



Food and Agriculture
Organization of the
United Nations

SUSTAINABLE
DEVELOPMENT
GOALS

FAO's Initiatives on Emergency Management & Biological Threat Reduction



Joshua Kimutai, Regional Laboratory Specialist, FAO, ESA

*Regional Training Seminar for WOA National Focal Points for Veterinary Laboratories (cycle III,)
Gaborone, Botswana, 8 – 10 July 2025*




FAO's role in emergency management of biological threats

- Operates under the One Health and GEMP frameworks to address biological threats at the animal-human-environment interface
- Supports countries across the emergency management cycle:
 - Preparedness – contingency planning, simulation exercises
 - Detection – laboratory and surveillance capacity building
 - Response – rapid emergency deployment and coordination
 - Recovery – post-crisis support and system strengthening
- Promotes risk analysis to inform prevention and response strategies.
- Strengthens multisectoral coordination among animal health, public health, and security sectors for effective, integrated biothreat management.

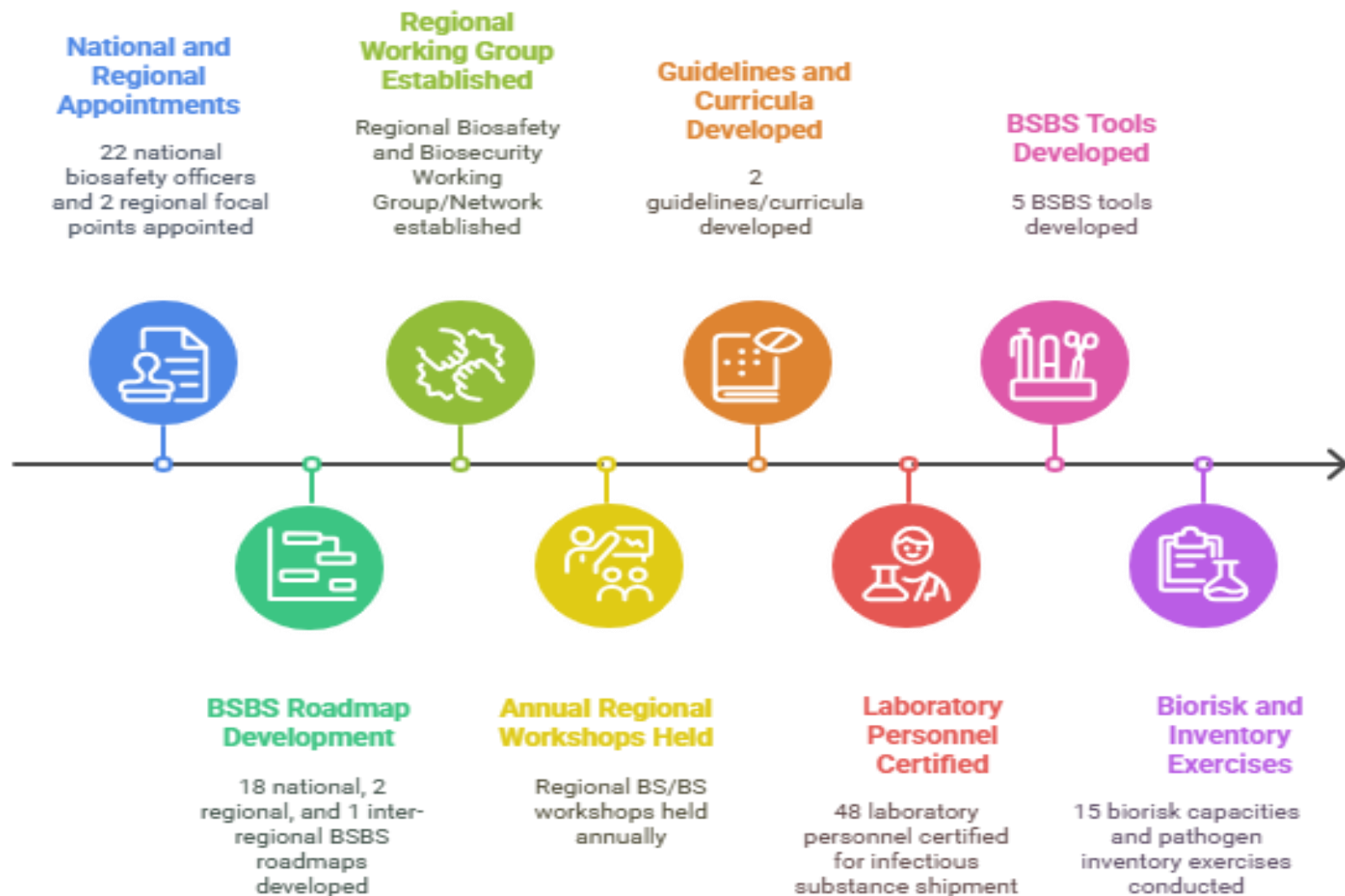


FAO tools for biosafety, biosecurity, biorisk and biothreat

Characteristic	LMT Safety Module	LMT Biothreat Module	Pathogen Inventory	Biorisk Assessment Tool	Animal Pathogen Ranking Tool
 Purpose	Assess biosafety capacity	Assess biothreat detection	Track biological agents	Assess biorisk capacity	Preliminary risk assessment



Key achievements



Guidelines for Safe Management and Disposal of Waste from Veterinary Practice in Kenya



An Orientation Guide for Veterinary Workers in Waste Management from Veterinary Waste Practice

THE UNITED REPUBLIC OF TANZANIA



NATIONAL LABORATORY
BIOSAFETY AND
BIOSECURITY GUIDELINES



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Challenges





Priority interventions

Immediate, (within 1 year)

- Deploy BSBS assessment tools in priority labs
- Conduct 10+ pathogen inventory exercises
- Train 50+ lab staff on infectious shipment handling
- Support BS/BS policy drafting in 5+ countries
- Procure biosafety cabinets, PPE, waste management

Medium-term (1-3 years)

- Implement 10 national BS/BS roadmaps
- Launch ToT programs and integrate BS/BS curricula
- Harmonize cross-border BS/BS protocols
- Establish digital BS/BS monitoring platforms
- Conduct regional One Health simulation exercise

Long-term (3+)

- Develop 2–3 regional BS/BS Centers of Excellence
- Upgrade labs to meet FAO/WOAH/ISO biosafety standards
- Build a regional network of certified BS/BS officers
- Harmonize legislation with AU/ECOWAS/EAC frameworks



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FAO's work with laboratory networks



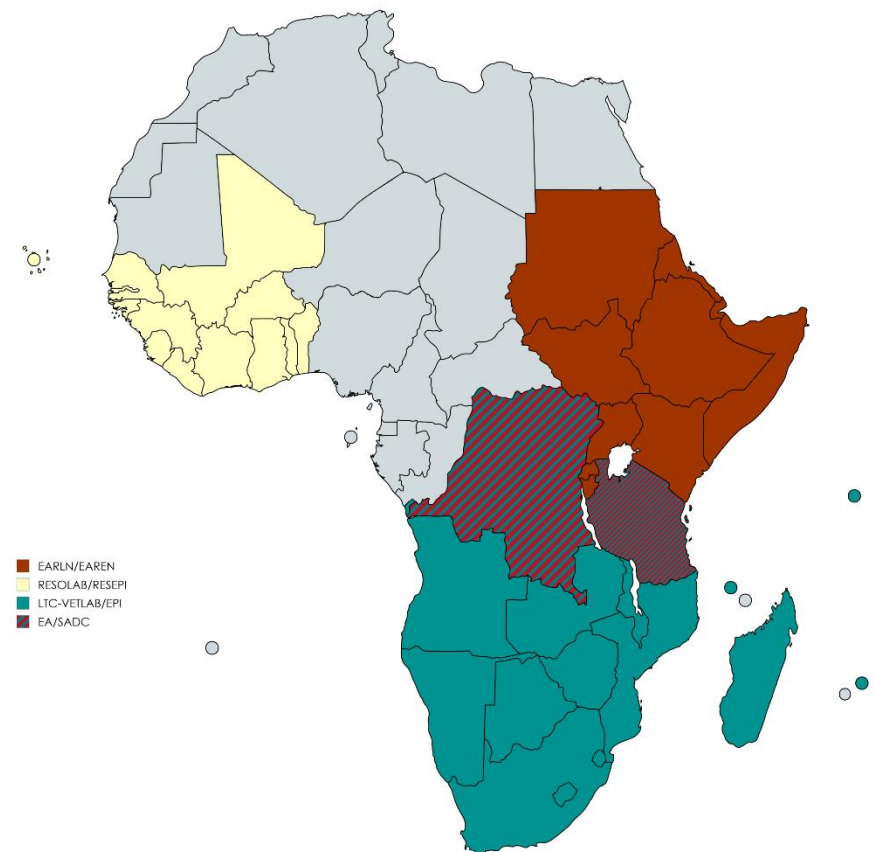
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Lab/Epi Networks in SSA

Network	Region	Countries	Labs/Systems	Key Partners
RESOLAB	West & Central Africa	21	National & zonal labs (48+ labs)	ECOWAS, FAO, AU-IBAR, WOA
RESEPI	West & Central Africa	21	National Epi Units	ECOWAS, FAO, AU-IBAR, WOA
EARLN	East Africa	12	National & zonal labs (50+ labs)	FAO, IGAD, AU-IBAR, WOA
EAREN	East Africa	12	National Epi Units	FAO, IGAD, AU-IBAR, WOA
LTC-Vet Lab	Southern Africa	16	National & zonal labs (20+ labs)	SADC Region
EIS	Southern Africa	16	National Epi Units	SADC Region



Source: Mapchat.net



PPR and ASF

PPR



FAO Countries

Ethiopia, Sudan, Guinea



Network

GF-TADs Africa, EAREN/EARLN



Actions

Coordinated mass vaccination campaigns and post-vaccination sero-monitoring



Impact

Ethiopia reported a 60% drop in PPR outbreaks between 2015–2020

Guinea (post-vaccination monitoring after 2020–2021 vaccination campaign under Mano–River project) indicated an increase of 35.6% in seroconversion.

ASF



FAO Countries

Uganda and Kenya



Network

EAREN/EARLN/AUIBAR



Actions

Cross-border surveillance and harmonized reporting protocols



Impact

Uganda traced outbreaks to porous border markets and implemented movement control



Conclusion



FAO plays a critical role in reducing biological threats



Tools and frameworks build long-term capacity



Partnerships and One Health collaboration are key



Thank you



Protecting people, animals, and the environment everyday