

Directorate of Research, LUVAS, Hisar
Department of Veterinary Pathology
(RKVY Project Success Story)

1. Name of the Project:- **4042-C (g)-VPT-03-OA (RKVY)- Title “Strengthening of clinical pathology and post-mortem facilities to provide effective and high quality diagnosis services to the farmers”**
2. PI’s name: **Dr. K. K. Jakhar, Professor & Head, Department of Veterinary Pathology, LUVAS, Hisar**
3. Co-Investigator (s): **Dr. R.P. Gupta, Dr. Vikas Nehra, Dr. Babulal Jangir, Dr. (Mrs.) Chandratre Gauri A Dr. (Mrs.) Deepika and Dr. Ramesh Kumar**
4. Starting year of the projects:- 2015-2016
5. Present Status: **Ongoing**
6. Objectives/Activities to be undertaken:-
 - i. To Strengthen and develop effective, high quality, clinical pathology laboratory services particularly responsive to the needs of farmer’s /livestock and poultry owners.
 - ii. To Strengthen and develop effective high quality postmortem services laboratory services particularly responsive to the needs of farmer’s /livestock and poultry owners.
7. Achievements:-
 - iii. Under Objective 1
To Strengthen and develop effective, high quality, clinical pathology laboratory services particularly responsive to the needs of farmer’s /livestock and poultry owners.

A. Physical Achievement under Objective 1 & 2:

 - i. Renovation work of Rs. 8.95 lakhs has been initiated in the clinical pathology laboratory
 - ii. Renovation of post-mortem hall and associated Seminar Hall of the Department is also under repair process at the cost of Rs. 10 lakhs.
 - iii. Purchase of equipments of Rs worth 9.3 lakhs as detailed below:

List of equipments purchased

Sr. No.	Name of the Equipment	Quantity
i.	Autopsy table	One
ii.	Automatic tissue processor	One
iii.	Weighing balance	One
iv.	Microscopes with battery backup	Two
v.	Air conditioner	One
vi.	Fly catchers,	Four
vii.	Stabilizer power system	One
viii.	LED display	One
ix.	Autopsy case	One
x.	Deep freezer	One
xi.	Urine analyzer	One
xii.	Embedding rings	-



Postmortem Hall undergoing renovation



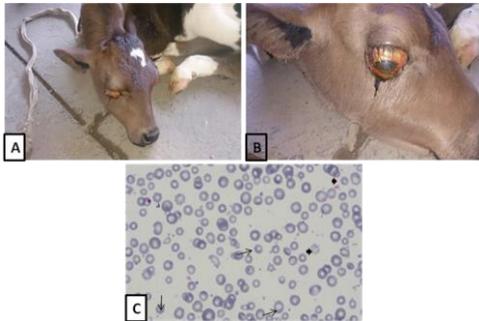
Necropsy table in Postmortem hall



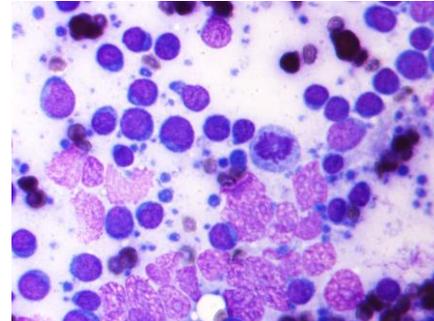
Automatic Tissue Processor

- i. **Diagnostic Services (under objective 1):** To Strengthen and develop effective, high quality, clinical pathology laboratory services particularly responsive to the needs of farmer's /livestock and poultry owners

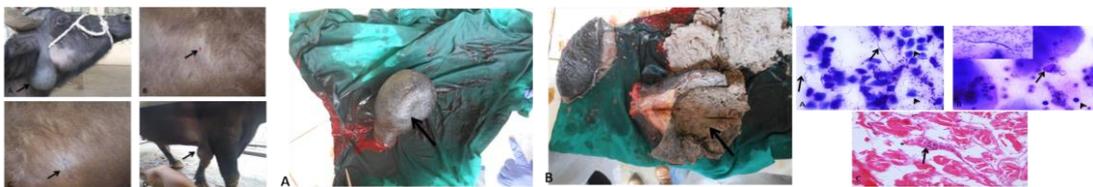
A total of 86 blood samples were analyzed for haematological diagnosis. Among them 15 cases were positive for Theileriosis, 2 anaplasmosis and other conditions such as anaemia, leucocytosis, thrombocytopenia were also noted. A total of 75 serum samples were processed for diagnosis of liver and renal disorders. Among these, renal dysfunction was found in many cases. Five urine samples were analysed and showed granular cast, RBCs, pus cells and epithelial cells in different samples indicating renal cause. Total ten Fine Needle Aspiration Cytology of lymph node, body fluids and tumor masses were processed and diagnosed. Among these, Major conditions were Koch Blue bodies in Theileriosis, Parafilariasis, Transmissible venereal tumour in dogs and actinomycosis in Buffalo.



Anaplasmosis in calf



Lymphosarcoma in Dog



Subcutaneous parafilariasis in Buffalo

Under Objective 2: To Strengthen and develop effective high quality postmortem services laboratory services particularly responsive to the needs of farmer's /livestock and poultry owners

Postmortem examination of 215 different animals including (19 Buffaloes, 10 Cattle, 14 Buffalo Calves, 10 Cattle Calves, 6 Sheep, 5 Goats, 6 Lambs, 5 Kids, 87 Nilgai, 37 Black Buck, 5 Pigs, 2 Horses, 6 Dogs, 1 Monkey, 1 Camel And 1 Rabbit) was conducted for diagnosis of various diseases involving cardiovascular system, reproductive system, urinogenital system and multiple organ failures, etc.

Histopathology of different samples of 60 animals was undertaken to diagnose diseases of above mentioned systems.

Principal Investigator
(Dr. K.K. Jakhar)

Professor and Head
(Dr. K.K. Jakhar)