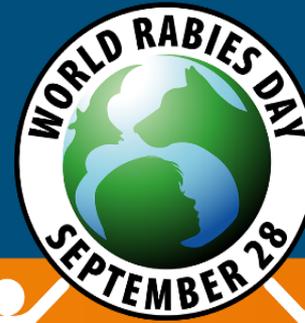


# END RABIES: COLLABORATE, VACCINATE



## Sharing experiences of a successful mass dog vaccination campaign in Namibia

Dr Rauna Athingo

*Africa Rabies Webinar, 23-24 September 2020*



**WORLD ORGANISATION FOR ANIMAL HEALTH**  
*Protecting animals, preserving our future*

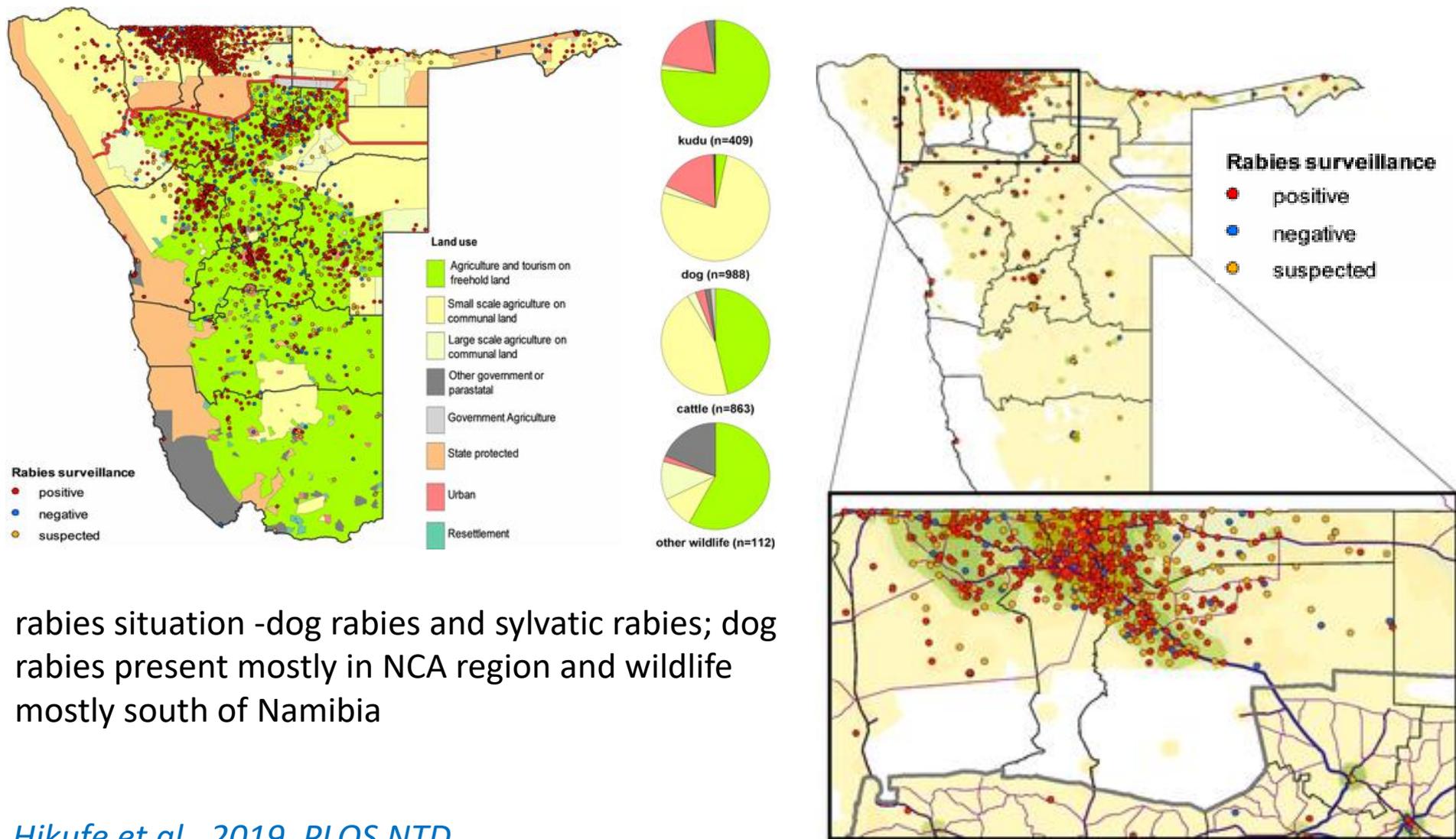


# Background

- Area: 825,615 km<sup>2</sup>
- Population: 2.59 million people
- Population density: 2.6 person/ km<sup>2</sup>
- Namibia is ethnically diverse
  - 11 ethnic groups
  - speaking 22 different languages
- Shares its borders with Angola, Botswana, South Africa, Zambia and Zimbabwe.

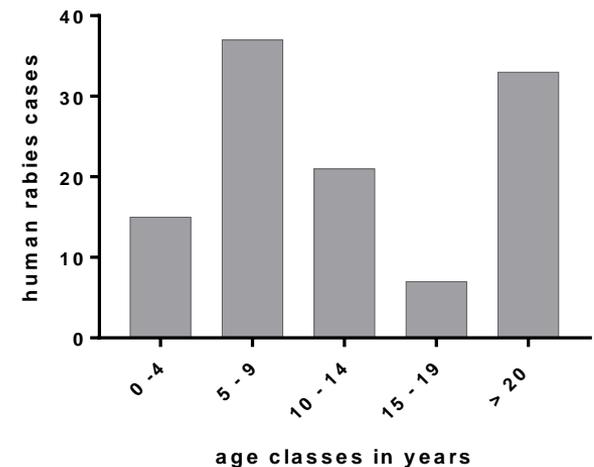
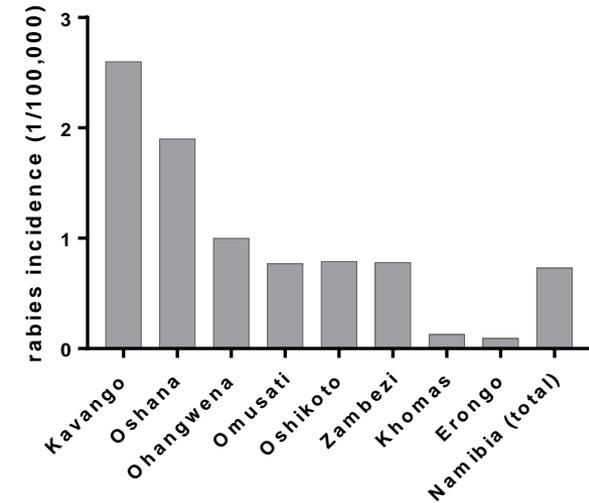
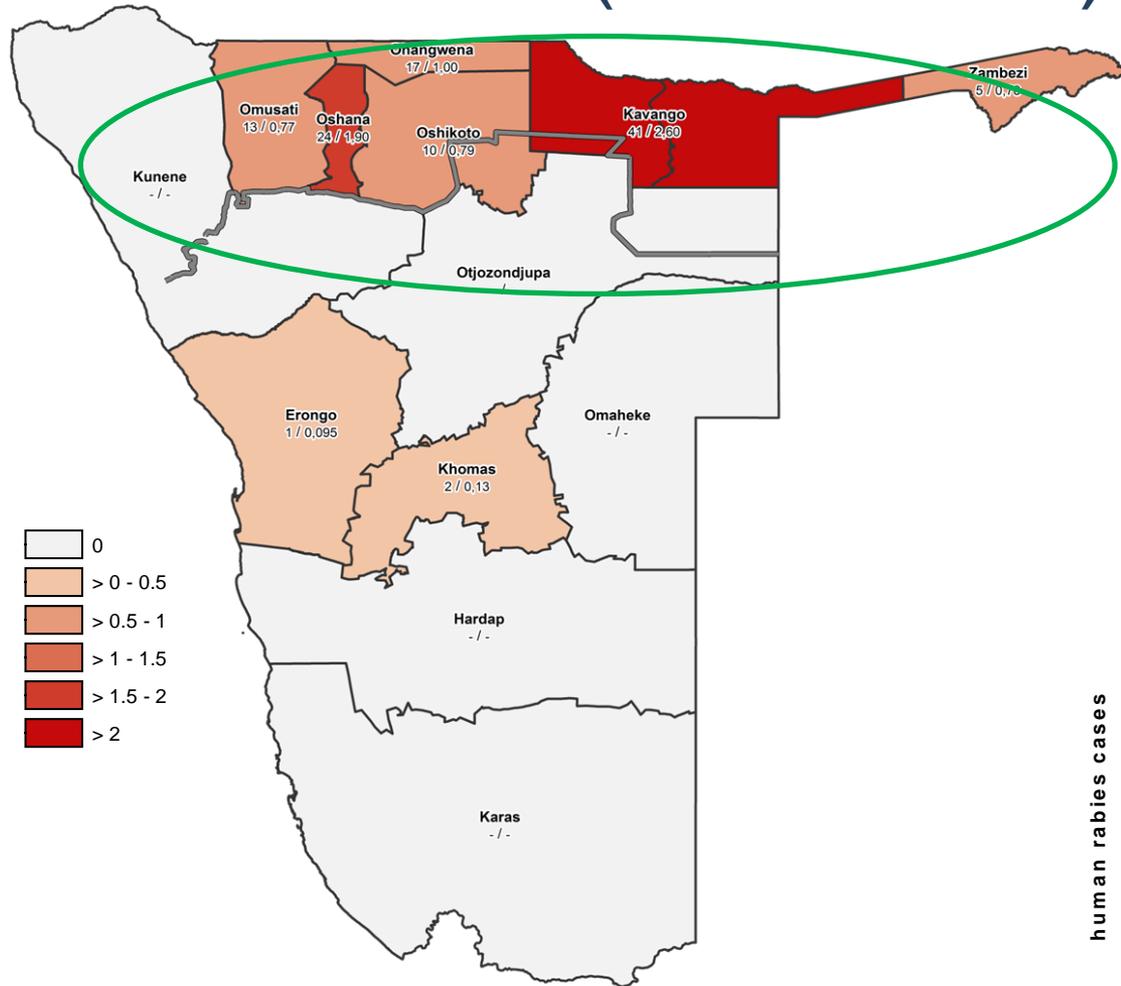


# Rabies in Namibia – animal rabies (2011-2017)



rabies situation -dog rabies and sylvatic rabies; dog rabies present mostly in NCA region and wildlife mostly south of Namibia

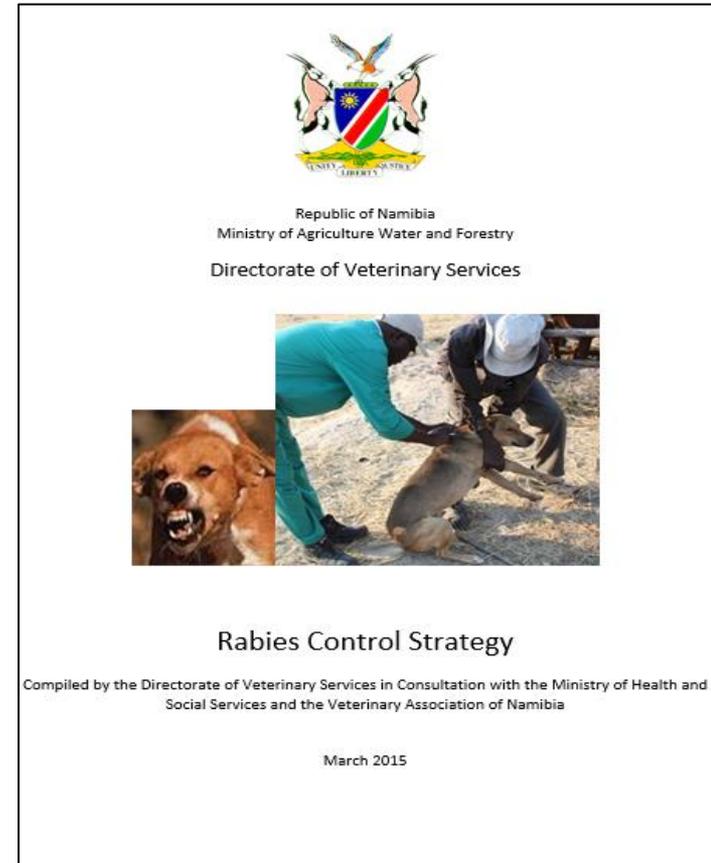
# Rabies in Namibia – human rabies (2011-2017)



Direct link b/t dog rabies and human rabies surveillance data in terms of location

# Rabies Control Strategy

- Rabies is a notifiable disease in Namibia as per Animal Health Act 1 of 2011 – reporting of the disease to authority
- Namibia developed and officially endorsed a **“National Rabies Control Strategy”** in May 2015
- Multisectoral One Health approach



# Key stakeholders identified under Namibia Rabies Control Strategy

## Local and international stakeholders

- Traditional authorities
- Local authorities
- Regional councilors
- Ministry of Education
- Ministry of Health
- Law enforcement
- MAWF
- VAN
- UNAM
- Private sector/Business communities
- OIE/FRG/FLI





# Capacity building: training of the vaccinators



# School-based rabies awareness education



# Awareness education to the children



Public education and awareness via TV and radio

# Resource/Logistics arrangement

- Pre- approved campaign budget
- Compile an inventory of rabies control
  - Infrastructure –cold chain facilities
  - Diagnostic Labs and sample packaging materials
  - Transport -vehicles
- Equipment and material
  - PrEP and PoEP
  - Vaccines (enough doses)
  - Handling equipments- nets, control poles and leashes
  - Megaphones
  - Cooler boxes
  - Certificates
  - Tables and chairs



# Mass dog vaccination campaign

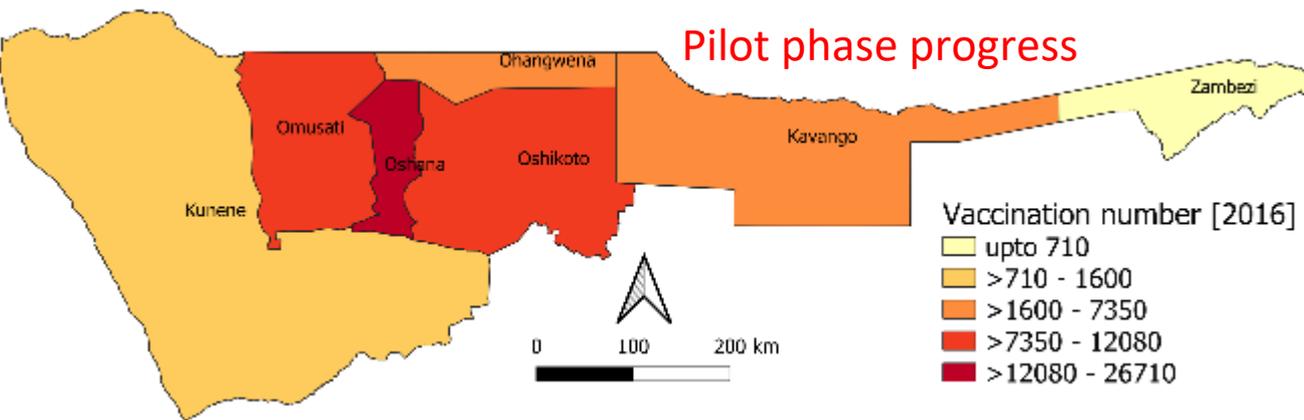
- Targeted campaign- Central point and house to house vaccination
- Vaccination campaign conducted during school holidays



# Vaccination at cattle crush pen

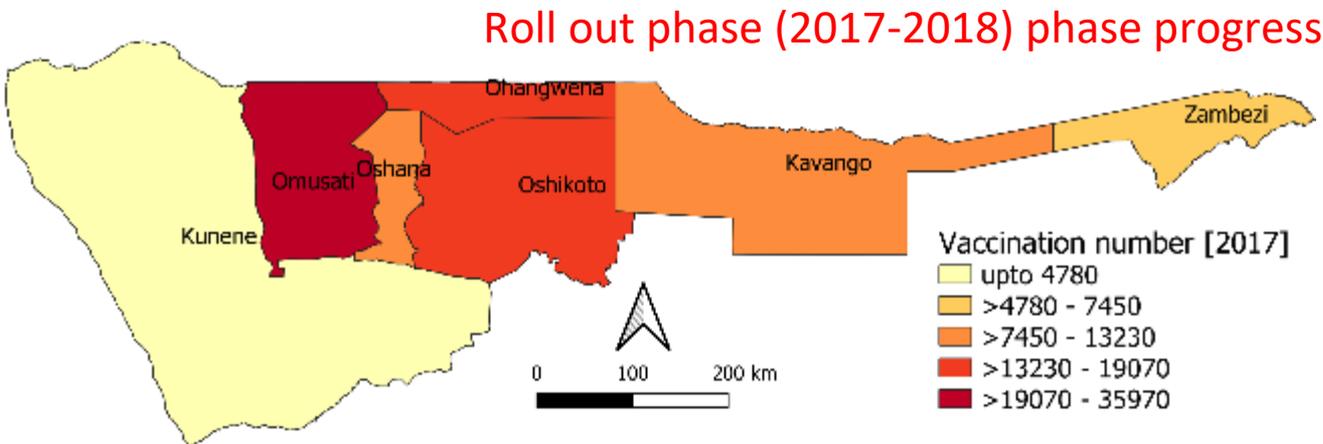


- Annual vaccination campaign at crush pen
- Challenge on distance
- People without cattle unlikely to come



Dog and cat vaccination

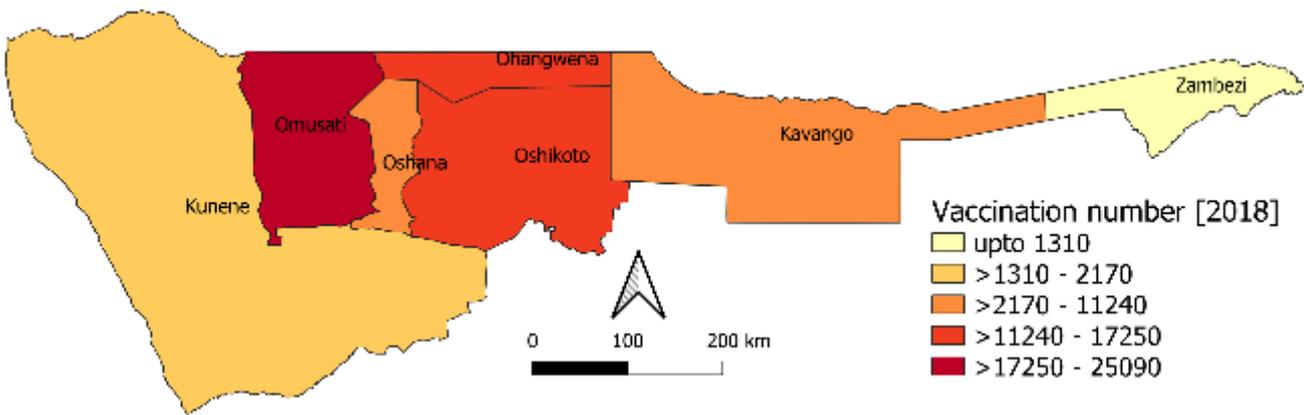
- 2016: **62,213**



Dog and cat vaccination

- 2017: **110,352**

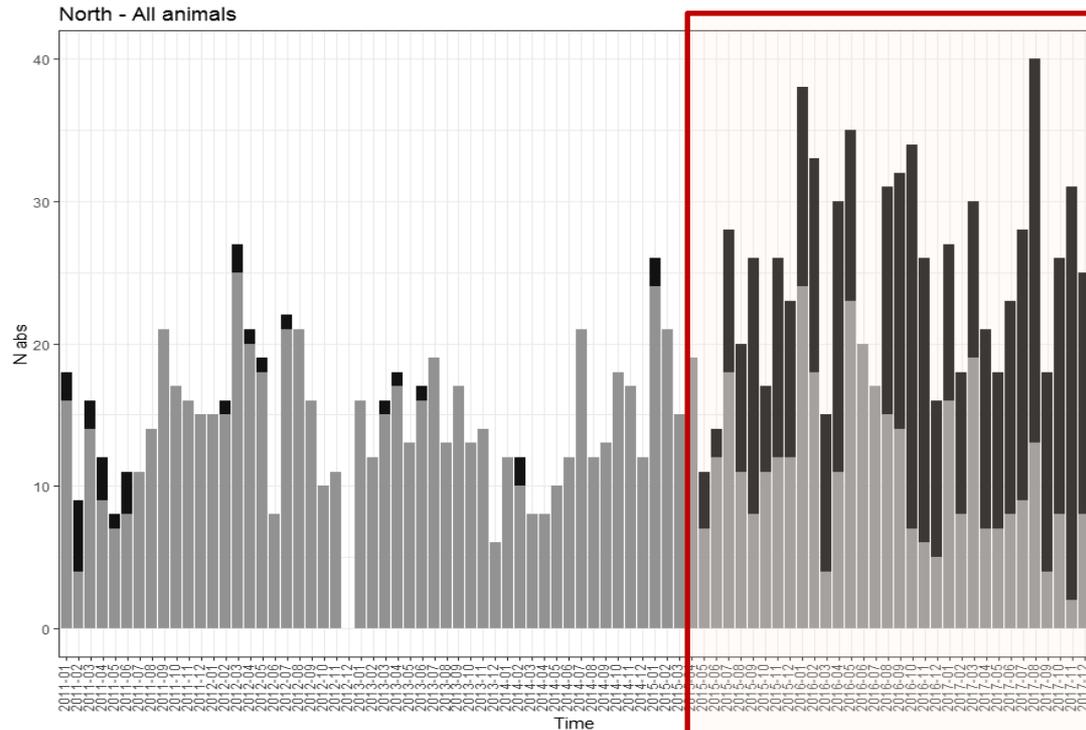
**Estimated vaccination coverage: 69% (40-87%)**



Dog and cat vaccination

- 2018: **81,663**

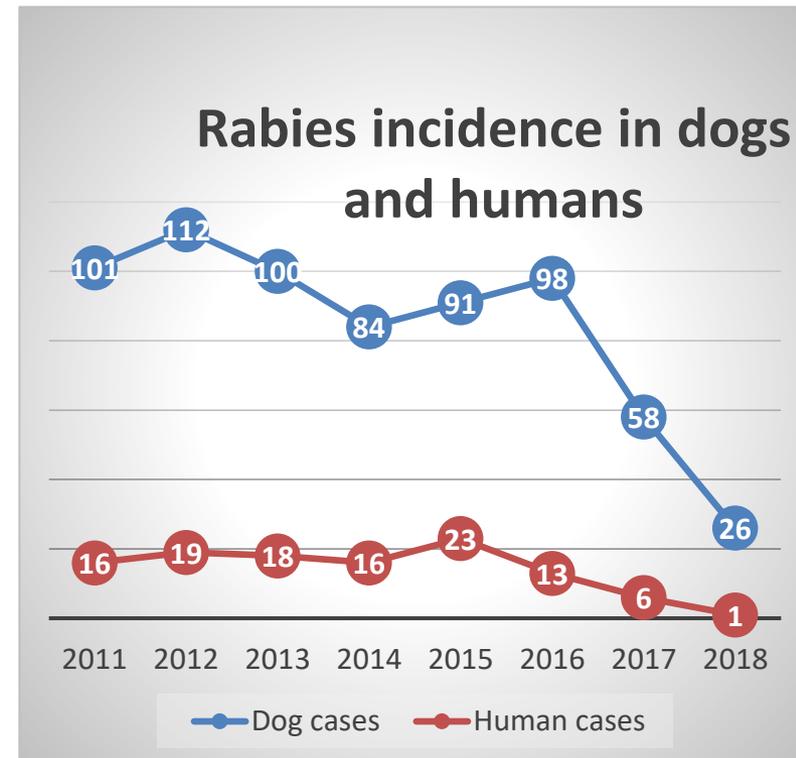
# Impact of dog vaccination on rabies incidence in animals and in humans



Rabies surveillance increased;  
Rabies positivity rate has  
reduced; increased negativity  
rate

## Dog and cat vaccination

- 2016: 62,213
- 2017: 110,352
- 2018: 81,663
- Vaccination coverage: 69% (40-87%)



RESEARCH ARTICLE

# Ecology and epidemiology of rabies in humans, domestic animals and wildlife in Namibia, 2011-2017

Emmanuel H. Hikufe<sup>1</sup> , Conrad M. Freuling<sup>2</sup> \*, Rauna Athingo<sup>3</sup>, Albertina Shilongo<sup>1</sup>, Emmy-Else Ndevaetela<sup>4</sup>, Maria Helao<sup>4</sup>, Mathews Shiindi<sup>4</sup>, Rainer Hassel<sup>5</sup>, Alec Bishi<sup>5</sup>, Siegfried Khaiseb<sup>6</sup>, Juliet Kabajani<sup>6</sup>, Jolandie van der Westhuizen<sup>6</sup>, Gregorio Torres<sup>7</sup>, Andrea Britton<sup>8</sup>, Moetapele Letshwenyo<sup>8</sup>, Karin Schwabenbauer<sup>9</sup>, Thomas C. Mettenleiter<sup>2</sup>, Nicolai Denzin<sup>10</sup>, Susanne Amler<sup>10</sup>, Franz J. Conraths<sup>10</sup>, Thomas Müller<sup>2</sup>, Adrianatus Maseke<sup>1</sup>



*Tropical Medicine and  
Infectious Disease*

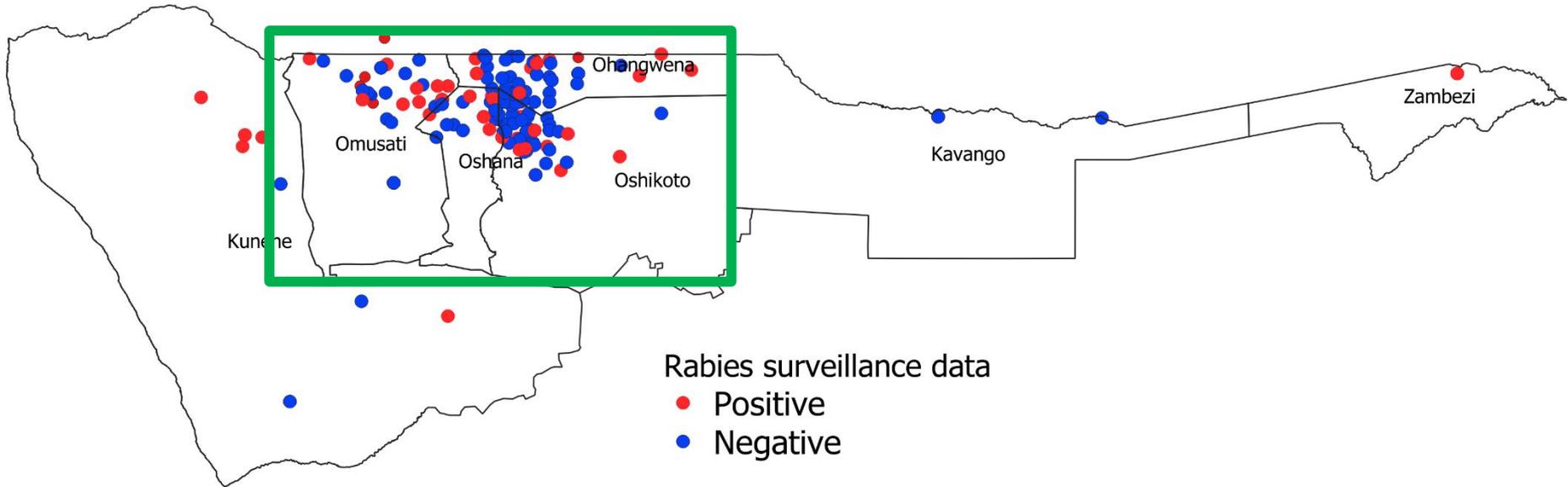


Article

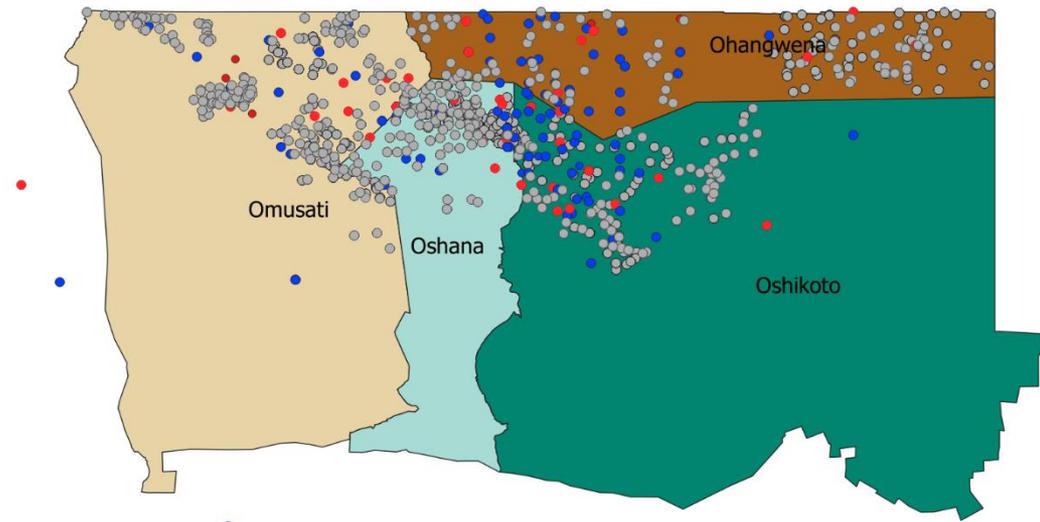
## Fighting Dog-Mediated Rabies in Namibia—Implementation of a Rabies Elimination Program in the Northern Communal Areas

Rauna Athingo<sup>1,†</sup>, Tenzin Tenzin<sup>2,†</sup> , Albertina Shilongo<sup>3</sup>, Emmanuel Hikufe<sup>3</sup>, Kenneth K. Shoombe<sup>1</sup>, Siegfried Khaiseb<sup>4</sup>, Jolandie van der Westhuizen<sup>4</sup>, Moetapele Letshwenyo<sup>2</sup>, Gregorio Torres<sup>5</sup>, Thomas C. Mettenleiter<sup>6</sup> , Conrad M. Freuling<sup>6</sup>   
and Thomas Müller<sup>6,\*</sup> 

# Targeting vaccination on rabies hotspot areas from 2019 onwards



Gray dots are the location of vaccination points in 2019 and 2020 campaigns



# Vaccination data management

- Paper-based form used until 2018

Rabies vaccination register/ Data

Name: All 10 Form Date: 26-10-18 to 26-11-17

Name of Person/Shop: 419 Name of Constituency: 12

Dogs						Cats						Total Pets (Column)
Total (No)	Total (No)	First visit	Address	Age (Months)	Total (No)	Total (No)	First visit	Address	Age (Months)	Total (No)	Total (No)	
04-01/18/10254	3435	2637	803	590	5871	346	363	313	46	679	1388	6659
12-10/18/3592	3574	5481	1185	1106	7821	313	407	630	87	1992	2712	10593
5848												17552

NO. 1. Vaccine Used - 6418, Wanted 68 in first week. Therefore class A + B = 4821 whilst cats X + B = 704 while makes up total registered unvaccinated pets = 5390. Hence, 6418 - 5390 = 1028 unregistered vaccinated pets.

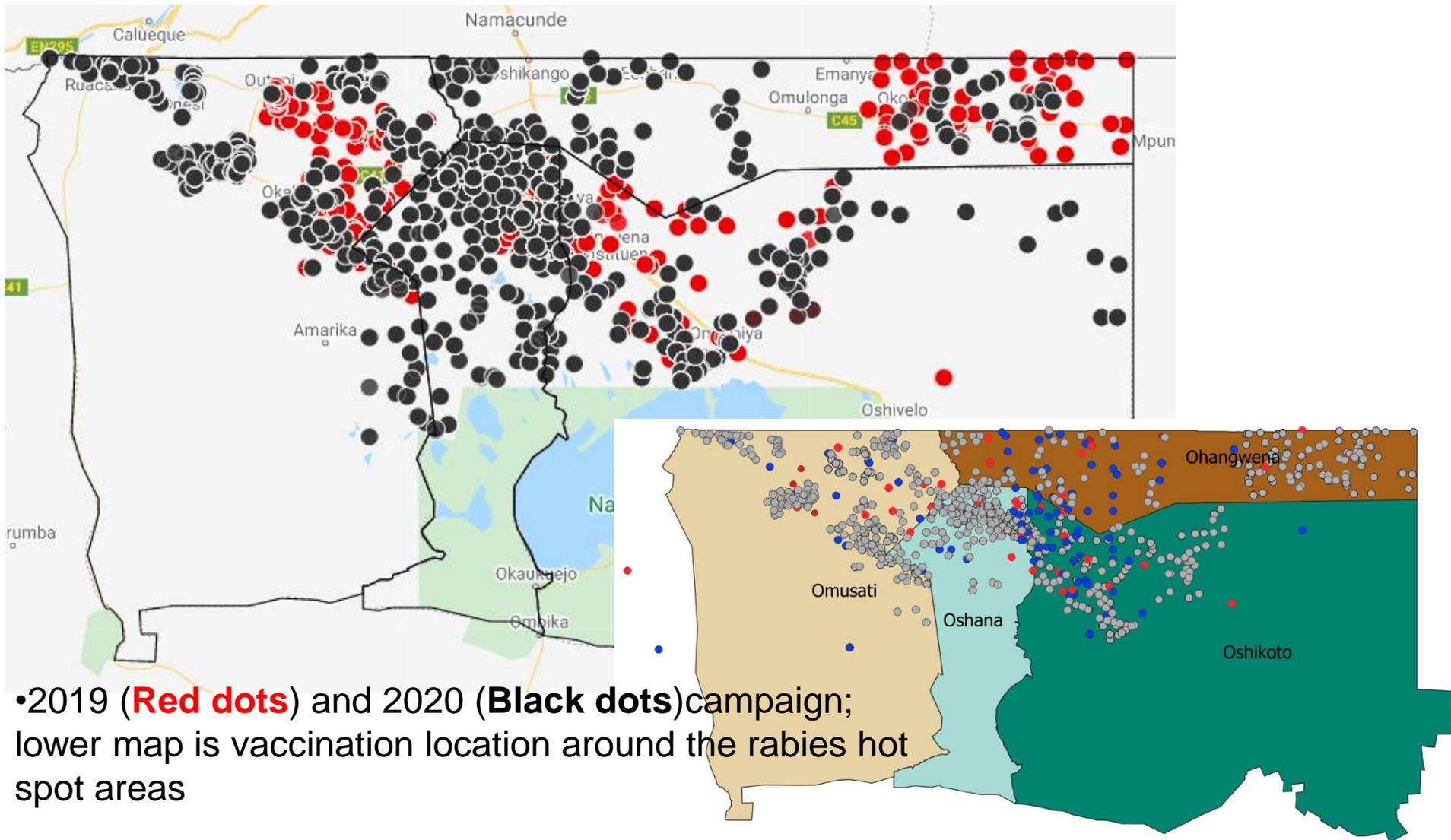
2. Refer to previous report on training

3. (13060) or 13804 pets vaccinated (78%)



Since 2019, GARC Data Logger is being used to capture vaccination data

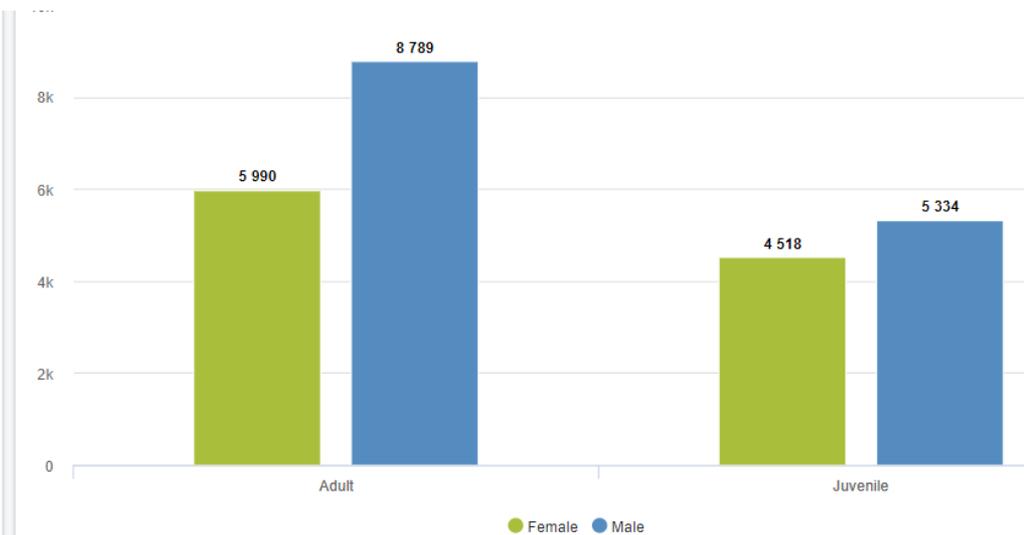
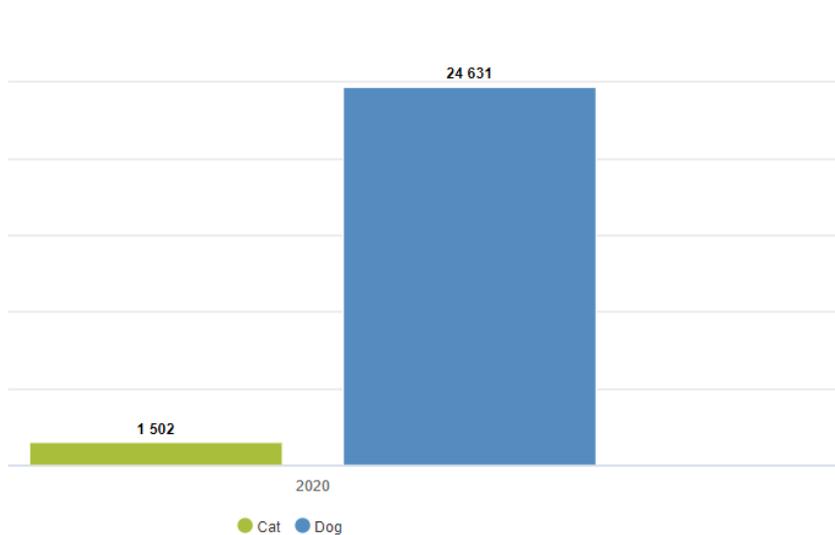
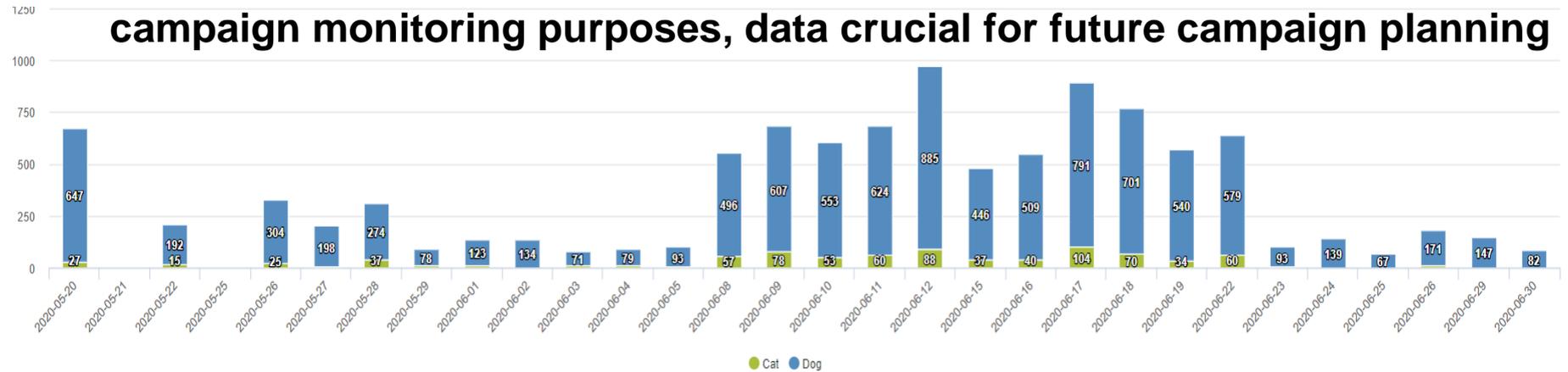
# Visualization of vaccination location via Rabies Epi Bulletin



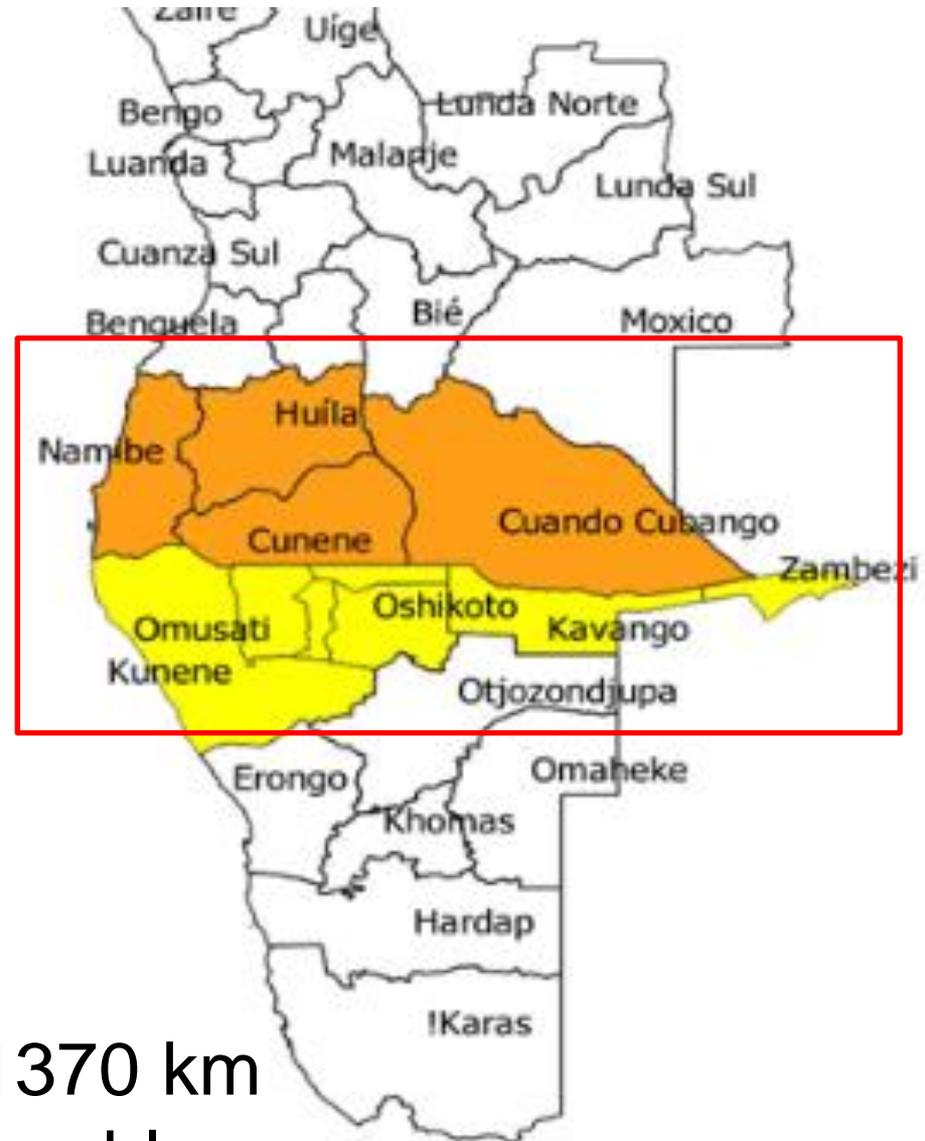
•2019 (Red dots) and 2020 (Black dots) campaign;  
lower map is vaccination location around the rabies hot spot areas

# Visualization of daily and cumulative vaccination data via Rabies Epi Bulletin

**campaign monitoring purposes, data crucial for future campaign planning**



# Cross-border collaboration



- Namibia-Angola border: 1370 km
- Rabies is a cross-border problem

# Annual Review and Planning



# Important elements of rabies elimination program

- Legal framework – national control plan
- Political support and commitment
- Leadership – national committee, coordinators
- Public and stakeholder sensitization, commitment and engagement - rabies is a public good
- Inter-sectoral collaboration – One health
- Training/ capacity building
- Resource –both human and materials
- Good advocacy plan
- International support
- Logistic arrangement
- Proper planning
- Surveillance system
- Monitoring and evaluation



# Challenges and way forward

- Vast country and a sparsely populated Northern Communal Areas where dog rabies is endemic.
- Porous border with neighboring country
- Nomadic lifestyle of people moving in search of grazing areas influenced by climatic changes as a results that might affect campaign timing
- Estimation of the target dog population and high dog population turnover,
- Unforeseen budgetary constraints at the governmental level
- Possible animal and human disease outbreak and most recently the SARS-CoV-2 pandemic.
- Surveillance mostly depends on reporting from communities and samples presented to local hospitals, hence inter-sectoral collaboration very crucial
- Therefore, strategic vaccination campaigns (targeted vaccinations) focusing on high risk areas and improving the vaccination coverage at a local level.
- Coordination of rabies control efforts between Angola and Namibia and its implementation is a priority as set in the bilateral agreement on TADs
- Namibia submitted a rabies elimination commitment letter to the UAR in February 2019 (level of commitment towards Rabies elimination)
- Preparing to submit an application for endorsement by the OIE of their official national control programme for dog-mediated rabies.



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[#rabiesendshere](#) community!  
Discover how 

# Thank you

## END RABIES: COLLABORATE, VACCINATE



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Protecting animals, preserving our future

**VACCINATE YOUR DOG. SAVE LIVES.**

**RABIES:  
VACCINATE TO ELIMINATE**

1. Annual rabies vaccination of dogs
2. Responsible dog ownership
3. Dog bite prevention
4. Treatment of dog bite wounds

Photos: Namibian Dog-Mediated Rabies Elimination Project | [www.oie.int/rabies](http://www.oie.int/rabies)

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