



AFRICAN UNION
INTERAFRICAN BUREAU
FOR ANIMAL RESOURCES



THE AU-IBAR 2021-2022 SURVEY TO DETERMINE THE 'INSTITUTIONAL PREPAREDNESS OF AFRICAN COUNTRIES TO ELIMINATE RABIES BY 2030'

(This presentation is being given on behalf of the AU-IBAR who are the sole owner of this survey data with Permission from Dr Hiver Boussini – Animal Health Lead AU-IBAR, Hiver.Boussini@au-ibar.org)

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PROVIDING LEADERSHIP IN THE DEVELOPMENT OF ANIMAL RESOURCES IN AFRICA

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Study Objectives

Overall Objective

- To support development of a CONTINENTAL DOG-MEDIATED RABIES ELIMINATION STRATEGY

Specific objectives was to:

- 1) Review literature on the rabies landscape in Africa,
- 2) Understand the policy and institutional preparedness for the end rabies by 2030 campaign
- 3) Establish country-specific profiles of policies, institutions, and preparedness for rabies elimination towards supporting national rabies elimination strategies and programs (add-on).



Study Outputs

1. Landscaping of policies and institutional arrangements for rabies elimination in Africa by 2030
2. Abridged version of Landscaping of policies and institutional arrangements for rabies elimination in Africa by 2030
3. Baseline survey on the preparedness of African countries to eliminate rabies by 2030
4. Country profiles on their rabies preparedness (43)
5. Included in reports are PESTEL (with literature review) and SWOT (with baseline survey)



Methodology

- Literature Review
- KAP survey on Kobo collect from December 2021 and April 2022
- 58 respondents interviewed
- 43 CVO questionnaires/ interview done
- Analysis on 39 (71%) CVOs and 16 (29%) from partner organisations.



Literature Review

Landscaping of policies and institutional arrangements for rabies elimination in Africa by 2030



Observations from literature

Reviewed 200 documents

- In Africa, the annual livestock losses from rabies US\$ 280 million; GDP loss of US\$ 773 million
- Wildlife rabies from livestock grazing around national parks and illegal wildlife hunting
- 80% of human cases in rural areas; >40% of rabies deaths in children (primarily boys) aged less than 15 years.
- Literature academic, biased for monitoring, surveillance, virus typing.
- Not enough quantitative data to help plan a rabies program

Literature Gap

- Insufficient economic, planning and institutional data for one-health project formulation (processes, workplans etc.).
- Very little literature to guide policy formulation



Online Survey

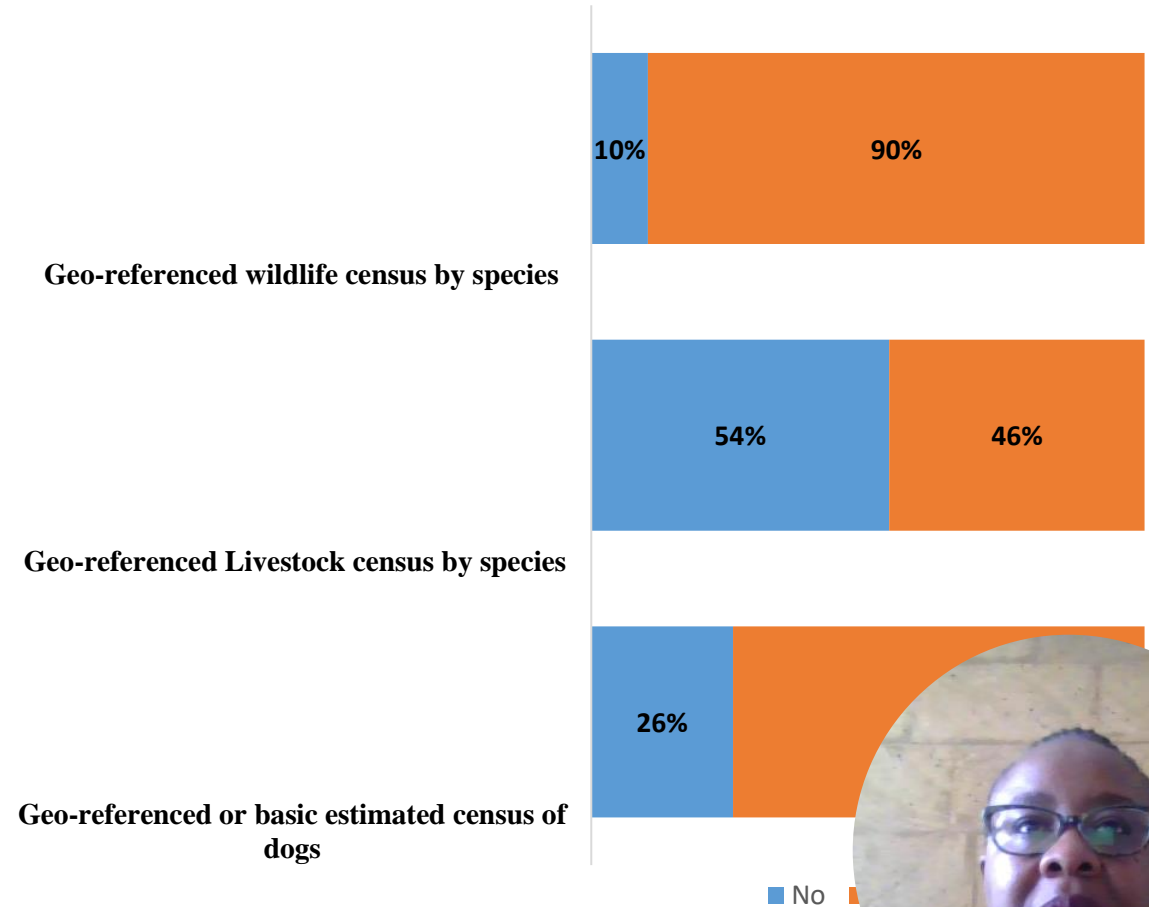
Baseline survey on the preparedness of African countries to eliminate rabies by 2030



Animal Population Data

- No geo-referenced dog census (74%) and wildlife (90%)
- Lack of reliable rabies morbidity and mortality data
- No gender-disaggregated data
- 69% CVOs don't aware when national census is done.
- 16% countries do national census every 1, 5 or 10 years.
- 26% countries guesstimate dog populations

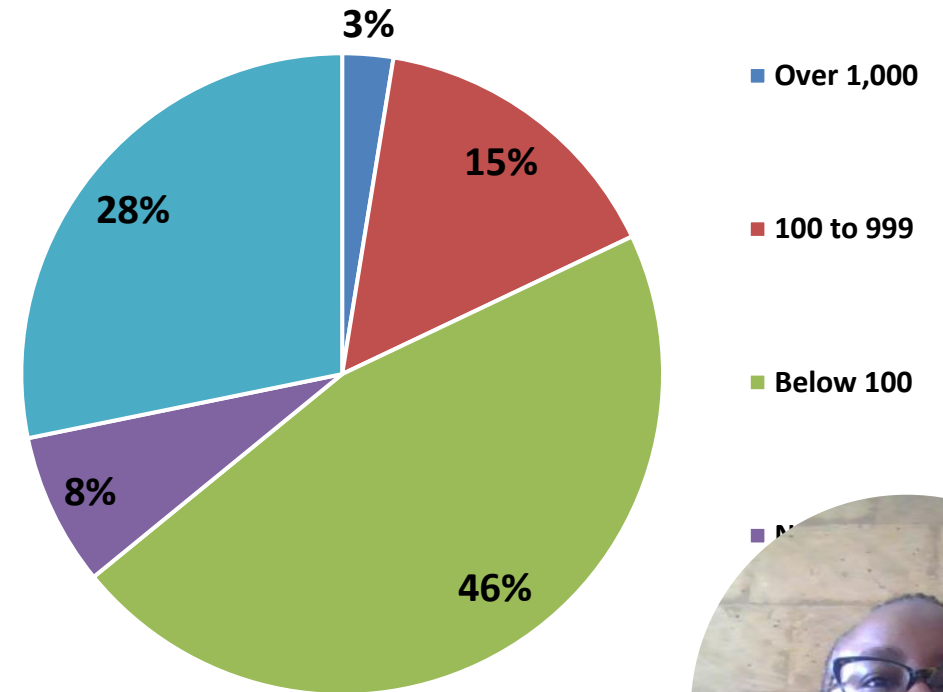
Geo-referenced census of wildlife, livestock and dogs, as reported by CVOs from 39 African countries.



Dog, Livestock, Wildlife rabies numbers

- Tanzania highest dog rabies - 2,030
- 8 countries No data on rabid dogs
- 72% No data on livestock rabies deaths
- Chad and Algeria highest livestock deaths
- 5 countries with wildlife rabies deaths
- Most have no wildlife data

Number of dogs infected by rabies per in 2021 (39 CVOs)



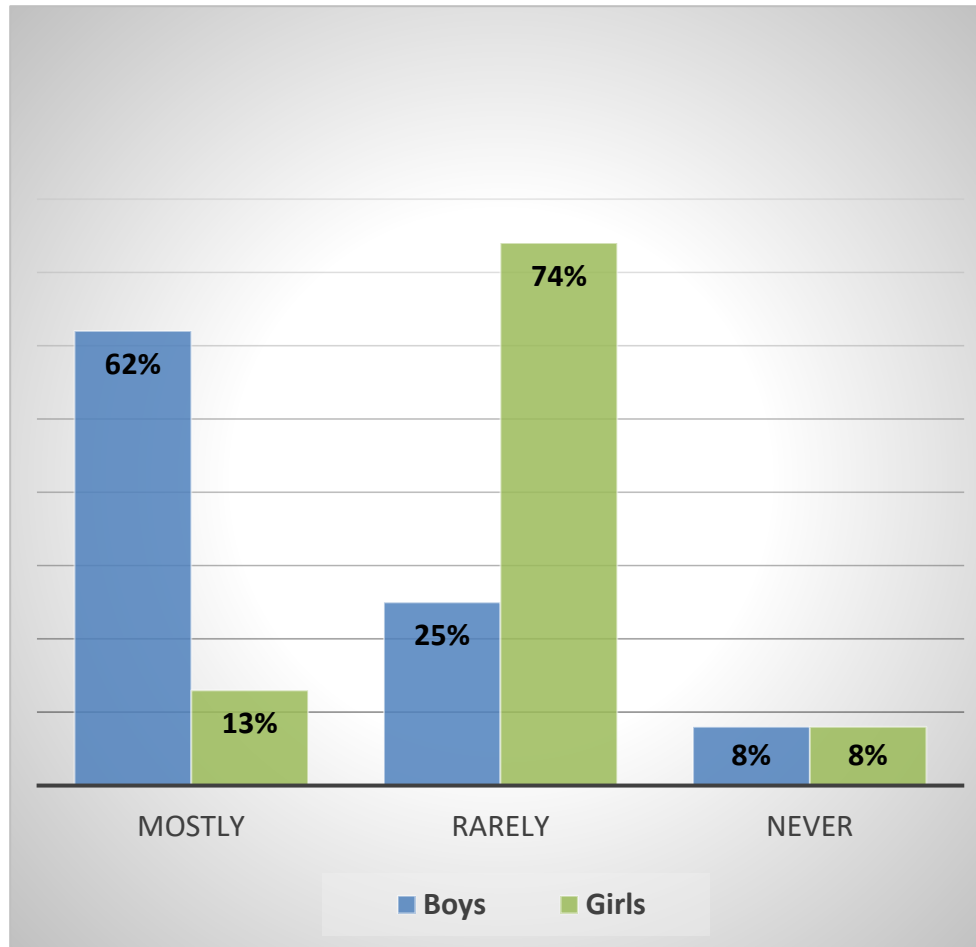
Dog Population Management

- 87% CVOs believe vaccinations and DPM **together** not vaccinations alone.
- All 39 CVOs believed rabies and DPM for education, chiefs, religious, influencers.
- 85% believe DPM for wildlife; 50% partners don't know DPM importance in wildlife.
- 62% CVOs believe rabies has affected wildlife populations.
- Challenges for wildlife rabies management– lack of funding
No dog census; inadequate wildlife surveillance, expansion of dog populations, hunting dogs not regulated

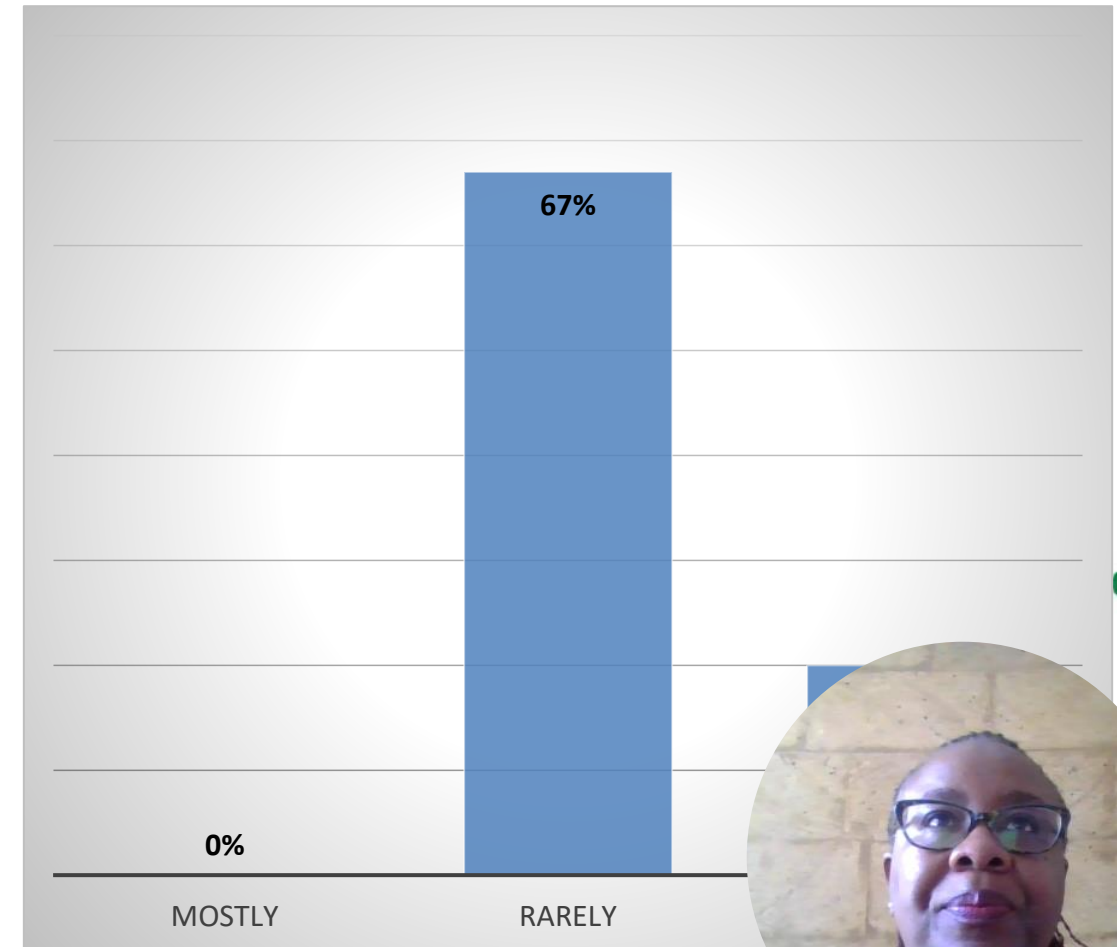


Gender and vulnerability disaggregated Data who takes dogs for vaccinations?

Boys or Girls



PLWD



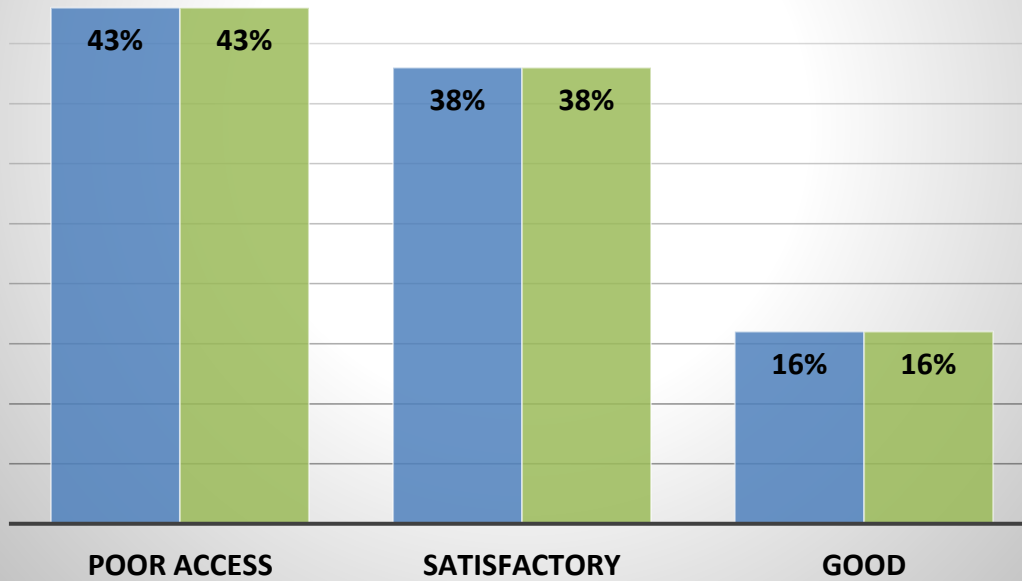
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Gender and vulnerability disaggregated Data who has access to treatment?

Access to Treatment (reported by CVOs)

Boys Girls



Access to Treatment (reported by CVOs)

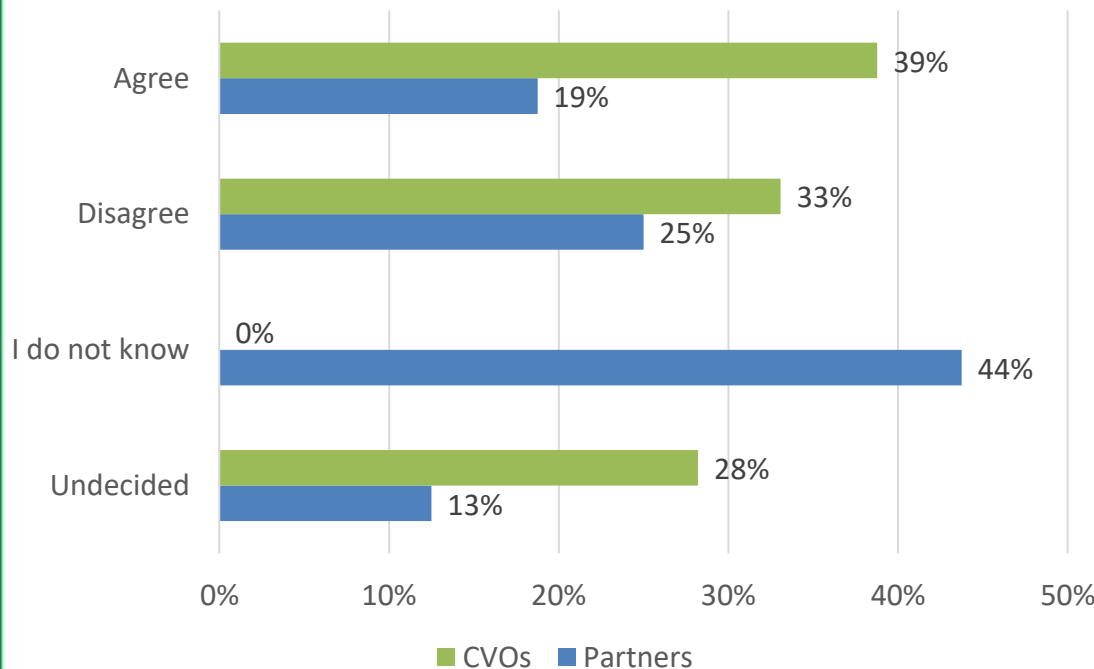
Men Women



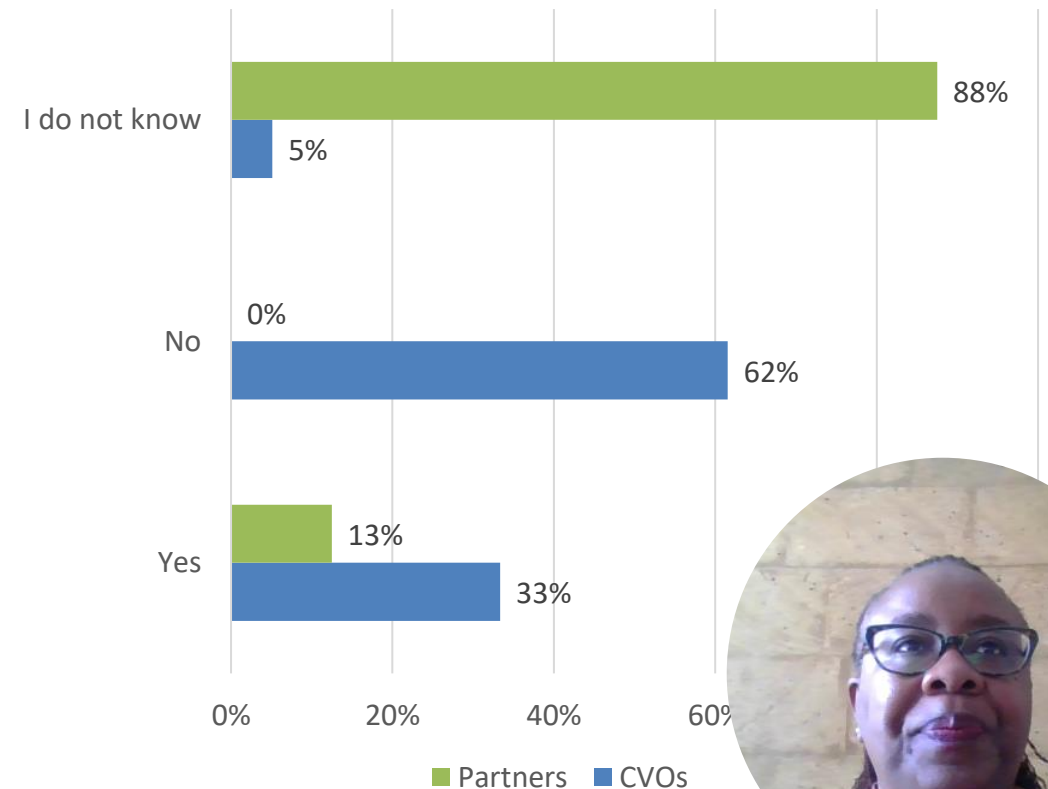
Politics and Governance

Political Support not translating to multisectoral guidelines, regulations or budget allocation

Parliamentarians attention to legal instruments that support zoonotic control and rabies eradication (39 CVOs and 16 partners)

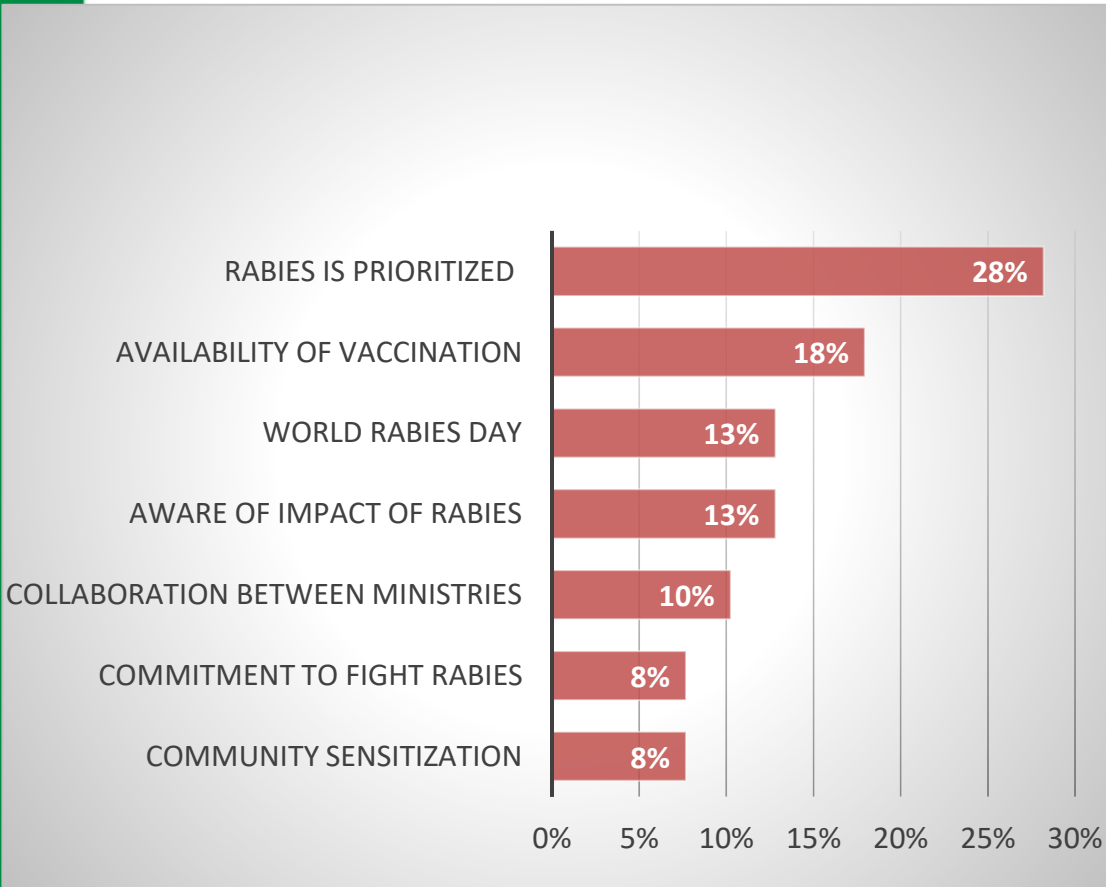


Legal instruments that support rabies control in place (39 CVOs and 16 partners)

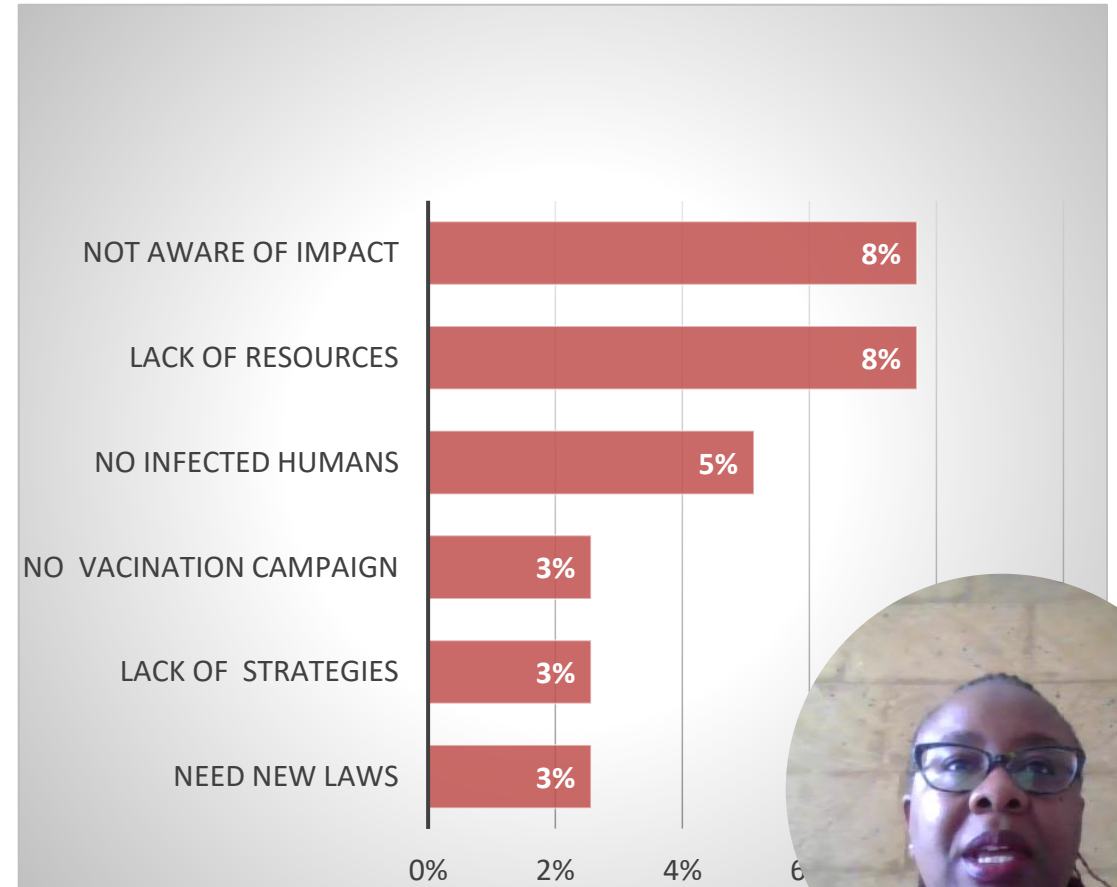


Reasons for high and low priority on rabies from politicians

- Main Reasons CVOs perceived high priority from political structures



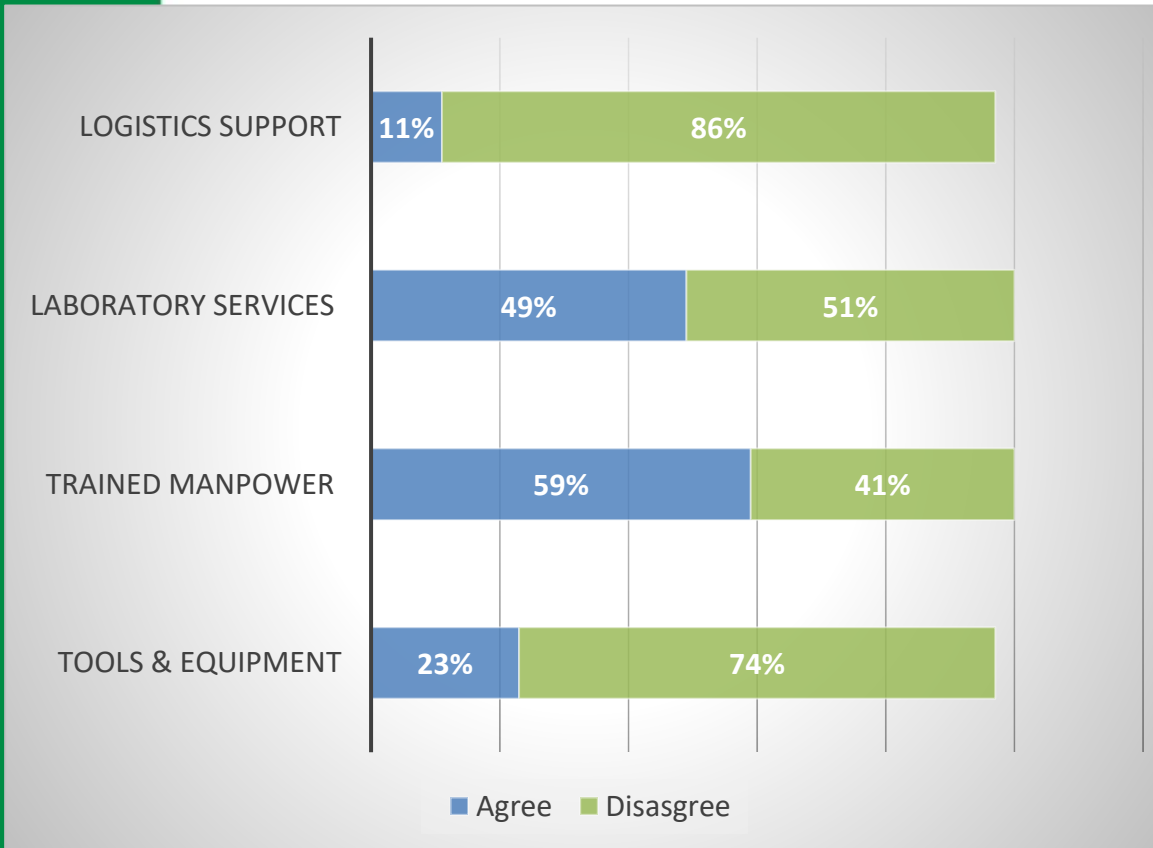
- Main Reasons CVOs perceived low priority from political structure



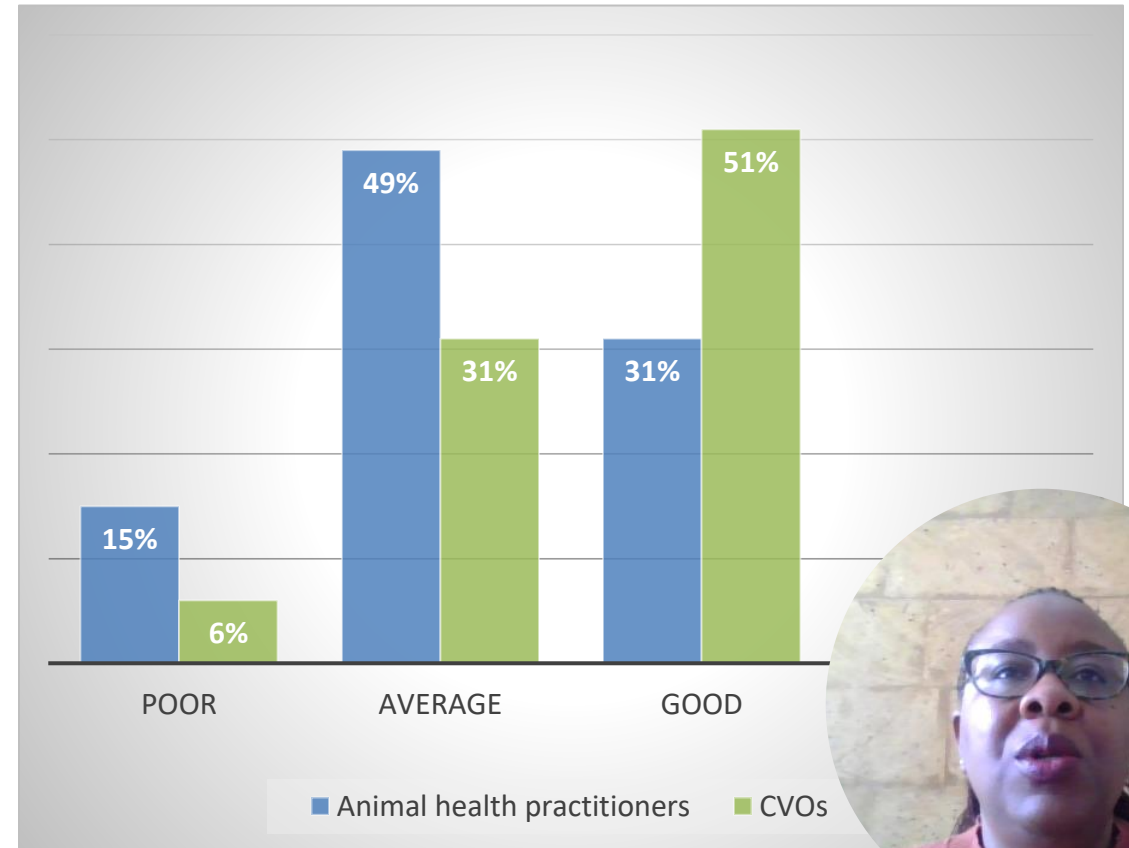
Institutional Capacity

logistics, equipment, knowledge

- Logistics, tools and equipment to deliver NRE



- Technical knowledge to run the NRE program



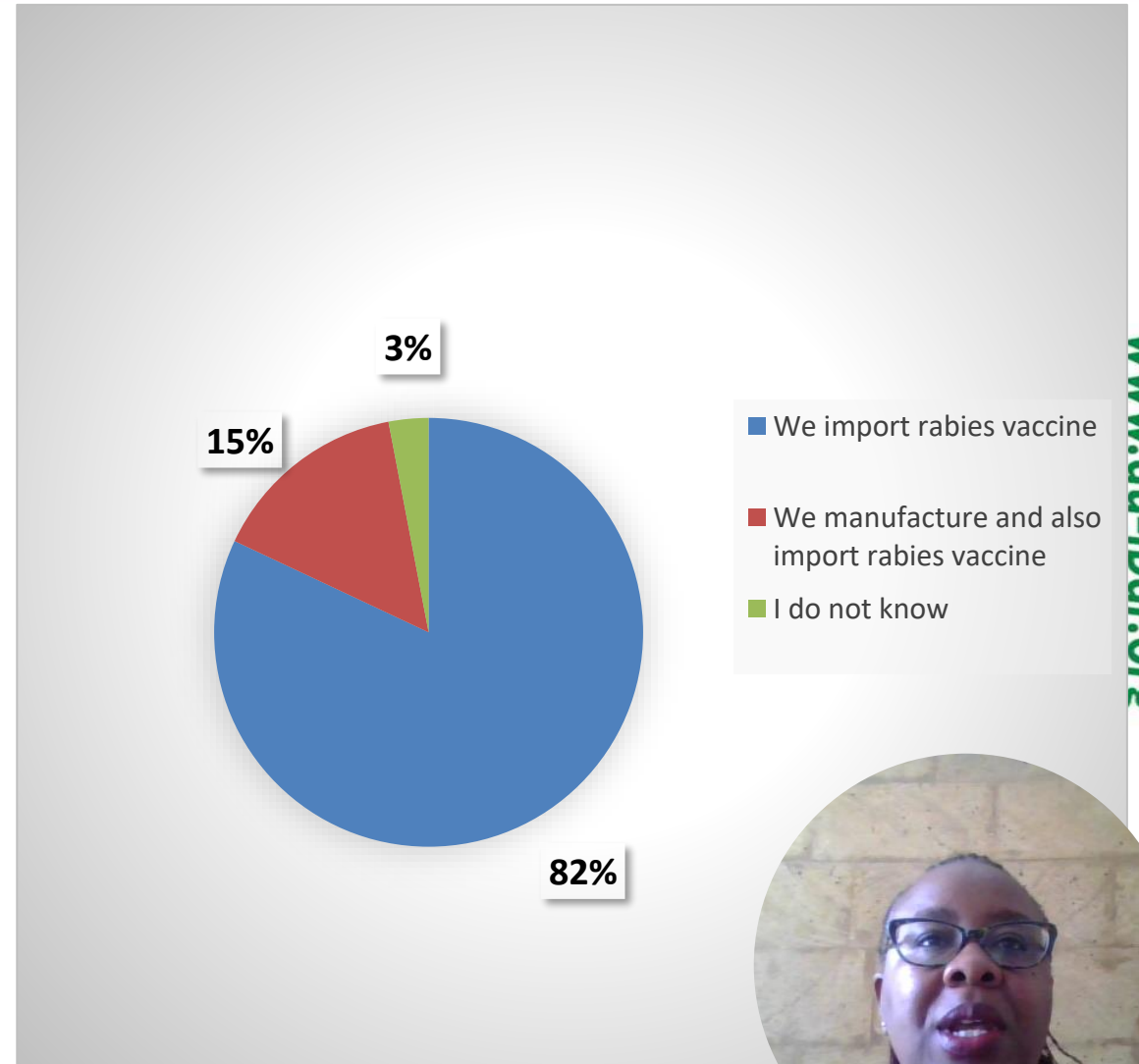
Institutional Capacity Training

Type of training undertaken	No. of Countries	% of assessed Countries (39)
Epidemiological diseases surveillance	32	82%
Dog Bite Prevention and Management	25	64%
Sensitisation and Awareness for Rabies	24	62%
Animal Rabies diagnosis & Reporting protocols	18	46%
Disease Control Drills	18	46%
Animal First Aid	18	46%
Human Rabies treatment protocols	17	44%
A veterinary disaster response team	17	44%
Human First Aid	17	44%



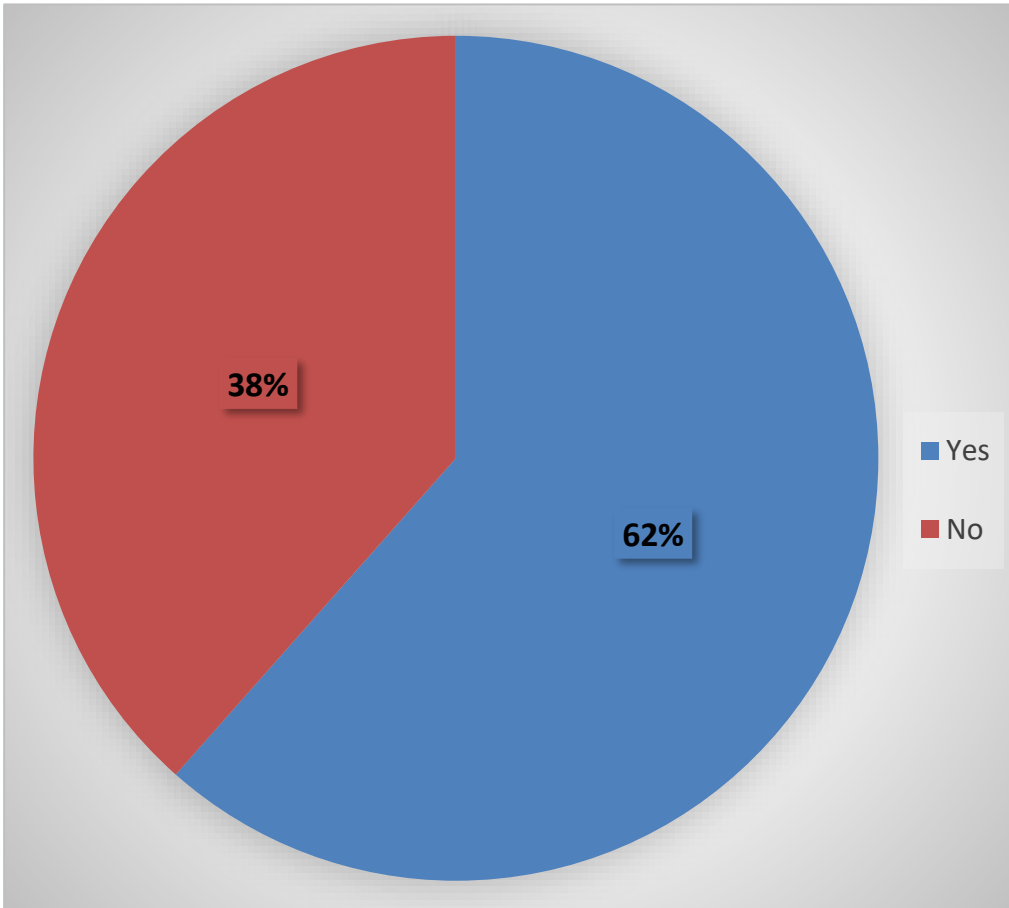
Institutional Capacity Vaccines

- 62% CVOs and 38% partners No PrEp and PEP for veterinary, human and wildlife teams in the rabies process.
- 74% have national cold chain system for animal vaccines.
- 15% purchase through OIE vaccine bank.
- Most countries have >50% vaccine deficit against planned.



Rabies Testing reagents, tools & equipment

Availability of reagents and equipment N=26



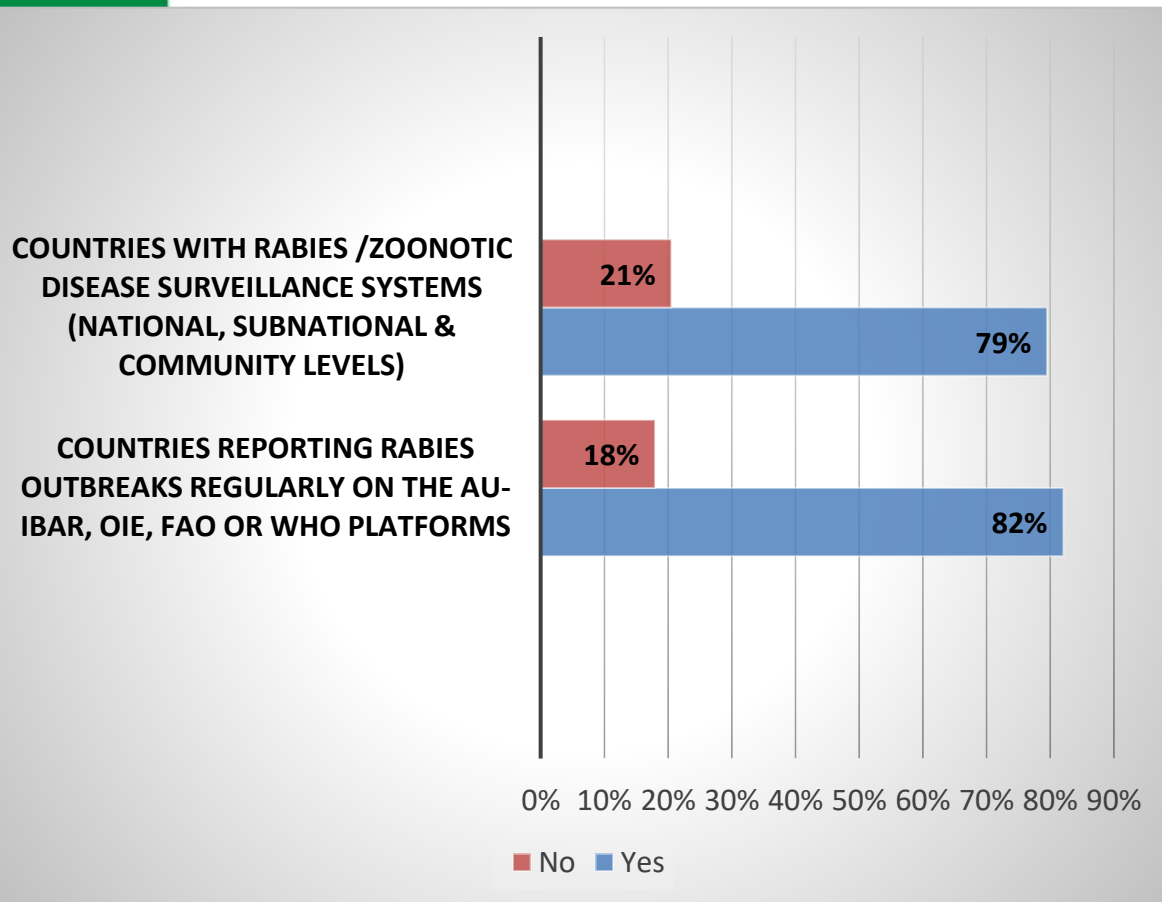
Abbreviation (Test)	Full Name	Countries using test (n=16)
DFAT	Direct Fluorescent Antibody Test	12
DRIT	Direct, Rapid Immunohistochemical Test	1
ELISA	Enzyme-linked immunosorbent assay	1
FAT	Fluorescent Antibody Technique	3
FAVN	Fluorescent Antibody Virus Neutralization Test	1
FITC	Fluorescein isothiocyanate labelled antibody	1
IVCC	Viral Isolation on Cell Culture	
MIT	Mouse Inoculation Test	
RFFIT	Rapid Fluorescent Foci Inhibition Test	
RT-PCR	Reverse transcription polymerase chain reaction	

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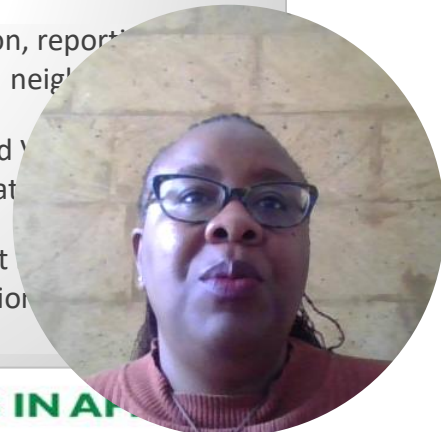
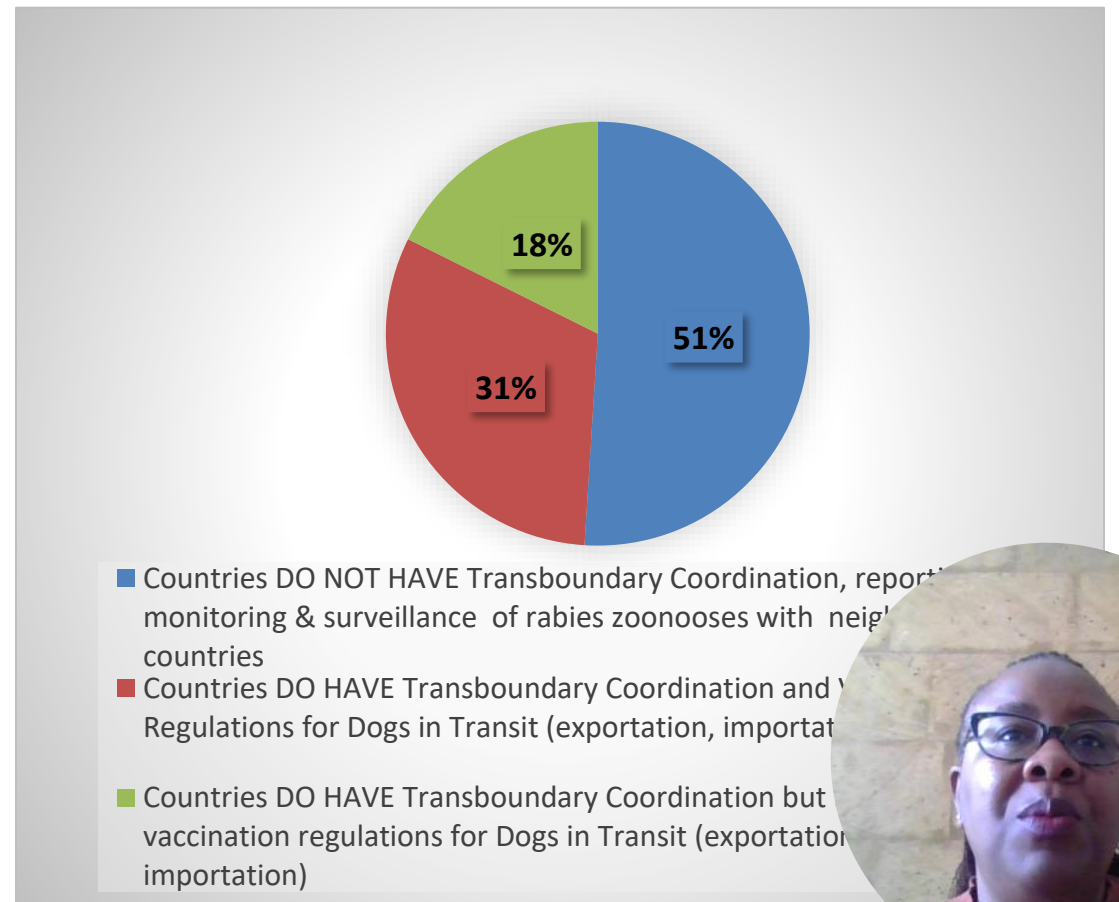


Monitoring & Surveillance

Countries with in-country rabies/zoonoses surveillance and reporting to OiE, FAO, AU-IBAR, or WHO



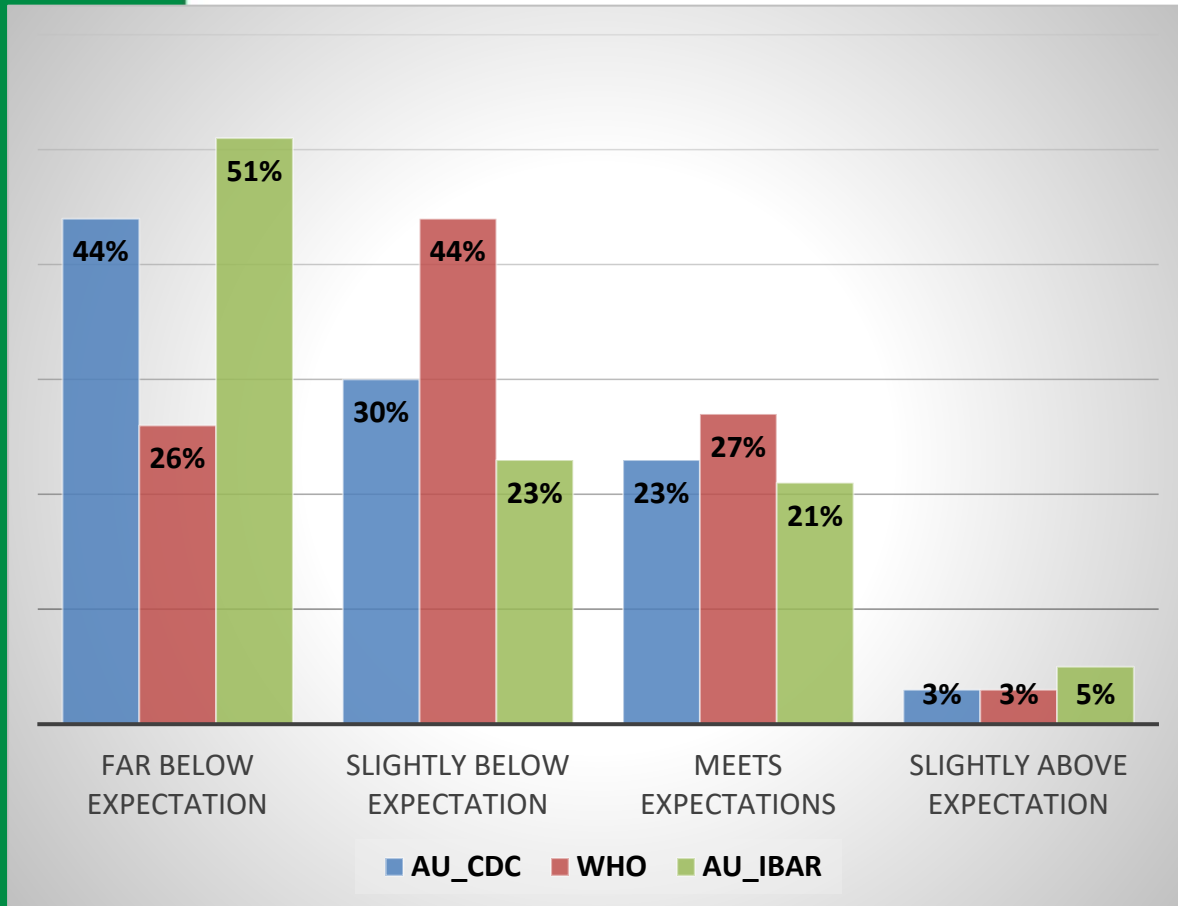
Monitoring & Surveillance of Dog rabies for transboundary and dogs-in-transit



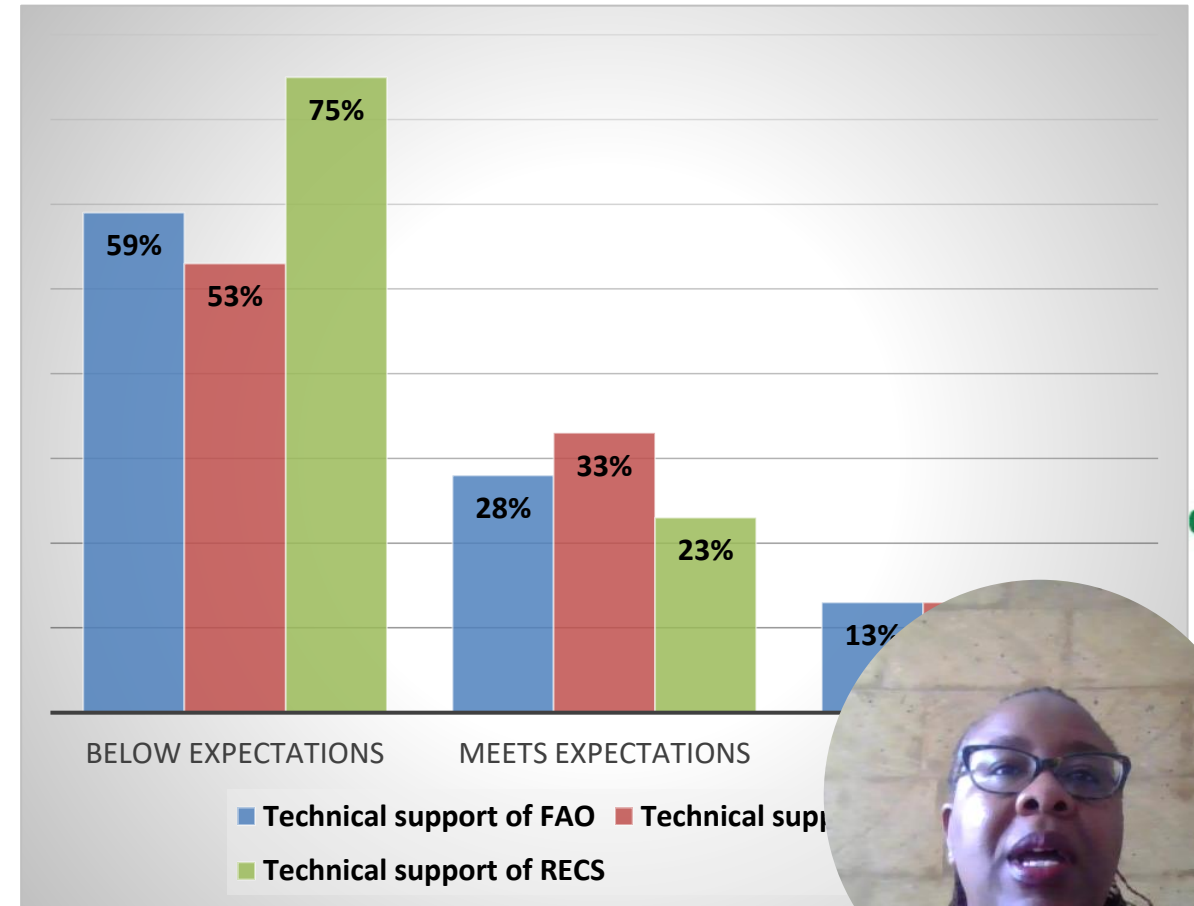


Continental Coordination

Leadership and coordination of rabies elimination at the continental level for AU-IBAR, AU-CDC & WHO (CVO rating)



Regional Coordination



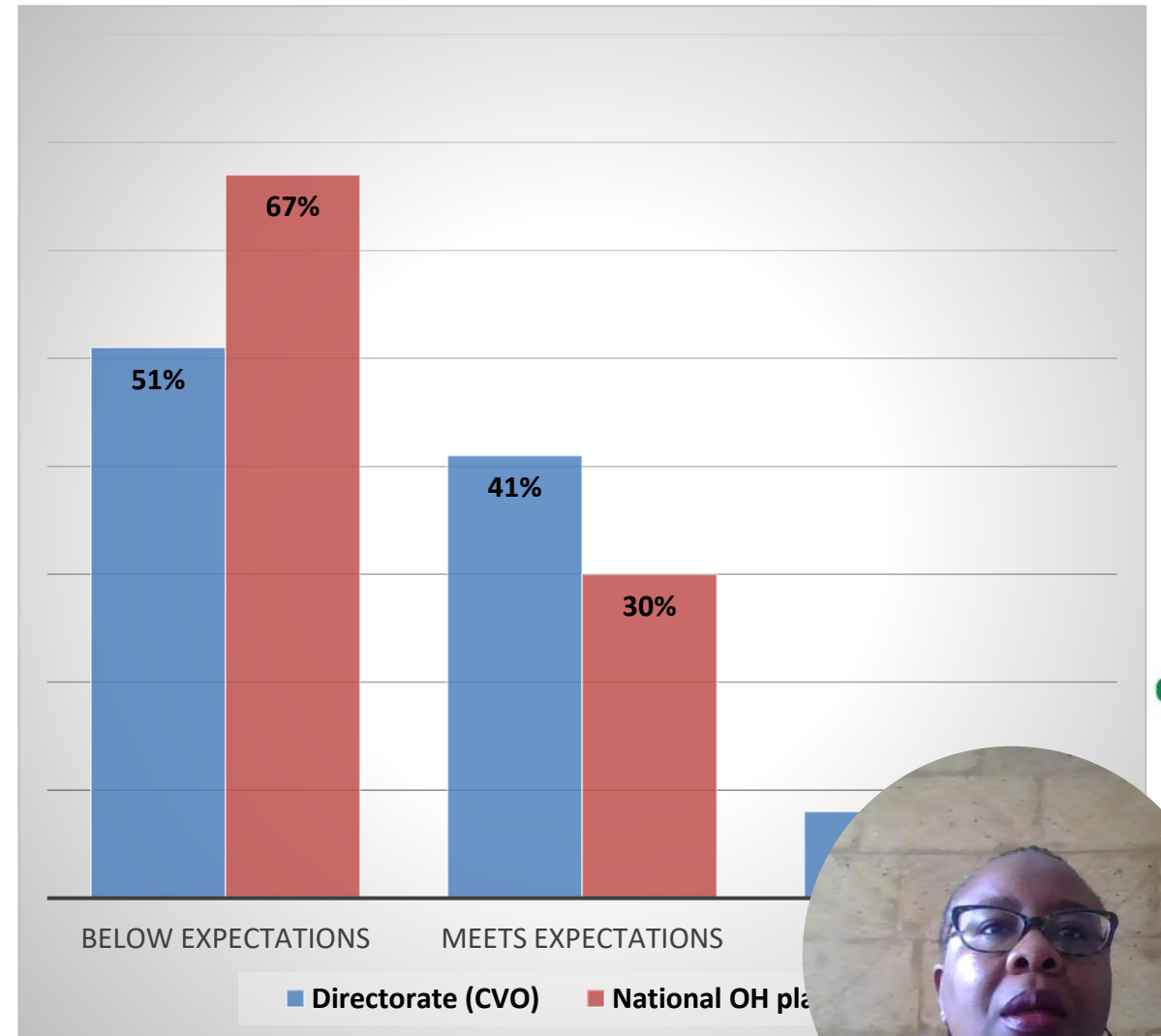
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National Coordination

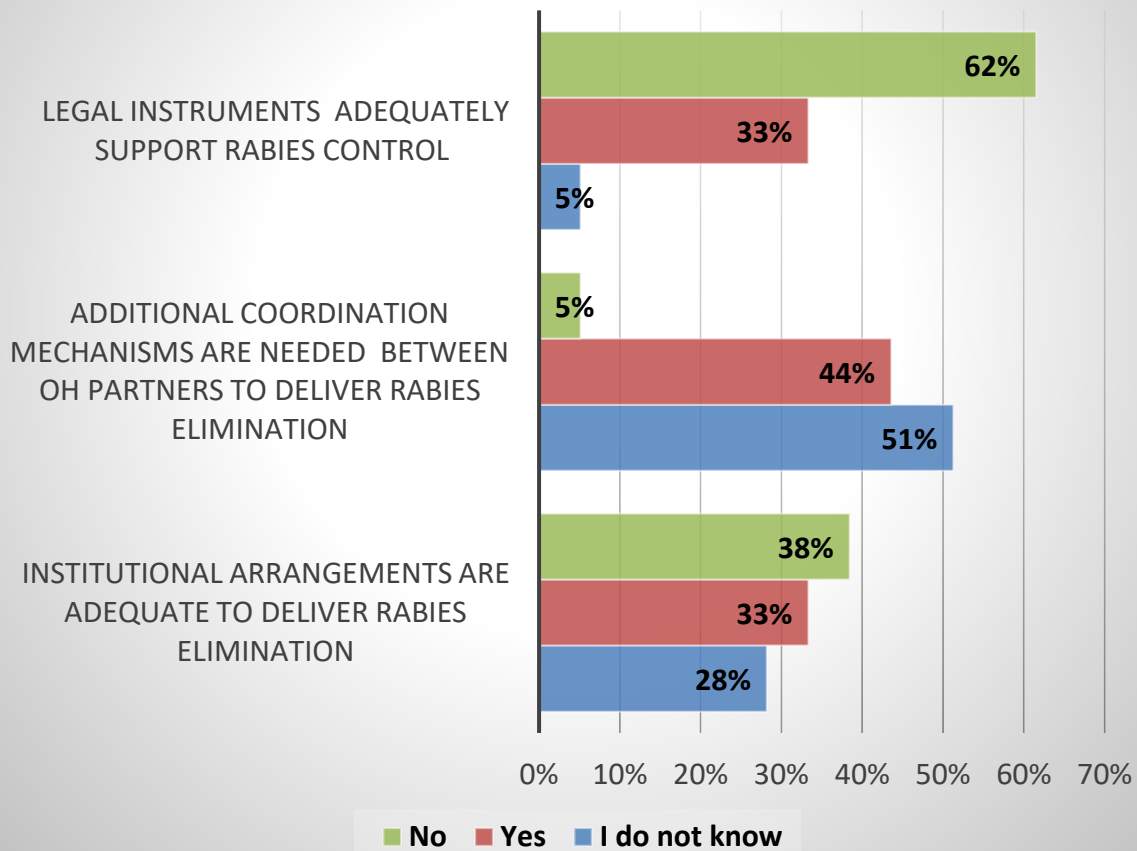
CVOs attributed the poor coordination

- lack of good leadership
- few rabies programs
- inadequate rabies vaccines
- inadequate support from RECs,
- lack of a regional rabies elimination strategy.
- inadequate resources,
- technical support not readily available
- lack of geo-referenced population data on dogs, livestock and wildlife

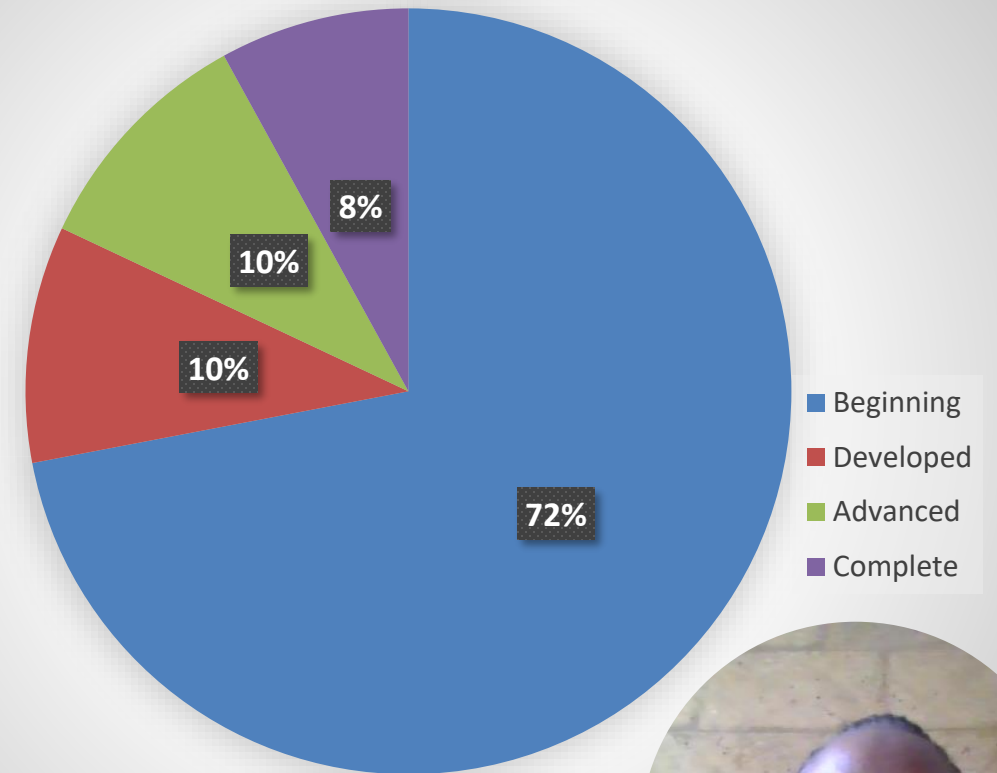


National Coordination

Coordination mechanisms, legal and institutional arrangements to support rabies in place (39 CVOs)



Stage of strategies for National Rabies Elimination & DPM

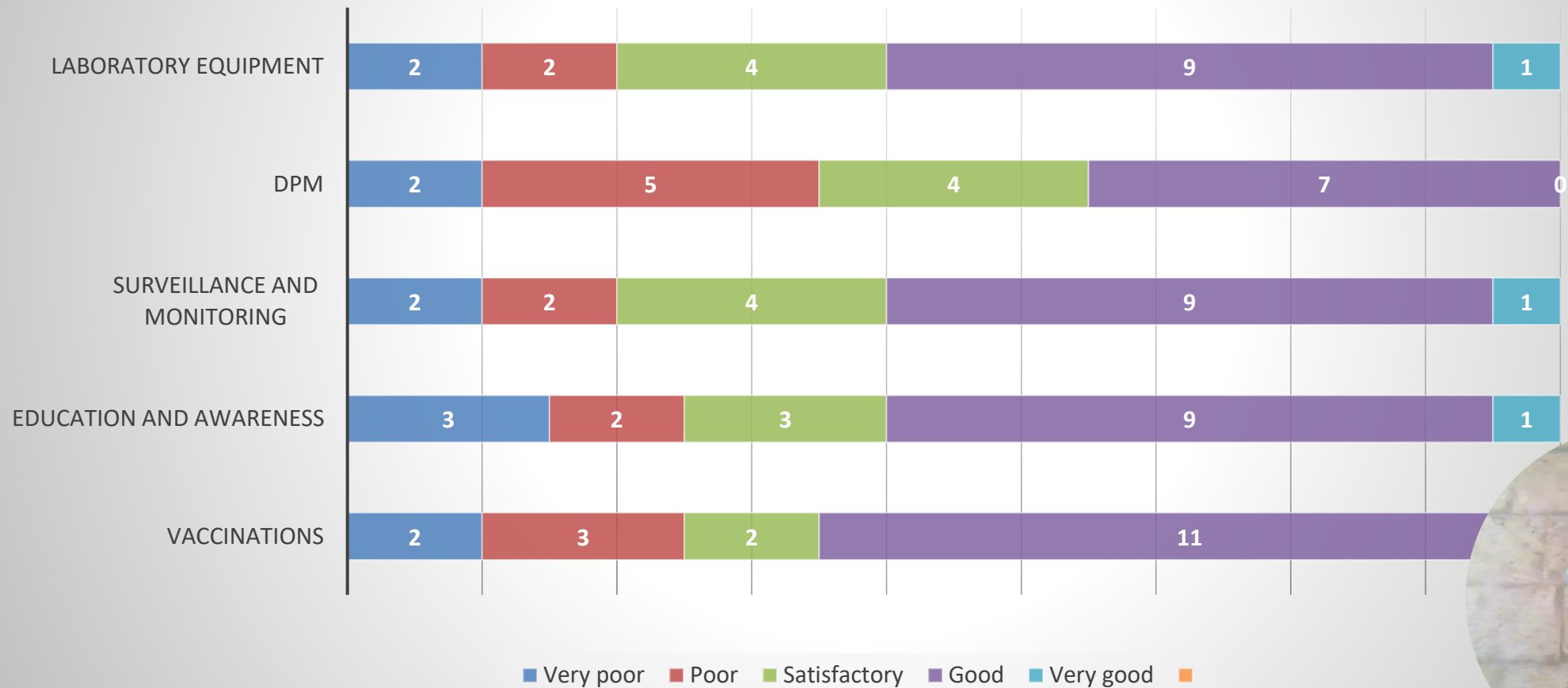


National Coordination

- **Inadequate inter-sectoral coordination** between livestock and wildlife authorities
- **Poor technical and institutional coordination** between the organisations, networks, private partners and government stakeholders
- Limited Cross-boundary linkages and collaborations.
- 38% CVOs said YES and 62% said NO to country's laws providing a robust institutional framework for NRE and DPM
- **72% NRE is at formative stages**; NRE advanced (Uganda, Kenya, Algeria, Morocco); NRE developed Eritrea, Tanzania, Rwanda, Tunisia)
- 54% CVOs country's rabies control laws and animal welfare laws (namely, dog ownership regulations, breeding, owning, selling, disposal, and registration) LACK strong institutional integration for OH rabies coordination.
- **18% countries have specific rabies laws** and regulations providing legal basis for rabies activities (Morocco, Zimbabwe, Uganda, Mali, Algeria, Kenya and Tanzania).
- Most Countries have Zoonotic Contingency plans as building block. BUT Togo, Libya, Djibouti NO contingency plans.
- **11 countries have rabies plans**

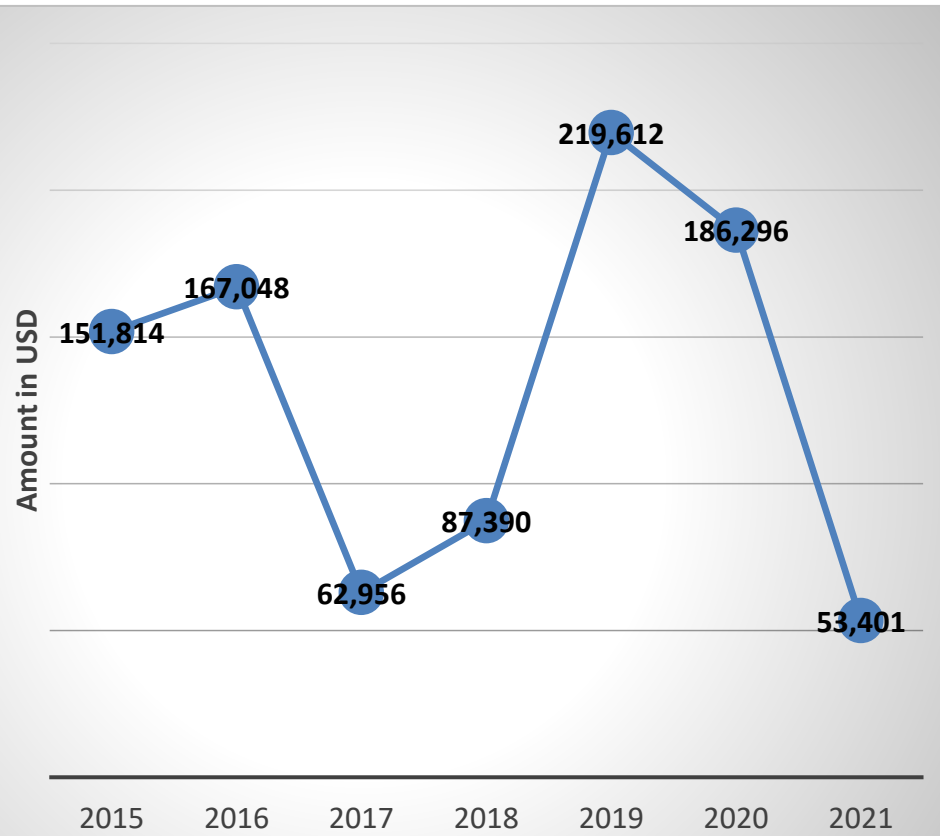


Quality of the SARE planning, 18 CVOs done SARE

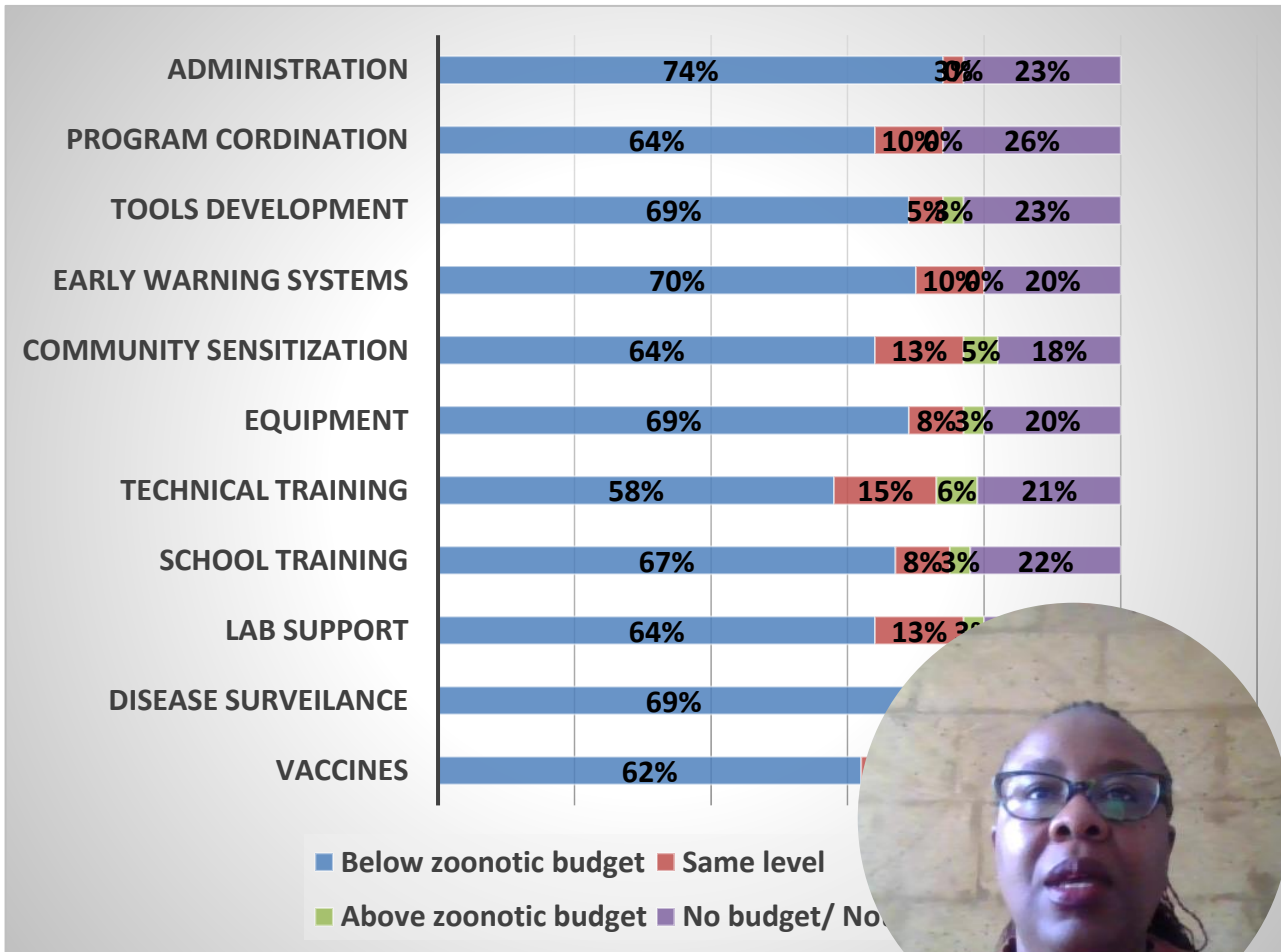


Rabies Budgets

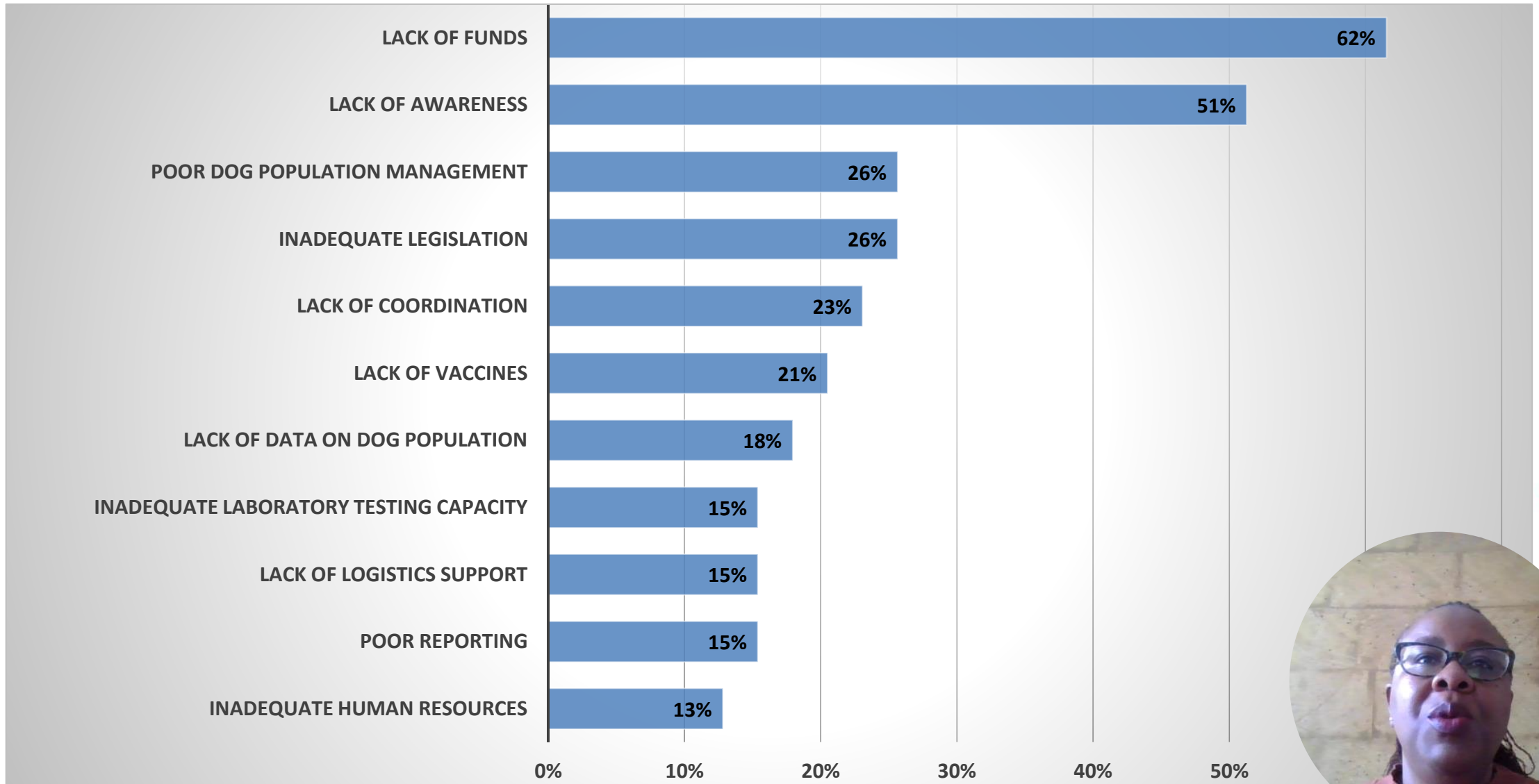
Trend in annual rabies budget between 2015 and 2021, (n=13)



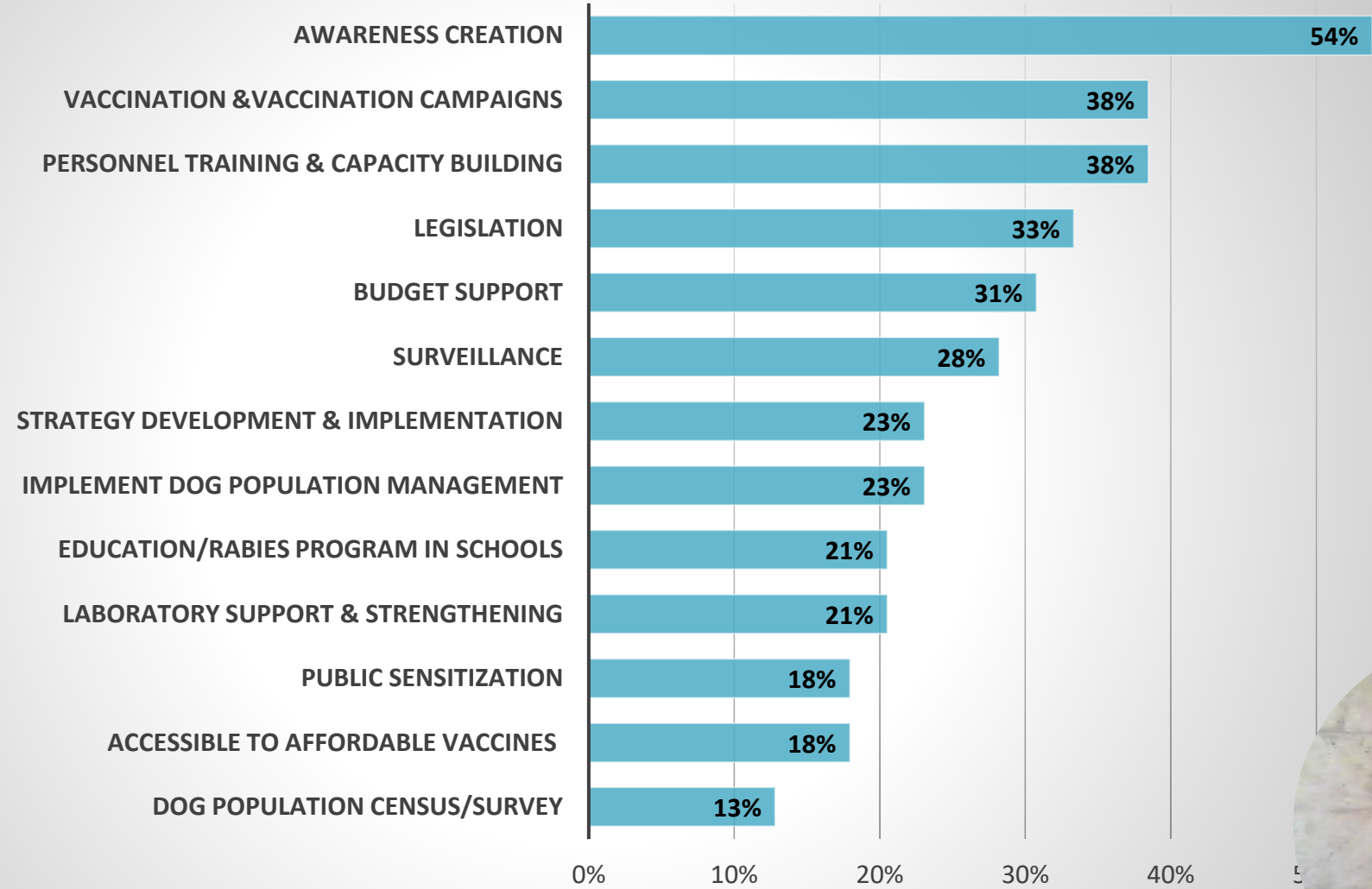
Rabies budgets compared to zoonotic diseases



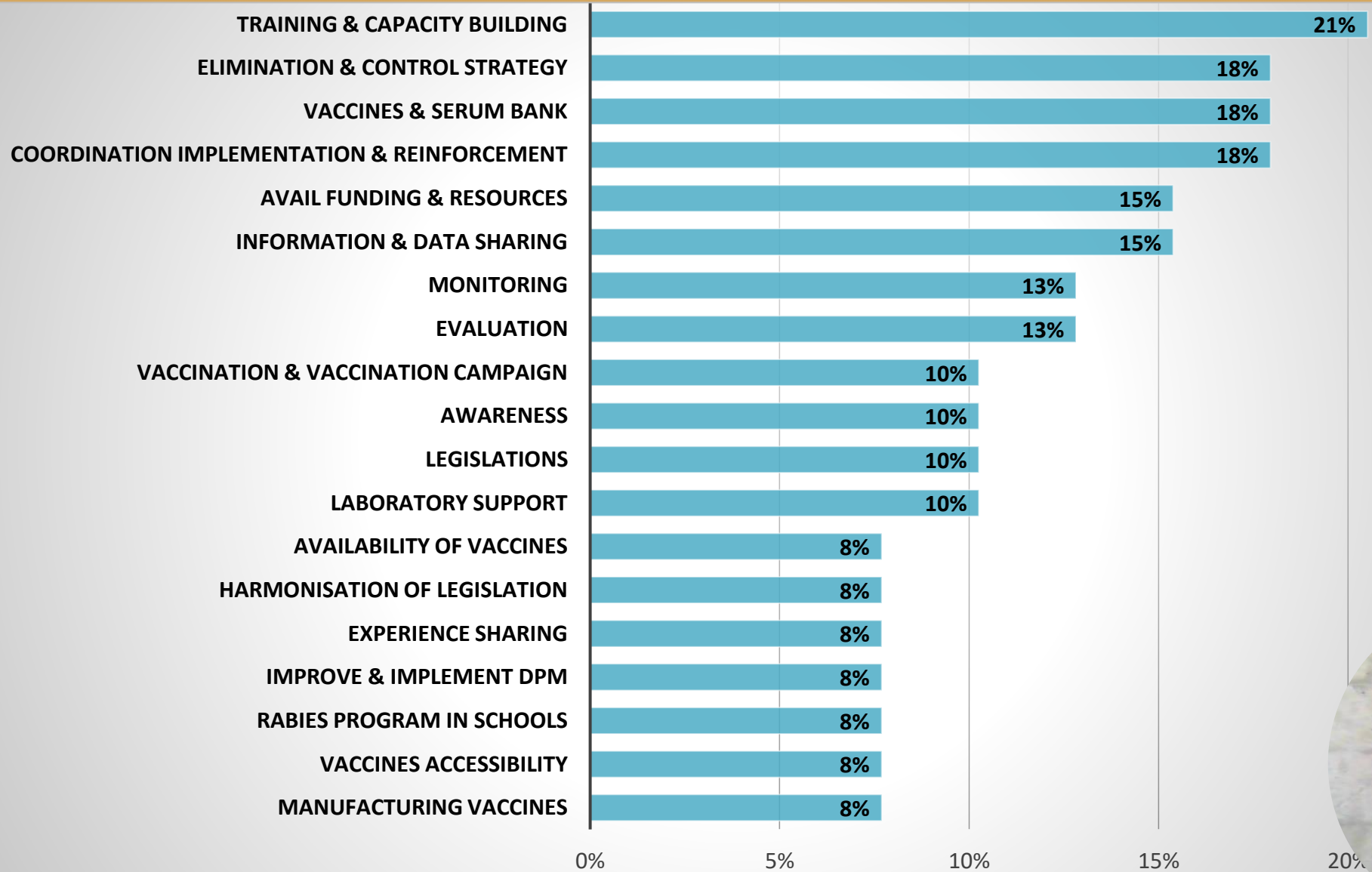
Gaps in current Rabies Elimination Activities



CVOs ranked recommendation (National Level)



CVOs ranked recommendations (Continental Level)



Study Recommendations



Institutional Policy

1. Develop a continental rabies elimination strategy.
2. Support national rabies control and elimination strategies
3. Regional and continental bodies provides technical expertise, enhance coordination, improve leadership for NRE strategies.
4. Rabies protocols included in transboundary disease management at the national, regional and continental levels NOT lumped with other zoonotic diseases.
5. National level, the relevant public bodies should develop regulations that assign specific roles and responsibilities especially inter-ministerial and inter-departmental coordination in the reporting, information sharing, monitoring and surveillance rabies elimination strategies.
6. Improve coordination of national One Health platforms by clarifying the responsibilities of non-state actors.



Awareness Creation

1. Create awareness among the relevant parliamentary committees to provide budgetary support for the NRE.
2. Lobby governments and development partners to increase funding for sufficient supply of rabies vaccine for both dogs and front-line workers.
3. Create community awareness on dog population management - improving dog welfare, first aid to victims of dog bites, dog registration, fertility control and vaccination compliance.



Capacity Building

1. Strengthen the lobbying capacity of communities to demand that governments increase funding for rabies elimination.
2. Strengthen the capacity of border public health and security personnel to effectively undertake rabies cross-border monitoring and enforcement for dogs-in-transit.
3. Training of veterinary technicians in mass dog vaccinations, dog population management surveillance and reporting within the One Health system.
4. Training of human health technicians in dog bites management, monitoring surveillance and reporting within the One Health system.
5. Map out the national laboratories, select some laboratories as the national diagnostic and testing center's, equip them with cost effective diagnostic tools and train laboratory technicians in rabies diagnostics



6. Studies on dog ecology and epidemiology to guide evidence-based rabies elimination programming, monitoring and surveillance.
7. Undertake geo-referenced and species specific census for livestock, dogs and wildlife for CRE and NRE.
8. Incorporate gender-based programming to achieve over 70% coverage and that no dogs are left behind. Example: during mass vaccinations, dogs of vulnerable people may be missed out because they are unable to access the service. Furthermore, the interaction between gender and rabies is not taken into account when planning rabies elimination programs.

Mobilize Resources

1. Governments should increase animal health vote to livestock budget - zoonotic disease ring fence rabies elimination budget.
2. Development partners to mobilize resources to support the Continental, Regional National Rabies Elimination Strategy.



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