

CURRENT STATUS OF FOOT AND MOUTH DISEASE IN TANZANIA

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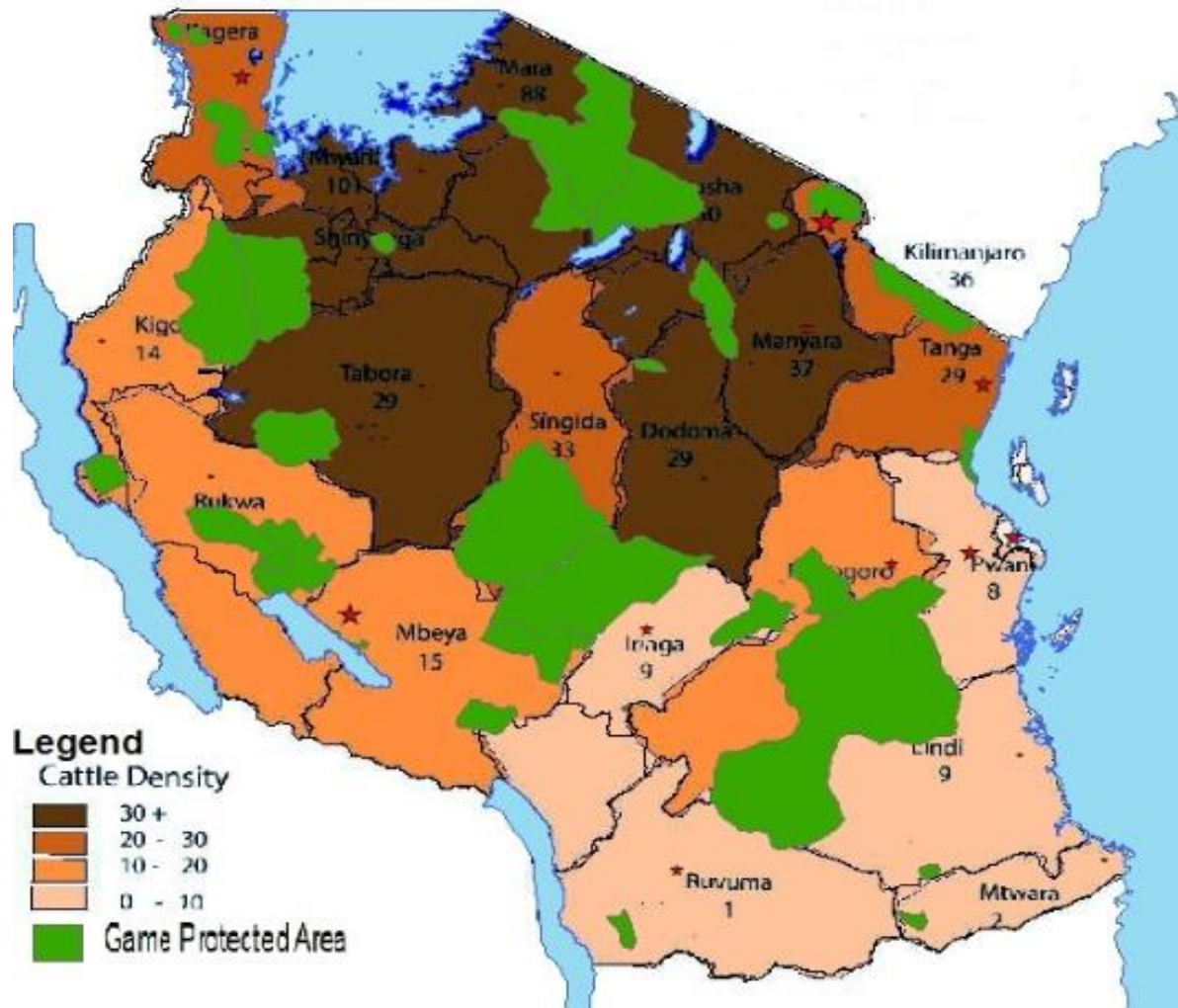
3 – 5 July 2018

ENTEebbe - UGANDA

Introduction

- Tanzania has 30.5 million cattle, 18.8 mil goats, 5.3 mil sheep and 1.9 mil pigs
- Tanzania has reserved 30% of its land for conservation (National Parks, Game Reserves, Ngorongoro Conservation Area, Game Controlled Areas, Wildlife Management Areas and forest reserves)
- Tanzania has highest wildlife population in Africa
- Estimated buffalo population of about 240,712 is found in the different protected areas

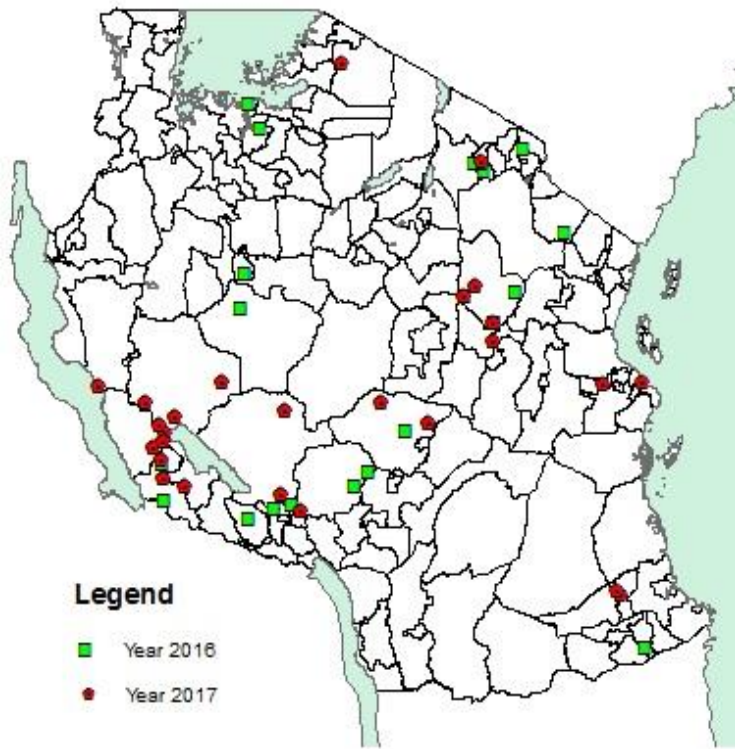
Spatial distribution of cattle density and Game protected areas



FMD Status-TZ

- FMD is widespread and endemic in Tanzania
- FMD outbreaks occur every year in different parts of the country
- Susceptible domestic species include cattle, pigs, goats and sheep
- Usually less than 5% of adult animals die from FMD.
- In young animals mortality may be as high as 50%.
- Occurrence of FMD in Tanzania 2016 -2018 (map)
passive surveillance data;

A. FMD OUTBREAKS 2016 -17



B. SEROTYPES DISTRIBUTION



FMD Status -Tanzania

- Serotypes A, O, SAT1 and SAT2 are the main cause of FMD outbreaks in Tanzania, SAT3 identified in Buffalo probang in Katavi national park
- FMDV isolates so far detected in Tanzania are genetically related to lineages and topotypes from East Africa
- Presence of multiple susceptible spp, serotypes, topotypes and short lasting immunity after vaccination complicates FMD control in Tanzania

Animal movement and FMD hot spots



FMD OUBREAKS 2016 - 2017

- A total of 1,894 FMD cases was reported, that resulted in 75 deaths in 16 regions/24 districts/
- 31 outbreaks in 2017
- 28 tissue samples collected and sent CVL for diagnosis and SUA for sequencing 2016 -17
- 9 tissue collected in year 2018 sent to CVL
- 30,068 cattle vaccinated in 12 LGA

Gaps

- Understanding FMD prevalence in livestock and buffaloes at different ecosystems
- Identifying risk factors for livestock exposure
- FMD in livestock herds adjacent to wildlife
- To investigate morbidity and mortality impacts of FMD outbreaks in detail
- Virus characterization
- Identifying more hot spots for FMD
- Determining whether and how immunity to one type of FMD virus can protect against other type of serotypes or strains

Work done to address gaps

- i. FMD exposure pattern in livestock and buffalo:**
 - Serological data (after NSP ELISA) revealed variable levels of exposures across ecosystems;
 - Very high seroprevalence (NSP) in livestock populations in pastoralists and agro pastoralists
 - Pastoral :Ngorongoro (64%) and Tarangire (66%)

Work done to address gaps

- Agro pastoral: Serengeti (67%)

Similar patterns in buffalo populations, with

- High levels of exposure in Ngorongoro NP (90%), Serengeti NP(69%), and Tarangire NP (96%)
- Lower seroprevalence in Arusha NP buffaloes (48%)

Major events up to 2017

- Cost benefit analysis on DFZ done 2017 with the help from STDF.
- Need to invest Tshs 63,500 million or 28.59 million USD
- CBT and compartment suggested.
- A draft of Risk Based Control Plan for FMD control in place.
- Law enforcement to control livestock going in protected areas (movement control).
- FMD among 10 priority disease for vaccinations
- Cattle identification done in the whole country

FMD control strategy

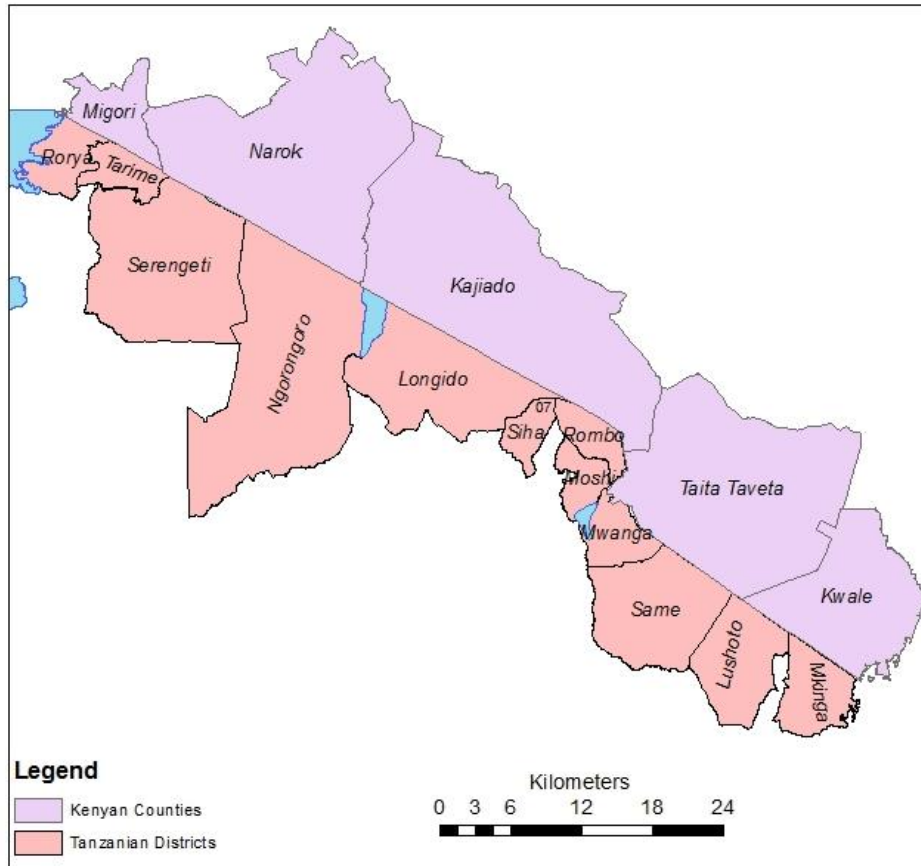
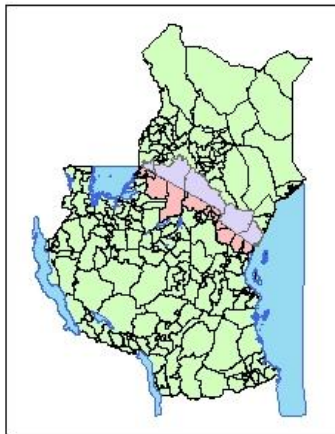
- To improve capacity for disease surveillance, diagnosis, monitoring, reporting and feedback system.
- To strengthen livestock health inspection certification system for regulating movement of animals and animal products
- To develop a cost effective vaccine and implement massive vaccination campaigns
- To control FMD transmission between wildlife and domestic animals
- To strengthen and improve use of ICT in networking, data capture, storage and dissemination.

FMD and TADS CONTROL EFFORTS

- Enforce Laws and regulations governing control of TADS and provision of vet services.
- Proposal to establish a disease free zone in the south western Tanzania and free farms/compartments in NARCO ranches will help to demonstrate effective and intensive FMD control with positive spill over effect to control of other diseases
- Mandatory livestock identification in the whole country

International and regional efforts addressing FMD and other TADS include:

- SACCIDS, MSD animal health, Bill and Melinda Foundations, Research partners, strengthening institutions for disease surveillance: capacity building for staff, labs and logistics
- Harmonization of Cross border disease surveillance and control in East Africa through SMP - AH project



Activities to strengthen the veterinary services

Comments (if any)

Critical competencies
relevant to PCP-FMD Stage 1

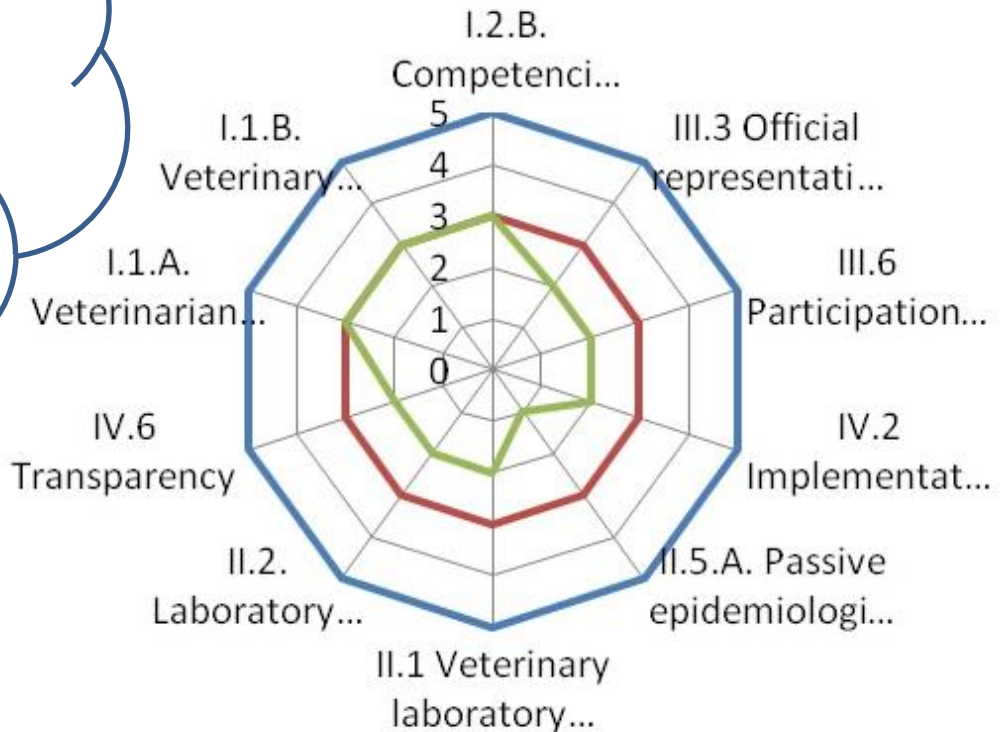
Score required

Current score
(OIE evaluation) 2016

I.2.B. Competencies of veterinary para-professionals	3	3	
III.3 Official representation	3	2	
III.6 Participation of producers and stakeholders in joint programs	3	2	
IV.2 Implementation of legislation & stakeholder compliance	3	1	
II.5.A. Passive epidemiological surveillance	3	2	
II.1 Veterinary laboratory diagnosis	3	2	
II.2. Laboratory quality assurance	3	2	
IV.6 Transparency	3	3	
I.1.A. Veterinarians and other professionals	3	3	
I.1.B. Veterinary para-professionals and other technical staff	3	3	

Follow up evaluation 2016

Findings are summarized in the web including expected scores for particular competences –



— Required Score
— Current Score

Provisional PCP-FMD Roadmap for {TANZANIA} 2014-2025

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimation in 2012	1	1	2	2	2	2	3	3	3	3	3	4	4	4
Estimation in 2018	1	1	2	2	2	2	2	2	3	3	3	3	3	3



Summary

- FMD is widespread in traditional livestock production systems in Tanzania:
- multiple outbreaks occur every year due to type O,A, SAT1 and SAT2 viruses, causing considerable concern amongst livestock owners
- Development of control strategies based on need of these communities is key priority area. Additional studies required to constantly update patterns of infection among livestock and buffalo, assessing the socio economic impact of FMD on livestock owners and
- identifying more high-risk areas for interaction and hence transmission.
- Investigating other factors related to livestock management and movement to further understand livestock –related factors,
- identify appropriate intervention strategies (compartments)
- Available data, information and understanding allows consolidation of the draft Risk based control strategy plan for FMD and start implementation of Stage 3 of PCP-FMD