

Enhanced Passive screening and diagnosis for g-HAT in NW Uganda-Moving towards elimination

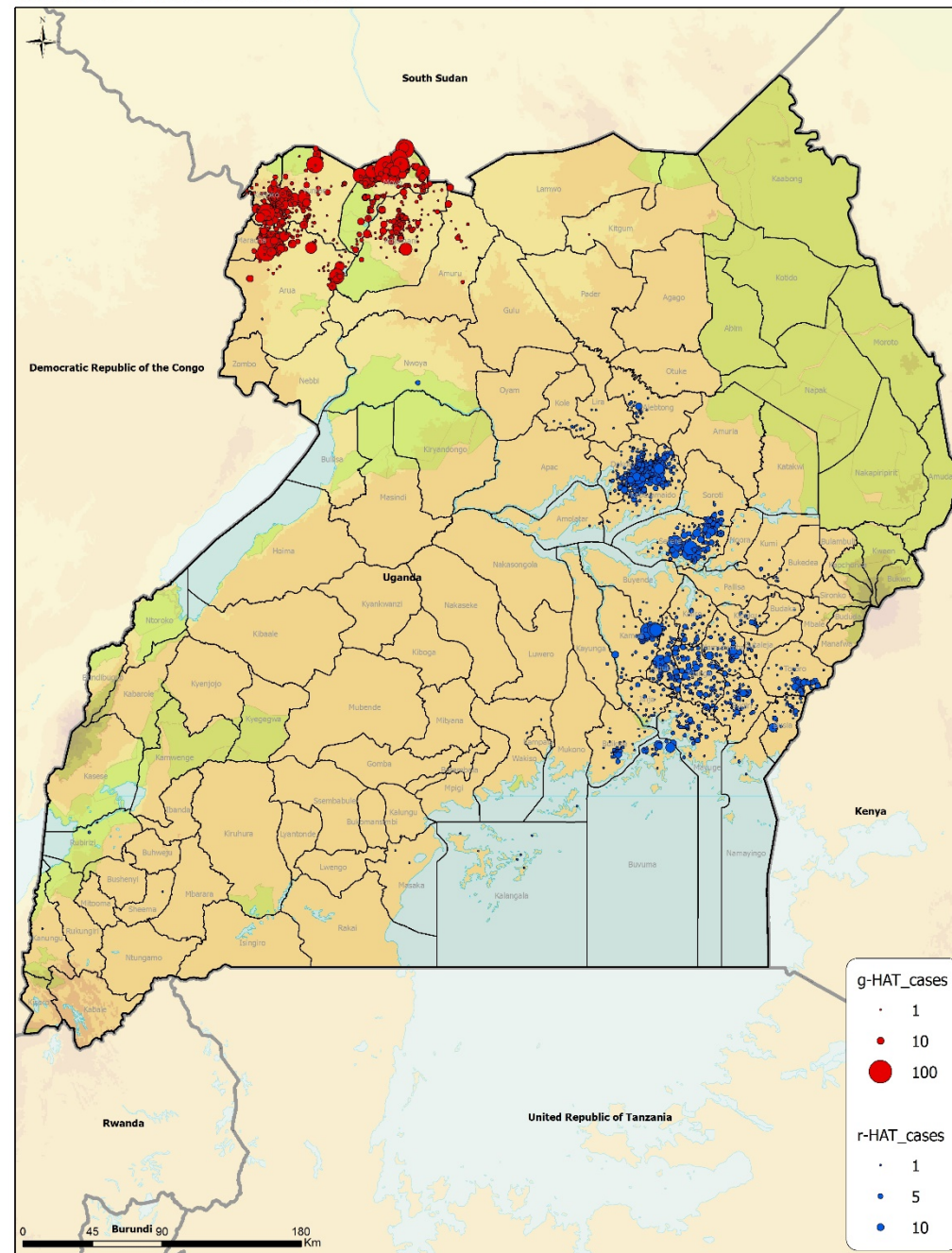
Charles Wamboga¹, Enock Matovu², Paul Richard Bessell³, Albert Picado⁴, Sylvain Bieler⁴, Joseph Mathu Ndung'u⁴

¹ Ministry of Health, Kampala, Uganda,

² College of Veterinary Medicine, Animal Resources and Biosecurity (COVAB), Makerere University, Kampala, Uganda,

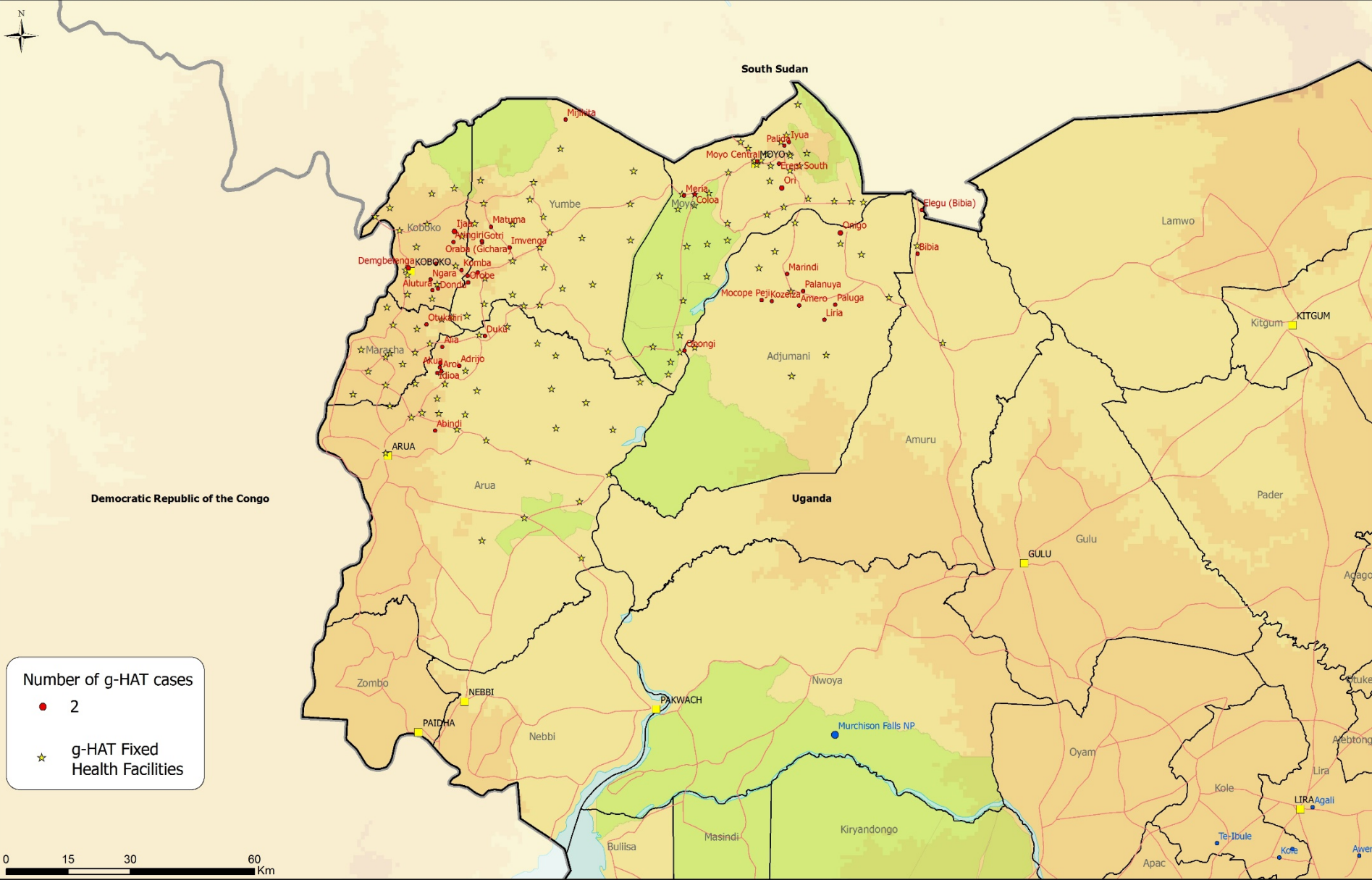
³ Epi Interventions Ltd., Edinburgh, United Kingdom,

⁴ Foundation for Innovative New Diagnostics (FIND), Geneva, Switzerland



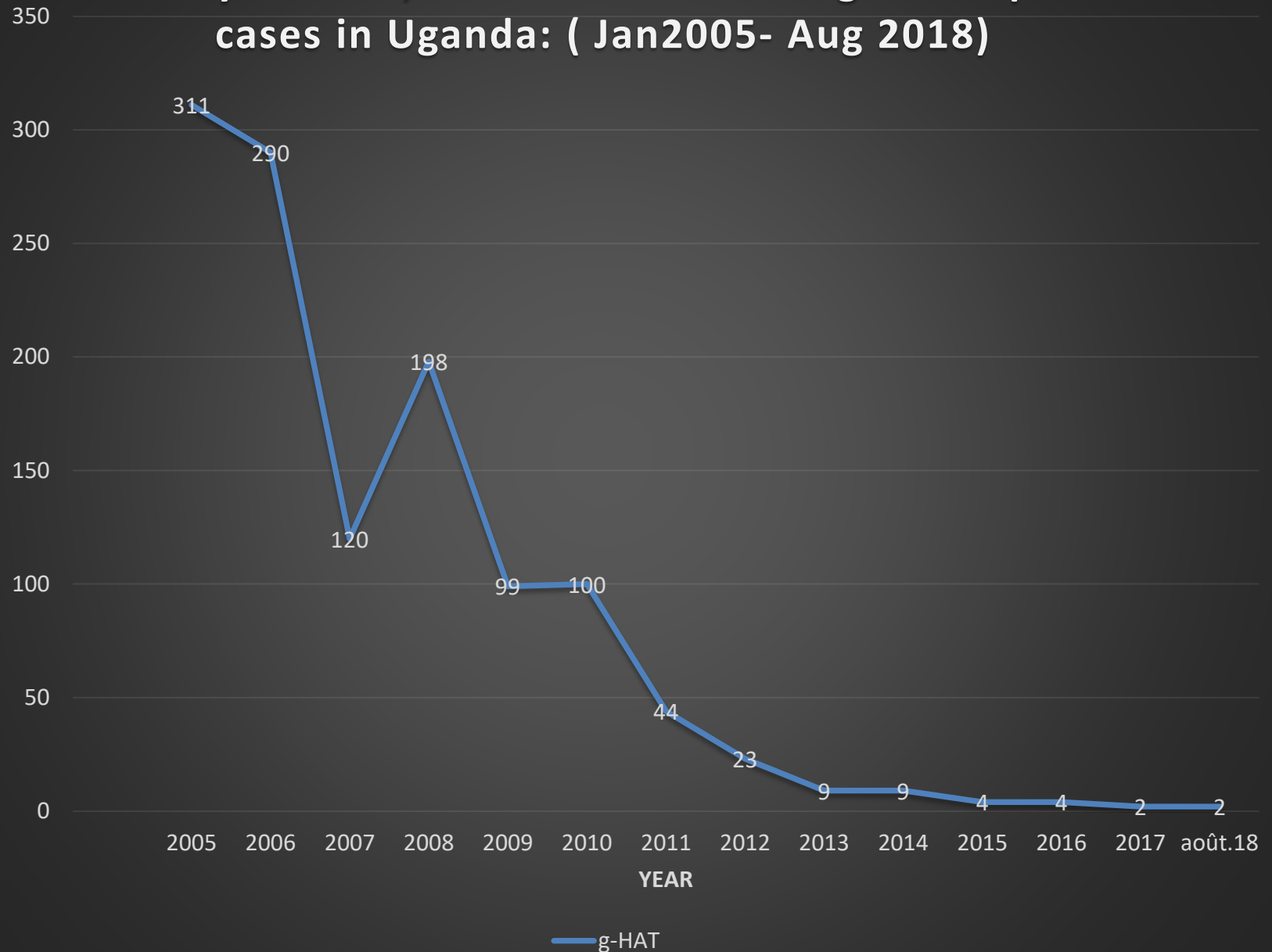
Number of HAT cases (2012-2016) in North-Western Uganda

Atlas of human African trypanosomiasis (2000-2016)
Version: June 2018. Optimised for printing in A3 format



The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

A Steady Decline; Set for Elimination. g-HAT reported cases in Uganda: (Jan2005- Aug 2018)



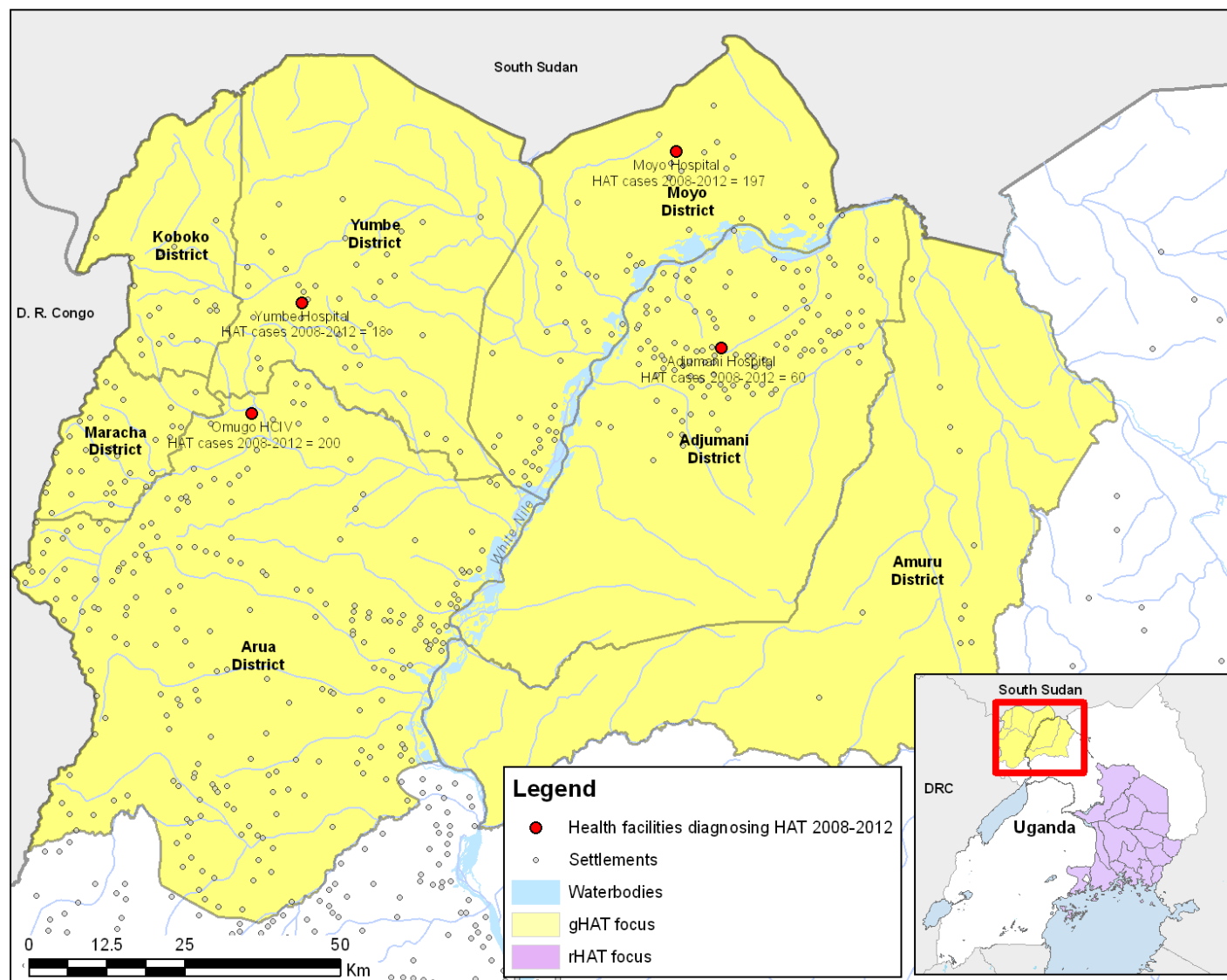
Case detection

- Passive
OR
- Active

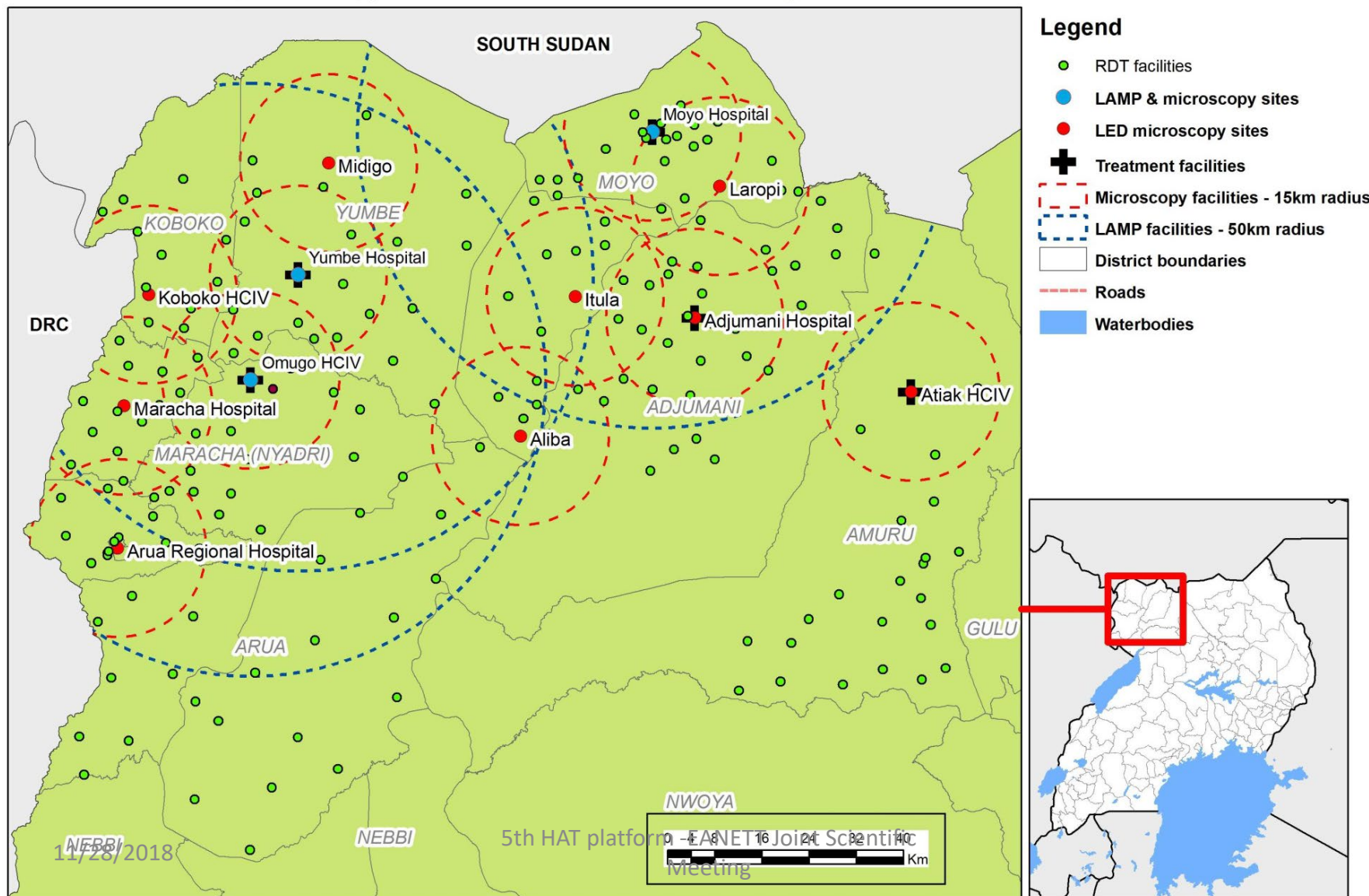
Traditionally, detection of *gambiense* HAT cases relies mainly on active screening of the population living in high risk areas using specialized mobile teams

- ❖ Therefore, HAT diagnosis inevitably became a parallel structure in the health system
- ❖ This surveillance is done using CATT (Antigen based test) which requires cold chain
- ❖ With reduction in g-HAT prevalence, **active screening became too expensive and considered cost ineffective**
 - thus limited access to screening in absence of mobile teams
- Before 2013, **passive surveillance was only in 4 health facilities** across the *gambiense* HAT belt in NW Uganda covering a population of 2.22m
- The recent development of rapid diagnostic tests (RDTs) has improved screening for HAT at peripheral level health facilities

Previous HAT Diagnostic Centres



Health facilities in *gambiense* belt since 2013 performing HAT screening



Current Strategy and Rationale for Enhanced Screening

- ❖ Based on passive screening integrated into existing health care facilities
 - Deploy RDTs to screen clinical suspects
 - Increased coverage of passive screening from 4 health facilities to 174 health facilities
 - Reactive screening around villages with a new case
 - Active screening in refugee camps
 - LAMP to increase suspicion

Current Strategy and Rationale for Enhanced Screening

- ❖ Increased microscopy coverage
 - From 4 to 12 centres
 - Introduce iLED microscopy
 - Re-introduce mAECT to compliment CTC
 - Mobile microscopy teams to improve access to confirmatory parasitology tests
 - Take pictures of positive microscopy results and share among team members
- ❖ Use of mobile phones to transfer data from health facilities on to a common platform
 - to improve management and decision making
- ❖ Identification of possible source of infection

Operationalizing the Current Strategy

- ❖ Upgrading of health facilities
- ❖ Training of health workers on the diagnostic algorithm (clinical suspicion, RDTs) and data transfer by sms and on line application
- ❖ Provision of RDTs and screening algorithms to health facilities
- ❖ Put in place transport system for filter paper sample collection, RDT distribution and for mobile microscopy outreach
- ❖ Regular External Quality Assurance and monitoring
- ❖ IEC material development and role out (Technical support from Malteser International and PAL)

District Launch and Trainings



11/28/2018



5th HAT platform / EANETT Joint Scientific Meeting

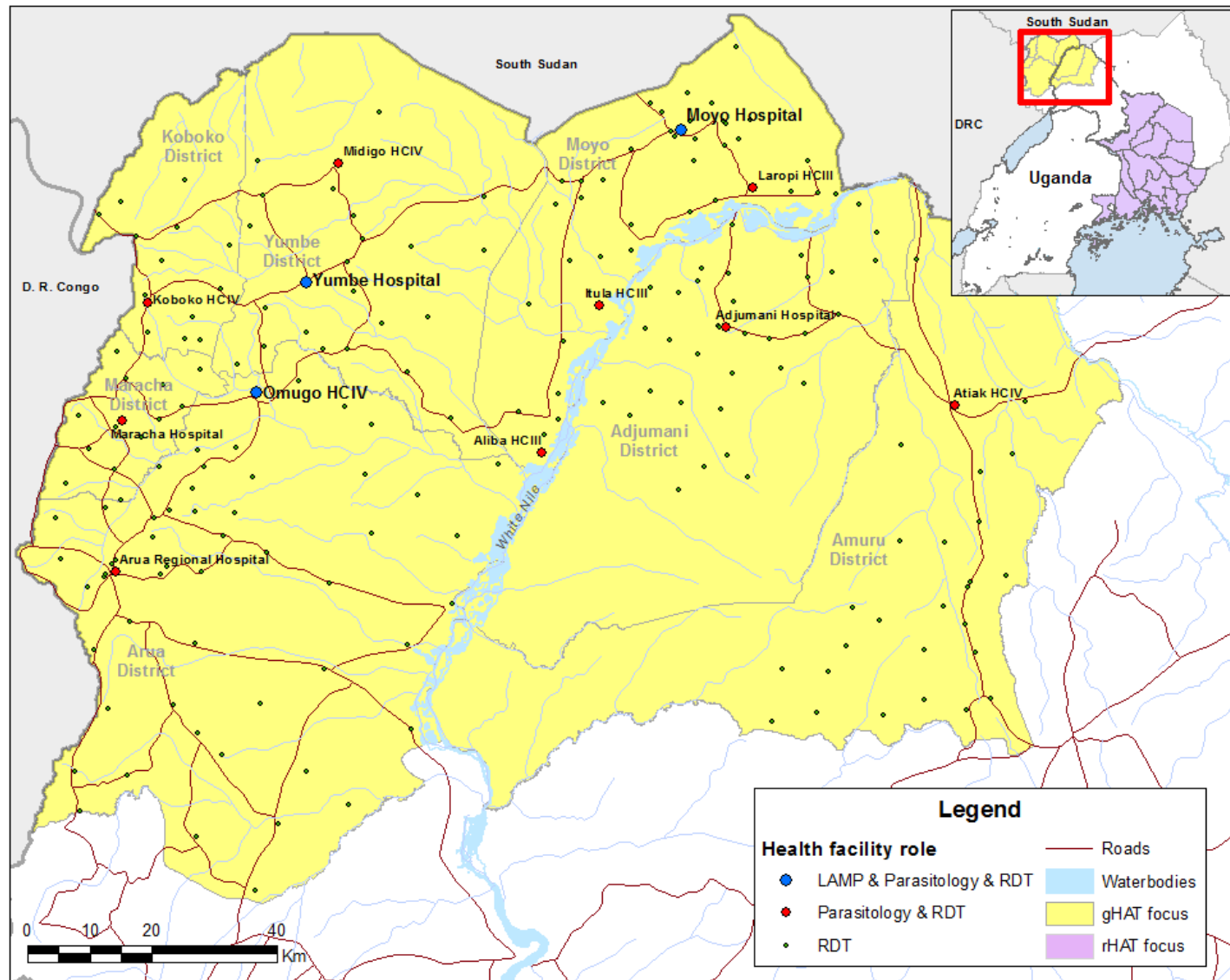


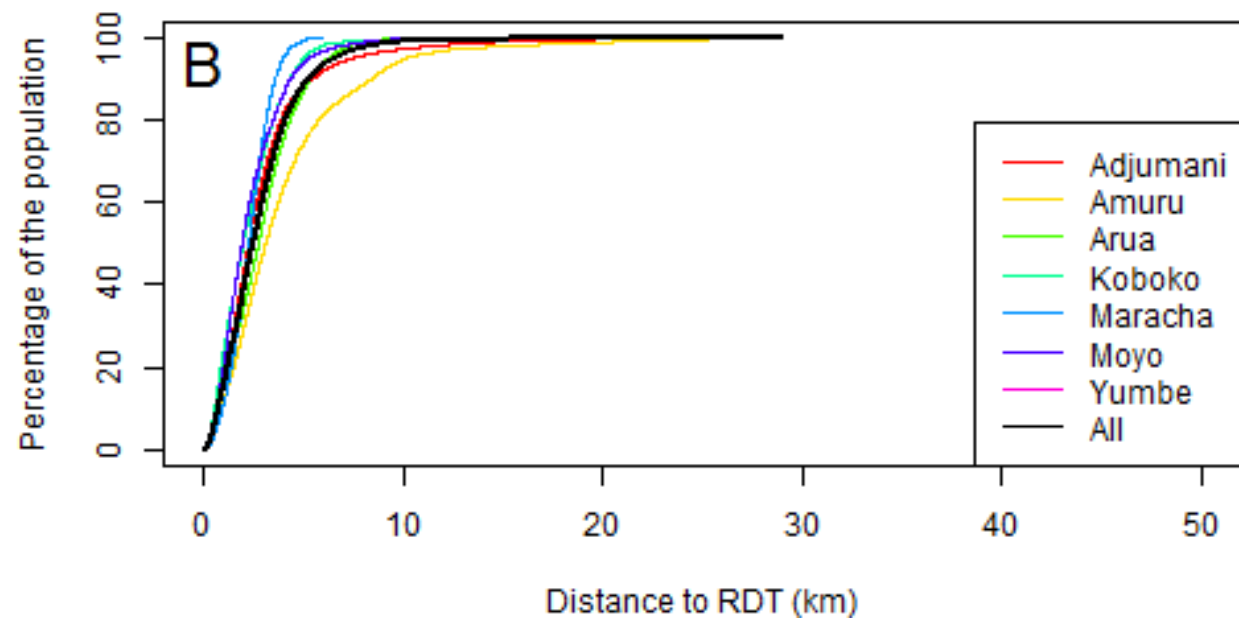
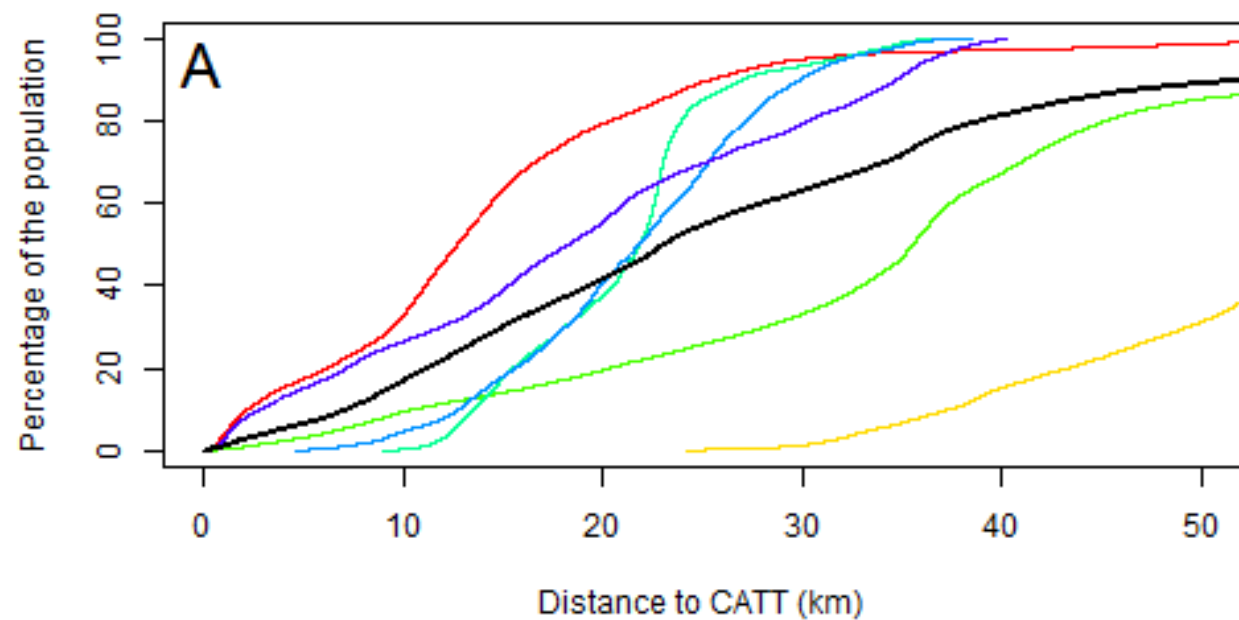
Communication strategy

- Sensitization of key administrative & local leaders (28) in W.Nile Region
- Sensitization of health staff (269) in refugee settlements
- Sensitization of village health teams (264)
- Airing of Radio content (SS jingles, stories, drama – Lugbara, Madi, Kakwa, Arabic, English languages, Jan-Oct 2018)
- Distribution of IEC materials



Current Microscopy and LAMP Centres





- RDTs brought to the nearest Health centre (from 23 km to 2.5km)
- Microscopy at a median distance 12.49 km

Summary of screening results- August 2018

RDTs performed :Passively	Positive RDTs	Suspects (RDT positive) tested by parasitology	Parasitology positives (Passive & Active HAT cases)
36,119	861 (2.4%)	706 (82.0%)	21

Other relevant data:

- ❖ Most recent HAT case was reported in June 2018 (of south Sudanese origin)
- ❖ It is two years since last native case was reported
- ❖ Actively screened 60,432 people in refugees camps: One case identified (Kijaki village, Kajokeji)
- ❖ Actively screened 19,134 local population: No cases identified

HAT screening at refugee camp



5th HAT platform -EANETT Joint Scientific
Meeting

11/28/2018

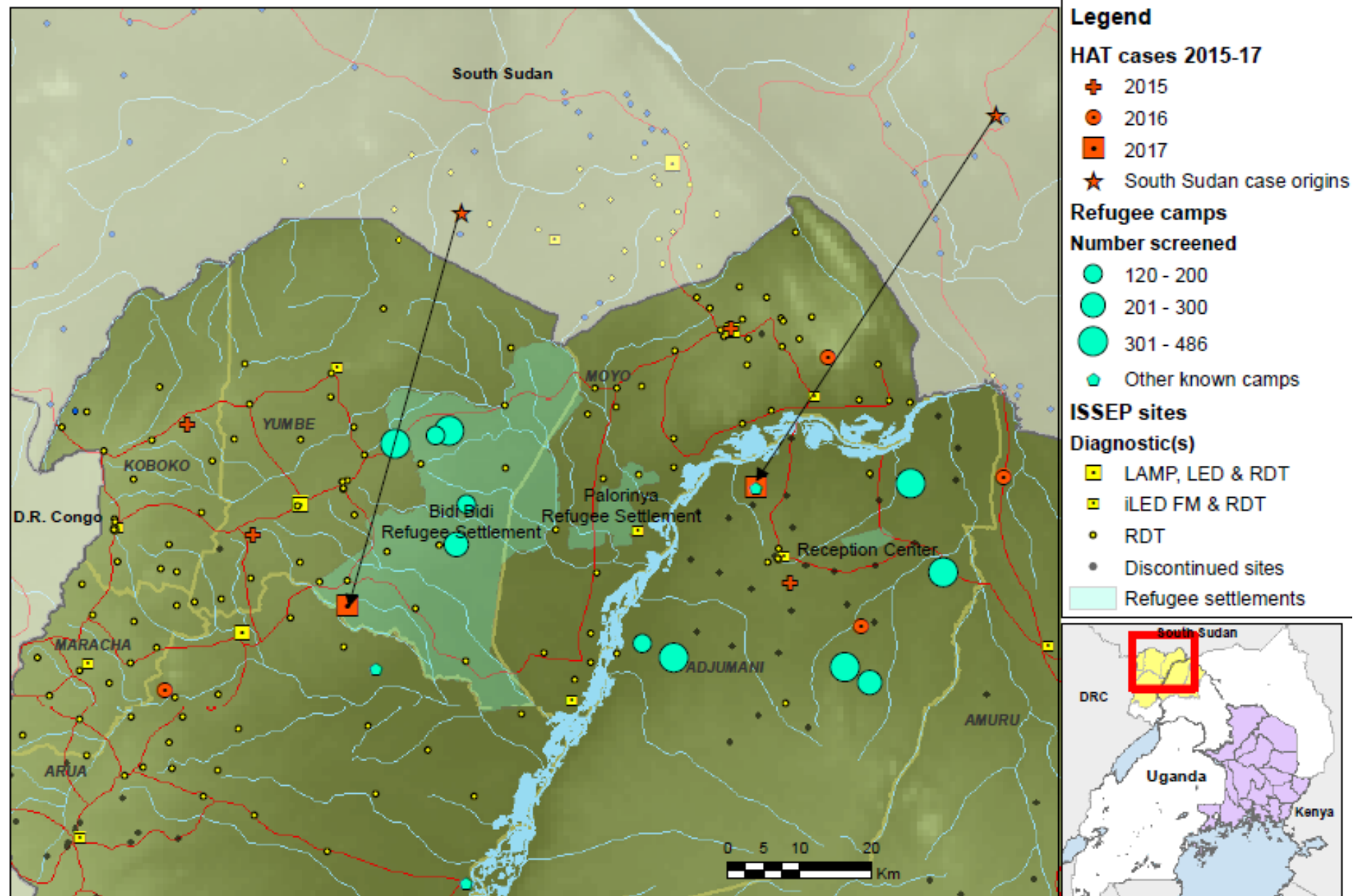
A New challenge: refugee influx from South Sudan

- ❖ Some refugees coming from HAT endemic areas in South Sudan
- ❖ Settling down in HAT endemic areas in Uganda

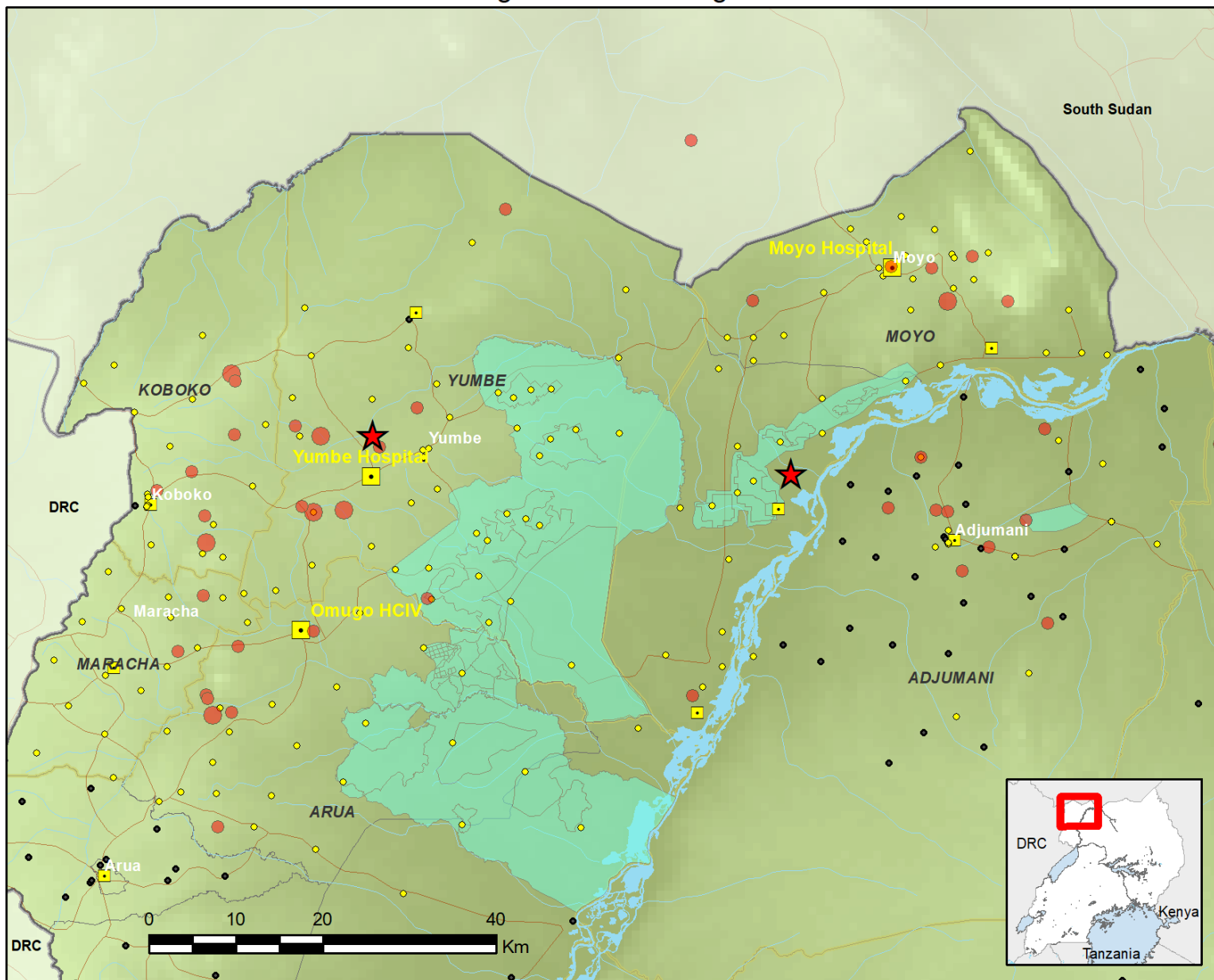
Response

- ❖ Increased passive screening capacities in health facilities attending refugees, including centers managed by NGOs
- ❖ Active screening in districts where refugees have integrated with the local community
- ❖ Active screening in refugee camps:

The 2 HAT cases in 2017 were South Sudanese



gHAT cases in Uganda in 2018



Legend

HAT cases 2018

★ 1 case

HAT cases 2012 - 2017

● 1 case

● 2 case

Health facilities

Diagnostic(s)

■ LAMP, LED & RDT

■ iLED FM & RDT

● RDT

● Discontinued facilities

■ Refugee settlements

Boundary data are from GADM
Rivers and roads are DCW
Location data from GeoNames
Data on refugee settlements from OSM

Conclusion

- ❖ We have demonstrated that it is possible to integrate passive screening into the existing health care delivery
- ❖ The strategy is appropriate to accelerate elimination of the gambiense HAT in an area of low-prevalence
- ❖ Elimination of sleeping sickness in Uganda could be jeopardised by the conflict in South Sudan

Acknowledgements

- Clinicians & lab staff
- Focal persons of implementing districts
- COCTU
- FIND
- Makerere University
- Malteser International and PAL
- WHO
- LSTM
- BMGF
- Local Governments
- NGO's
- Other partners not listed