

**India Roadmap Series  
High-level Roundtable**

**“Has COVID-19 Improved  
the Prospects of  
One Health in India?”**



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**ONE  
HEALTH  
POULTRY  
HUB**



**CHATHAM  
HOUSE**

Report prepared by

# Chatham House Global Health Programme, UKRI-GCRF One Health Poultry Hub and Jawaharlal Nehru University

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## Executive summary

The UKRI-GCRF One Health Poultry Hub is conducting an impact-driven development research programme in four countries in Asia, including India. As part of the Hub's policy work, it hosted a series of online discussions, the [One Health Roadmap Series](#), which aimed to identify practical and equitable approaches to health security, food security and food systems that incorporate justice in human, animal and environmental health, and contribute to the United Nations' call to 'Build Back Better' after COVID-19. Based on the series, eight key elements were identified as essential to build a sustainable poultry production system with One Health governance and coordination being central. These are:

1. Equity and justice (environmental, gender and youth)
2. Cultural aspects
3. Local perspectives and priorities
4. Interdisciplinary and intersectoral approaches to antimicrobial stewardship
5. Robust and relevant data
6. Effective science communication and education
7. Interdisciplinary and intersectoral actions for risk management and welfare
8. Nature-based food systems

Country-level roadmap events were conducted to contribute to the evolving discourse on policy design, implementation and monitoring of sustainable poultry production. To strengthen One Health implementation in post COVID-19 India, two webinars and a high-level roundtable on the themes of i) antimicrobial resistance (AMR), and ii) safe and sustainable food supply in India were conducted.

The roundtable was convened by the Centre of Social Medicine and Community Health, Jawaharlal Nehru University, New Delhi, in collaboration with the Global Health Programme at Chatham House, London, working within the One Health Poultry Hub (The Hub). The roundtable panel included representatives from NITI Aayog, Ministry of Health and Family Welfare, Principal Scientific Advisor to the Government of India, Centre for Science and Environment, United Nations Development Programme, Christian Medical College Vellore, Indian Council of Agriculture Research, World Health Organization, and Centre of Social Medicine and Community Health, Jawaharlal Nehru University.

One of the key issues identified was defining One Health in a way that recognises the broad scope of the approach whilst indicating how One Health interventions can specify aims to facilitate implementation. There was agreement that One Health must move beyond zoonotic disease, AMR and disaster management to address issues such as ecosystem health, food safety, mental health, spiritual wellbeing, ethnoveterinary medicine and achieving the Sustainable Development Goals (SDGs) of the United Nations. The roundtable panellists noted key challenges in development of the One Health framework, including data sharing across stakeholders and resource equity. During the COVID-19 pandemic, the health emergency governance in India was significant in its success. The panellists highlighted the importance of advocating for One Health based on 'Health in All Policies' (HiAP) as per the 2017 National Health Policy (NHP). There is also a need to explore the governance of upstream and downstream issues of One Health. They noted that to ensure effective implementation of the One Health Framework it is important to document the outcome of One Health discussions at each level, to create a knowledge pool and help understanding local issues and priorities. There is a need for top-down and bottom-up capacity building, and evidence generated at local level should inform national One Health policies. One Health is a unique challenge because of well-established silos. The expertise, capacity and resources exist; however, getting these to work together is a challenge as there has been little cross-sectoral programming outside of emergency settings. An equity-based, multisectoral approach is needed to develop a One Health framework and governance structure in India.

## Findings and recommendations of the roundtable panel

1. **Citizen science input into One Health:** There is a need to bring citizen science into the One Health governance framework to make it more inclusive through local capacity building and the production of knowledge at the local level, including understanding diverse cultural and behavioural realities. Innovation at the local level should be actively promoted. One Health needs to be understood as a driver to a sustainable system rather than an abstract concept for prevention of diseases and their spillage.
2. **Top-down and bottom-up One Health governance framework:** The One Health governance framework in India should be based on top-down and bottom-up governance approaches. Identification and involvement of local champions and utilising local knowledge in framing the One Health governance framework will result in collaborative ownership of the issue.
3. **Multisectoral collaboration:** Global, regional, national, and local level coordination and communication are vital to the One Health governance framework and intersectoral coordination and communication. In the multisectoral governance framework for One Health in India, the role and responsibilities of all stakeholders should be determined, along with accountability and deliverables on their part. An environment of inter-ministerial and interdepartmental dialogues for One Health should be nurtured.
4. **Resource allocation:** Adequate resource allocation and optimum utilisation of resources across sectors need to be addressed at the outset of the development of the One Health governance framework. Understanding should also be developed around sectoral needs, and thus incentives should be devised to keep different sectors motivated to contribute to the One Health governance. One Health has not received adequate investment. Dedicated funding is required to push the agenda of One Health in India in the face of the competing priorities for the government of India in human health and animal health.
5. **Geopolitics and political economy of One Health:** Understanding the geopolitical issues and political economy of One Health will help prioritise upstream and downstream issues that have a bearing on the implementation of the One Health governance framework.
6. **Analytical skills in the government:** The One Health governance framework should capitalise on existing analytical skills within government departments. Along with the required capacity building within the government, there is a need for a roadmap for the One Health governance framework based upon adequate functioning structure, leadership and fixed accountability.
7. **Different types of data:** There is a need to establish a mechanism to generate and analyse qualitative data on social and behavioural aspects and quantitative data on economics and disease surveillance to provide evidence for policy development and refinement. Multi-sectoral collaboration will foster data sharing and the creation of data repositories at all levels.

## Background

This roundtable was convened by the Centre of Social Medicine and Community Health at the Jawaharlal Nehru University (JNU), New Delhi, in collaboration with the Global Health Programme at Chatham House, London, working within the UKRI-GCRF [One Health Poultry Hub](#) (The Hub). The Hub has taken a keen interest in COVID-19 because the drivers that contributed to the emergence of the virus are believed to be closely linked with our food systems. Consumer concerns in many countries, including India, regarding a lack of access to affordable animal-source food (due to high animal mortality and market failure) and a lack of confidence in food safety (e.g., worries about food contamination with hormones, antibiotics or pesticide residues) frequently underlie preferences for non-domesticated animals sold through informal markets. Understanding of, and responses to, the drivers behind consumer and farmer behaviour have yet to be adequately researched and addressed. The Hub believes that using a One Health lens is key to effectively and efficiently preventing future pandemics.

The roundtable was moderated by Professor Rajib Dasgupta (JNU) and run as a hybrid event, with nine participants being present at The Park Hotel, New Delhi, India, and others joining virtually. All panellists agreed to conduct the roundtable under the [Chatham House Rule](#).

Professor Dasgupta welcomed all esteemed participants and thanked them for making time to participate. Following a brief introduction to the Hub by Professor Robyn Alders (Chatham House), Professor Dasgupta guided the discussion via the four questions below.

## Defining One Health

**How do you see One Health from your respective vantage points and responsibilities?**

The panellists noted that the challenge starts with agreeing on a definition that identifies the broad scope of the approach while also indicating how One Health interventions can specify aims to facilitate implementation.

As demonstrated by the December 2021 definition<sup>1</sup>, it is increasingly recognised that One Health must move beyond zoonotic disease, AMR, and disaster management to also address issues such as ecosystem health, food safety, mental health, spiritual wellbeing, ethnoveterinary medicine and achieving the SDGs.

***“One Health should be understood more as a driver to sustainable systems than just addressing infections and disease spillover. It is also important to define the roles and responsibilities of each sector and actor.”***

## Effective stakeholder collaboration, coordination and communication

The panellists emphasised collaboration, coordination and communication within a ‘collaborative ecosystem’ using both top-down and bottom-up approaches at global and regional levels, and across sectors (public, private, civil society, academia and research). It would be beneficial to identify local champions across all sectors and levels for the cause. They opined that communication with stakeholders beyond the scientific and policymaker areas cannot be overemphasised. They shared that One Health has been discussed globally and nationally, however it has been confined mainly to scientists, policy makers and knowledge experts. They cited the example of COVID-19 when citizen-driven responses and conversations beyond the scientific community entered the mass media reaching people at local

<sup>1</sup> <https://www.who.int/news/item/01-12-2021-tripartite-and-unep-support-ohlep-s-definition-of-one-health>

levels, leading to greater awareness and improving policy implementation. The panellists emphasised the need to take the One Health discussion closer to communities downstream of government policy.

## Resource equity

There has been a significant level of investment in human health; however, the animal and environmental/ecosystem health aspects of One Health have not received adequate investment. In the view of the panellists, dedicated funding is required to push the agenda of One Health in India in the face of the competing priorities for the government of India in human health and animal health. They noted that adequate resource allocation is required for One Health research.

## One Health governance

***“Differential policies of payments of salaries and even personal ambitions driven by different policies affect the way groups work together and these leads to everyone working in silos.”***

During COVID-19, the health emergency governance in India was significant to country’s success against pandemic. This was supported by the approaches of government, society and high political commitments. In the Ministry of Health, there was a well-established structure of case escalation, including a war room and emergency operating centres at state levels. There was also good data management, and much technology was developed and deployed, including through Indian Council of Medical Research (ICMR) applications and various portals. Integrated platforms were developed and many of these initiatives received contributions from private practitioners.

***“It is important to advocate for One Health based on the ‘Health in All Policies’ (HiAP) as per the 2017 National Health Policy (NHP). This should be done in all ministries including agriculture, food, environment, labour, women, and child education, with at least a point desk and One Health point***

Unfortunately, One Health is not part of international health regulations (IHR). There is a need to advance discussion on including a One Health element in the IHR through the ongoing World Health Assembly. The pandemic ‘treaty’ [a convention, agreement, or other international instruments under the Constitution of the World Health Organization] is being negotiated and may include One Health.

The panellists emphasised the need to explore upstream and downstream issues of One Health governance. It will be crucial to determine national level accountability and commitment for One Health governance and to develop a legally

binding set of inter-governmental regulations. This will require a roadmap, a governance and leadership structure, roles, responsibilities, and deliverables from all participating organisations and stakeholders involved in taking up the One Health agenda in its totality. Assessing how geopolitical factors impact One Health will further strengthen the governance structure.

Key points:

- Ministries should appoint One Health champions who can assist with identifying and dealing with positive and negative contributions of each ministry.
- Policies should consider the health of each component ecosystem, including urban ecosystems.
- Reductionism should be addressed in One Health.
- There is a need for research to incorporate transdisciplinary principles.
- Preparedness and control of endemic (as well as epidemic/pandemic) human and animal diseases remains important.



## Analytical capability and capacity

**Does India have sufficient analytical capability to bridge evidence and policy gaps? Are we making efforts towards creating capacity at organisational and systemic levels? How can we harness and implement these in a One Health agenda?**

### Capability within government departments

The panellists shared that analytical skills are available within government to develop One Health policies, and mapping exercises to gauge capacity have been taking place. However, this will not identify all capabilities within government departments; cross-ministry linkages and engagement is needed to access relevant data or metadata and deliver bidirectional (top-down and bottom-up) efforts. Crucially, they noted there was no platform available for people from the grassroots to share their knowledge and information. The panellists commented that the Ministry of Health and Family Welfare in India has begun to address this challenge after COVID-19 by working to create platforms for public health experts, epidemiologists and entomologists to contribute to health surveillance, data collection and reporting, and diagnostics from top levels to the block system or community levels.

### Capability among other stakeholders

The panellists mentioned that capability exists in India not just within government departments but among other stakeholders. They emphasised the need to formally recognise these capabilities, establish links across sectors and actors, and strengthen stakeholder groups where this is lacking. In the context of disease control, it boils down to having capability in epidemiology, outbreak response and analytical aspects associated with disease modelling and other laboratory analytic capability.

### Requirements for capacity building

Whilst there is analytical capability among various government and non-governmental actors for presenting scientific evidence and bringing policy issues to the fore, the panellists noted gaps in the capacity of organisations that impact on the ability to respond to fast-paced change. Future preparedness planning requires a clear-cut roadmap as well as governance and leadership structures with defined roles, responsibilities and deliverables from all participating organisations and stakeholders. A roadmap is required not only for outbreak situations, but for managing ongoing endemic conditions, including and beyond human infectious diseases. Panellists were of the view that more investment is essential as funds available now are insufficient to achieve even 50% of recommendations being raised. They further noted that there exists a digital integrated platform with an abundance of data, but with little analysis and action. It will be important for the government to develop a policy of data sharing so that this data can be available for researchers.

### Capability and One Health implementation

One Health is still very theoretical and how policies that go across public, animal, plant and environmental health can be developed, implemented and operationalised at different societal levels is a complex yet vital question. There is a need to ensure the forthcoming detailed unified service plan is closely monitored to support effective One Health implementation. The panellists noted that building capability and capacity at local levels is essential. There is a need to develop a practice of documentation of the outcomes of One Health discussions to create a knowledge pool and help understanding local issues and priorities. They also highlighted the need to integrate surveillance, biotechnology and effective risk assessment to detect and monitor threats. An integrated platform could capture the

diversity of One Health components and help provide a holistic view of the way forward, particularly for future public health emergencies. They noted that full integration of social science is essential to understand behavioural patterns and cognitive processes in supply and production chains, including traditional knowledge and practices that shape people's daily lives.

Key points:

- There is a need for top-down and bottom-up capability and capacity building.
- Evidence generation at local as well as state and national levels is key; case studies such as the control of Nipah virus in Kerala can provide critical evidence as to what can work.
- There is a need for an integrated roadmap for One Health, supported by a strong governance structure, engaged leadership and clear responsibilities and accountabilities.
- Mechanisms for data analysis and generating evidence to support policies should be put in place.
- There is a need for a repository of qualitative data on health systems.
- The social and commercial determinants of One Health issues need due consideration.

## An inclusive and equitable approach

**Has COVID-19 taught us to frame the One Health discourse beyond issues such as laboratory leaks and pandemic preparedness? Does it open the door to social sciences and the development of inclusive approaches in which equity can be ensured across sectors and disciplines? Have we really grown as a learning state and society?**

The participants noted that it is essential to step beyond past discussions around data generation and sharing and agreed that more research is required, including exploration of how climate change and current lifestyles will affect people and the environment in years to come.

### Systemic innovation

The panel noted that many innovations had occurred directly in response to the pandemic. These included crowdsourced initiatives in which district-level authorities leveraged technology to pool data and information from local communities. Another area of learning was the rollout of technology for managing the health emergency response, such as use of temperature sensors and provision of enabling guidelines, especially when the system was overwhelmed. They also took note of the management of COVID-19 in forest and tribal areas, highlighting that collaboration between folk and traditional systems of medicine can be of help. They shared that there is a process in the biodiversity registry where village-level information (traditional knowledge around alternative medicines) is collected and can support integration of traditional and alternative medicines with modern medicines.

### Data and material sharing

Sharing experiences during COVID-19, the panellists noted that knowledge sharing, sample sharing and creating repositories of information assisted in vaccine development and deployment. They were of the view that a One Health approach to AMR may push governments to sign up for global sharing of data, facilitating a global consortium exchange of knowledge, and in India this approach needs to be accelerated until it is internalised within the government system. They emphasised the creation of One Health data-sharing platforms and protocols which could also incentivise contributions by the private sector. They were of the view that understanding factors of motivation and devising incentives for each



stakeholder is equally important. Inter-ministerial discussions should take place frequently to address a few priority areas such as data sharing, sample sharing and data analysis.

Key points:

- Innovation at the local level should be fostered.
- Understanding the needs of One Health actors and developing focused strategies as to how to work with them is crucial.
- Understanding motivating factors and devising incentives for each stakeholder is equally important.
- There is a need to understand the political economy of One Health.
- There is a need to explore behavioural and cultural aspects of One Health.
- Contextual wisdom is essential for One Health and social scientists can add to One Health by generating this.

## Operational challenges

**What operational challenges do we anticipate in each sector to implement One Health policies given that there are diverse political settings in this country and competing sectoral needs?**

### Inter-ministerial/departmental collaboration

The panellists opined that One Health is an enormous challenge because of well-established silos which will be hard to overcome. Capability, capacity and resources do exist, to a greater or lesser extent, but getting sectors to work together is a major challenge. They noted that virtually no cross-sectoral programme has been implemented outside of an emergency setting. They were of the view that inter-ministerial discussions should be held addressing a few priority areas at a time such as data sharing, sample sharing and data analysis as this was likely to yield specific positive progress. They noted the example that pollution control departments are little interested in AMR, not because they do not think it is important but because they are trained and focused on heavy metals, analytical chemistry and pesticides rather than bacteria and biological agents. Thus, there is a need for reflections on the mandates and priorities of various ministries and departments.

### Optimism vs realism in a One Health approach

Panellists shared their thoughts on the prevalent optimism that in times of emergency many innovations and experiments will take place and that this will lead to longer-term changes in how departments and organisation function. The realistic view is that taking a One Health approach poses enormous logistical challenges because of existing silos, gaps in capability and capacity, inherent inertia, and resistance to change. To address these issues, there is a need to identify and foster a commonality in objectives and end goals among scientists and policymakers. To develop consensus among stakeholders there is an urgent need for bottom-up inclusion and top-down leadership to guide the debate, develop a road-map and shape pathways to the development of a One Health framework.

Key points:

- Fostering inter-ministerial dialogue is a crucial first step.
- A cross-sectoral One Health programme must be established and budgeted for.