

Country experiences on bovine TB/ zTB diagnosis, surveillance and control

Country: **BANGLADESH**

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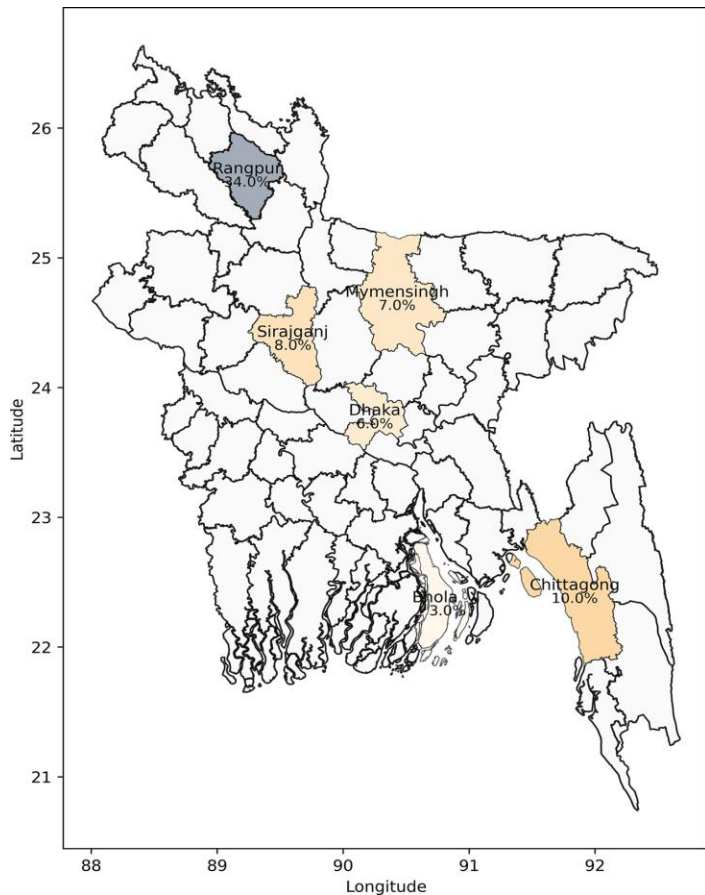


**WOAH Regional Hands-on Training on
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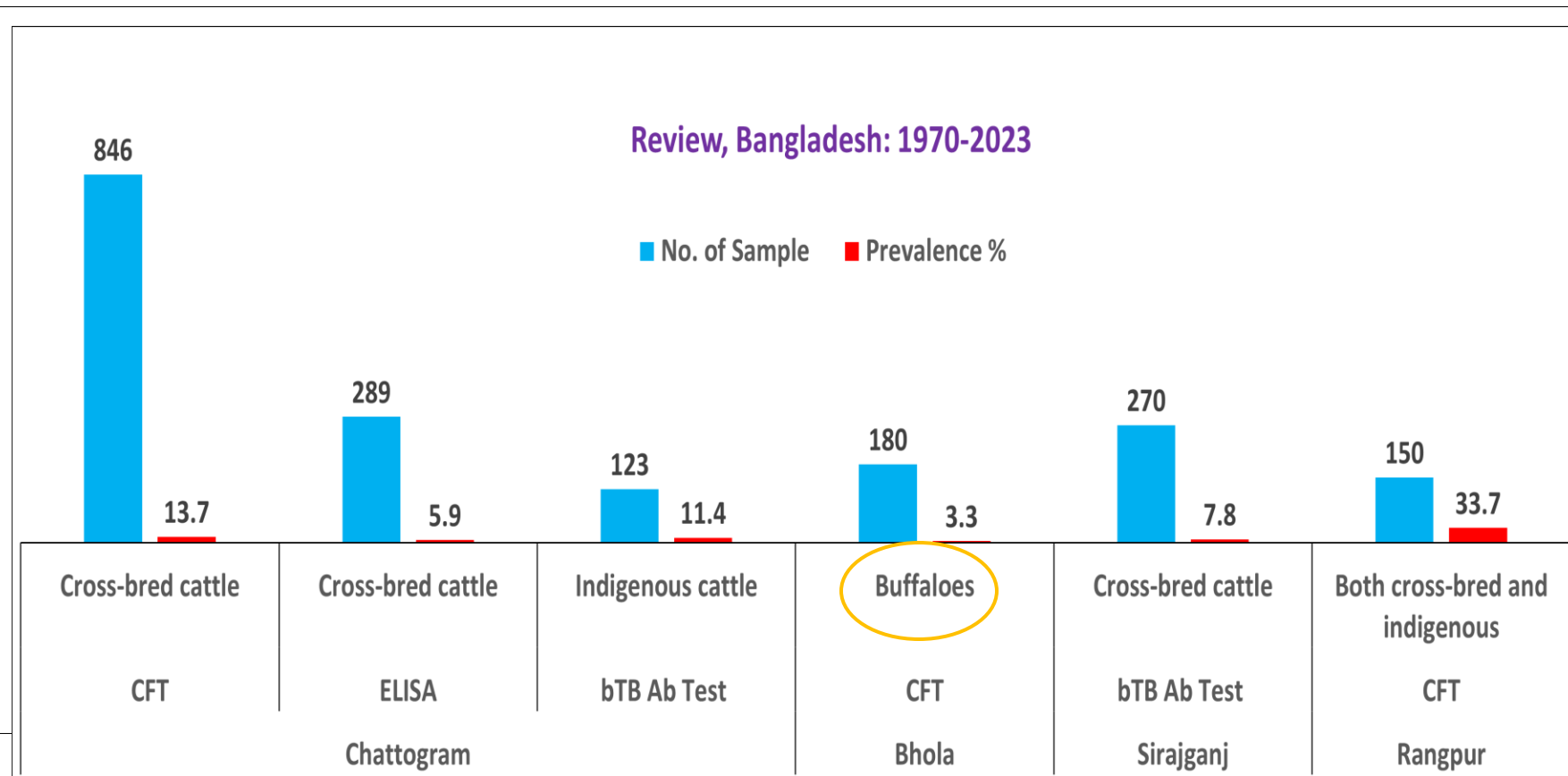


Current disease situation

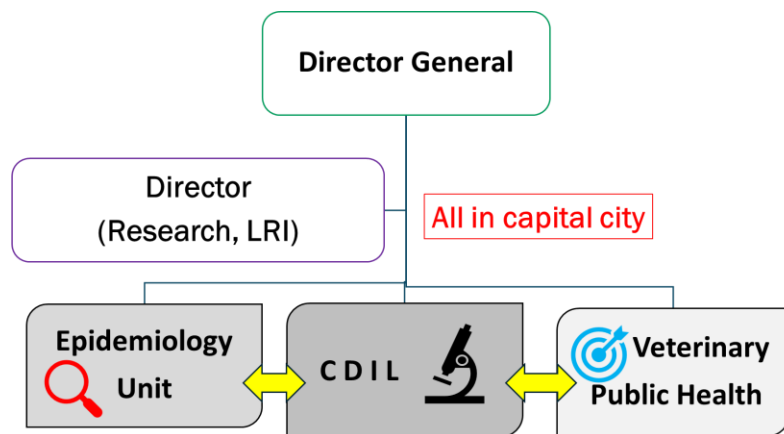
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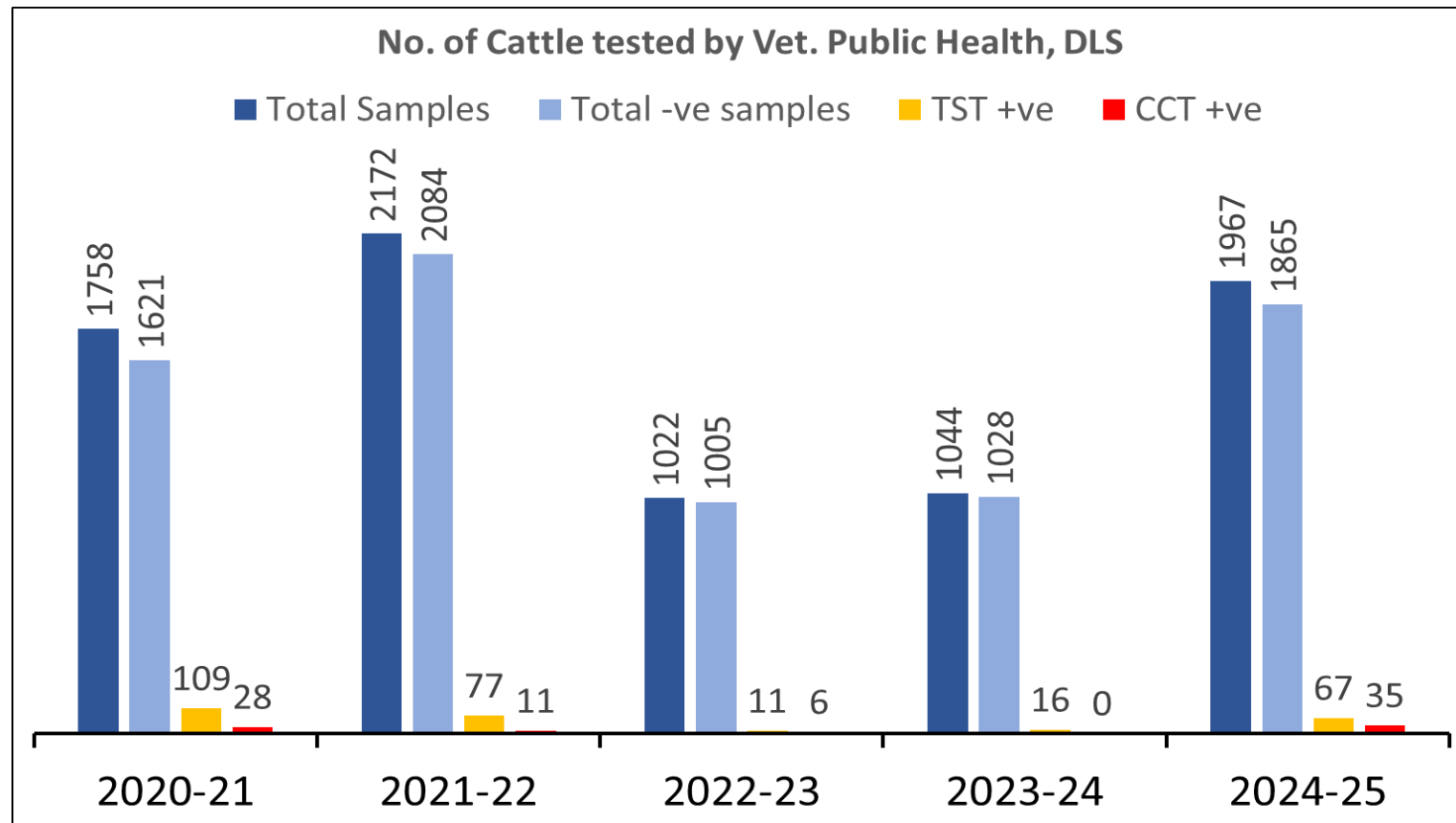
Bangladesh: Study locations and meta-analytic prevalence of bTB in Bangladesh, 1970 to 2023.



NB: No robust Bangladesh-specific zTB cost figure is published yet.



Diagnostic capacity & methods	Responsible unit	Resources
Epidemiological studies & tracking transmission (Epidemic diseases)	Epidemiology Unit	01 Assistant director 01 Vet. Surgeon
Ziehl-Neelsen staining & molecular detection @ BSL-2 facilities	Central Diseases Investigation Laboratory (CDIL)	01 PSO, 02 SO 04 lab technician & attendant
Tuberculin Skin Test (TST) & Comparative Cervical Tuberculin (CCT) test @ BSL-2 facilities	Veterinary Public Health (VPH)	02 PSO, 01 SSO, 06 SO 06 Lab technician 03 Lab attendant





Key Disease Surveillance Activities in Bangladesh

- ✓ **Epidemiological surveillance system** through field veterinary hospitals, VPH, FDILs and CDIL, **focusing on transboundary animal diseases** (e.g., Foot and Mouth Disease, Avian Influenza, Bovine Tuberculosis, Anthrax, PPR).
- ✓ **Zoonotic Disease Monitoring:** **Collaboration with the One Health Secretariat** involving Dept. of Livestock Services, DGHS (health sector), and Dept. of Environment for zoonoses like rabies, Nipah virus, and zoonotic TB.
- ✓ **Passive and Active Reporting:** Farmers and veterinarians report outbreaks to local offices, which are investigated by Rapid Response Teams. **Active surveillance is conducted during high-risk seasons**
- ✓ **Laboratory Diagnostics:** National labs like CDIL and Field Disease Investigation Laboratories (FDILs) provide confirmatory testing, **while international collaboration (e.g., FAO, OIE, WHO) supports advanced diagnostics.**
- ✓ **Digital Reporting:** The Laboratory Information Management System (**LIMS**) and District Veterinary Hospital reporting contribute to a growing **digital database for tracking diseases**

Challenges Are Being Addressed

- **Capacity Building:** Training veterinary staff and field epidemiologists through the Field Epidemiology Training Program (FETP).
- **One Health Approach:** Strengthening coordination between health, livestock, and environment ministries via the National One Health Secretariat.
- **Digital Innovations:** Expanding mobile and online reporting tools to improve real-time outbreak reporting.
- **Public Awareness:** Community education campaigns on zoonoses and reporting importance.
- **International Partnerships:** Collaborations with WOA, FAO and WHO for technical and financial support.



Bangladesh does not **currently have a publicly available**, dedicated "**National Action Plan for Zoonotic TB Control**".

However, the country's **National Tuberculosis Control Program (NTP)** does address zoonotic TB (zTB) as part of its broader strategy to combat tuberculosis through various initiatives,

1. National Tuberculosis Control Program (NTP):

- Primary body responsible for TB control in Bangladesh.
- Aim to eliminate TB as a public health problem and reduce its prevalence.
- Focuses on strengthening TB control through partnerships, resource mobilization, and ensuring quality diagnostic and treatment services.

2. One Health Approach:

- Recognizing the importance of a One Health approach (human, animal, and environmental health) .
- Collaboration between the human health sector (NTP) and the animal health sector.

3. Addressing zTB Specifically:

- Strengthening veterinary services and establishing regional/national networks for collaboration.
- Supports surveillance systems for antimicrobial resistance (AMR), relevant to zTB



- ✱ **Limited Resources** – Insufficient funding , inadequate laboratory capacity, and shortage of trained personnel
- ✱ **Weak Surveillance Systems** – Underreporting of cases, fragmented data sharing
- ✱ **Coordination Gaps** – Weak inter-sectoral collaboration slows down One Health implementation.
- ✱ **Public Awareness** – Low awareness among farmers and communities, about zoonoses and preventive measures
- ✱ **Policy and Enforcement Gaps** – Weak regulatory enforcement in areas like food safety, animal movement control, and biosecurity practices.
- ✱ **Dependence on Donor Support** – Many disease control programs rely heavily on donor-driven projects, raising sustainability concerns.



- ✓ **Adaptation of the Global Zoonotic TB Roadmap** to the Bangladesh context.
- ✓ **Enhanced surveillance**, diagnostics, and research in both human and animal sectors.
- ✓ **Formalized intersectoral coordination** through One Health platforms.
- ✓ **Policy guidelines**, community engagement, and improved food safety measures.
- ✓ **A clear advocacy and investment strategy** to mobilize sustainable funding.



Thank you!

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