

# प्रयोगशालाहरुबाट सञ्चालित रोग निदान तथा अन्वेषण सम्बन्धी प्रथम त्रैमासिक प्राविधिक समिक्षा

आ. व. २०८२/०८३

पशुपन्छी रोग अन्वेषण प्रयोगशाला  
सुर्खेत

बजेट उपशिर्षक: ३१२०२१०२३ र ३१२०२१०२४

कार्यालय कोड: ३१२०२६८०१

# १. कार्यालयको आधारभूत विवरण

## प्रयोगशालाको कार्यक्षेत्र

प्रदेश	जिल्ला	स्थानीय तह
कर्णाली	१०	७९
लुम्बिनी	६	४७
जम्मा	१६	१२६



# संचालित मुख्य कार्यक्रमहरू



नियमित प्रयोगशाला परिक्षण सेवा



रोगको निगरानी, सर्भिलेन्स



महामारी तथा जुनोटिक रोग अन्वेषण तथा नियन्त्रण



खोपको भण्डारण तथा वितरण



खोपको प्रभावकारिता जाँचन सिरोमोनिटरिङ्ग



पालिकाको बेसिक तथा प्राइमरी प्रयोगशाला सुदृढिकरणमा प्राविधिक सहयोग

# संचालित मुख्य प्रयोगशाला परिक्षणहरु

## Pathology Unit

- **Faecal Examination**  
(EPG, Larva culture)
- Urine Examination
- Postmortem
- **Haematology**
- Biochemistry

## Microbiology Unit

### 1. Bacteriology/Mycology Unit

- CMT Test
- Culture of bacteria,
- Gram staining,
- AST
- Culture of Fungus

### 2. Molecular Unit

PCR

## Serology Unit

- Rapid Test,
- PAT of Brucella, Salmonella, CRD
- ELISA of FMD, PPR, CSF, ND

३. संचालित कार्यक्रमका प्रमुख उपलब्धीहरु

# बिभिन्न पशुपन्धीका माहामारी रोग तथा परिक्षण नतिजा सम्बन्धि विवरण

<b>Disease</b>	<b>Number of Positive (Number tested samples)</b>	<b>Districts</b>	<b>Species</b>	<b>Remarks</b>
Rabies	5 positive out of 7	Surkhet, Dailekh,	Dog, Cattle	Regular Received Sample
Brucellosis	All are Negative out of 20	Dang	Swine	
AI	All are Negative out of 58	Surkhet, Dailekh, Banke, Bardiya, Salyan, Jajarkot	Poultry	
ND	2 positive out of 25	Surkhet, Dailekh, Banke, Bardiya, Salyan, Jajarkot	Poultry	
LSD	7 positive out of 9	Surkhet, Dailekh	Cattle	

# Results of Post mortem findings

S.N	Species	Total no of sample	PM Diagnosis
1	Broiler	71	IBD, Colibacillosis, Mycotoxicity, Ascitis
2	Local	29	Salmonellosis, Colibacillosis, IBD
3	Duck	1	Colibacillosis, Mycotoxicity
4	Goat	6	Pneumonia, Enteritis, Tape worm, PPR, Septicemia
5	Layers	36	Salmonellosis, Colibacillosis, IBD
6	Giriraj	5	Colibacillosis, Mycotoxicity
7	Quail	4	Mycotoxicity , Colibacillosis
8	Kaliz	2	Colibacillosis, Mycotoxicity
9	Dog	3	Pneumonia, Enteritis, Tabies
10	Pig	5	Pneumonia, Enteritis
11	Turkey	1	Colibacillosis, Fowl Pox
12	Koiler	9	Colibacillosis, IBD, Fowl Pox
13	Buffalo	2	Rabies
	<b>Total</b>	<b>174</b>	

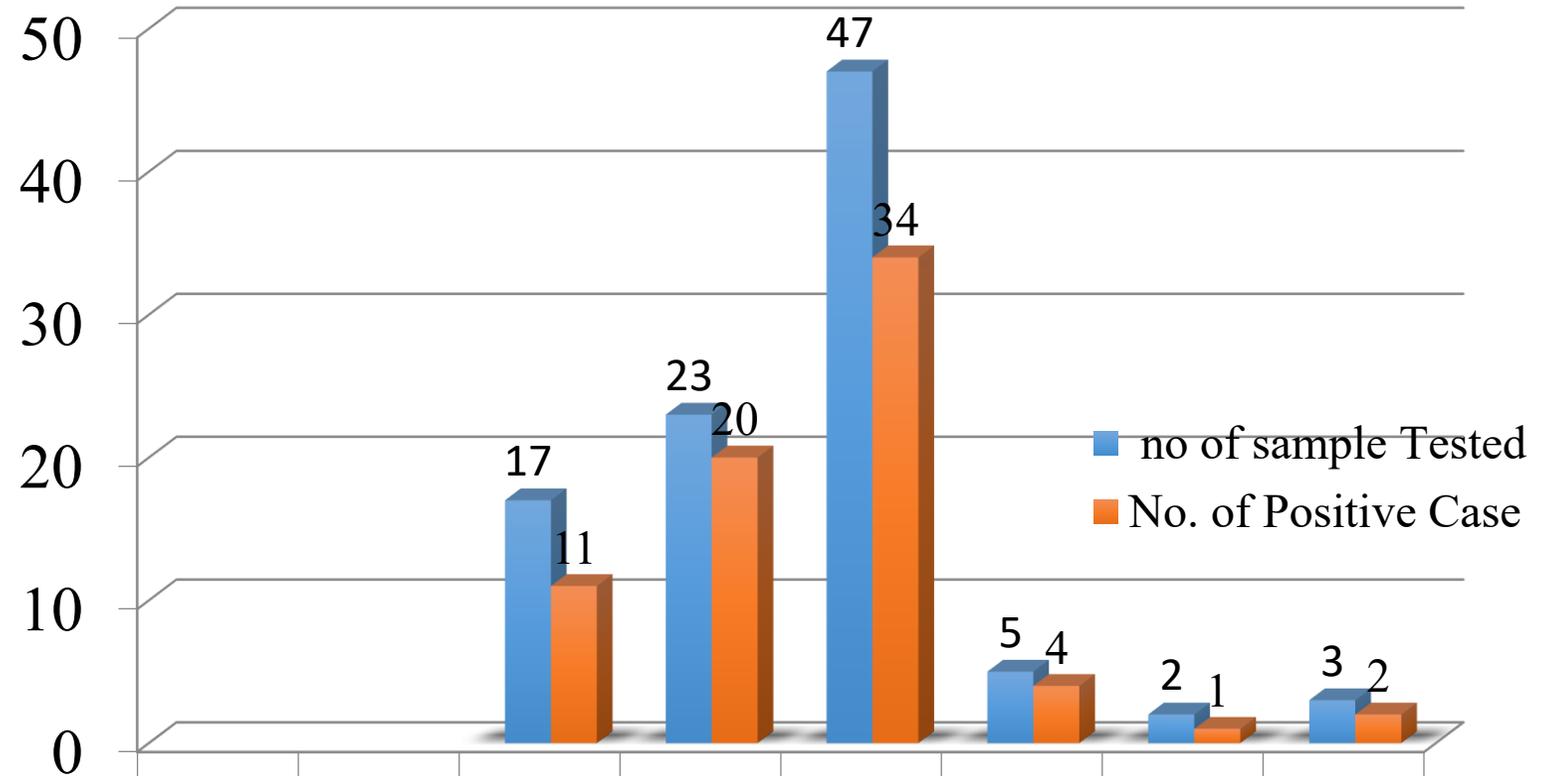
# Result on Hematology

S.N	Species	Total no of sample
1	Sheep	1
2	Goat	23
3	Buffalo	2
5	Dog	4
<b>Total</b>		<b>30</b>

# Findings on parasitology

Species	Total no of sample	Sample tested	Test Method	Result														Total Pos	Total Neg	Remarks	
				<i>Nematodes</i>									<i>Trematodes</i>		<i>Cestodes</i>						
				Ascaris	Strongyles	Toxocara	Trichuris	Haemonchus	Bunostomum	Strongylids	Trichostrongylus	Nematodirus	Fasciola	Paramphistomum	Moniezia expansa	Moniezia Benedeni	Dipylidium Caninum				
Cattle	17	17	Sedimentation, Flootation	1	2	0								4	4				11	6	
Buffalo	23	23	Sedimentation, Flootation	9	1									3	7				20	3	
Goat	47	47	Sedimentation, Flootation	8			4	6			5			1	3	3	4		34	13	
Sheep	5	5	Sedimentation, Flootation	1			1									1	1		4	1	
Swine	2	2	Sedimentation, Flootation	0												1	0		1	1	
Dog	3	3	Sedimentation, Flootation	0												1	1		2	1	
<b>Total</b>	<b>97</b>	<b>97</b>		<b>19</b>	<b>3</b>	<b>0</b>	<b>5</b>	<b>6</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>14</b>	<b>6</b>	<b>6</b>	<b>0</b>	<b>72</b>	<b>25</b>		

# Findings on Parasitology



no of sample Tested			17	23	47	5	2	3
No. of Positive Case			11	20	34	4	1	2

# CMT Test findings

<b>Total Sample</b>	<b>Positive</b>	<b>Negative</b>
42	20	22

<b>S.N.</b>	<b>District</b>	<b>Number</b>	<b>CMT +ve</b>	<b>CMT -ve</b>	<b>Remarks</b>
1.	Surkhet	15	14	1	
2.	Salyan	1	1	0	
3.	Banke	26	5	21	
	Total	42	20	22	

- Sample Source : Received at lab from farmers



# AST Data of Passive surveillance of Milk Samples

S.N.	Isolates	Genta		Cipro		Tetra		C		Levo		Ap	
		S	R	S	R	S	R	S	R	S	R	S	R
1.	E.Coli = 2	0	2	1	1	2	0	2	0	2	0	0	2
2.	Staphylococcus = 1	0	1	1	0	1	0	1	0	1	0	0	1
3.	No Growth =1	<b>1,most of the milk samples brought to the lab for CMT Test only</b>											



# AMR Active Surveillance in Poultry Species

S.No.	VDCs	Surkhet	Remarks
1.	Bheriganga	10	
2.	Lekbesi	10	
3.	Gurvakot	10	
	total	30	

**Banke = 30**

**Dang = 30**

# Surkhet active AMR Surveillance AST data

Isolate s	Ciprofloxacin			Tetra			Cotrimox			Ampicillin			Erythromycin			Imipenem			Levoflox			Vancomycin		
	S	I	R	S	I	R	S	I	R	S	I	R	S	I	R	S	I	R	S	I	R	S	I	R
E.Coli-16	10	2	4	8		8	1	1	14	1	4	11	1		1	1		1						
Salmonella-11	11	0	0	0	0	11	4	0	7	1	0	10				1	0	0	1	0	0			
Enterococcus-19	15	1	3	9	0	10				7	2	10	1	0	6	1	2	0				1	7	0

44 master copy of isolates preserved and sent to CVL as biorepository bank

# Emergency Response

<b>S.No.</b>	<b>district</b>	<b>Suspected disease</b>	<b>Results</b>
1.	Banke	Glander	Positive
2.	Surkhet	BSE	Neg
3.	Bardiya	Q-Fever	Detected
4.	West Rukum	Brucellosis	Neg

# Findings on Virology

S.No.	Species	Sample Tested	<i>Disease</i>														Remark	
			ND		IBD		AI		Brucella		Mycoplasma		Salmonella		Rabies			
			Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg		
1	Pig	20								0	20							PAT
2	Dog	4														3	1	RDT
3	Cattle	3														2	1	RDT
4	Poultry	194	2	23	7	18	0	58			0	43	0	43				RDT /PAT
<b>Total</b>		<b>221</b>	<b>2</b>	<b>23</b>	<b>7</b>	<b>18</b>	<b>0</b>	<b>58</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>43</b>	<b>0</b>	<b>43</b>	<b>5</b>	<b>2</b>		

# Sample Dispatched Details (To CVL)

S.N.	District	Species	No.of Sample	Sample Type	Suspected	Result	Remark
1	Surkhet	Cattle	5	Pus/Tissue	LSD	Positive	
2	Banke	Horse/Mule	9	Blood	Glander	glander	
3	Dailekh	OX	3	Brain,Tissu,Pus	Rabies	rabies	
4	Surkhet	Dog	1	Brain	Rabies	rabies	
5	West Rukum	Goat	1	Intestine	Enterotoxaemia		
6	Dailek	cattle	1	pus	LSD	Positive	
7	Surkhet	Poultry	44	CS	Active AMR samples		

# Capacity Building (Trainings attended)

S.N	Name of Staff	Level	Name of Training	Duration	Venue
1	Bishnu Prasad Dhakal	Officer	FMD ELISA	6 Days	FMD Lab, Kathmandu

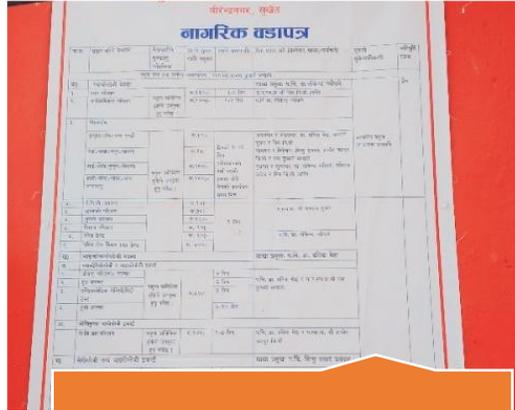
# **Training on Biosecurity Measures and Rational Use of Antibiotics**

**For Small and Medium Holder Poultry Farmers  
(July–October 2025)**

# Summary of training conducted

Location	Date	Total Participants	Male	Female	Brahmin/Chhetri	Janajati	Dalit	Madhesi	Others
Surkhet	20 June	22	17	5	18	1	0	0	3
Bardiya	21 July 2025	18	12	6	7	7	3	1	-
Surkhet	21 Aug 2025	26	13	13	16	2	2	-	6
Salyan	14 Oct 2025	18	11	7	13	2	-	-	3

# सुशासन सम्बन्धि विवरण



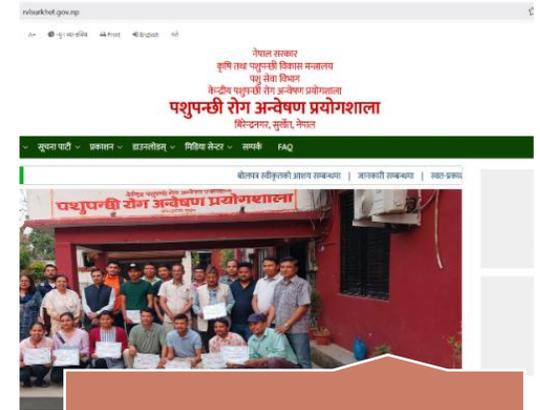
नागरिक बडापत्र



सूचना अधिकारीको व्यवस्था



Digital Display Board



Updated Website



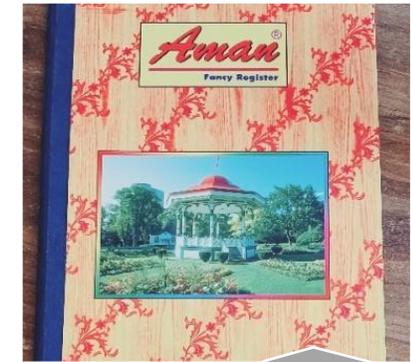
उजुरी पेटीका



सूचना पाटीको व्यवस्था



कर्मचारी लगबुक



मासिक बैठक

## ४. ऀयाकिसन बैक सम्वन्धि बिवरण

# Vaccine Bank Update:

खोप बिबरण	गत आ व मा प्राप्त खोप बिबरण	गत आ व को अन्तिम सम्म मौज्दात भ्याक्सिन डोज	चालु आ व मा वितरण गरिएको भ्याक्सिन डोज	हाल मौज्दात रहेको भ्याक्सिन डोज
खोरेत	४७२०००	११३५००	०	११३५००
पि पि आर	१३२५६००	५०००	०	५०००
CSF	३२७००	३९२००	०	३९२००
HS BQ	२८०००	०	०	०
LSD	६००००	४२०००	५०००	३७०००
Rabies	११५००	२६००	१९००	७००
रानीखेत	०	२२८४००	०	२२८४००

केहि तस्बिरहरु

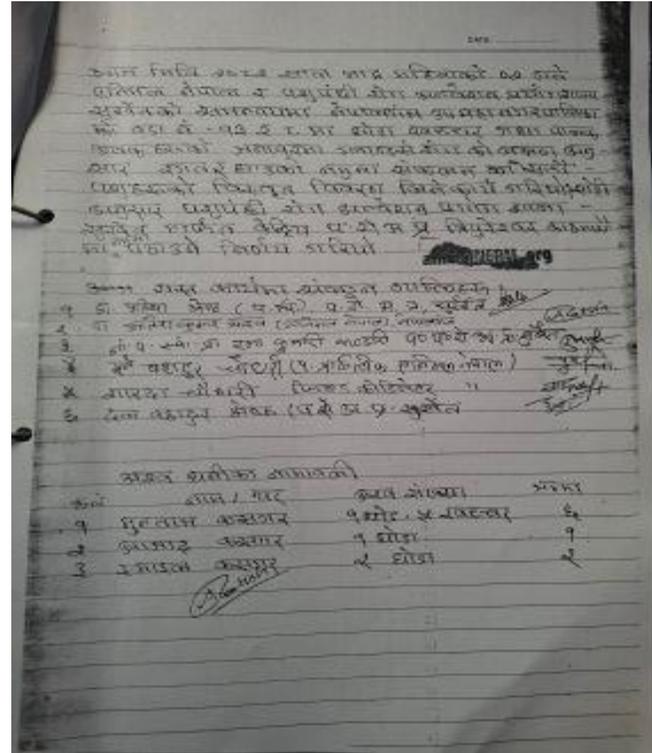






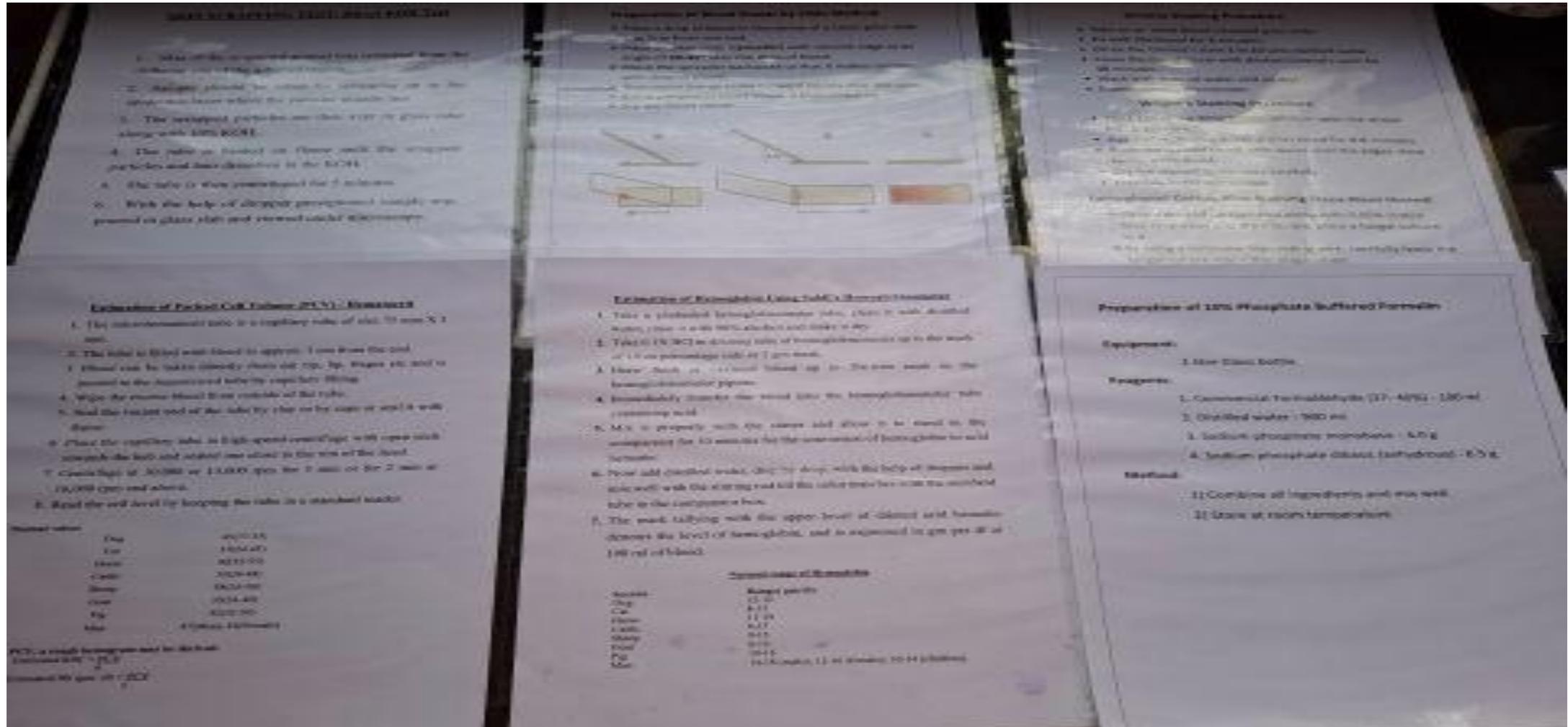


# Major extra activities



- Glander Case In Banke
- Technical Coordination in provincial laboratory training

# Desktop Protocol Develop Work-haematology



# EQA 2025

Five Samples proceed with AST Results.

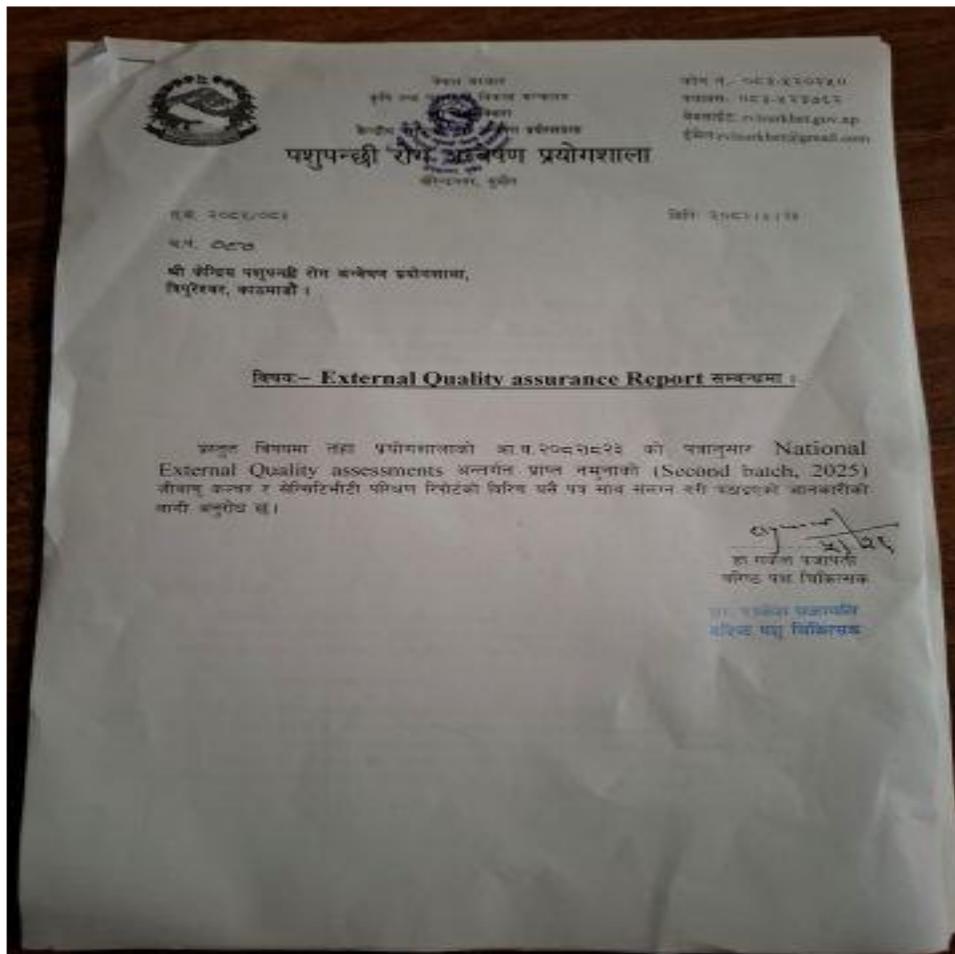
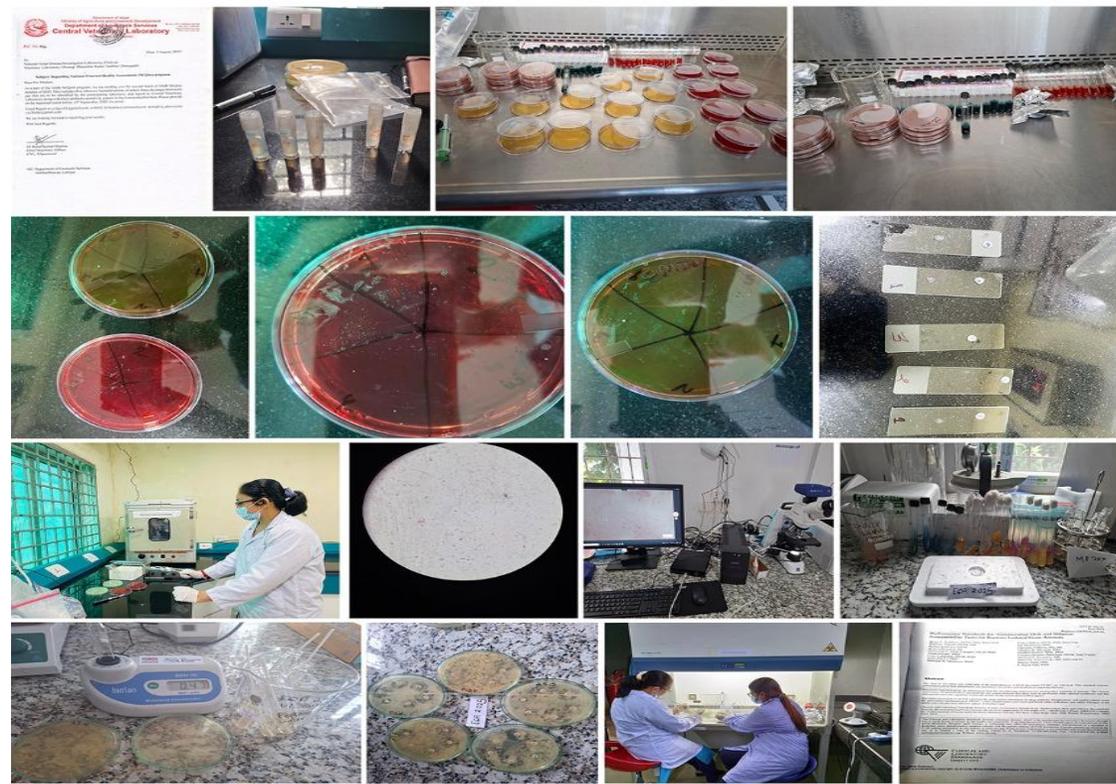


नेपाल सरकार  
कृषि तथा पशुपन्छी विकास मन्त्रालय  
पशु सेवा विभाग  
केन्द्रीय पशुपन्छी रोग अन्वेषण प्रयोगशाला



**पशुपन्छी रोग अन्वेषण प्रयोगशाला**  
वीरेन्द्रनगर, सुर्खेत, नेपाल

## EQA 2025 Bacteriology Unit



# Constraints/Issues and Way forward

- Basic and Advance Laboratory Training Required for motivation (Hands-on)..including AMR
- Rt- PCR training
- FAT test and enterotoxaemia ELISA Test (reagent available at VL).
- Quality control of each unit and cold chain management of vaccine.
  
- Future plan
- FAT Test/Enterotoxaemia,Soatic cell count meter applied and Haematoanalyzer use after purchase.
- Waste Water treatment repair and maintenance..

# Acknowledgements



- **MoALD, DLS**
- **Provincial and Local Government**
- **CVL, FMD & TADs Laboratory**
- **FAO Nepal**
- **Fleming Fund**
- **Farmers**
- **All other Stakeholders**

*Thank You*