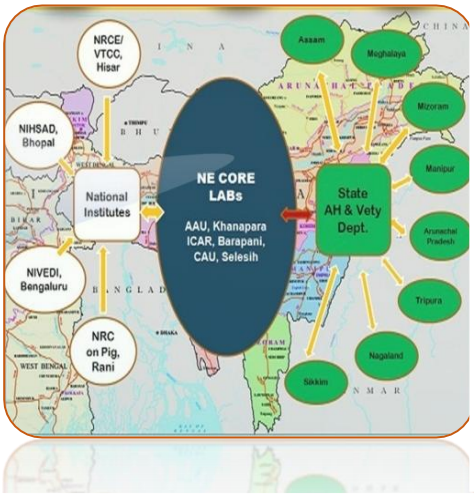
# ADVANCED ANIMAL DISEASE DIAGNOSIS AND MANAGEMENT CONSORTIUM (ADMaC) : FUTURETRANSLATIONAL RESEARCH CENTRE

**Genesis of ADMaC**: The North Eastern Region is the most vulnerable part of India for incursion of any pathogens due to sharing open international borders with five neighbouring countries. However, there seems to be little preparedness to handle any imminent danger of any trans-border or emerging diseases including diseases of zoonotic origin. In various forum such issues were discussed time and again without any realistic solution. Dr K M Bujarbaruah after resuming as Vice Chancellor of the Assam Agricultural University, we appraised about the transboundary and zoonotic disease situation in NER. In one fine evening Bujarbaruah Sir called then Director of Research (Vety), Dr A Chakrabory, Dr S K Das, HOD, Microbiology and DR N N Barman to VC's chamber. Sir explained about the concept of the Megaprojects on Animal Diseases and Animal Production. It was a dream of former Vice Chancellor, Dr K M Bujarbaruah that in his first tenure, he wanted to establish a replica of DBT-AAU centre at Khanapara. Accordingly Bujarbaruah Sir organized a meeting on 04.05.2013 in presence all representatives of Veterinary Faculty, State Veterinary Departments and NER Research Centres and explained the genesis of the concept on two R & D projects, one on establishment of an Advanced Animal Disease Diagnostics and Services Management Centre (AADSMC) and the other on establishment of a centre of Veterinary and Biomedical Research on Food Security, Safety and Zoonotic Issues in NER. Bujarbarua Sir has constantly pursuing at DBT-New Delhi for approval of the project. It was his leadership and constant monitoring for finalizing the proposal. Still I remember, one evening after his return from Delhi called all of us to take dictation on objectives of the proposal and preparation of output and outcome of the project. Really, I admire about his leadership in executing the concept into realistic state. In this development one should also record and acknowledge the initiative and efforts made by Dr. Arun Varma, Sr Consultant of DBT. With constant effort of Dr A Chakraborty, Dr S K Das, DrArnabSen, Dr N N Barman, Dr P Borah, Dr Tapan Dutta, the project proposal was finally submitted. On 4th April, 2014, Dr T Madhanmohan, advisor DBT communicated to the Director of Reserch (Vety), Dr A Chakrabory about approval of the multi-institutional project estimated outlay of **Rs.36.2562 crore.**

**The ADMaC Project**: The project was initially named as Advanced Diagnostics and Services on Animal Health and Disease (ADSAHD), subsequently changed to Advanced Animal Disease Diagnostics and Services Management Centre (AADSMC) and finally it was tuned as Advanced


Animal Disease Diagnosis and Management Consortium (ADMaC) in the present form. This Tripartite Mega project under the initiative of the Core Lab I, College of Veterinary Science, Assam Agricultural University has been launched by the Hon'ble Minister of Science and Technology, Earth Sciences, **Dr Harsh Vardhan** on 17th February 2015 in College of Veterinary Science, Khanapara. Hon'ble Vice Chancellor, AAU, Dr K M Bujarbaruah welcomed the minister. Dr.HarshVardhan in his speech desired that everyone should have a solemn duty to protect the health of our animals. In fact love for animals is an integral tradition of Indian society. According to him launching of this Project to day is a humble beginning in the cause of animal health. He appealed the scientists to work in a dynamic spirit and come out of the box so as to link science to common man. He expressed his firm confidence that the Project will be a role model, not only for North East India but also for other parts of the country in respect of its scientific output and service management. In this project, AAU, Khanapara centre (Department of Veterinary Microbiology, CVSc) was identified as the Core Lab by DBT, Govt of India. As such a four storey building with fully functional **state-of-the-art laboratories** were created near to the Veterinary Clinical complex (VCC), CVSc, AAU Khanapara. The ADMaC building was




inaugurated by Hon'ble Governor of Assam Prof Jagadish Mukhi 28th August, 2018.

## Gound Floor

| | |
|---|---|
| 001 | Reception |
| 002 | Data Processing & Bio-Informatics |
| 003 | Visitor's Room |
| | Wash Room |
| 004 | Sample Repository Unit |
| 005 | Conference Room |
| 006 | Sterilization Room |
| | Wash Room |
| 007 | Post-mortem Room |
| 008 | Waste management Unit |
| 009 | Sample Reception Counter |
| 010 | Cleaning & Washing Room |
| 011 | Clinical & Histopathology Lab |
| 012 | Clinical Parasitology Lab |
| | Scientist-I |
| 013 | Serology Lab |
| 014 | Central Store |
| 015 | Training Hall |
| 016 | Bacteriology Lab |
| | Wash Room |

## First Floor

| | |
|---|---|
| 101 | Lobby |
| 102 | Preparation Room |
| 103 | Wash Room |
| | Office Room |
| 104 | Facility Incharge |
| 105 | Molecular Lab |
| | Wash Room |
| 106 | Clean Room |
| 107 | Amplification Room |
| 108 | DNA Isolation Room |
| 109 | RNA Isolation Room |
| 110 | Vaccine Research Unit |
| | Scientist –II |
| | Scientist --III |
| 111 | Cell Repository Room |
| 112 | Cell Culture Room |
| 113 | Preparation Room |
| 114 | Mammalian Virology Lab |
| 115 | Avian Virology Lab |
| 116 | BSL-3 Lab |

The Department of Veterinary Microbiology is successful in earning various externally funded projects (ICAR, DBT, DST) and thus procured all modern sophisticated instruments and appliances that are being utilized successfully for disease diagnosis and generation of cutting edge technologies. The DBT-ADMaC facility has tagged the **ISO 9001:2015 certificate**, signed MOU with Pollution Control Board, Assam, channelized Bio-medical waste disposal and in process for obtaining DBT-RCGB certificate for operation of the only BSL-3 facility available in NER to handle animal and avian pathogens. With ongoing activities, the DBT-ADMaC facilities able to reach the expected goal in establishing infrastructure, developing a team of skilled man power and batteries of diagnostic reagents, vaccines and disease information technologies in all 8 NER states. Besides core laboratories (3) in NER institutes, a total 32 state disease diagnosis laboratories are renovated and furnished with minimum essential equipments. Each state central laboratory is now well equipped with molecular and ELISA based diagnosis facilities. As such a strong disease diagnosis network has been developed in NER. The ADMaC facility is equipped with all modern instruments to carry any type of out cutting edge technology.

**Modern instrument facilities are available at DBT-ADMaC**

| Name of Instruments | Status |
|---|---|
| Afunctional BSL-3 Lab with all instruments facilities | 1 |
| Molecular and Immunological labs | 1+1 |
| Small animal maintenance laboratory | 1 |
| Experimental animal facility | 1 |
| GPS hand set | 3 |
| Ultra freezer -$86^0$ C vertical type | 3 |
| Deep freezer (-20/-30ºC) | 5 |
| $CO_2$ incubator | 2 |
| Biosafety cabinet | 3 |
| High speed refrigerated centrifuge with rotor | 1 |
| $LN_2$ containers (various capacities) | 4 |
| Immune electrophoresis apparatus | 3 |
| Western blotting apparatus | 1 |
| Vaccine carrier | 6 |
| Orbital shaking incubator | 1 |
| Light microscope with fluorescent and photographic attachment | 1 |
| Real TimePCR | 2 |
| LAMP PCR | 1 |
| Inverted microscope with live cell imaging facility | 1 |
| Table top centrifuge machine | 1 |
| Cryotome&Microtome with accessories | 1+1 |
| Water bath shaker | 2 |
| BOD incubator | 3 |
| Micropipette set | 7 |
| Minilysate | 2 |
| Multi-channel micropipette set | 3 |
| pH Meter | 1 |

| | |
|---|---|
| Autoclave horizontal / vertical type | 3 |
| Formalin vaporizer | 1 |
| Fume hood | 1 |
| ELISA reader | 2 |
| Egg incubator | 1 |
| Auto-analyser | 1 |

The collaborative research finally contributed a lot in the field of disease diagnosis and control. The biological resource generated includes a large number of important pathogens from various species of animal which are preserved safely in **Veterinary Type culture centre**, Hissar and at all three core Labs. Besides, serum and tissue repository are also maintained. In the field of information technology, a web site (www.cvscadmaclab.org.in) was developed. Again, GPS based disease maps of important animal diseases were generated and disease data were authenticated with the help of meta-analysis. Worth mentioning scientific contribution includes development of two cell culture adopted vaccines against classical swine fever and duckplague, 7 ELISA based diagnostic kits, 9 PCR in house assays. Besides 38 existing diagnostic tests were optimized /improved. All the products /tests mentioned above were supplied to the field laboratories for field validation. In the field of knowledge sharing, the project was able to contribute one book, 5 laboratory manuals, and 83 research articles. A good number of scientific abstracts were also presented. The project was also successful in creating a linkage with end users. For easy communication with the farmers a Mobile App named "PDDES" was developed which was loaded with some necessary information/photograph for symptomatic diagnosis and appropriate action to be taken by farmers. A pig disease diagnosis app also developed and information is available at https://play.google.com/store/apps/details?id=com.nivedi.myapplication.The other beneficiary of the project is various Govt departments including Krishi Vigyan Kendras. Valuable wild animals at the State Zoo, Assam were saved due to timely detection of Canine Distemper, PPR and immediate adoption of preventive measures suggested by ADMaC centres. The diffusion point for incursion of novel diseases is located in the North Eastern part of India because of the porous borders. ADMaC provided the stepping stone for fulfilling the one health concept and for making the NER well equipped to restrict entry of trans-boundary diseases. The success story of the project has already been highlighted in the official website of DBT.

The existing ADMaC facility has been receiving various clinical and post-mortem samples from entire NE states. About 20,000 different samples of bovine (5548), caprine (2160), swine (6544), avian (1200), wildlife (1200) and others were handled and a disease map is created. Besides livestock, there is considerable pet population in this region. However, till date there is no commercial molecular diagnosis laboratory in this region to detect infectious diseases of animals. Early disease diagnosis is critical to save lives of not only human but also of animals by providing appropriate treatment and implementing effective prevention and control measures.


To adapt real time disease diagnosis and prevention in NER states with an effective deployment of indigenous technologies, DBT, GoI has been supporting other projects for validation of already developed vaccines and diagnostics as per OIE guidelines. Accordingly, DBT sanctioned following projects:

| Sub Project | Title of the project | Sanction Number |
|---|---|---|
| **Project -Validation and translation of the vaccines as well as diagnostic technologies developed in Phase I of ADMaC"** | | |
| Sub-1 | Validation, Regulatory Compliance And Translation Of Vaccine And Molecular Diagnostic Duck Plague | 99/DRV/309/ADMaC PH-II/S.P-01/2021-22 |
| Sub-2 | SWINOSTICS: A Platform For Development And Validation Of Diagnostics Of Important Pig Pathogens In Ne Region Of India For Commercial Exploration | 99/DRV/306/ADMaC PH-II/S.P-02/2021-22 |
| Sub-3 | Validation And Field Testing Of Diva Tests Developed In ADMaC Phase-I Project For Surveillance Of Brucellosis In North Eastern Region Of India | 99/DRV/310/ADMaC PH-II/S.P-03/2021-22 |
| Sub-4 | Upgradation and Implementation Of Knowledge Based System (KBS) In NER Of India (An Extended Activity Of Advanced Animal Disease Diagnosis And Management Consortium, ADMaC) | 99/DRV/308/ADMaC PH-II/S.P-04/2021-22 |
| Sub-5 | Development , Evaluation and validation of peptide based Elisa for the Zoonotic diseases (I) Brucellosis and (II) Coxiellosis (Q fever) | 99/DRV/ /ADMaC PH-II/S.P-05/2021-22 |
| Project-6 | Porcine circovirus generation and evaluation of a live vectored vaccine against virus infection of swine | BT/PR33050/ADV/90/277/2019 and dated 16.06.2021 |
| Project-7 | Modelling of indigenous diagnostics and immuno-potent vaccine candidates to combat African swine fever in India | BT/PR41246/NER/95/1685/2020) sanctioned date 25.03.2021 |
| Project-8 | Establishment of Consortium for One Health to address Zoonotic and Transboundary Diseasesin India, including the Northeast Region | BT/PR39032/ADV/90/285/2020 dated 06.08.2021 |
| Project-9 | National Animal Disease Epidemiological Network (NADEN) | 6-25(31)/NICRA/NIVEDI/2019-20/5801-5803 Dtd.17.03.2021 |
| Project-10 | Building a Surveillance Model for Detecting Zoonotic Spill Over in Increased Animal-Human Interaction Setting Using a One Health Approach: A Study at Selected Slaughter Houses | ICMR/2023/ECD/O/04/SlaughterHouse Part (1) (E-Office- 176423) dated 03.07.2024 |

| | | |
|---|---|---|
| Project-11 | Genomics-based Discovery of (Potential) Pathogens for India's North-Eastern Region (GDP-FINER) | BT/PR47979/NER/95/1968/2023 dated 21.05.2025 |
| Project-12 | All India Network Project on challenging and emerging diseases of animals (AINP-CEDA) | 1-1/PC/AINR-CEDA/PATH/2024-25, Dtd:-28.10.2024 |

## Important Visitors

DDG, Animal Science

OIE ASF Team Review

ADMaC Review Team

Bangladesh University

**Revenue generating model in PPP mode:** Currently, the available facilities and services of ADMaC Laboratory are functioning with the direct funding from DBT through various other research projects as well as to some extent from AAU. However, the funding from the DBT and other external agencies are gradually decreasing. It is the high time to disseminate the findings of laboratory research to the stakeholders by building solid PPP linkage. Furthermore, stakeholders are in need of active veterinary consultancy service to mitigate various animal health problems that are encountered in field conditions. Thus, it is essential to establish a robust mechanism like **Advanced Animal Disease Diagnosis and Vaccine Research Centre** (ADVaRC) to address the aforementioned issues. The facility will conduct research activity, generate manpower, provide consultancy as well as run revenue model in PPP mode for its self-sustainability through animal welfare activity. Accordingly, in 2019 a pilot diagnostic and vaccine development Project entitled "Advanced Disease Diagnosis and Vaccine Research Centre (ADVaRC)" was implemented in ADMaC laboratory by the former Hon'ble Vice Chancellor, Dr. K.M. Bujarbaruah with two manpower. Subsequently, in 2021 the present Hon'ble Vice Chancellor, Dr. B.C. Deka has sanctioned three manpower to strengthen the diagnostic component of ADVaRC. It has open the pathway to run business model pertaining to animal disease diagnosis service and vaccine production. The **ADVaRC** processed, sofar, 3477 clinical samples during 2019-23 of canine and feline origin for detection of Babesia (1279), Ehrlichia (988), Theileria (48), CDV (202), Leptospira (25), Parvo virus (2), Adeno, EEHV (237), Brucella (59), DPV, NDV, and culture-sensitivity test (622). Three vaccine candidates are developed to meet-up the demand of the farmers as field trial, and vaccines are being provided to the needy stakeholders. Besides, number of BSc, B. Tech students from various reputed institutes of India have enrolled for 3 months short-term training. Together, ADVaRC has generated more than **41 lakhs** revenue during 2019-24 periods. Subsequently, it has been functioning as **Advanced Animal Disease**

**Diagnosis Facility (AADDF).** The AADDF is a joint venture of College of Veterinary Science, Assam Veterinary & Fishery University (AVFU), Khanapara, Guwahati and M/S Krisshna Enterprise, Guwahati which is being operated in Public-Private Partnership Mode. It is located in the DBT-ADMaC Building of College of Veterinary Science, AVFU, Khanapara. The AADDF is operational from 10$^{th}$July, 2024. The key components of AADDF are:

i) **Animal Disease Diagnosis**
ii) **Capacity building and skill development through training and internship program,**
iii) **Consultancy services to the stakeholders.**

The team of AADDF comprises well-experienced expert, and skilled virologist, bacteriologist, molecular biologist, clinician and pathologist. The AADDF promises accurate, fast and cost-effective diagnostic services to clients, consultation to stakeholders related to livestock, pets and wild animals, and hands-on-training to students and researchers in the field of molecular diagnostics, vaccine production, animal cell-culture and microbiology.

The AADDF primarily focuses on providing diagnostic service to the stakeholders so that proper treatment and preventive measures could be taken at the earliest to save the suffering of animals. The diagnostic laboratory of AADDF is well equipped with state-of –the-art facilities. The diagnostic service provided by AADDF includes molecular test (PCR & Real-Time PCR) for infectious diseases of pets, livestock and wild animals, serological assays (ELISA) for detection of antibodies and antigens specific to animal pathogens, general microbiology such as bacteriological culture and antibiotic sensitivity test, and histopathology.

**List of molecular and other diagnostic service provided by AADDF:**

I. Molecular assays:

- PCR/Real-Time PCR for *Babesia* spp.
- PCR/Real-Time PCR for *Babesia gibsoni*
- PCR/Real-Time PCR for *Ehrlichia* spp.
- PCR/Real-Time PCR for *Ehrlichiacanis*
- PCR/Real-Time PCR for *Anaplasma* spp.
- PCR/Real-Time PCR for *Anaplasma platys*
- PCR/Real-Time PCR for *Leptospira* spp.
- PCR/Real-Time PCR for *Dirofilari immitis.*
- PCR/Real-Time PCR for *Theileria* spp.
- PCR/Real-Time PCR for *Brucella* spp.
- PCR/Real-Time PCR for Tuberculosis
- PCR/Real-Time PCR for John's Disease
- PCR/Real-Time PCR for *Campylobacter* spp
- PCR/Real-Time PCR for Infectious Bovine Rhinotracheitis (IBR)
- PCR/Real-Time PCR for Canine Distemper Virus (CDV)
- PCR/PCR/Real-Time PCR for Canine Distemper Virus (CDV)

- Real-Time PCR for Canine Adenovirus
- PCR/Real-Time PCR for Feline Panleukopenia Virus (FPV)
- PCR/Real-Time PCR for Feline Leukemia Virus (FeLV)
- PCR/Real-Time PCR for Feline Coronavirus (FCoV)
- PCR/Real-Time PCR for Feline Immunodeficiency Virus (FIV)
- PCR/Real-Time PCR for Elephant endotheliotropic herpes virus (EEHV)
- PCR/Real-Time PCR for African swine fever virus (ASFV)
- PCR/Real-Time PCR for Classical swine fever virus (CSFV)
- PCR/Real-Time PCR for Lumpy skin disease virus (LSDV)
- PCR/Real-Time PCR for Porcine circovirus type 2 (PCV2)
- PCR/Real-Time PCR for Japanese encephalitis virus (JEV)
- PCR/Real-Time PCR for Peste des petits ruminants virus (PPRV)
- PCR/Real-Time PCR for Porcine Reproductive and Respiratory Syndrome (PRRSV)

II. Bacterial culture and Antibiotic Sensitivity Test

III. Basic Histopathology

IV. ELISA for detection of antibodies and antigen specific to pathogens.

## Disease diagnosis Service:

From 2019 to 2025, facility in ADMaC laboratory has been utilized to provide molecular diagnostics either on payment or free-off cost. And accordingly, about Rs. 65.05 lakhs have been generated from 2019 to September, 2025 (Fig. 2).

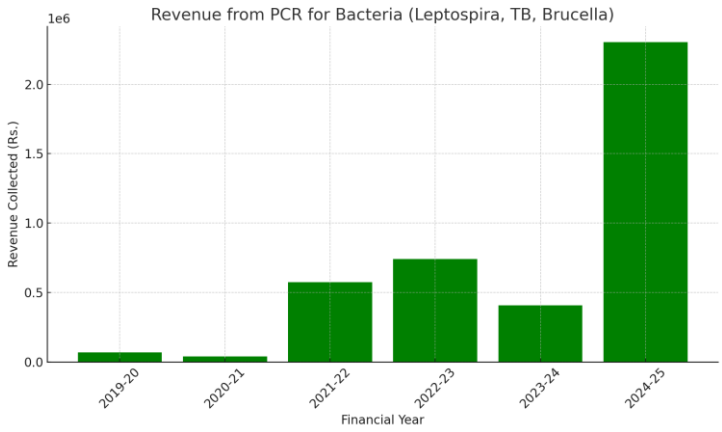



**Fig 2: Graph Showing revenue collection from diagnostic service during 2019-25**

## Training and Skill Development Platform (TSDP):

AADDF provides hands-on-training and internship to students and researchers in the following areas:

1. **Molecular Biology & Biotechnology**
2. **Molecular Diagnostics**
3. **Bacteriology**
4. **Virology**
5. **Vaccinology**
6. **Animal cell-culture**
7. **Basic Bioinformatics**

Till now several students from different institutes have undergone internship programme and three Ph.D research scholars have used the ADMaC facility, thereby 4.54 lakhs revenue has been generated since 2019. The details of the researchers are presented in Annexure-II. Moreover, ADMaC laboratory has been utilized by several students from different Departments of C.V.Sc, AAU, Khanapara to carry-out M.V.Sc. and Ph.D research work without any charge which has contributed to the academic and research growth of the university.

**Annexure II: List of external Internee/Research Scholars used facility ofADMaC Laboratory**

| Sl No. | Name of the Institute | Number | Duration | Period | Amount Paid (Rs.) |
|---|---|---|---|---|---|
| 1 | Assam Don Bosco University | 09 | 3months | 2022 | 54,000.00 |
| 2 | Cotton University | 04 | 3 months | 2022 | 24,000.00 |
| 3 | Gauhati University | 09 | 3 months | 2023 | 54,000.00 |
| 4 | Assam Down Town University | 01 | 3 months | 2023 | 6,000.00 |
| 5 | University of Science and Technology, Meghalaya | 07 | 3 months | 2021 to 2023 | 42,000.00 |
| 6 | Oxford college of Science | 01 | 3 months | 2021 | 6,000.00 |
| 7 | North Guwahati College | 01 | 3 months | 2023 | 6,000.00 |
| 8 | Pondicherry University | 01 | 3 months | 2023 | 6,000.00 |
| 9 | St. Admund's College | 01 | 3 months | 2023 | 6,000.00 |
| 10 | Kalinga Institute of Industrial Technology | 01 | 3 months | 2023 | 6,000.00 |
| 11 | Sikkim Manipal Institute of Medical Science University of Calcutta | 01 | 6 months | 2023 | 12,000.00 |
| 12 | BodolandUniversity | 01 | 3 months Ph Research | 2023 | 6,000.00 |
| 13 | Assam Rajiv Gandhi University | 01 | 3 months PhD Research | 2023 | 6,000.00 |
| 14 | Cotton University | 01 | 6 months PhD | 2021-2022 | 12,000.00 |
| 14 | Kristu Jayanti College,Bengaluru | 01 | 2 months | 2024 | 6000.00 |
| 15 | Assam Don Bosco University | 12 | 1 month | 2024-2025 | 54,000.00 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | University of Science and Technology, Meghalaya | 15 | 1 month | 2024-2025 | 54,000.00 |
| 17 | Parul University, Gujarat | 01 | 1 month | 2025 | 6000.00 |
| 18 | Bodoland University | 01 | 2 months | 2025 | 6000.00 |
| 19 | National Institute of Advance studies , Bengaluru | 01 | 3 months | 2025-2026 | 6000.00 |
| 20 | Rabindranath Tagore University Hojai | 01 | 6 months | 2025-2026 | 10,000.00 |
| 21 | Assam Don Bosco University | 03 | 6 months | 2025-2026 | 30,000.00 |
| 22 | University of Science and Technology, Meghalaya | 03 | 3 months | 2025-2026 | 18,000.00 |
| 23 | Assam Down Town University | 03 | 3 months | 2025 | 18,000.00 |
| | | | | **Total** | **4,54,000.00** |

## Translational Research:

A total of Rs 10.7375 lakhs was generated through various projects under Microbiology Department transferred to companies as well as validation of different kits during the period 2018-2025. Details are in Annexure III.

**Annexure III: Revenue generated from translational research activities**

| Sl No. | Nature of Research | Company/Institute | Revenue Collected (Rs.) | | | |
|---|---|---|---|---|---|---|
| | | | 2019-20 | 2021-22 | 2022-23 | 2024-25 |
| 1 | CSFV vaccine validation | TANUVAS | 3,87,000.00 | | | |
| 2 | Validation of CSF lateral flow kit | GeNext Genomics Pvt. Ltd | | 2,56,750.00 | | |
| 3 | MOU for development of ASFV diagnostic | GeNext Genomics Pvt. Ltd | | | 2,00,000.00 and 1.5% royalty | |
| 4 | Additionally, we validated Brucella kit, CSFV MoAb | ICAR-NIVEDI | | | | |
| 5 | MOU for Validation of CSFV Antigen Detection kit | GeNext Genomics Pvt. Ltd | | | | 2,30,000.00 |
| **TOTAL** | | | **10,73,750.00 (Ten Lakhs Seventy Three Thousand Seven Hundred Fifty Only)** | | | |

Consultation is another arm of AADDF. The team of AADDF provides consultancy service to stakeholders in the following fields:

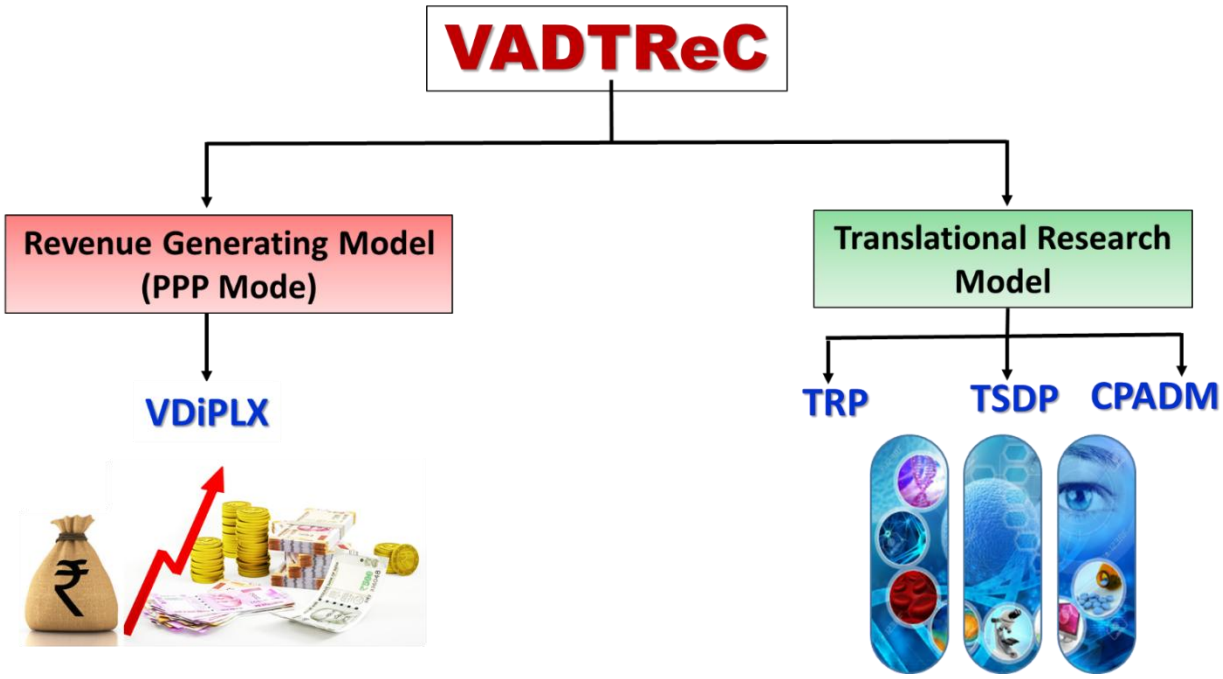
- **Biosecurity in livestock farms.**
- **Livestock and wildlife disease management.**
- **Vaccination of livestock, pets and wild animals.**
- **Disease management of pets.**
- **Handling of Transboundary, Exotic, Zoonotic and Endemic Disease of livestock, pets and wild animals**
- **Epidemiological investigation for animal and zoonotic diseases.**

**Societal impact:** The activities of ADMaC could createa permanent societal impact, which becomes visible at present. As a result farmers are in constant contact with the scientists of the core laboratory, either with request for experimental vaccines for swine fever, duck plague or for diagnosis of the diseases of their domestic birds or animals. Majority of the Government organizations, *viz*., forest department, state A. H. and Veterinary Departments used to approach the ADMaC consortium, whenever they confront a new problem. Many of the agencies used to consult the core laboratory for confirmation of suspected cases of protozoal infections like theileriosis, babesiosis, anaplasmosis, trypanosomiasis in large animals and pet animals. Many KrishiVigyanKendras are now utilizing services of ADMaC project in their program of "**doubling the Farmers income**" scheme.

The ADMaC project has organized different vaccination cum health camps in collaboration with state A.H. and Veterinary Departments to create awareness among farmers about early diagnosis of the diseases of livestock and poultry. The **mobile App** was developed to provide first-hand information on clinical and gross changes of important infectious diseases of livestock and poultry. This App helps the farmers, field Assistants, field Veterinary doctors for tentative diagnosis of the diseases followed by taking appropriate measures to contain the disease.

## FUTURE PROSPECT

The existing facility can be best utilized as**Veterinary Disease Diagnosis Platform (VDiPLX)** and as the **Translational Research Centre**. It is proposed for self sustainability of the facility having two major components, firstly it will have animal disease diagnosis service for entire North Eastern Region and it will be solely a revenue generating component that designated as **Veterinary Disease Diagnosis Platform (VDiPLX).** The second major component will be the translational research which will have **Training and Skill Development Platform (TSDP**), **Translational Research Platform (TRP)** encompassing development of new diagnostics, vaccine candidates, validations and other R&D activities and involve in **Consultancy Platform for Animal Disease Management (CPADM).**




It is expected that ADMaC will be a step forward in fulfilling one health concept in future. The success story of the project is already appeared in the DBT-website.

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