

# ANNUAL PROGRESS REPORT VETERINARY RESEARCH AND DISEASE INVESTIGATION CENTRE HANGU ROAD KOHAT, FOR THE YEAR 2014

### INTRODUCTION

Livestock plays a key role in the household economy of farming community. Kohat Division is 77% rain fed and only 23% irrigated offers greater potential for livestock rearing and less opportunity for investment in agriculture. The total number of cattle, buffaloes, sheep, goats, horses, donkeys, mules and poultry in Kohat Division is ranged as 487023, 142007, 355824, 838332, 6610, 2759, 76636, 1220 and 3107751 respectively (Livestock Census 2006). There is myriad number of problems in desired livestock production, performance and a general apathy towards the improved management (housing & feeding) and melodies/treatment of livestock.

To minimize these losses government of Khyber Pakhtunkhwa established Veterinary Research and Disease Investigation Center Kohat in 1991. Since then VR&DIC, Kohat has been extending diagnostic/technical services forth with problem oriented research facilities to the livestock farmers, wild life dept. Kohat, Garrison Center Kohat, SRRI Kohat and small /medium scale poultry farmers as well as migratory Afghan shepherd in the area.

#### **OBJECTIVES**

- 1. Provides diagnostic services/facilities to the livestock and poultry farmers of Kohat Karak, Hangu Districts and attached tribal areas.
- 2. Technical and advisory services to military Farms, GOC House and Wild life Department.
- 3. Provide advisory services to livestock and poultry farmers.
- 4. Conduct field oriented research.
- 5. Supply different biologics to the field staff.

## STAFF:

(Dr. Zabita Khan) Regional Director/ PRO (BPS-19) One (Dr. Muhammad Rashid Khan) Senior Research Officer (BPS-18) One (Dr. Shams-ul-Hayat) Research Officer (BPS-17) One Office Assistant (BPS-16) One Senior Clerk (BPS-14) . One Laboratory Technician (BPS-10) **Empty** Laboratory Assistant (BPS-6) One Driver (BPS-4) One Tube Well Operator (BPS-4) One Laboratory Attendants (BPS-1) Two Naib Qasid (BPS-2) One Chowkidar (BPS-2) One Sweeper (BPS-2) One

## **TECHNICAL ACTIVITIES**

In the year 2014, the total of 4390 samples/ specimen were processed in the laboratory for diagnostic/research purpose, the detail of which is reproduced as under:-

#### POULTRY DISEASE

A total of 3412 Poultry Postmortems (no. of birds submitted) were conducted in the laboratory brought by the farmers for disease diagnosis as well as postmortem performed during the field visit and attending outbreaks. Following poultry diseases are prevalent in jurisdiction (Hangu, Kohat, and Karak) of this Centre. Details of diseases are as under.

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#### A. Bacterial:

Yolk sac infection	64
Colibacillosis	70
Enteritis	42
Infectious coryza	54

#### B. Viral Disease:

Newcastle disease	23
Gumboro (IBD)	61
HPS	01
Infectious bronchitis	30

## C. Mycoplasmosis:

Chronic Respiratory Disease...... 80

## D. Fungal Disease:

Aspergilosis (Aflatoxicosis)............ 15

## E. Protozoan Disease:

Coccidiosis	(Clinical)	33
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**Note: -** These figures are based on no of cases submitted to the laboratory or during visits to the farm.

#### 2. LIVESTOCK CASES

## A. Morbid material of sheep/goat/cattle:-

A total of 62 morbid samples including Liver, Lungs, Spleen, Heart and Intestines were submitted to this Centre from Cows, Buffaloes, Sheep and Goats for post mortem and disease diagnosis. Detail of the diseases diagnosed through different tests and postmortem finding are as under.

2

Anthrax	80
CCPP/COPP	29
Enterotoxaemia	04
Fascioliasis	08

### **B. Faecai Samples**

A total of 219 feacal samples were received to laboratory a Veterinary Research and Disease Investigation Centre Kohat and examined fo diagnosis endoparasites/worm infestation. These samples were received from livestock farmers of Kohat, Lachi, Karak, Hangu, Tall, Doaba, Dara adam khe and attached tribal areas for diagnosis of worm infestation. Of the 219 samples 156 samples were found positive for, Amphistom, Bonustomum, Haemonchus Trichostrongylus, trichuris, Fasciola, Toxocara, Amoeba, Eimeria, ostretegia and Ascaris. The remaining 63 samples were declared negative.

## B. Milk Samples for Mastitis.

A total of 92 milk samples were received and examined for diagnostic purpose. Out of total, 62 were found positive for mastitis and 30 samples were declared negative.

Cow	Positive	55
	Negative	26
Buffalo	Positive	01
	Negative	03
Sheep	Positive	03
	Negative	00
Goat	Positive	03
	Negative	01

239

## **Blood Samples**

A total of 405 blood samples were received and examined for hemoprotozoan diseases and other diagnostic purpose. Out of which 301 blood samples were positive for protozoan disease (Babesiosis, theleriosis and Anaplasmosis) and 104 samples were declared negative.

#### E. Brucellosis

A total of 111 samples of human beings were received and examined for brucellosis at Laboratory for diagnostic purpose. Among them 11 samples were found positive for Brucellosis and 100 were found negative, the detail is as under;

## Brucellosis in Human Beings

Male positive	04
Male Negative	39
Female Positive	07
Female Negative	61

#### Miscellaneous

Diarrhea/Dysentery20	00
General Weakness33	35
Hyperthermia12	24
Others 4!	56

### F. Wildlife Department and Military Departments

This laboratory also provides the technical and advisory services to the wildlife department and Kohat garrison. A total of 92 animals/birds were submitted by wildlife department Kohat to this laboratory for postmortem and disease diagnosis. Animals and birds submitted includes;

24,

#### III. ADVISORY SERVICES:

Being one of the main objectives of this Diagnostic laboratory is to provide advisory services to the Livestock and poultry farmer in connection with control/prevention of various infectious/contagious, parasitic and reproductive diseases and to improve the managemental practices in different types of animals in the area. Feasibility reports for establishment of poultry/Livestock farms on scientific lines were also prepared for different farmers.

We have arranged Veterinary camps in different places in co-ordination with L&DD Kohat/ Hangu. Different services were provided to the farmer regarding management, control and prevention of different diseases, diagnosis, feasibility report for the establishment of livestock/poultry farms, vaccination.

a) 2590 Poultry and Livestock farmers were provided advisory services with the following details:-

i) Poultry farmersii) Livestock farmers1405

b) Short Courses/Seminar/Vet. Camps/ Field Days organized.

<ol> <li>Seminar/Workshop/ short courses held</li> </ol>	C-
II). Poultry Training Executed	04
III). Veterinarian and Para vets Trained	10
c) Number of outbreaks Attended	36

#### IV. RESEARCH ACTIVITIES:

No. of research projects in hand.......03

- 1. Prevalence of theleriosis in Dairy cattle in kohat and surrounding.
- 2. Effect of nematodes on blood profile of sheep and goats and comparative efficacy of Nilzan plus against prevalent nematodes at Arid Zone SRRI Kohat.
- 3. Comparative weight gain in sheep and goats in local environment at SRRI Kohat.