

Annexure V

List of Completed Project

Sl. No	Project Title	Funding
1	Generation-wise genetic evaluation of Rani crosses	Institute
2	Characterization and expression profiling MSY of Pig (male-specific region of Y chromosome) genes for boar fertility.	Institute
3	Exploring genetic variability in different candidate genes and their association with (re)production traits in pigs	Institute
4	Molecular characterization of indigenous pig breeds	Institute
5	Development of IRT image-based systems for examining the health status of pigs	Institute
6	Physic-genomic responses and MCT profiling of exotic and Indigenous pig breeds in heat stress during different seasons	Institute
7	Development of early fertility markers in pigs	Institute
8	Investigations on myogenesis in myostatin gene knockout cells through CRISPR-CAS9 based genome editing	Institute
9	Development of thermo-tolerant pig through biomarker assisted selection	ICAR-NF
10	Characterization of immunogenic and angiogenic growth factors regulating ovarian function in pigs.	Institute
11	Investigation of notch signalling in regulation of ovarian function in pigs	Institute
12	Preservation of boar semen using different additives in liquid and frozen state	Institute
13	Biochemical characterization of seminal gel and its application for biostimulation in pigs	DBT
14	Establishment of modern boar semen production centre and creation of extension facilities for capacity building of piggery stakeholders	NEC
15	Development of vegetable waste/fruit waste-based pig feeds	Institute
16	Molecular detection of aflatoxins producing <i>Aspergillus</i> spp.	Institute
17	Maize Production in NEH region for sustainable livestock production	ICAR-IIMR
18	Ethogram development and welfare assessment of growing desi and crossbred pig	Institute
19	Optimizing the processing conditions to prevent the occurrence of selected FSSAI listed food borne pathogens in pork and pork products and to develop risk mitigation strategies.	Institute
20	Setting up of food testing laboratory	MoFPI
21	Technical Advisory Services for Piggery Value Chain Improvement in Assam, under the World Bank financed Assam Agribusiness and Rural Transformation Project (APART).	World Bank
22	Farm-to-Fork Risk profiling of hazards associated with pork supply chain in India, developing a database on hazards and associated unique pig husbandry / processing practices, developing food safety interventions towards reducing hazards and effective risk communication strategies as guidance to the industry.	ICAR - LBS Award
23	Sero-prevalence and molecular epidemiology of important porcine viral diseases in pigs in northeastern part of India with special reference to Assam	Institute
24	Epidemiology of Intestinal protozoan parasitic diseases of Pigs, with special reference to <i>Cryptosporidium</i> and <i>Coccidia</i> .	Institute

25	Molecular and Serological detection of Porcine Parvovirus (PPV) and its characterization.	Institute
26	Expression and evaluation of diagnostic potential of immunogenic proteins of porcine reproductive and respiratory syndrome virus.	Institute
27	Development of CD163 host receptor based sero-diagnostic for early detection of porcine respiratory and reproductive syndrome virus.	Institute
28	Epidemiology, patho-physiology and development of nucleo-diagnostics against porcine coronaviruses from North-Eastern India.	Institute
29	Kinetics of FMD virus serotype specific protective antibody response induced in pigs vaccinated with commercial FMD vaccine intended for use in cattle	Institute
30	SWINOSTICS: A platform for development and validation of on-field diagnostics of important pig pathogens in NE Region of India for commercial exploration	DBT
31	Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India including North-East Region	DBT
32	Development of a virus like particle- based vaccine against Indian isolate of Porcine Circovirus	DBT
33	Development of loop-mediated isothermal amplification (LAMP) assay for rapid detection of important zoonotic bacterial pathogens of pig	Institute
34	Fostering the adoption of scientific pig production practices among small holders in Assam	Institute
35	Pork Marketing chains in North-East India for sustainable livelihood of tribal women (Assam, Meghalaya and Nagaland)	ICAR-NASF
36	Design and development of Image based growth rate estimation algorithm for different categories of pigs.	Institute
37	Traceable Value Chain for safe pork in North Eastern Region of India	NASF
38	Generation of sex-specific phenotypes in pig using genome editing	Network Project
39	Establishment of STI Hub for Mising and Bodo women of Assam for economic empowerment through technology interventions in pig value chain	DST
40	Exploration of Genome-Wide Selection Signatures in Ghoongroo and Doom pigs of India	Institute
41	Development of proteomic and transcriptomics atlas of porcine olfactory system	Institute

List of Ongoing Project

1	Cataloguing of genomic and transcriptomic signature in indigenous pig tolerant to African swine fever virus	DBT
2	Development of Myostatin Knock Out Pigs	Network Project
3	Self-sustainable cooperative model for propagation of artificial insemination and envisaging cryopreservation of spermatozoa in pig	NLM, DAHD
4	Development of multi-serotypic virus like particle-based vaccine against porcine circovirus disease of pig in India	NLM, DAHD
5	Indian Network for Fisheries and Animal Microbial Resistance (INFAAR)	Network Project
6	Network Program on Challenging and Emerging Diseases of Animals (CEDA)	Network Project

7	Advancing Nipah Virus Control: Combined Surveillance and Diagnostic Tool Development for Pigs	NASF
8	Serological and molecular surveillance of Swine Influenza in pigs coupled with Knowledge, Attitude, Practices studies to explore community insights in Northeast India	DHR
9	Novel Autochthonous Probiotic Bacterial Isolates from Indigenous Pigs as Sustainable Alternatives to Antibiotic Growth Promoters	DHR
10	unravelling host genomics for enhanced immune response against classical swine fever vaccination	ICAR-CCF
11	Performance Evaluation of a Novel LWY (male) X Khoongroo (female) Crossbred Pig	Institute
12	Performance Evaluation of a Novel Duroc (male) X Khoongroo (female) Crossbred Pig	Institute
13	Performance Evaluation of a Novel LWY (female) X Khoongroo (male) Crossbred Pig	Institute
14	Performance Evaluation of a Novel Duroc (female) X Khoongroo (male) Crossbred Pig	Institute
15	Exploring the genetic diversity of Swine Leukocyte Antigen (SLA) genes in indigenous pig breeds of India	Institute
16	Functional characterization of genes regulating reproduction in sows	Institute
17	Design of recombinant multi-epitope protein(s) and their expression for assay development	Institute
18	Artificial Insemination in Pigs	Institute
19	Hormonal and herbal intervention for optimizing eutocic farrowing in pigs	Institute
20	Propagation of Artificial Insemination for establishment of multiplier units and optimizing reproductive efficiency in pigs at farmers' field.	Institute
21	Development, characterization, and validation of nano zinc supplement for improving piglet productivity	Institute
22	Surveillance and Monitoring of Swine Diseases	Institute
23	Epidemiology and Molecular Epidemiology of African Swine Fever Virus (ASFV) in North-Eastern region of India (Inter-institutional project)	Institute
24	Isolation, Characterization of Porcine Muscle Stem Cells for development of 3D culture	Institute
25	Development of recombinant VP2 protein based indirect ELISA for serodiagnosis of Porcine parvovirus	Institute
26	Development of e-learning knowledge products in scientific pig production.	Institute
27	Development of pig seed village in Assam	Institute
28	Development of technology transfer models through participatory rural appraisal in the piggery sector	Institute
29	Development of a point of care colorimetric assay for detection of meat freshness	Institute
30	Association of farrowing and piglet traits <i>vis a vis</i> colostrum characteristic with neonatal performance in pigs	Institute
31	Assessment and optimisation of the water footprint in pig production and processing	Institute
32	Dynamics of gut microbiome to dietary management and antibiotic treatment in pigs	Institute

33	Design and development of Image based growth rate estimation algorithm for different categories of pigs	Institute
34	Machine learning assisted identification of different cells of porcine origin	Institute
35	Biobanking of reproductive and somatic germplasm of porcine origin	Institute
36	Exploring the genetic diversity and functional characterization of Swine Leukocyte Antigen (SLA) genes in indigenous pig breeds of India	Institute
37	Investigations on cytokine mediated stress pathways and development of managemental protocols for optimal growth and social well-being in weaned piglets	Institute
38	Molecular Characterisation of Porcine parasites	Institute
39	Development of a herbal anti-diarrhoeal formulation for pigs	Institute