



**GOVERNMENT OF ODISHA
FISHERIES & ANIMAL RESOURCES DEVELOPMENT
DEPARTMENT**



**ANIMAL DISEASE INVESTIGATION AND SURVEILLANCE
[Animal Disease Research Institute (ADRI)]**

ABOUT THE INSTITUTE :

The Animal Disease Research Institute is a State Level Referral Laboratory of the Department situated at Phulnakhara in between Bhubaneswar and Cuttack on the side of NH-16 and started functioning in the year 1992. The Institute deals with research and diagnosis of different livestock diseases as well as disease monitoring & surveillance in the State to safeguard animal health and welfare, protect the economy and enhance food security.

The institute is headed by a Joint Director (Level-II) with experienced officers having specialization in different field of Veterinary Science and other supporting staffs.

OBJECTIVES :

- i) Prompt diagnosis of different contagious/infectious diseases of livestock/ poultry with timely intervention to reduce spread of infection and economic loss.
- ii) Regular disease monitoring and surveillance of livestock and poultry diseases in the state.
- iii) Investigation of different animal disease outbreaks for early detection, diagnosis and characterize infectious agents and provide expert advice for control & containment.
- iv) Monitoring the activities of District Diagnostic Laboratories (DDL), Clinical Investigation Laboratories (CIL), State Veterinary Laboratory (SVL) at District & Regional level and providing technical supervision to these laboratories.
- v) Collection, compilation and analysis of epidemiological data related to diseases and dissemination of disease related information to different quarters.
- vi) Imparting need based trainings on disease control to the in-service Veterinarians and Para-veterinarians of the State.
- vii) Act as state coordinating agency with different Regional/ National level laboratories like RDDDL (ER), Kolkata/ ICAR-NIHSAD, Bhopal/ ICAR-IVRI, Bareilly & Mukteswar/ ICAR-PDFMD, Argul, Jatni/ ICAR-NIVEDI, Bangaluru/ OUAT, Bhubaneswar etc. on disease monitoring/surveillance, diagnosis of different emerging and exotic diseases.

FACILITIES AVAILABLE :

As of now, the ADRI is functioning with the synergistic effect of the following key laboratories (Divisions):-

1. Pathology Division – Deals with testing of pathological samples & conducting post-mortem.
2. Parasitology Division – Deals with parasitic & blood protozoan diseases.
3. Bacteriology Division – Deals with bacterial diseases & antibiogram study.
4. Virology Division – Deals with Viral diseases i.e. FMD, PPR, Goat Pox etc.
5. Bio Safety Level-II Laboratory (BSL-II Lab.) – Deals with certain zoonotic/ exotic diseases like Avian Influenza (Bird Flu), Brucellosis, Lumpy Skin disease etc.
6. ELISA facilities for detection of antigen/ antibody against different diseases using standard recommended protocol.
7. Molecular diagnostic lab with PCR/RT-PCR facilities for quick and confirmatory diagnosis of livestock diseases.

STAFF STRENGTH :

Sl.No.	Name of the Post	Sanctioned Strength
01	Joined Director–II	01
02	Research Officer	06
03	Leave Reserve Veterinary Assistant Surgeon	02
04	Ayurvedic Medical Officer	01
05	Senior Laboratory Assistant	01
06	Senior Assistant	01
07	Junior Assistant	01
08	Operator	01
09	Driver Light	01
10	Driver Heavy	01
11	Chowkidar	01
12	Attendant	06
TOTAL		23

ONGOING ACTIVITIES:

- i) Foot and Mouth Disease (FMD) diagnosis and sero-monitoring/ sero-surveillance as a collaborative centre of AICRP on FMD.
- ii) Network unit for AICRP on Animal Diseases Monitoring & Surveillance (ADMAS).
- iii) Disease surveillance and monitoring under-
 - a) NADCP for FMD & Brucellosis.
 - b) PPR Control Programme.
 - c) Anthrax Control Programme
 - d) Bovine Spongiform Encephalopathy (BSE) Surveillance.

- iv) Screening of Avian serum samples by ELISA in BSL-II Lab. against Avian Influenza and dispatching swab and environmental samples to RDDDL, Kolkata/ ICAR-NIHSAD, Bhopal under Avian Influenza Surveillance Programme.
- v) PCR based molecular diagnosis of diseases.

ACHIEVEMENTS (2019-20) :

Pathological Samples Examined:

Sl.No.	Particulars of Work Done	Achievement
01	Feecal samples examined	1989
02	Blood smears examined	12828
03	Haemogram done	6111
04	Urine samples examined	2214
05	Milk samples tested by CMT	564
06	Bacterial cultural test conducted	580
07	ABST conducted	527
08	Other tissues smear examined	40
09	PCR based molecular diagnosis	81
	Other Activities	
a.	No. of P.M. Conducted	1067
b.	No. of outbreaks attended	100
c.	No. of Vets. trained in under ASCAD & other disease control programmes	250
d.	Nos. of farmers trained under AICRP on FMD / ADMAS	1627

Surveillance & Allied Activities:

Particulars of Work Done	Achievement
a) Avian Influenza	25013
b) FMD (under the project AICRP on FMD/ FMD C.P.)	14681
c) Brucellosis (RBPT & ELISA)	1439
d) Salmonellosis sero-monitoring	2240
e) Bovine Spongiform Encephalopathy (BSE) surveillance	16
f) Tuberculin test for detection of Tuberculosis	111
g) Johnin test for detection of Johne's disease	111
h) Sero-surveillance against different diseases under AICRP on ADMAS	0
i) Japanese Encephalitis	302
j) PPR C.P.-PPR diagnosis & sero-surveillance	1898
k) Theileriosis C.P.	0
l) Anthrax sample	15
m) Samples collected from other diseases (including outbreak)	2997
TOTAL	48823

DISEASE DIAGNOSTIC LABORATORY

Disease Diagnostic Laboratories (DDLs) are functioning in all the district headquarters to provide need based diagnostic services of livestock & poultry diseases. There are 30 DDLs functioning in the State namely:-

- 01 (One) State Veterinary Laboratory (SVL) at Chiplima, Sambalpur.
- 03 (Three) Clinical Investigation Laboratories (CIL) functioning at Cuttack, Bhubaneswar & Berhampur.
- 26 (Twenty Six) Disease Diagnostic Laboratories in rest of the districts.

OBJECTIVES :

- i) Examination of clinical materials and specimens collected/ received from different parts of the district and communication of the results.
- ii) Attending outbreaks as and when required for investigation of the disease and collection of representative samples from morbid animals for diagnosis.
- iii) Collection, compilation of epidemiological data on different outbreaks/ occurrence of diseases for analysis and follow up strategy for prevention, control of livestock & poultry diseases.
- iv) Collection of sera samples for sero-monitoring/ sero-surveillance work under different ongoing disease control programmes, e.g. NADCP for FMD & Brucellosis, PPR-CP etc.
- v) Guiding field veterinarians for timely reporting of outbreaks/ diseases, collection and submission of sera and clinical samples for diagnosis.
- vi) Submission of monthly reports to higher quarters on different disease control activities.

FACILITIES AVAILABLE :

- (i) Basic facilities for routine testing to support diagnosis and treatment.
 - a) Faecal samples for different endo-parasitic infection.
 - b) Blood samples for haemoglobin estimation, ESR, predominant/ economically important blood protozoan, bacterial diseases.
 - c) Skin samples for ecto-parasitic infestation.
 - d) Urine samples for ketosis, bile pigments etc.
 - e) Milk samples for screening mastitis.
- (ii) Screening of blood/ sera samples for Brucellosis, Salmonellosis.

- (iii) Tuberculin/ Johnin test for screening of animals against Tuberculosis, Johne's disease.
- (iv) Rapid test kits for urine analysis & haematological parameters.
- (v) Prepare and supply of PBS, 50% PBS-Glycerine, N/10 HCl, 10% KOH, distilled/ ultrapure water to field veterinary institutions as per the need.

ACHIEVEMENTS :

ACHIEVEMENT FOR YEAR 2019-20 – Pathological Sample Test at SVL / CIL / DDL :

Sl. No.		Faecal Sample	Blood Smear	Haematological	Skin Scrapping	Nasal Smear	Urine Sample	Milk Sample	Culture & Abst	Post Mortem
01	Cuttack CIL	745	1121	2236	0	0	231	75	171	9
02	Berhampur CIL	547	240	727	14	0	48	115	210	27
03	Bhawanipatna CIL	590	28	14	14	20	4	356	244	98
04	Chipilima SVL	1640	293	821	11	0	27	85	306	1922
05	Jagatsinghpur DDL	0	3832	11496	0	0	940	65	0	0
06	Kendrapara DDL	2121	2595	2919	0	0	413	55	0	0
07	Kandhamal DDL	332	13	0	0	0	0	8	0	0
08	Rayagada DDL	501	312	461	147	20	154	190	0	650
09	Sundargarh DDL	1309	189	0	83	31	11	154	0	0
10	Nuapada DDL	1336	128	0	0	0	0	0	0	0
11	Jharsuguda DDL	721	18	0	0	0	0	0	0	0
12	Bhadrak DDL	343	75	1	65	1	13	60	0	0
13	Gajapati DDL	224	22	27	4	0	7	12	0	0
14	Bargarh DDL	724	42	96	1	0	16	46	0	0
15	Balasore DDL	596	277	80	9	12	87	90	3	0
16	Mayurbhanj DDL	333	251	166	0	0	46	4	0	0
17	Nayagarh DDL	401	27	0	0	0	27	37	0	0
18	Keonjhar DDL	332	62	28	0	0	139	127	0	0
19	Dhenkanal DDL	376	227	406	0	0	19	129	95	0
20	Jaipur DDL	722	0	0	0	0	0	3	0	0
21	Puri DDL	609	54	38	10	0	28	1	0	0
22	Koraput DDL	186	55	125	11	0	121	55	0	0
23	Bolangir DDL	555	140	0	0	0	130	375	0	0
24	Nawarangpur DDL	272	102	0	0	0	0	53	50	0
25	Angul DDL	531	4	2	23	0	5	8	0	0
26	Subarnapur DDL	190	40	29	33	2	66	87	0	0
27	Boudh DDL	260	51	0	44	18	28	46	0	0
28	Malkangiri DDL	136	6	20	0	0	0	0	0	0
29	Khurda DDL	671	40	4	1	1	2	20	0	0
30	Deogarh DDL	283	0	0	0	0	0	0	0	0
TOTAL		17586	10244	19696	470	105	2562	2256	1079	2706