have called for integrated multisectoral collaboration<sup>13,18,40-41</sup>. The challenge does not seem to be promoting the importance of multisectoral collaboration - there is widespread agreement it is important - but rather how to operationalize it within bureaucratic systems that do not easily permit or reward this kind of collaboration. Not only is this collaboration unrewarded, but the allocation of resources across sectors at international, national, and subnational levels is often perceived as a zero-sum game, further discouraging meaningful multisectoral collaboration.

The interviews suggest that despite participants' support of multisectoral collaboration and their proclaimed need for a multisectoral approach for 3P2R, there exist incomplete understandings and differing perceptions of the roles and realities of other sectoral counterparts. This echoes findings in reports from multilaterals and the literature which point to difficulties establishing a common understanding across sectors of roles and responsibilities and the need for transparency and accountability across sectors<sup>20-22,25,42</sup>. A multisectoral mechanism at the national level would serve to define roles and responsibilities across sectors to reduce misunderstandings, build relationships and communication channels between sectors prior to the onset of a health emergency, and create the foundations for trustful interactions across sectors. The shape such a mechanism should take, though, requires additional analysis of existing approaches and prospective research. Further research could explore existing mechanisms or plans, such as Nigeria's National Public Health Multi-Hazard Emergency Preparedness and Response Plan, to better understand how these mechanisms were stood up, how they are sustained (if they are sustained), and how well they operate before, during, and after a health emergency<sup>43</sup>. It could also be useful to further examine existing One Health platforms to understand opportunities and challenges for incorporating sectors beyond those in the human health, animal health, agriculture, and environment fields.

## Limitations

There are several limitations to this study. First, the health sector is overwhelmingly represented in the sample of participants we interviewed. It was much more challenging to access individuals in other sectors - animal health, agriculture, environment, and education. This limits what we can say about non-health sectors' perceptions of multisectoral collaboration and engagement. Second, this study asked individuals working at the international level to describe their observations and recommendations at the national and sub-national level. There are inherent limitations to what they are able to speak on as they work at the international level, however, we wanted to understand their perceptions of broad trends and notable country cases for 3P2R.

## **Conclusion**

Multisectoral collaboration is not a new recommendation for pandemic preparedness, prevention, response, and recovery. However, as this study and others have demonstrated, it is challenging to create relationships across sectors that are bureaucratically and institutionally divided. This study provides an intimate portrait of leaders' reflections on the COVID-19 pandemic, including their belief in building off of our successes and challenges but also their fears for the future. The lessons learned espoused by participants are aligned with literature detailing the lessons learned and ways forward from the pandemic and suggest a need to build capacity across sectors, invest in health and other sectoral infrastructure, build partnerships among different sectors before an emergency hits, and establish sustainable financing for pandemic prevention, preparedness, response, and recovery. These experiences and perspectives also reveal a lack of clarity and general confusion surrounding the way multisectoral collaboration should be implemented at national levels and a fear that the world will fail to learn its lesson from COVID. COVID presents an opportunity to adapt the current systems, to leverage attention and resources to prepare for and prevent future health emergencies. While we seem to agree multisectoral collaboration is crucial, we need to better understand what operationalizing it means if we are to make it a reality.

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