World Organisation for Animal Health

中国兽医药品监察所
China Institute of Veterinary Drug Control
国家动物布鲁氏菌病参考实验室
National Reference Laboratory for Animal Brucellosis

Presentation Title: Challenges and Opportunities for Brucellosis Surveillance and Control

Country: Fiji

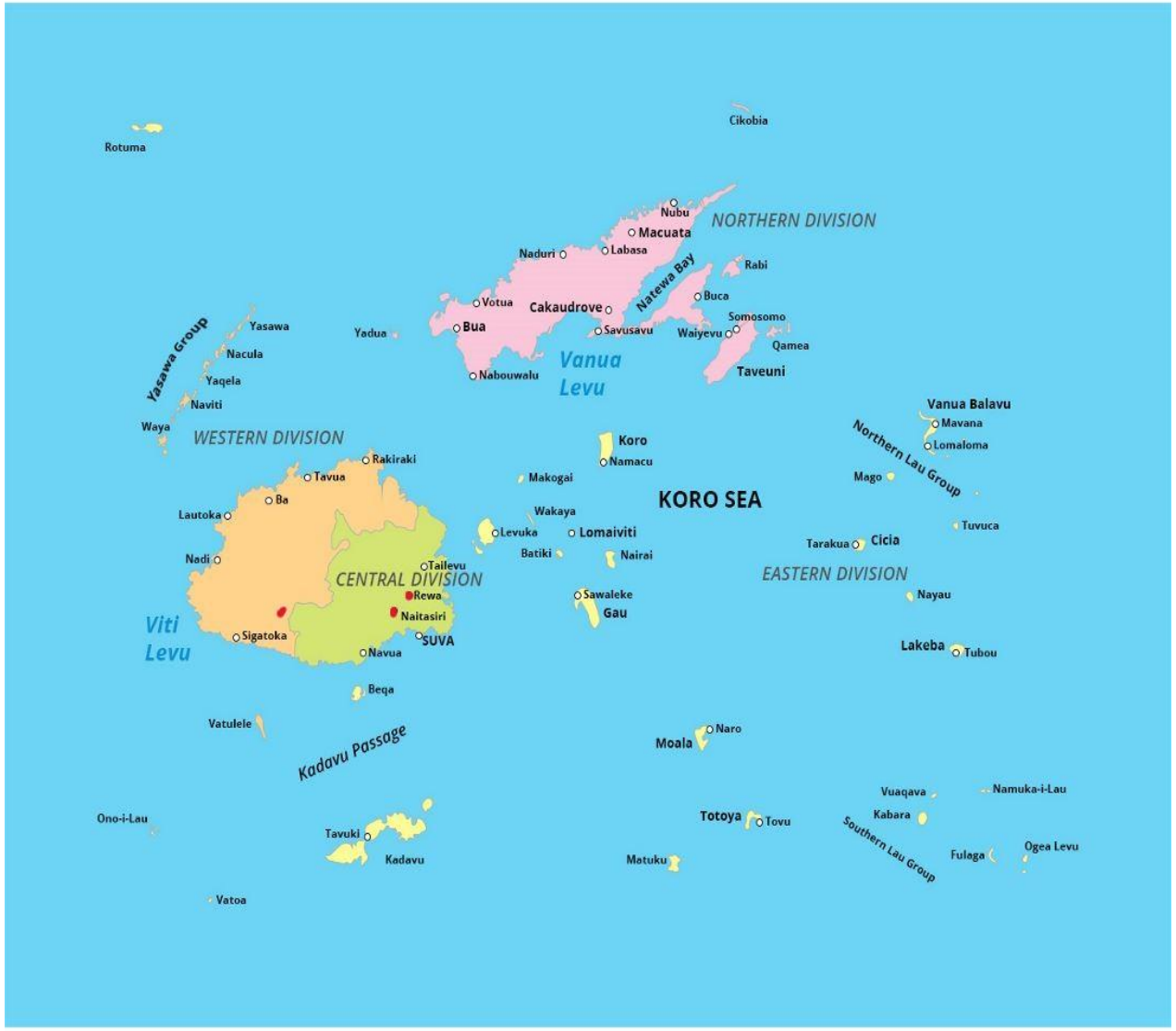
Name of presenter: Vilimoni Sabe

Designation of the presenter: Agriculture Assistant BTEC/Vetlab

WOAH Regional Training Workshop on Brucellosis Diagnosis
Beijing, China P.R., 5 – 8 August 2025

4th International Academic Conference on Brucellosis
(5 August)

Current disease situation



Based on the data collected in 2024,there were 3 Positive cases recorded:

1. Nuku Village (Naitasiri Province)
2. Koronivia Research Stations(Rewa Province)
3. Inia L farm(Nadroga Province)

Animal Species affected : Cattle, particularly dairy herds on Viti Levu

Bacterial Species Identified : Brucella Abortus

➢ **Prevalence of Brucellosis** :

- 1989 – Fiji declared free of Bovine Brucellosis
- 1989 onwards –targeted surveillance in abattoir testing slaughtered animal)-non detected
- 2009 June- 1st detected re-emergence from blood sample(Tailevu herd)with high abortion cases
- 2012 May 2.8%
- 2013 May 0.05%
- Wide range coverage of testing since 2012

➢ **Economic Burden**:

✓ Decrease of milk productions

✓ Large number of positive are sent to slaughter house

✓ Reduced Breeding and culling

Disease Diagnostics

The Fiji Veterinary Pathology Laboratory plays a vital role in supporting animal health surveillance, diseases diagnosis and livestock productivity in Fiji. The laboratory operates under the Ministry of Agriculture & Waterways and provides diagnostic services for a wide range of animal species including cattles,pigs,goats,sheep and chickens.

Diagnostic Capacity:

Serology	Bacteriology	Parasitology	Necropsy	PCR
• Antibodies/antigens test in serum • Annual Diseases Surveillances • Exotic Diseases Surveillances • Support Diseases Surveillances Programs (BTEC) • Developing capacity for PCR	• Isolations and Identifications of bacterial pathogens • TB Cultures • Antibiotics sensitivity testing	• Fecal Egg count and larval identifications • Diseases Surveillances (Ovine,Caprine,Bovine)	• Post-mortem • Lesion tissues from bTB reactors and suspect cases are routinely collected and processed for culture, microscopy, and post-mortem pathology. • Molecular Support	• Real-Time PCR for TB & Bruce Samples • Still developing full operational scope

Diagnostic Test Used:

- ✓ Elisa
- ✓ Developing capacity for PCR

Disease Surveillance

Key Diseases Surveliance Actitivities

1. Emergency declaration on Bovine Tuberculosis & Brucellosis by BAF in 2016 to control movement of cattle and prevent spread of disease.
2. Establishment of Brucellosis and Tuberculosis Eradication campaign (BTEC) in 2017 in Fiji through Ministry of Agriculture & Waterways.
3. Induction and Appointment of MOAW staff as Temporary Biosecurity Officers (TBSO) by BAF to have powers to conduct disease testing on farms.
4. Laboratory routine testing of all cattles every week and culling all positive.
5. Trace-backs for Infected farms
6. Awareness in Villages and rural areas
7. Testing of Abattoir samples

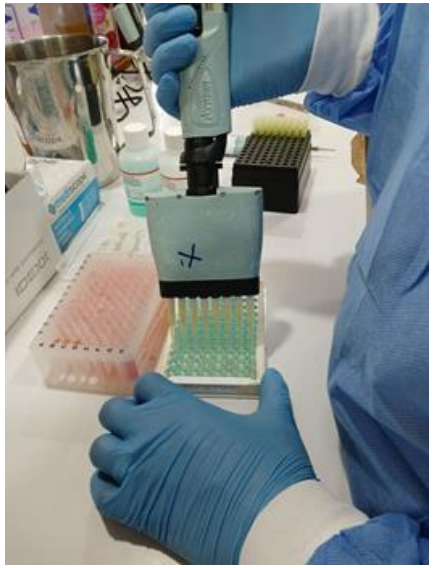
Disease Surveillance

- **Challenges**:

1. Failure of farmers to comply for testing
2. Delay of Shipment for Elisa Kits
3. Not enough serum collected from Field officers
4. Incomplete submission form
5. Lack of Resources
6. No proper monitoring and evaluations

Addressing Challenges :

1. Quarterly Annual Meetings
2. BTEC Forum
3. Time Management
4. More Resources to be provide
5. Flexible management operations
6. Need advanced Technologies for Laboratory Testing



Disease Prevention and Control or Preparedness Strategy

1. Biosecurity Measures

- ✓ Movement restrictions on animal from infected farms
- ✓ Quarantine enforcement for high risk areas
- ✓ Disinfection of transport vehicles and equipment's
- ✓ Encouragement of on-farm biosecurity practices(e.g. fencing, proper waste disposal)

3.Testing & Surveillance

- ✓ regular sero-surveillance and testing of animals are conducted, especially in commercial and dairy herds
- ✓ Slaughter policies are applied when infected animals are confirmed
- ✓ Laboratory diagnostic capacity is supported through veterinary services ,including ELISA

4. Risk Communications

- ✓ Public awareness campaigns are conducted to inform farmers and the general public about Zoonotic diseases
- ✓ Educational Material are shared in both English/Hindi and Itaukei to ensure wide comprehension
- ✓ Extension officer conduct on-site farmer training on diseases recognition, transmission and prevention

5.One Health Coordination

- ✓ Fiji adopts a One Health Approach
- ✓ Collaborations between Ministry of Health ,Ministry of Agriculture & Waterways and Biosecurity Authority of Fiji to monitor and respond to outbreaks
- ✓ Human Health surveillances is integrated with veterinary alerts to identify possible brucellosis cases in people.

Key challenges/issues

- ✓ Financial Limitations-Limited government funding
  - No compensation for farmers
- ✓ Farmers Compliance - some farmers they do not comply with testing
- ✓ Logistics and Infrastructure- Limited number of Trained staff in rural areas
- ✓ Surveillances Gaps –weak follow-up on Trackbacks for Positive cases
- ✓ Public Awareness and Educations - Low awareness among farmers of the zoonotic risk of Brucellosis
  - Cultural beliefs and language barriers hinder effective communications
- ✓ Coordination and Governance- Lack of clear ,enforceable policies for outbreaks managements and animal movements
- ✓ Geographic Challenges – difficult terrain and remote islands make consistent diseases monitoring very challenging

Way forward

- ✓ Testing of samples every 3 months for all farms
- ✓ Strengthen legal movements of Cattles
- ✓ Culling of Positive cattle's
- ✓ Regular monitoring of farms which have high Abortion rate
- ✓ Compensations for infected farms
- ✓ Identify other regional reference laboratories involved in Brucellosis diagnosis
- ✓ Provide recovery/rehabilitation assistance to heavily infected farms
- ✓ Vaccination
- ✓ Capacity Building for Laboratory Staff

Thank you!

Regional Representation for Asia and the Pacific
Food Science Building 5F - The University of Tokyo
1-1-1 Yayoi, Bunkyo-ku
Tokyo, 113-8657
JAPAN

rr.asia-pacific@woah.org
rr-asia.woah.org

Facebook
Twitter
Instagram
LinkedIn
YouTube
Flickr