



# What more is needed to make One Health a reality in Bangladesh?

This brief identifies barriers to, and opportunities for, advancing multisector and multidisciplinary action at national, district and community levels to benefit human, animal and planetary health.



## Background

Bangladesh is vulnerable to zoonotic diseases which transmit from animals to people (including emerging infectious diseases such as COVID-19), from environmental degradation, antimicrobial resistance (AMR) and food safety issues. These threats have contributed to the Government of Bangladesh recognising the need for a One Health approach—that is, one which recognises the interconnection of human, animal, plant and environmental (including ecosystem) health.<sup>1</sup> Bangladesh has made great strides to institutionalise One Health. However, hurdles remain.

To date, Bangladesh has largely focused on zoonotic disease, and most One Health activities occur at national level with limited functional linkages with district and community levels. Many activities are project-based and dependent on external funding. There is room for better coordination and communication between government sectors, academia, development partners and civil society organisations, and for greater capacity building. Ways in which a One Health approach could help to coordinate sectoral activities which deliver multiple benefits with a high return on investment need to be identified too. The COVID-19 pandemic highlighted the need for a comprehensive, integrated approach to public health that promotes collaboration between sectors and stakeholders. This brief identifies ways to advance One Health drawing on qualitative research and high-level roundtable discussions.

## Recommendations

- Apply One Health **principles** across ministries and at community level.
- Strengthen the One Health Secretariat by reinforcing the **operational system**.
- Promote One Health **education**, training, learning and career pathways.
- Create **inclusive policies** and cross-sector alliances.
- Develop an effective budgeting strategy with a realistic and adaptable **budgeting plan**.
- Establish an effective One Health **research** and development platform.
- Cultivate **trust** to enable sharing of key data.
- Conduct regular **evaluations** and assessments to keep the One Health strategic document up to date.

## Priority areas for better One Health

### Institutionalising and building ownership of One Health

The One Health approach is gaining recognition around the world, including in Bangladesh and among the G7 and G20 countries, as an efficient strategy to manage complex health issues at the human-animal-environment interface. To fully realise the potential of One Health, however, it is necessary to institutionalise and establish ownership of the approach at all levels, from the global to the local, for the prevention, detection and response to health risks.

At the policy level, it is critical to establish a strong governance structure capable of facilitating coordination and collaboration among the different sectors and development partners. This can be accomplished by developing policies and regulations that promote the implementation of One Health principles across ministries.

One Health awareness campaigns and capacity-building programmes can help to promote a better knowledge of One Health concepts and increase

community participation in disease prevention and control at the community level. To make this effective, a multi-sectoral One Health working group at sub-district (upazila), district and divisional levels would be beneficial, and one efficient way would be to train and resource workers at grassroot level. Further, rotating discussion and meeting venues pertinent to One Health across different departments could help to broaden its ownership.

### Strengthening the existing One Health Secretariat

The One Health Secretariat is responsible for coordinating and facilitating One Health activities in Bangladesh – an extremely important function. However, for the Secretariat to be effective, it needs to have ongoing adequate resources, infrastructure and personnel. Consequently, it is vital to reinforce its present operational system.

This includes setting clear mandates, duties and responsibilities, as well as establishing effective communication channels through focal persons within relevant ministries and departments. To improve the coordination mechanisms and technical capacity and access to assistance provided by experts, dedicated

## Establishing a broad reach across state and society



In 2007, prompted by an avian influenza outbreak, a civil society network of researchers and technical experts in animal and human health was set up. A year later, One Health Bangladesh launched and it is now an active community of practice working to strengthen surveillance, promote and share research, facilitate evidence-based decision making and build capacity.

In 2016, a Government of Bangladesh One Health Secretariat and One Health Steering Committee were established. The Committee is a forum for high-level policy leadership and its chair rotates every three years. The Secretariat comprises three officers: one each from the health, livestock and forestry sectors. It is currently headquartered at the Institute of Epidemiology, Disease Control and Research.

One Health is now included in graduate-level programme curricula in Bangladesh, and a One Health Institute at Chattogram Veterinary and Animal Sciences University has been established.

teams consisting of mid-level professionals nominated by their sectors may be considered. In addition, as the Secretariat plays such an essential part in One Health initiatives in Bangladesh, it should be encouraged to place a greater emphasis on both mobilising and management of the resources that are already available.

### **A next-generation One Health workforce**

Also critical for sustaining and scaling up One Health activities is the development of a skilled and diversified One Health workforce. Advocating for One Health education and training programmes, fostering interdisciplinary and inter-professional learning and collaboration, building career pathways and professional development opportunities, and giving mentorship and networking opportunities can all help to achieve this.

Regular advocacy from national to grassroots levels and practical multi-sectoral training programmes, such as the Field Epidemiology Training Program (FETP, involving public health, animal health and environmental health officers), and the establishment of a university network, such as that in operation in Vietnam<sup>2</sup>, may be viable options for developing an action-oriented next-generation workforce.

In terms of a long-term networking and advocacy programme, it was also suggested by roundtable participants that an emergency fund for a joint response plan be established.

### **Inclusivity**

One Health is intrinsically multidisciplinary and multi-sectoral. To ensure effective collaboration and coordination, it is crucial to promote inclusivity and involve diverse stakeholders. This can be achieved by formulating inclusive policies and fostering cross-sectoral partnerships and collaborations so that all relevant partners feel included.

Moving forward, we will need to add more relevant sectors, such as the Ministry of Planning and Finance and the Ministry of Education to secure a sustainable source of funding and intellectual support.

In addition, it was anticipated that the participation of the Centers for Disease Control and Prevention (CDC) of Bangladesh, the Directorate General of Health Services (DGHS), and the Directorate General of Drug Administration (DGDA) would increase the efficacy of One Health implementation.

The participation of marginalised communities or sectors is an additional way of achieving inclusivity. This can be accomplished through the engagement of community leaders and other stakeholders, the development of communication strategies that are sensitive to cultural values, the establishment of community-based participatory research, the empowerment of community health workers and the provision of regular training on basic personal hygiene



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practices, disease prevention and environmental management.

### **A sustainable work plan and budgeting strategy**

One Health initiatives should be integrated into existing health and development programmes and connected with national health strategies. This necessitates the establishment of short- and long-term work plans and budgeting strategies that assure proper resource allocation for One Health activities, promote multi-stakeholder engagement, develop responsibility and allow for progress evaluation, monitoring and learning.

In terms of sustainable funding, the concept of pooled funding from several ministries for One Health, as well as memoranda of understanding (MOUs) between ministries and sectors, as implemented in Thailand and Vietnam according to our analysis, was strongly appreciated by roundtable participants, who prioritised shaping One Health strategic documents with a more active engagement of multiple sectors.

### **One Health research**

To create an effective One Health research platform, we must focus on broader working topics that can bring in people from different departments or sectors, such as antimicrobial resistance (AMR), food safety, pollution, waste disposal and emerging infectious diseases, so that everyone can recognise how their work areas connect with One Health.

Establishing a liaison between multi-sectoral research activities and the One Health Secretariat was strongly advised by roundtable participants. Individual or institutional partnerships should be encouraged to develop innovative future research that can bring together students, academics and other partners on one common platform.

### **Multisectoral data sharing**

In terms of One Health data sharing, alongside the One Health dashboard<sup>3</sup>, efficiency would be advanced if all agreed common shareable data from multiple sectors were automatically linked with the dashboard using advanced technology such as block chain, rather than uploading data from each sector separately.

Fostering trust across sectors and good professional relationships are essential to make the data-sharing process run smoothly.

## The One Health strategic document

The latest (2017-2021) One Health strategic document must be updated in the near future to ensure that One Health remains relevant and responsive to changing health concerns. Regular evaluations and assessments, including of diverse stakeholders, incorporating evolving concerns and trends, encouraging innovation and learning, and fostering accountability and transparency are required to more fully realise the benefits of the One Health approach.

## Next steps

The following are recommendations for policymakers and One Health stakeholders to help achieve better health for all:

- Establish a comprehensive governance structure that encourages the implementation of One Health principles across ministries and at community level.
- Strengthen the current One Health Secretariat by reinforcing the current operational system. This should include sufficient staffing and increasing communication through continuous liaison with technical experts.
- Promote One Health education, training, interdisciplinary learning and career pathways to produce a skilled, effective and diverse One Health workforce.
- Create inclusive policies and cross-sector alliances to include all relevant stakeholders.
- Establish a working budget (short- and long-term) by prioritising the One Health approach's strategic goals and developing an effective budgeting strategy with a realistic and adaptable budgeting plan. This should allow for adjustments based on changing circumstances and priorities, with resources allocated accordingly.
- Put emphasis on innovative and inclusive research and development (R&D) topics to establish an effective One Health R&D platform.
- Cultivate trust across sectors and professional connections to enable the sharing of key data.
- Conduct regular evaluations and assessments to keep the One Health strategic document up to date.

## Further information

The GCRF One Health Poultry Hub is an impact-driven research and development programme working to help meet Asia's growing demand for chicken meat and eggs while minimising risk to local and global public health.

This briefing is based on a review of Bangladesh's One Health implementation and awareness carried out via a comparative study with 12 countries, including three high-income countries, and key informant interviews with interviewees from 10 countries, including two high-income countries. The analysis was based on a 10-month qualitative research project and was presented at a high-level roundtable convened on 4 March 2023.

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### Footnotes:

1. [who.int/news/item/01-12-2021-tripartite-and-unep-support-ohhlep-s-definition-of-one-health](https://www.who.int/news/item/01-12-2021-tripartite-and-unep-support-ohhlep-s-definition-of-one-health)
2. [linkedin.com/company/vohun/about/](https://www.linkedin.com/company/vohun/about/)
3. <https://ohebsdd.org/dash>