REPUBLIC OF KENYA



KENTTEC

MAINTAINING ZERO STATUS OF SLEEPING SICKNESS IN WESTERN KENYA: A REVIEW OF KENTTEC'S ROLE IN ACTIVE DISEASE SURVEILLANCE AND CONTROL PRE AND POST-VALIDATION.

Presentation for the 37th ISCTRC conference, Nairobi- Kenya

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INTRODUCTION

- Kenya has reached a landmark public health milestone, The World Health Organization validated Kenya as having eliminated human African trypanosomiasis (HAT) as a public health problem- June 2025
- HAT is a vector-borne disease caused by the blood parasite *Trypanosoma brucei*.
- Transmitted to humans through the bites of tsetse flies that have acquired the parasites from infected humans or animals.
- Rural populations dependent on agriculture, fishing, animal husbandry or hunting are most at risk of exposure
- Kenya experienced the acute form - *Trypanosoma brucei rhodesiense.*
- Prior to 1990, most HAT cases originated from Lambwe Valley -Nyanza Province,
- 1990 to 2009, the majority of cases came from new focus in Busia, Teso, and Bungoma districts in Western Province

Contd’

- Kenya has engaged in consistent control activities, without indigenous new cases reported for over 10 years.
- KENTTEC actively monitors the control and surveillance of tsetse flies and animal trypanosomiasis, both within and beyond the historical HAT endemic areas,
- These activities and the related data provide supplementary backing to the claim of HAT elimination as a public health problem.

Objectives

a. Highlight the role of KENTTEC in active disease surveillance 5 years pre- validation
b. Highlight the control methods used by Kenttec to maintain the zero status of sleeping sickness.
c. Document challenges faced and recommend post validation strategies to avoid resurgence.

Method and Results

- Done using data collected from Busia county(all Sub- counties) and Bungoma county(Sirisia and Bumula)

- 126 reports from the Western regional office and KENTTEC repository were used.
- Surveillance and control data was extracted and recorded for analysis

HAT active surveillance

- **HAT** - 3 active surveillance missions, 1744 people screened in HAT foci
- 1,744 people screened, No HAT detected

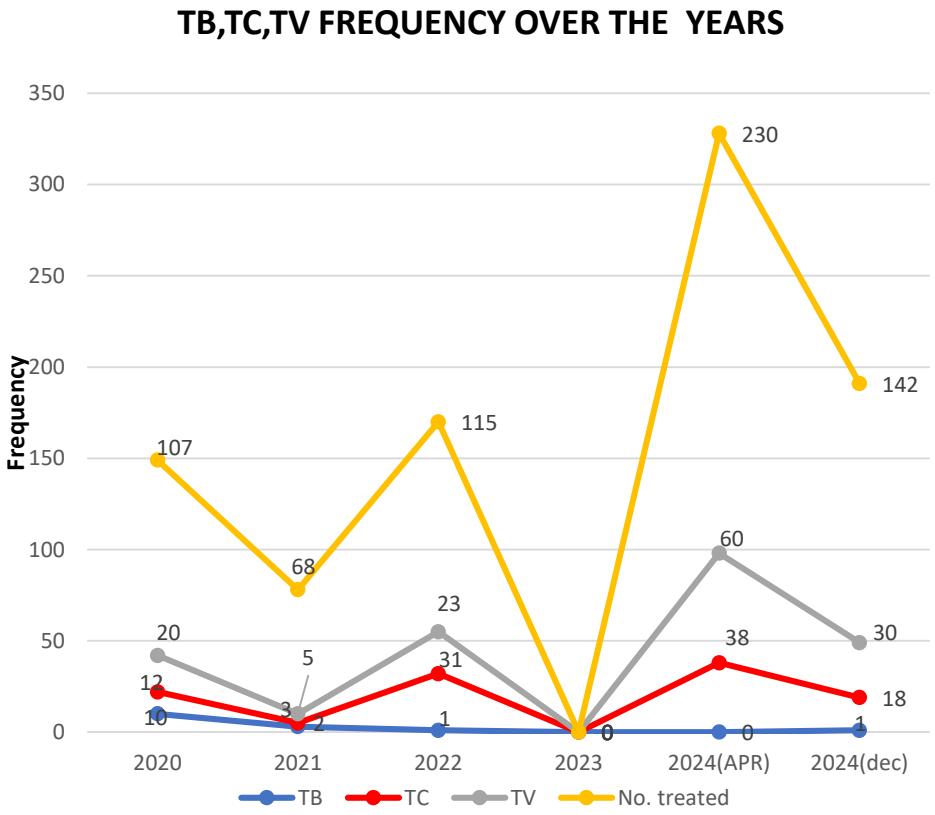
YEAR	NO SAMPLED	TBR
2019	555	0
2022	609	0
2024	580	0
	1,744	0

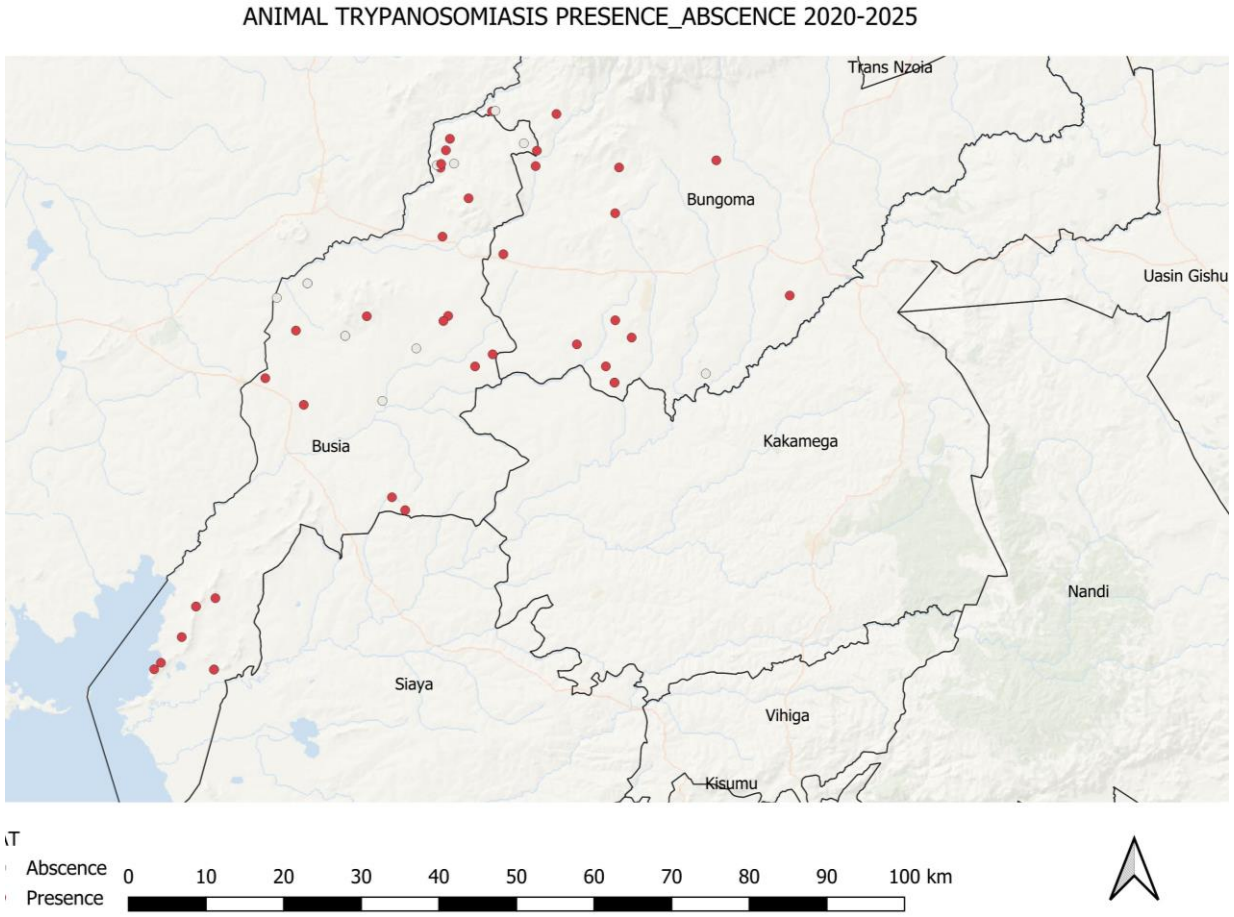
AAT active surveillance

- 5 active surveillance missions
- 3,844 livestock screened

YEAR	NO SAMPLED	TB	TC	TV	No. treated
2020	843	10(1.2%)	12(1.4%)	20(2.4%)	107
2021	746	3(0.4%)	2(0.3%)	5(0.7%)	68
2022	800	1(0.1%)	31(3.9%)	23(2.9%)	115
2023	-	-	-	-	-
2024(APR)	619	0	38(6.1%)	60(9.7)	230
2024(dec)	836	1(0.1%)	18(2.2%)	30(3.6%)	142
	3,844	15	101	138	662

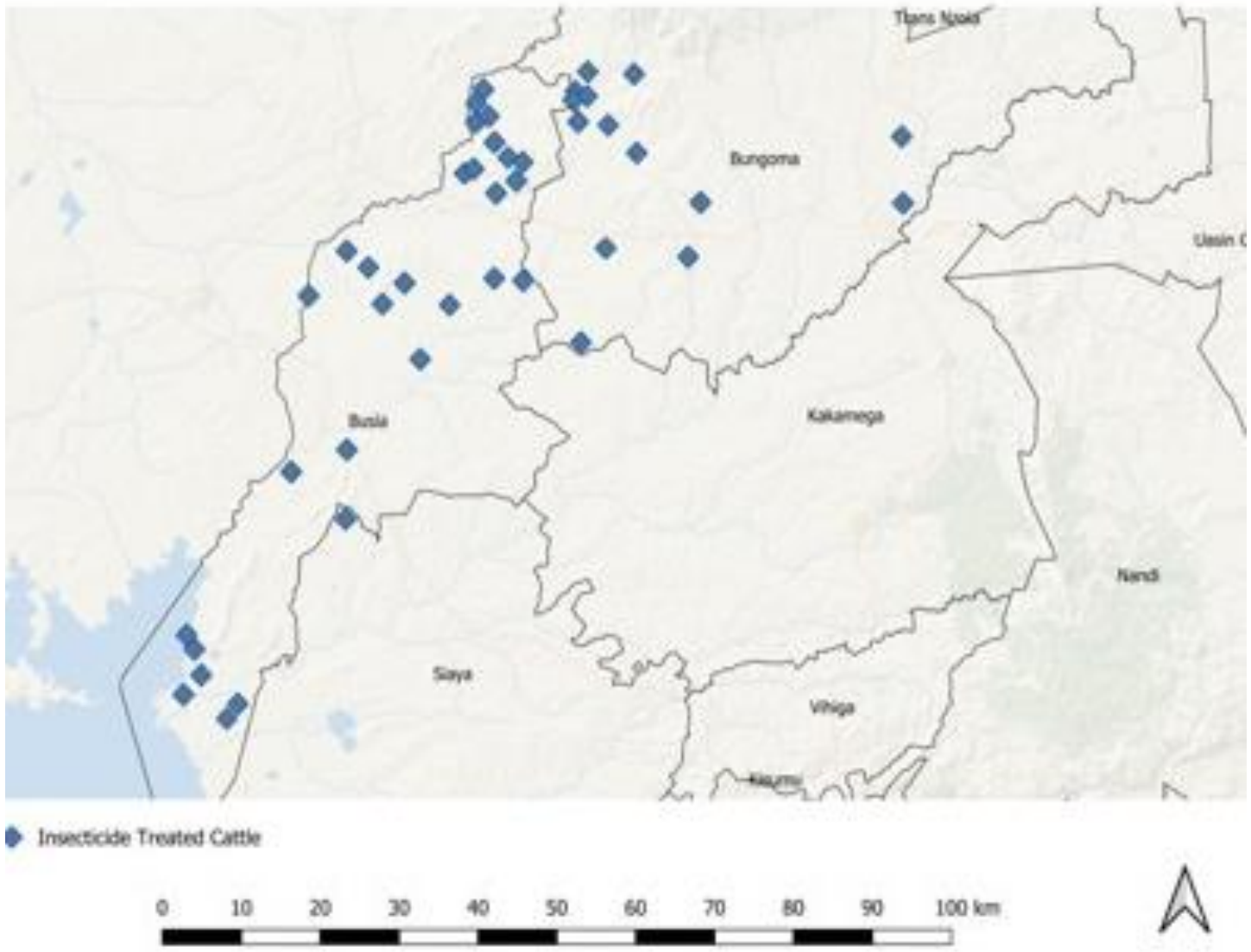
AAT Surveillance





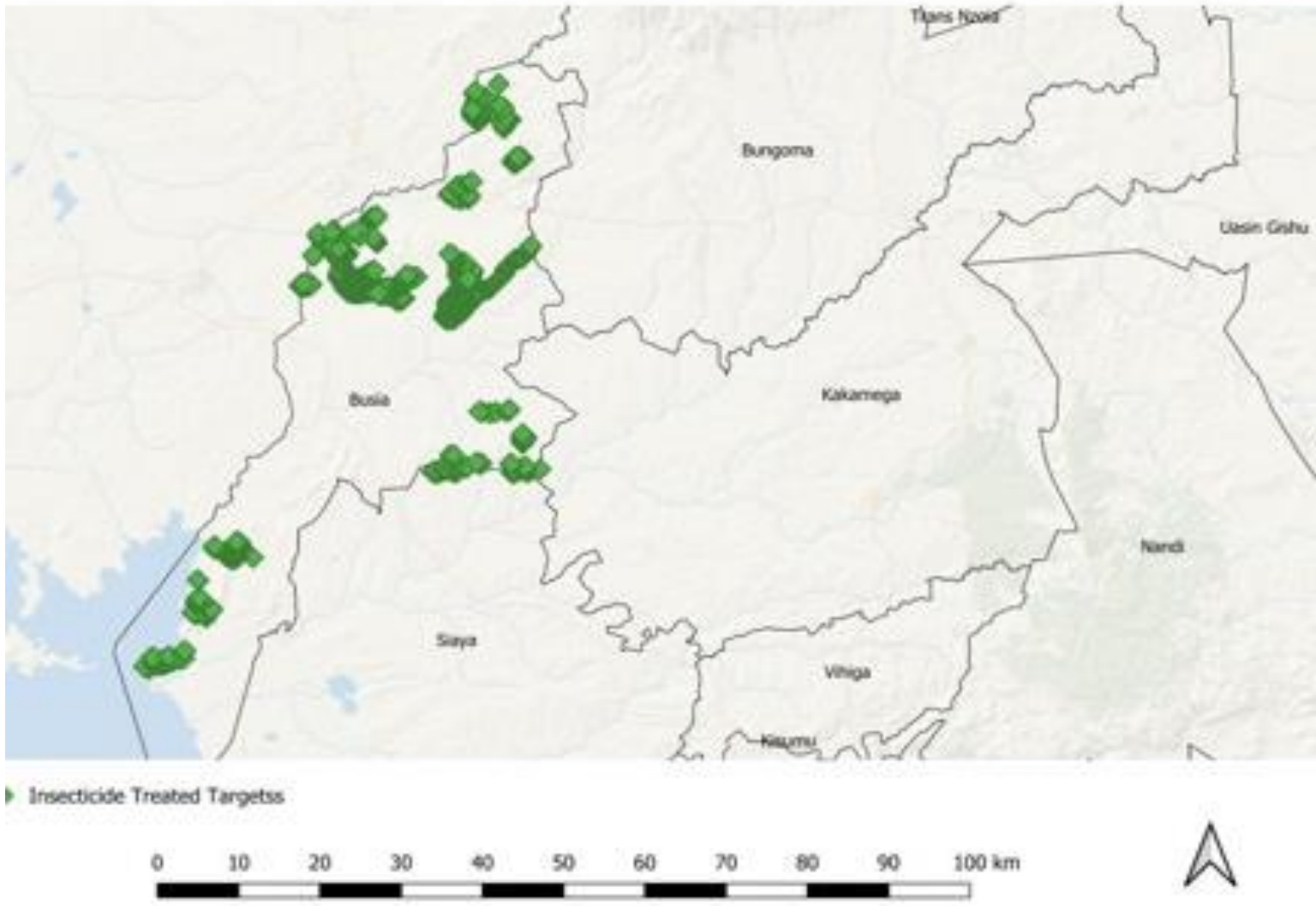
Insecticide treated cattle

- Livestock sprayed in communal crush pens
- Over 50 crush pens supported – insecticide, pump, training
- 204,890 livestock **reported** as sprayed



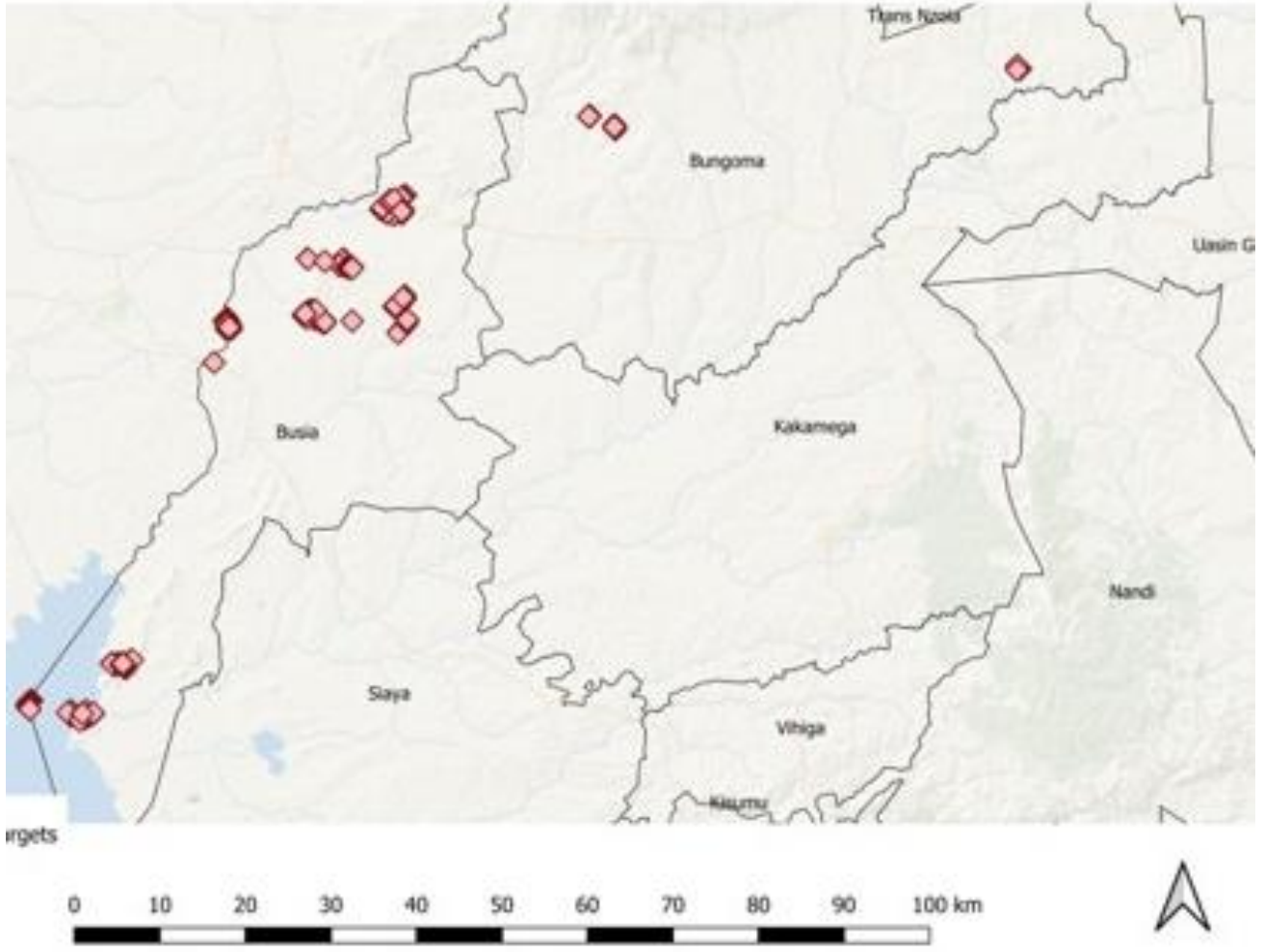
Insecticide treated targets

- Installed in thickets and along rivers/streams
- Serviced/ replaced annually
- Community sensitized and involved in installation and maintenance
- 932 installed/ serviced



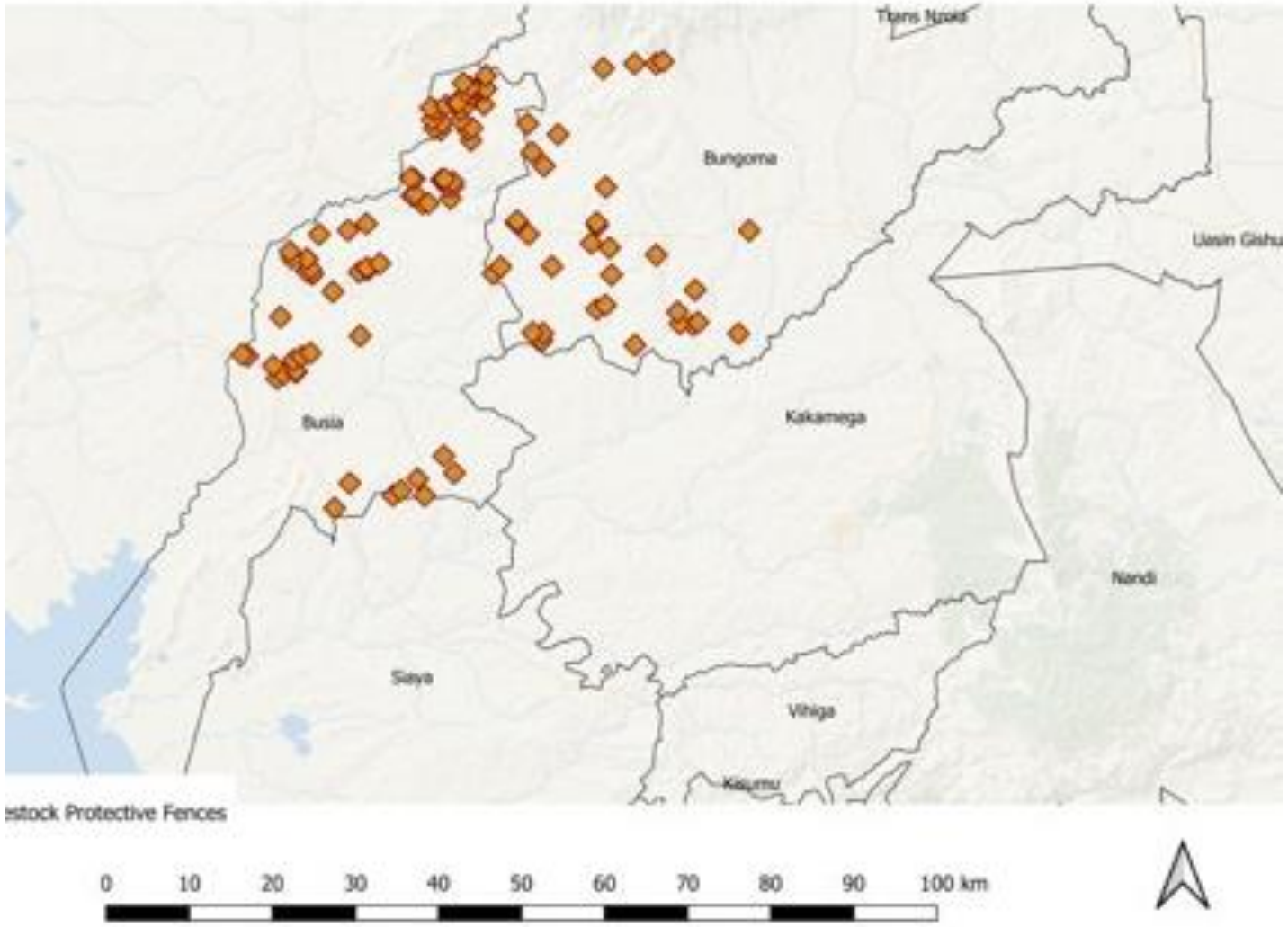
Tiny targets

- Areas with minimal human interference targeted
- Lake shore hotels
- Institutional farms, protected forests and Islands
- 594 installed



Livestock protective fences

- Installed on zero grazing units
- As part of sustainable land-use management
- Done with distribution of sexed semen in 2023 and 2024
- 123 LPF installed



Community sensitization and training

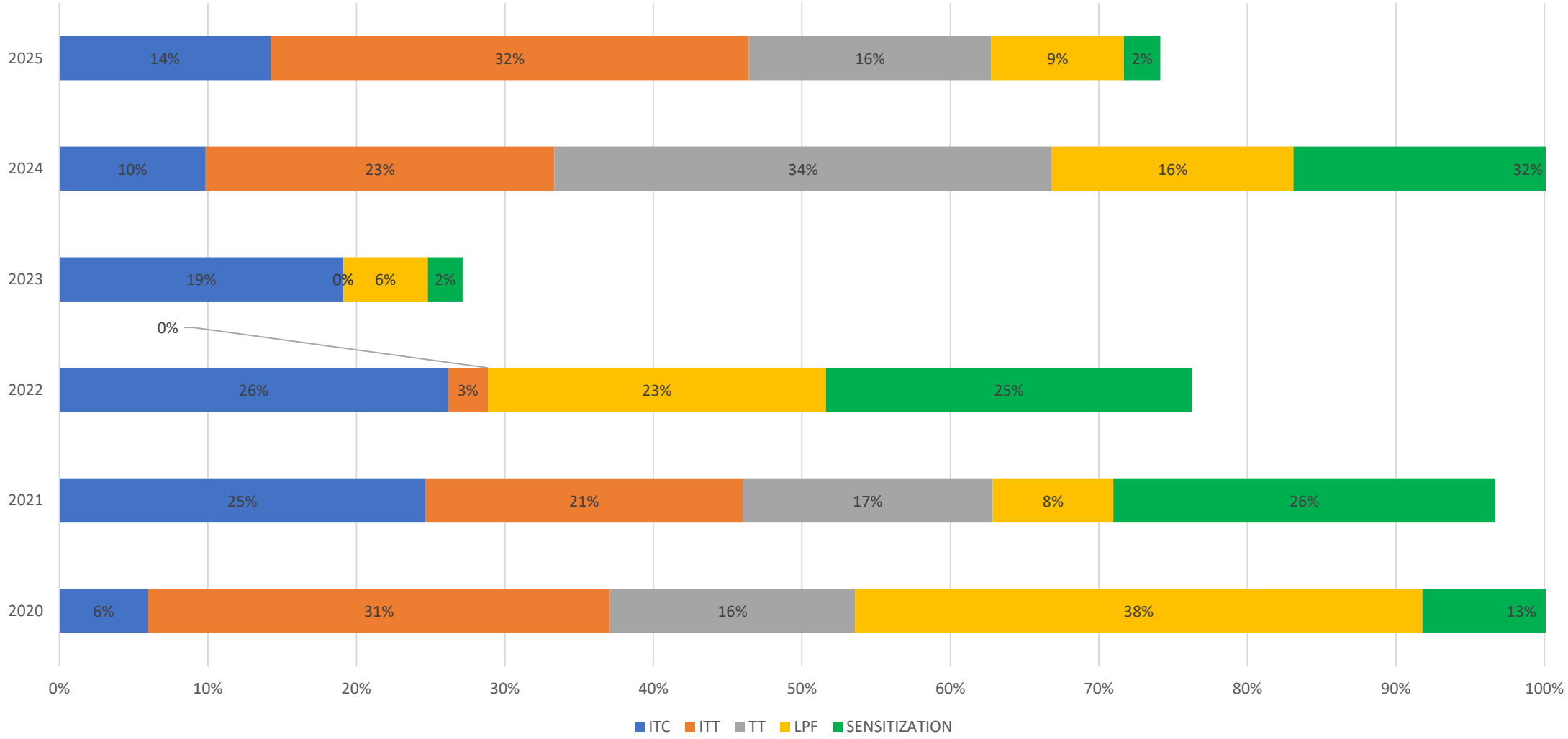
- Done in public barazas, gatherings before AAT and HAT surveillance
- In exhibitions and trade fairs
- Training of CHEWs
- Trainings before commissioning of new communal spraying groups
- 4,508 people sensitized







Proportions of control activities

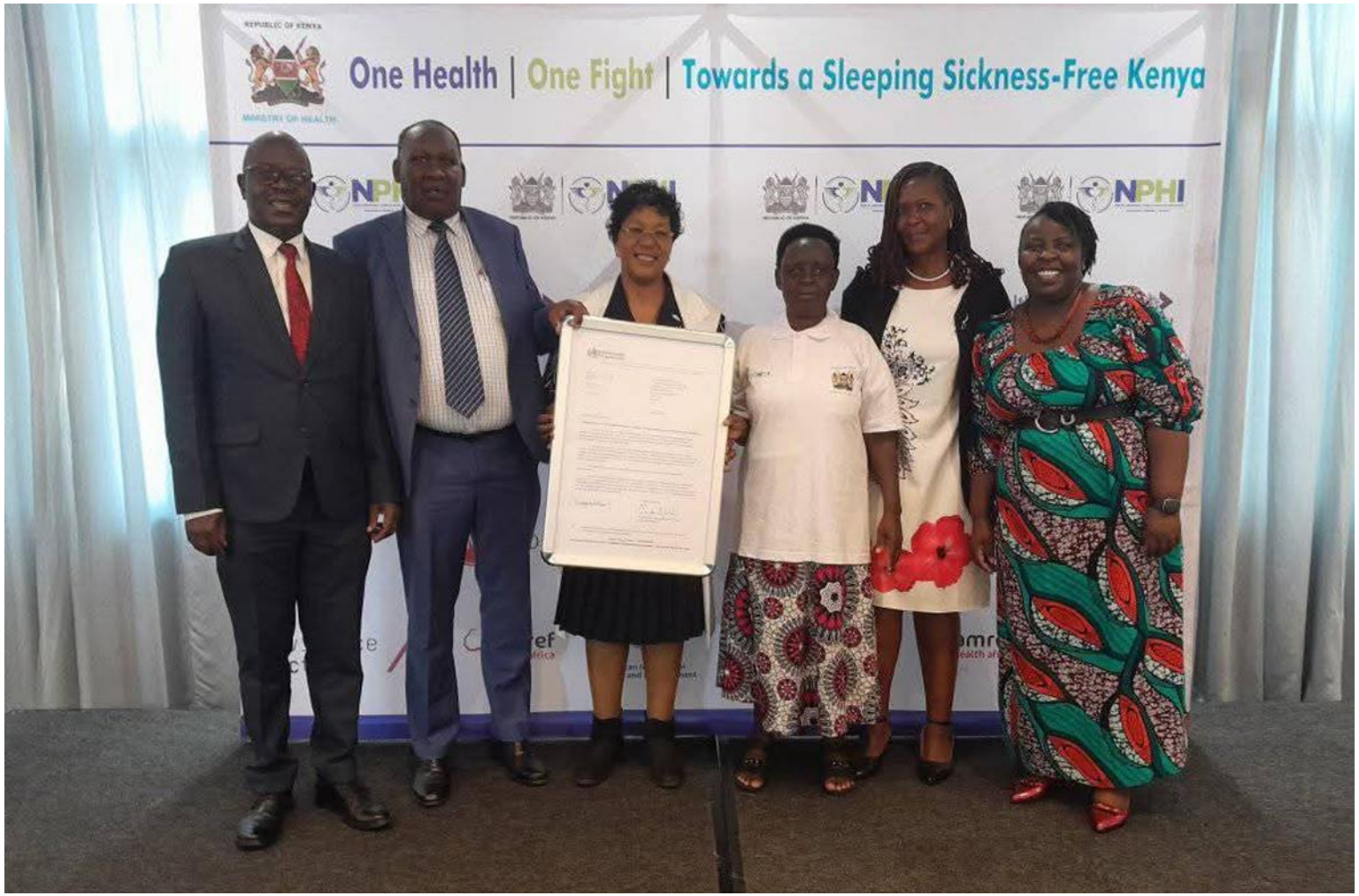


CHALLENGES

- Laxity from the community as the disease burden decreases
- The need to address other endemic diseases during surveillance makes it expensive.
- Zoonotic nature of TBr- Variety of domestic animal reservoirs
- Dwindling and delays in release of funds as the government prioritizes other diseases
- Waning expertise due to death and retirement- experience requires practice

POST –VALIDATION STRATEGIES

- Incorporate HAT management in Primary Health Care instead of few sentinel facilities and one referral hospital
- Sustained disease and vector surveillance – Ethiopia case
- Maintain the dedicated National institution for T and T control
- Incorporate T and T control in CIDPs of different counties
- Continuous community sensitization as AAT surveillance and control continues
- The best way to continue downward pressure is the multidisciplinary approach where case finding and management, brings host numbers down and tsetse control diminishes vector numbers and transmission.


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THANK YOU.