

# Rabies situation and progress updates from the South Asian countries since June 2019

SAARC Rabies Webinar series:

“Updates and progress in the SAARC region towards elimination  
of dog-mediated human rabies by 2030” – 18 to 20 May 2020

# Outline of the presentation

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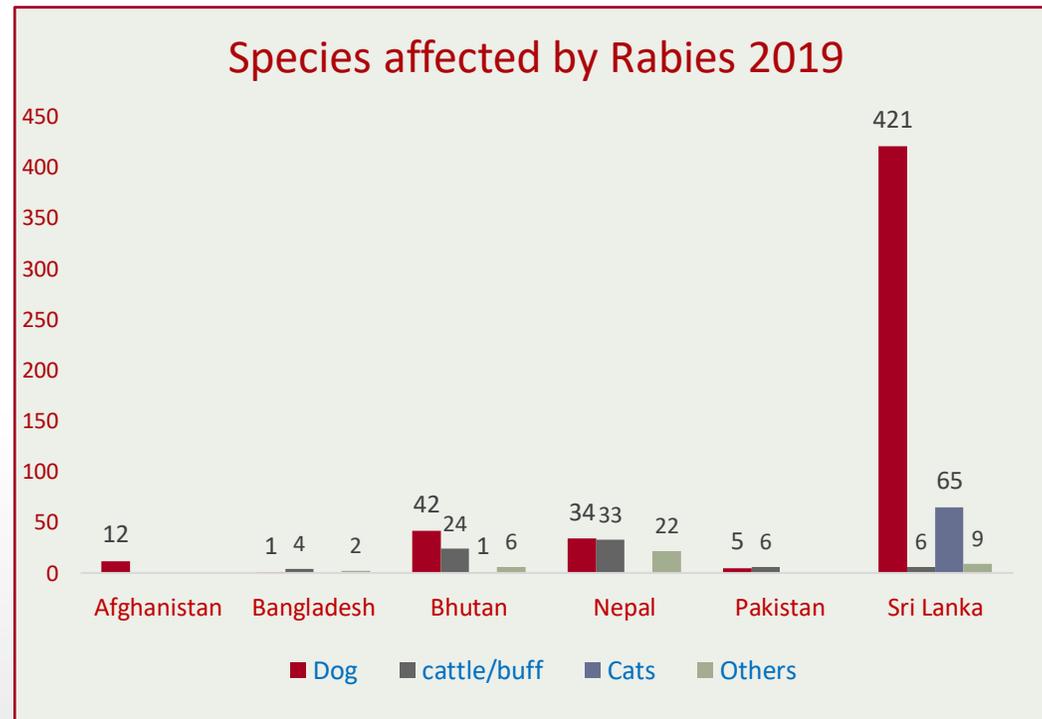
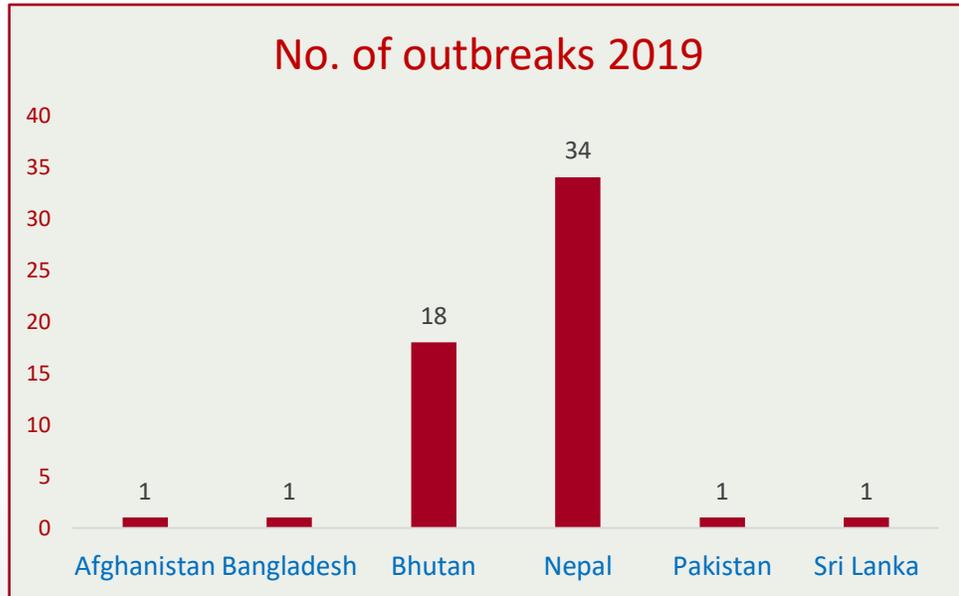
- Background and introduction
- Rabies situation in human and animal health sectors
- Legislation, National Strategic Plans and Funding
- Diagnostic capacities, MDV and PEP in human
- One Health or Multi-sectoral Coordination Mechanisms (MCM)  
in responding to rabies or other zoonoses
- Key Challenges and possible solutions

# Introduction and background

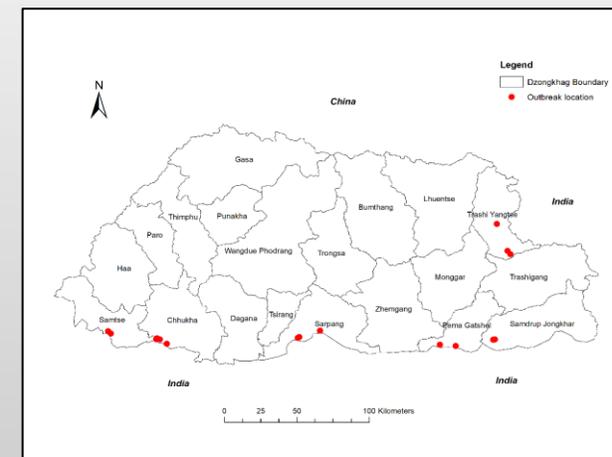
- The presentation covers collation and analysis of the country reports shared by six of the eight SAARC MS from both the sectors.
- The response rate is good 6/8 (Maldives is rabies free anyway)
  - Afghanistan (only animal health), Bangladesh, Bhutan, Nepal, Pakistan & Sri Lanka
  - Limited data/information available from human health
- Data collected from countries through a questionnaire
  - Focal points nominated by OIE delegates and contacted Public health relevant officials through WHO SEARO support and earlier contact details available
- Collation, analyses and presentation done by OIE on behalf of tripartite and the MSs to save time and also to have a vivid overall picture across the countries
- The data/information covers the period 2019-2020



# Rabies situation in animals in 2019



- **Nepal**- data for only first half of 2019
- In all countries except Pakistan the outbreaks/cases in animals are lab confirmed. In **Pakistan** it is clinically diagnosed.
- **Bangladesh** (fox) and **Sri Lanka** (jackal, mongoose, squirrel) reported rabies in the wild animals



# Rabies situation in human

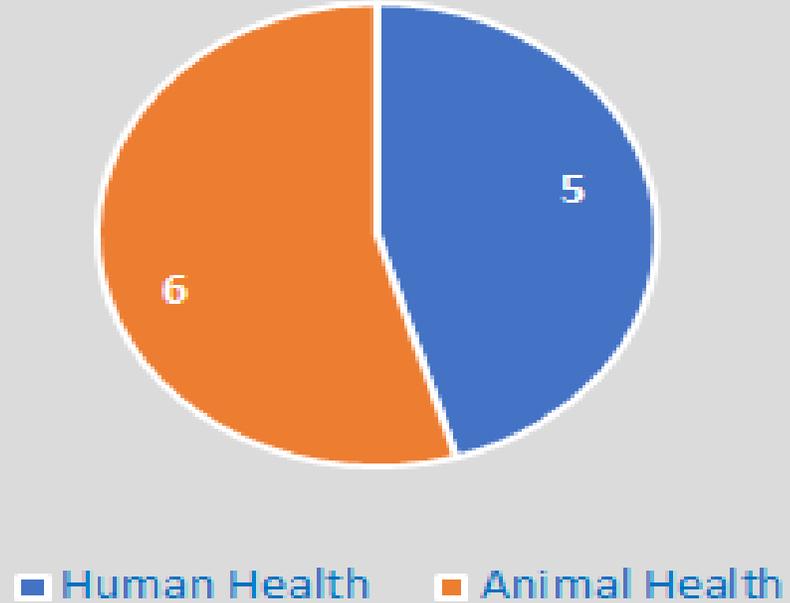
Country	Rabies cases/deaths
Afghanistan	?
Bangladesh	?
Bhutan	0
Nepal	32
Pakistan	3000??
Sri Lanka	28

- Many countries do not have records of human rabies
- Bhutan has no human rabies since 2013 except one case in 2016
- Pakistan – no record is available but some studies indicate ~ 3000 cases per year
- Of the countries reporting human cases only Sri Lanka is performing lab diagnosis

# Legislation and regulations on rabies control/eradication 1/2



## Countries where rabies is notifiable (human and animal health sectors)



## Countries where rabies is declared notifiable and the year of declaration

	HH sector	AH sector
Afghanistan	No	2010
Bangladesh	?	2019
Bhutan	?	2001
Nepal	?	2019
Pakistan	2018	2019
Sri Lanka	1971	1972

# Legislation and regulations on rabies control/eradication 2/2



*Legislation(s) covering rabies prevention & control/ elimination in Animal health sector, including year of enactment and when was it last revised*

Country	Title of the legislations	Year introduced	Year revised
Afghanistan	Strategy for Rabies control (NOT A LEGISLATION?)	New	
Bangladesh	1. Animal Welfare act-2019, 2. Animal disease act-2005	2019 2005	
Bhutan	1. Livestock Act of Bhutan 2001	2001	2005?
	2. Livestock Rules and Regulations of Bhutan 2017		2017
Nepal	1. Animal Health and Livestock Services Act 1999	1999	
	2. Animal Health and Livestock Services Rules 2000	2000	2006 & 2019
Pakistan	Punjab Animal Health Act 2019 (Only in Punjab Province)	2019	
Sri Lanka	1. Dog registration ordinance - 1902, currently in the process of revising,	1902	In the process of revising
	2. Animal Disease Act - 1992	1992	

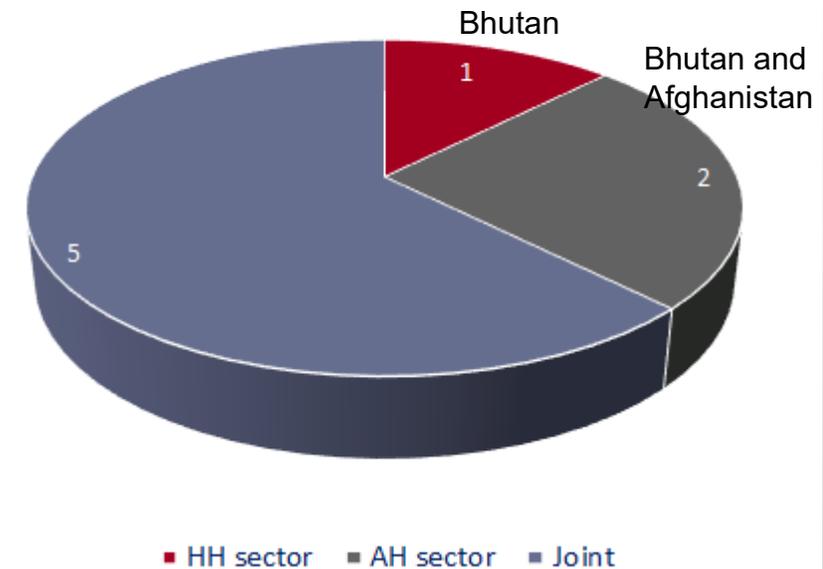
*Legislation(s) covering rabies prevention & control/ elimination in Human health sector, including year of enactment and when was it last revised*

Country	Title of the legislations	Year introduced	Year revised
Afghanistan	NA		
Bangladesh	NA		
Bhutan	National guideline for Management of Rabies 2020 (NOT legislation)	2020	
	Strategic plan for Elimination of Rabies by 2030 (NOT legislation)	2020	
Nepal	Infectious Disease Act 1964	1964	1972
Pakistan	NA		
Sri Lanka	Rabies ordinance - 1894, revised in 1956	1894	1956 and in the process of revising

# National action/strategic plans for rabies control/elimination



**National Strategic Plan for Rabies Elimination**

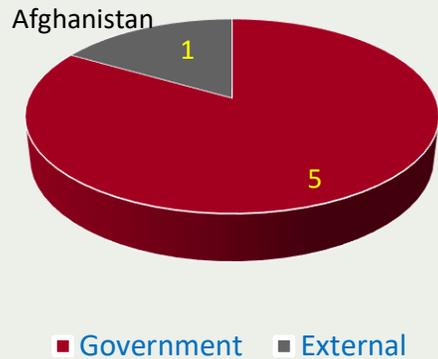


Country	Title of the NSP	Endorsement/Approving Authority
<b>Afghanistan</b>	Strategy for RABIES CONTROL AND ELIMINATION - 5 year period	
<b>Bangladesh</b>	Mass Dog vaccination Program, 2017-2022	Ministry of Health and Family Welfare
<b>Bhutan</b>	National Rabies Prevention and Control Plan 2017 (MoA)	MoAF - Renewable Natural Resources – Gross National Happiness Committee)
	National guideline for Management of Rabies 2020 (MoH)	Ministry of Health (High Level Committee)
	AND Strategic Plan for elimination of rabies by 2030 (JOINT) -2019-2025	Inter-Ministerial Committee for One Health (IMCOH) lead by Ministers from MoH and MoAF
<b>Nepal</b>	PWARE outputs(Prepared during the SARE workshop in June 2019) - 13 years plan. <b>STRATEGY under preparation</b>	Not endorsed
<b>Pakistan</b>	The National Strategic Framework on One Health was prepared in 2018 which covers rabies - 2018-2023 plan	Ministry of National Health Services, Regulation and Coordination
<b>Sri Lanka</b>	National strategic plan for elimination of dog mediated human rabies - 2020- 2025	Pending endorsement by stake holders (technical working committee)

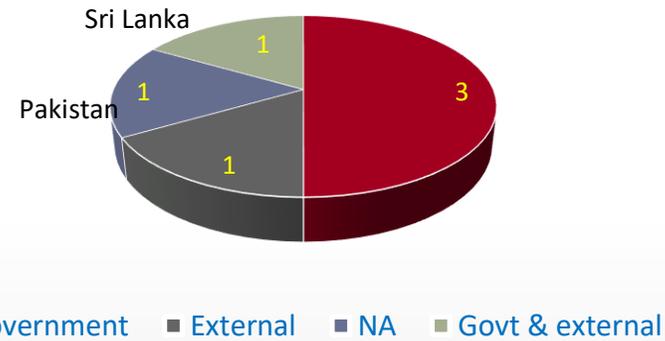
# Funding for rabies control/elimination programme(s)



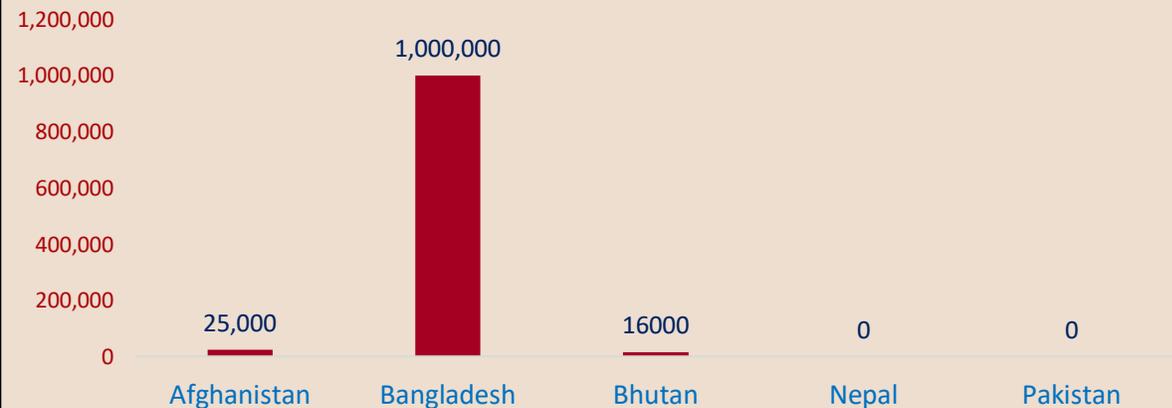
## Source of funding for rabies control/elimination (Animal Sector)



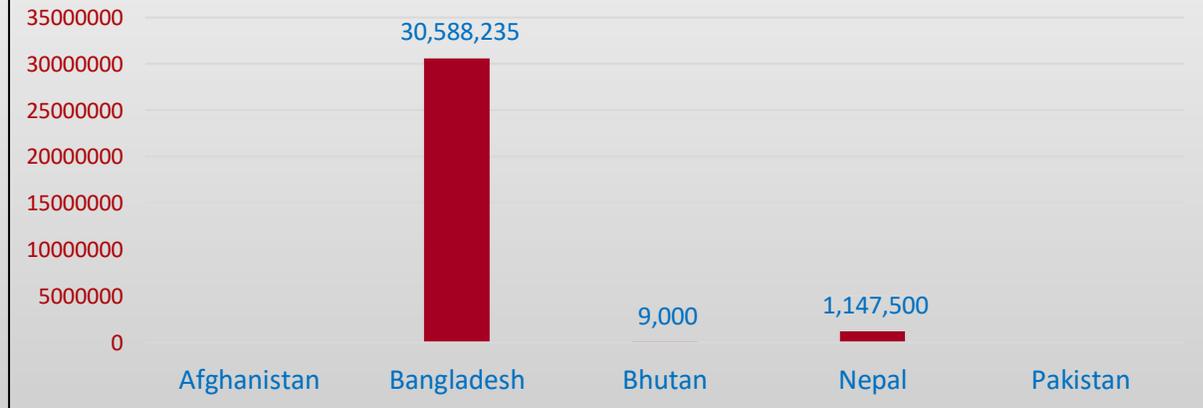
## Source of funding for animal rabies control/elimination (Human Health)



## Fund amount for animal rabies control/elimination in 2019



## Fund amount for human rabies control/elimination in 2019 (in USD)



# Diagnostic facilities and capabilities for rabies diagnosis

- All 6 countries reported they have diagnostic capacities for **animal rabies** diagnosis

Rabies diagnostic facility at both national and sub-national levels	Rabies diagnostic facility at national level only	Rabies diagnostic facility at sub-national level only
Afghanistan, Bhutan, Sri Lanka & Nepal	Bangladesh	Pakistan



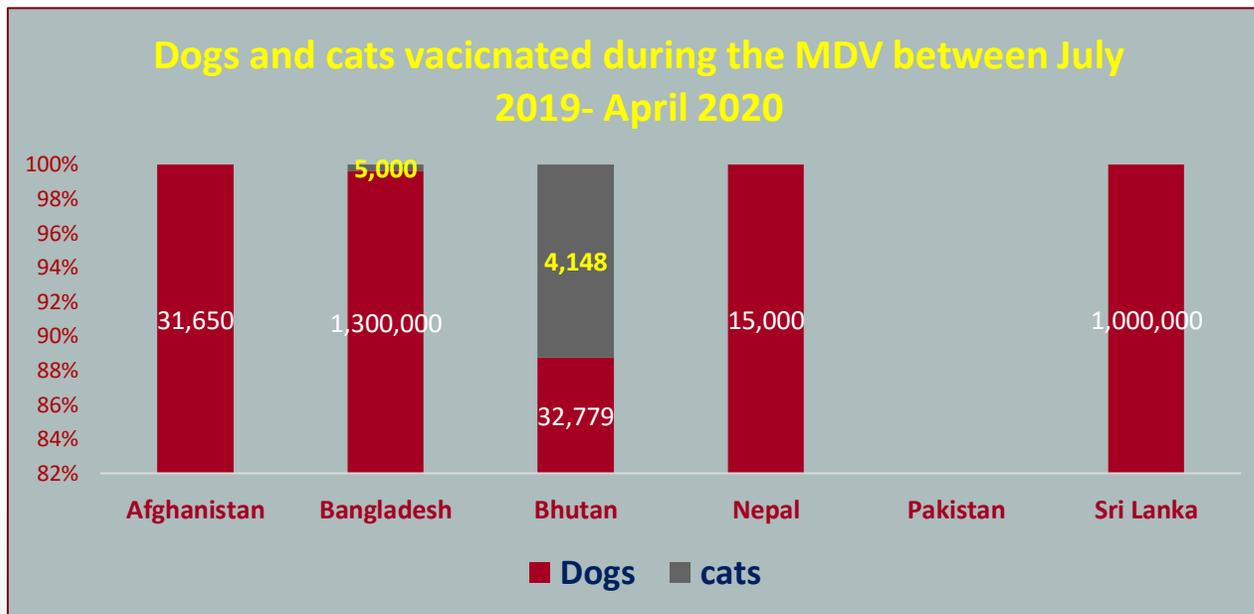
- Bangladesh, Pakistan, Sri Lanka reported they have lab facilities for human rabies diagnosis
- In **Bhutan** - when required human rabies diagnostics is done at animal health lab

Country	Diagnostic tests employed in <b>animal</b> sector	Diagnostic tests employed in <b>human</b> sector
Afghanistan	DFA and Reverse Transcriptase RT-PCR, Rapid Ag detection test	No testing
Bangladesh	DFA	FAT
Bhutan	FAT & Rapid Ag detection	No testing
Nepal & Sri Lanka	DFA and MIT	No testing
Pakistan	MIT	Conventional RT-PCR

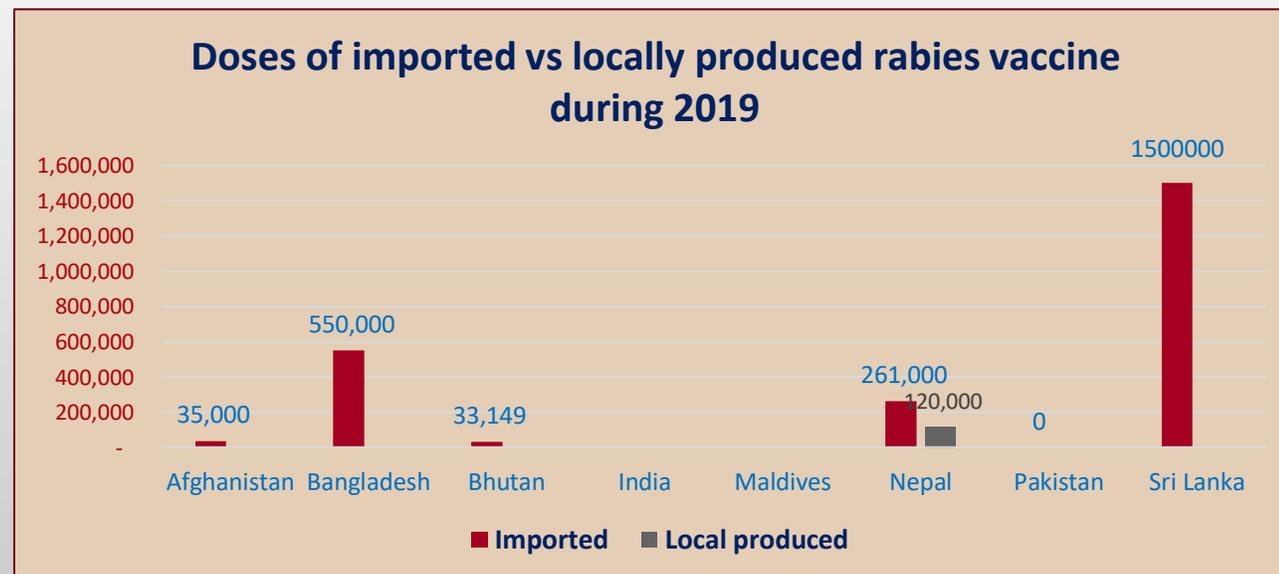
# Mass Dog Vaccination (MDV) Programme



- MDV was carried out in 5 of the 6 reporting countries
- **Afghanistan**- Kabul province, partially in Kapisa, Badkshsan
- **Bangladesh, Nepal and Sri Lanka** – Nationally in identified provinces/Divisions
- **Bhutan** – primarily in rabies endemic districts and high risk areas in Southern districts



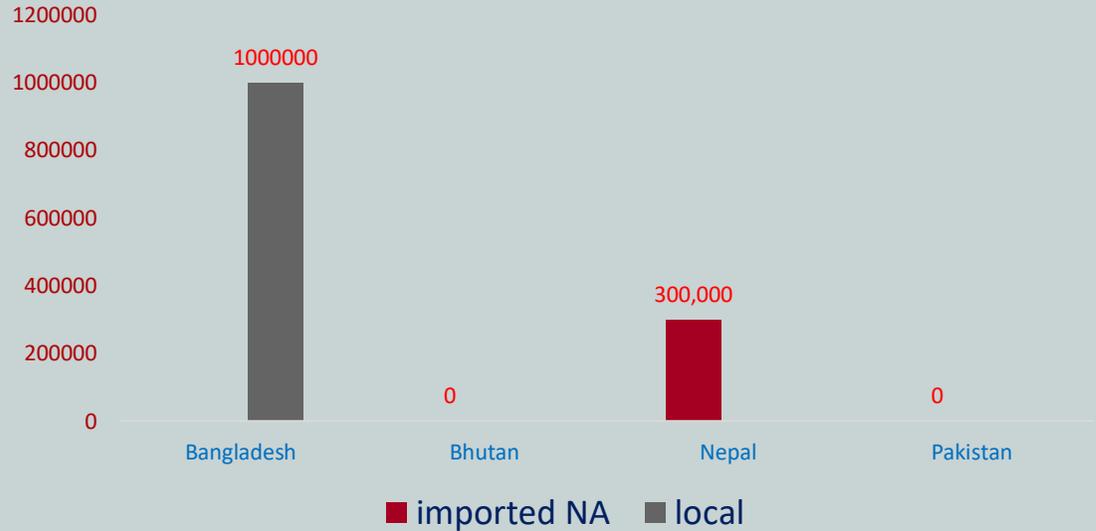
**All six countries import animal rabies vaccine but Nepal also produces locally**



# Post and pre-exposure anti-rabies prophylaxis in human

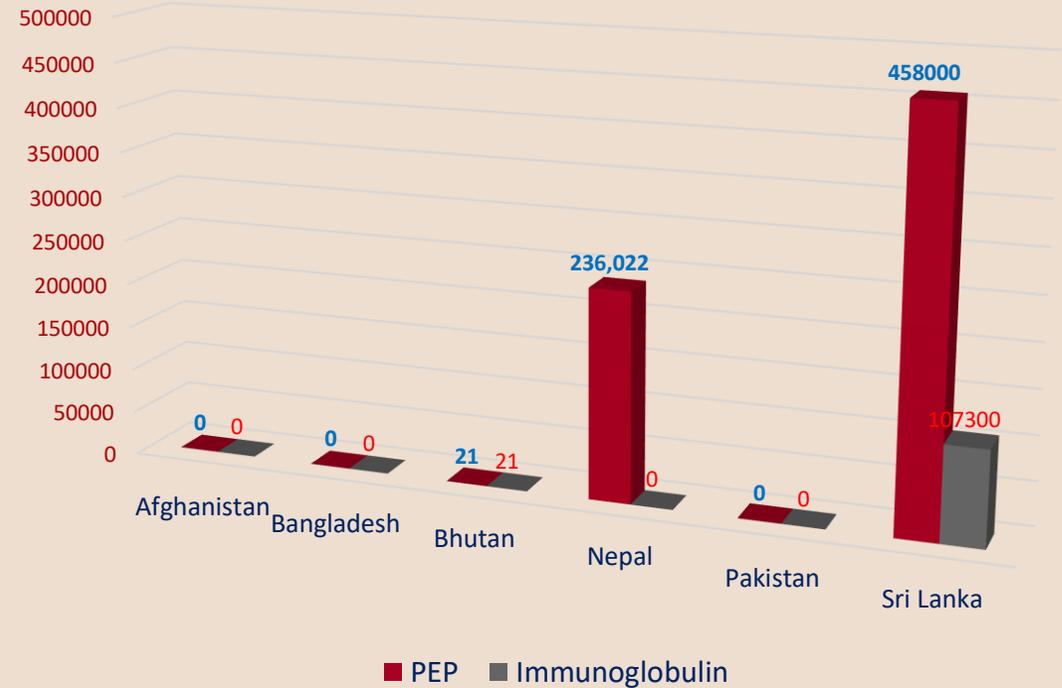


Doses of anti-rabies vaccines for human imported or locally produced in 2019



- Only Bangladesh reported producing human anti-rabies vaccine locally

Reported PEP and Immunoglobulin administered in 2019



# One Health or *Multi-sectoral Collaboration Mechanism (MCM)*

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- All the 6 countries reported they have some form of One Health or MCM in place in responding to rabies or other zoonoses
- It is mostly in the form of Committees. Some may be adhoc or some entrusted to just one Institute as in Pakistan
- In **Bangladesh** and **Bhutan** they have One Health Secretariat



# Governance and funding structure of One Health/Multi-sectoral Coordination Mechanisms

Country	Governance structure	Approving authority and legal instrument	Funding source
Afghanistan	Zoonotic Disease Committee lead by MoH and MAIL alternating six monthly	<ul style="list-style-type: none"> <li>• H.E Executive premier and signed by all involved Ministers</li> </ul>	Government core and ordinary budget & donors
Bangladesh	<ul style="list-style-type: none"> <li>• BOHS at Dept of Health Services headed by DGs of Health Services, DoLS &amp; Forest Dept</li> <li>• 1. Interministerial Steering Committee on Health at Ministry level               <ul style="list-style-type: none"> <li>• 2. Technical Advisory Group at DG level</li> </ul> </li> <li>• 3. Coordination committee for one health Secretariat at Director level</li> </ul>	Ministry of Health and Family Welfare approved One Health Secretariat in 14 June, 2016.	Government – by Leading Ministry + donors
Bhutan	One Health Secretariat – IMCOH, National One Health Technical Committee comprising of officials from human, animal health and other relevant sectors	<ul style="list-style-type: none"> <li>• Govt Executive Order.</li> <li>• Bhutan One Health Strategic Plan by 119th Cabinet Meeting held Nov 2016</li> <li>• National One Health Technical Committee by IMCOH - June 2019</li> </ul>	Government with small support from WHO, FAO and OIE
Nepal	OH Steering Committee and a Technical Committee with members of Human Health and Animal Health Sectors – Chair rotates annually	<ul style="list-style-type: none"> <li>• Council of Ministers, Govt of Nepal- 30 Dec 2019</li> <li>• Instituted under One Health Strategy 2019</li> </ul>	? Govt of Nepal; Development Partners will be approached
Pakistan	Established in National Institute of Health, Pakistan under MoNHSR&C	NA	Government – under Field Epi and Disease Surveillance Division of NIH
Sri Lanka	National steering committee for IHR	<ul style="list-style-type: none"> <li>• Ministry of Health, August 2016</li> <li>• National Action Plan for Health Security of Sri Lanka: 2019 - 2023</li> </ul>	Government & WHO

# Key challenges

Afghanistan	Bangladesh	Bhutan	Nepal	Pakistan	Sri Lanka
<ol style="list-style-type: none"> <li>1. Quality vaccine</li> <li>2. Budget lack</li> <li>3. Increasing Stray dog population</li> <li>4. Implementation of TVNR policy</li> </ol>	<ol style="list-style-type: none"> <li>1. Inadequate rabies surveillance capacity</li> <li>2. Inadequate laboratory diagnostic facilities</li> <li>3. Insufficient trained personnel for rabies diagnosis</li> <li>4. Inadequate PEP for animal bite of animals</li> <li>5. Inadequate budget allocation for rabies elimination</li> </ol>	<ol style="list-style-type: none"> <li>1. Porous border with India –related to majority of rabies cases incursion &amp; surveillance challenges</li> <li>2. Lack of dedicated fund for rabies control program both in human and animal sector</li> <li>3. Limited technical capacity at national and district level.</li> <li>4. Lack of community support</li> </ol>	<ol style="list-style-type: none"> <li>1. Inter and intra - sectoral coordination and collaboration</li> <li>2. Dog Population Control</li> <li>3. Low level of awareness in public</li> <li>4. Lack of a joint plan and legal framework</li> <li>5. Low political commitment</li> <li>6. Database management of human deaths</li> </ol>	<ol style="list-style-type: none"> <li>1. Multisectoral Coordination</li> <li>2. Financial Resources</li> <li>3. Trained Field Force</li> <li>4. Lack of Dog Population Control Measures</li> <li>5. Lack of awareness</li> </ol>	<ol style="list-style-type: none"> <li>1. Achieving 70% d vaccination coverage</li> <li>2. Reaching the population at risk</li> <li>3. Improving animal rabies surveillance</li> <li>4. Developing multisectoral coordination</li> </ol>

Key challenges and solutions are more from the animal health sectors

# Suggested solutions

Afghanistan	Bangladesh	Bhutan	Nepal	Pakistan	Sri Lanka
<ol style="list-style-type: none"> <li>1. Establishing the vaccine bank in the region for member countries</li> <li>2. Advocacy for budget (Donor and government)</li> <li>3. Joint effort for disease control</li> </ol>	<ol style="list-style-type: none"> <li>1. Sufficient budget allocation for rabies elimination program</li> <li>2. Training on capacity building for lab diagnosis</li> <li>3. Strengthening of Rabies surveillance system</li> </ol>	<ol style="list-style-type: none"> <li>1. Fund for implementation of One Health approach – Cross border harmonization</li> <li>2. Strong financial support committed solely for rabies prevention, control and elimination</li> <li>3. Human Resource capacity building programmes</li> <li>4. Sensitization and awareness campaigns for communities</li> </ol>	<ol style="list-style-type: none"> <li>1. Advocacy and lobbying in the political fronts</li> <li>2. Formation and approval of a joint plan and legal framework</li> <li>3. Fostering joint disease outbreak investigations and monitoring</li> <li>4. Prioritization of the diseases</li> <li>5. Development and dissemination of effective communication materials at all levels</li> </ol>	<ol style="list-style-type: none"> <li>1. Sufficient budget allocation for rabies elimination program</li> <li>2. Training on capacity building for lab diagnosis</li> <li>3. Strengthening of Rabies surveillance system</li> </ol>	<ol style="list-style-type: none"> <li>1. improving infrastructure facilities of district rabies units</li> <li>2. Improve animal sample collection and transportation</li> <li>3. Developing a multisectoral technical working committee.</li> <li>4. Developing an awareness plan</li> </ol>

# Thank you for your attention



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## Acknowledgement:

Country focal points from Afghanistan,  
Bangladesh, Bhutan, Nepal, Pakistan and Sri  
Lanka



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