

Tamil Nadu Dr. J. Jayalalithaa Fisheries University DIRECTORATE OF RESEARCH

COMPLETED RESEARCH PROJECTS

Abstract (2012-2022)

16
12
23
8
45
104

List of completed external funded R&D projects -16 Nos.

SI. No.	Project Titles	Budget (In Rs Lakhs)	Period
1.	DBT Project on 'Molecular characterization of pathogens associated with fish diseases in Assam'	23.48	2013 -2014
2.	DST- SERB Project on 'Bioactive peptides from fish protein hydrolysates produced using endogenous proteinases from fish processing wastes'	39.97	2013-2016
3.	SERB - MoFPI Project on 'Development of database for Indian seafood safety and traceability based on AFLP markers'	31.45	2013-2015
4.	NCSCM MOEF Project on 'Impact of large scale cultivation of seaweed culture in coastal environment of India'	27.12	2013-2015
5.	ICAR Project on 'Niche Area of Excellence in Fish Safety and Quality Assurance'	305.60	2014-2017
6.	ICSSR Project on 'Conversion of low value fish marketing to high value fish marketing among the marginalized fisherwomen in the coastal districts of Tamil Nadu'	8.00	2014-2016
7.	Gomber Project on 'Impact on anthropogenic activities and seasonal variation in plankton biomass in Gulf of Mannar Biosphere in Thoothukudi District'	10.505	2014-2017
8.	ICAR Project on 'Value chain analysis of farmed shrimp industry in Tamil Nadu'	12.00	2016

9.	DBT-BBSRC Project on 'Novel molecular approaches for advancing prediction and mitigation of disease outbreaks in aquaculture for small-scale farmers'	109.912	2016-2019
10.	DBT Project on 'Healthy shrimp and GIFT tilapia production through Bio-Floc based farming system: Development of technology an Standard Operating Procedure'	57.93	2016-2019
11.	DBT Project on 'Bio-prospecting for anti-osteoporotic collagen peptides derived from fish bones'	36.07	2017-2020
12.	ICAR Project on 'Development demonstration and dissemination of solar energy operated aerators in shrimp farms'	21.25	2018-2020
13.	DBT Project on 'Adoption of foldscope as a tool to study the diversity of fish parasites and microalgae in different aquaculture systems'	6.00	2018-2019
14.	FSSAI Project on 'Monitoring of heavy metals in fish and shellfish species along the Indian coast and possible mitigation measures '	9.50	2018-2020
15.	DBT Project on 'Evolving artificial fish bait for long line fishingusing biopolymers and bio-attractants derivedfromMarine FishProcessingwastes'	44.56	2019 -2021
16.	DST — SERB Project on "Re-emergence of <i>Vibrio vulnificus</i> risk in seafood safety in response to climatic changes of Tamil Nadu supported projects -12 Nos.	29.26	2019 22
1.	IAMWARM Project on 'Development of environmental guidelines and operational protocol for sustainable development of cage culture in the reservoirs of Tamil Nadu'	12.00	2014-2015
2.	IAMWARM Project on 'Development of low cost feeds for fish production demonstration in farm ponds and cages in Tamil Nadu'	5.70	2014 -2015
3.	Part —II Scheme on 'Biosecured Microbial Floc driven farming for domesticating eco-friendly and viable culture practices for Vannamei and Milk fish'	44.39	2014-2016
4.	Part –II Scheme on 'Popularization of cost effective fish compost in Thoothukudi District of Tamil Nadu '	11.10	2015
5.	Part –II Scheme on 'Design upgradation of line fishing gears for species specific fishing along South-East Coast of Tamil Nadu'	17.10	2015
6.	TANII Project on 'Establishment of Aquatic Rainbow Technology Park at Madhavaram for developing 'Rural Aquaculture Entrepreneurship'	1030.00	2015 - 2018
	NAFCC Project on 'Assessment of Fishing pattern and	21.00	2017-2018

8.	NAFCC Project on 'Socio-economic vulnerability of fishermen and other coastal communities in Thoothukudi District of Tamil Nadu'	5.00	2017-2018
9.	TANII Project on 'E - fish health surveillance and monitoring network to improve fisheries production in Tamil Nadu'	590.40	2017 -2020
10.	TANII Project on 'Development and demonstration of innovative fisheries engineering inventions for the product maximization in fisheries industries'	75.20	2017-2020
11.	SBGF Project on 'Livelihood Improvement through Technology Backyard genetically improved farmed Tilapia carp farming'	18.00	2018 -2021
12.	SPC Project on 'Livelihood Improvement through Technology Backyard Genetically Improved Farmed Tilapia Carp Farming'	30.00	2017-2021
List o	f completed NADP/RKVY projects -23 Nos		
1.	NADP Project on 'Establishment of Regional Fisheries Research and Extension Cenrain	121.04	2014-2016
2.	NADP Project on 'Establishment of Marine Finfish Hatchery System at Mandapam'	184.50	2015-2017
3.	NADP Project on 'Establishment of Shrimp Brood Bank at Kanyakumari'	198.91	2015-2017
4.	NADP Project on `Establishment of Multiplier stations for the Breeding and Dissemination of JayantiRohu Seeds to Farmers'	100.00	2016-2017
5.	NADP Project on 'Strengthening of Regional Stations of Centre for Sustainable Aquaculture (CeSA)'	274.54	2016 -2018
6.	NADP Project on 'Farmed Pearl Sport (Etroplussuratensis') Production as an Alternative Livelihood to Promote Brackish Water Aquaculture Entrepreneurship for Fishers of Pulicat Lake'	260.88	2016- 2018
7.	NADP Project on 'Development of cost efficient feeds for enhancing freshwater fish production'	398.00	2016-2019
8.	NADP Project on 'Establishment of Fish and Shellfish Health Certification and Disease Surveillance Laboratories in Tamil Nadu for enhancement of Aquaculture'	491.075	2016 -2018
9.	NADP Project on 'Demonstration and Training from the farmers capacity building at regional CeSA in TNFU'	100.534	2017- 2019
10.	NADP Project on 'Establishment of fisheries technopark cum fish processing technology business incubation centre'	114.65	2017- 2019
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11.	NADP Project on 'Developing the National Aquatic Rainbow Mall (NAQRAM) to promote Incredible Indian Ornamental Fish Trade through One Stop Shopping at Madhavaram, Tamil Nadu'	250.00	2017- 2020
12.	NADP Project on 'Establishment of Fisheries Training Institute, Mandapam, Ramanathapuram'	450.00	2017- 2021
13.	NADP Project on 'Establishment of RecirculatorySeabass Aquaculture Technology Park, for Doubling the income with Low water Budgeting'	350.00	2018 -2021
14.	NADP Project on 'Kayalagam the Future Store for Amplification of Marketing of Diversified Fish products in Tamil Nadu'	250.00	2018-2021
15.	NADP Project on 'Establishment of State Referral Laboratory for Fish feed Testing and Quality Certification at IPGS, TNJFU, OMR Campus, Vaniyanchavadi, Chennai'	250.00	2018 -2021
16.	NADP Project on 'Establishment of Loach (AyiraiMeen) breeding Centre at Parakkai, Kanyakumari District	175.00	2020 -2022
17.	NADP Project on 'Hands on Training cum Demonstration on "Limited Water Usage Aquaculture'	187.40	2021-2022
18.	NADP Project on 'TNJFU'S Business incubators for Aquaculture and Fish Processing Technology to promote Start-Ups Integrated Fisheries Entrepreneurship in Tamil Nadu State'	300.00	2020 -2022
19.	NADP Project on 'Integrated Multi-tropic Aquaculture (IMTA) based Culture Technology to Augment Fish Production as an Alternative Livelihood for the Fisherfolk of Tharuvaikulam, Tamil Nadu'.	299.600	2019-2022
20.	NADP Project on 'Development and Transfer of Seaweed Farming Technology as an Alternative Employment Option for the Coastal Fisher Folk in Mandapam Region of Tamil Nadu'	251.100	2019-2021
21.	NADP Project on 'Establishment of Aqua Agriculture Integrated Systems for inland farmers in Erode District'	138.50	2019-20
22.	NADP Project on 'Establishment of Aquaculture Service Centre in Cauvery Delta Region'	130.00	2019-20
23.	NADP Project on 'Establishment of Aquaculture Service Centre	130.00	2019 -20
List of	f completed NFDB projects -8 Nos		
1.	NFDB Project on 'Establishment of State Referral Laboratory for Fish disease Diagnosis and AquaticAnimal Health'	55.11	2014- 2015
2.	NFDB Project on `Establishment of Aquatic Animal Health and Environment Management Laboratory'	56.00	201 - 2017

3.	NFDB Project on 'Up-scaling of biofloc production technology for developing eco feed for vannamei shrimp culture'	50.00	2018- 2020
4.	NFDB Project on 'Establishment of Demonstration Units on Recirculatory Aquaculture systems for doubling the Vannamei shrimp culture'	24.08	2018- 2020
5.	NFDB Project on 'Establishment of Technology demonstration unit of Azolla as Feed supplement of GIFT Tilapia at Advanced Research Farm Facility, Madhavaram, TNJFU campus, Tamil Nadu'	3.01	2018- 2020
6.	NFDB Project on `Establishment of Aquaponics Unit for Training and Demonstration to fish farmers at KVK, Sikkal, Nagapattinam'	10.66	2018-2020
7.	NFDB project on "Upscaling of Biofloc production technology for developing eco-feed for Vannamei Shrimp Culture	50.00	2018-2020
8.	NFDB project on "Open Sea Cage Culture of Mairne finfishes along the coast of Ramanathapuram District of Tamil Nadu"	267.6	2018-2022

List of Completed University Funded Projects- 45 Nos

SI. No.	Title of the project	Period	Location
URP		2 2	
1.	Seasonal variation in lipid and fatty acid profile of sardine (Sardinella gibbosa) and emperor fish (Lethrinus lentjan) from Thoothukudi coast	2014-2015	FC&RI, Thoothukudi
2.	Studies on biology of Mullet fish varieties from Pulicat lake, north part of Chennai	2015-2016	FC&RI, Thoothukudi
3.	Quality evaluation of chitin and chitosan from various shellfish waste and their resource potential in Tamil Nadu	2015-2016	FC&RI, Thoothukudi
4.	Designing and fabrication of cages for mud crab fattening/farming along the Pulicat lake	2015-2016	Dr. MGR FC&RI , Ponneri
5.	Induced breeding and artificial propagation of Pangas, <i>Pangasianodan hypothalamus</i> (Sayvage, 1878)	2015-2016	Dr. MGR FC&RI , Ponneri
6.	The effect of ionic concentration of low saline waters on growth characteristics of <i>Litopennaeus</i> vannamei	2015-2016	Dr. MGR FC&RI , Ponneri
7.	Development of seaweed based nutritional food products	2015-2016	Dr. MGR FC&RI , Ponneri

8.	Dissemination of GIFT tilapia farming technology in PonneriTaluk of Thriuvallur District	2015-2016	Dr. MGR FC&RI , Ponneri
9	Development of an e-interface indicator gadget against for domestic level freshwater aquarium	2017-2018	CoFE, Nagapattinam
10.	Design and Development of a low cost solar Tunnel Fish dry dryer	2017-2018	CoFE, Nagapattinam
11.	Development of bio-piezoelectric material form prawn shell	2017-2018	CoFE, Nagapattinam
12.	Validation of different mathematical drying models for the dry fish production	2017-2018	CoFE, Nagapattinam
13.	Design and integrated acclimation tank unit of shrimp culture system	2017-2018	CoFE, Nagapattinam
14.	Risk Assessment of squid landed in Colachel region of Kanniyakumari district for heavy metal contamination	2018-2019	FC&RI, Thoothukudi
15.	Development of fish freshness gadget using fuzzy logic based technology in Indian Mackeral (<i>Rastrelliger kangurtha</i>) landed in Nagapattinam Coast	2018-2019	CoFE, Nagapattinam
16.	Investigation on the nutritional requirements for the growth of Spiny Loach "Lepidocephalus thermals" in captivity	2019 - 2020	ThanjavurCeSA
17.	Monitoring the presence of nitrofuran metabolites in farmed shrimp and farm implements in Southern Peninsular India	2019 - 2020	FC&RI, Thoothukudi
18.	Impact assessment of the welfare schemes on socioeconomic upliftment of marine fishers of Thoothukudi district, Tamil Nadu	2019 - 2020	FC&RI, Thoothukudi
19.	Extraction of natural pigments from Marine sources for the formulation of nutritional food and cosmetic products	2019 -2020	Dr. MGR FC&RI , Ponneri
20.	Plankton Diversity in Pulicat Lake of Tamil Nadu region	2019 -2020	Dr. MGR FC&RI , Ponneri
21.	Characteristics of Shrimp farm organic rich waters and its influence on the Pulicat ecosystem of Palaverkaadu region"	2019 -2020	Dr. MGR FC&RI , Ponneri
22.	Seasonal variation in fatty acid profiles of cultured and wild loach (<i>Lepidocephalus thermalis</i>)	2020 -2021	Vaniyanchavadi, Chennai
23.	Comparative skeletal osteology of anchovies (Genus: <i>Stolephorus</i>) off Thoothukudi coast	2020 -2021	FC&RI, Thoothukudi
24.	Investigation of CO2 emission by motorized fishing vehicles of Thoothukudi coast	2020 -2021	FC&RI, Thoothukudi

25.	Demonstration farming of vannamei in lined ponds at MRFF, Tharuvaikulam	2020 -2021	FC&RI, Thoothukudi
26.	Development and evaluation of combined gill net with long line for pelagic fishery for traditional fishermen in Pulicat Region of Coromandel coast	2020 -2021	Dr. MGR FC&RI , Ponneri
27.	Screening of phosphorus solubilizing bacteria in mangroves of Ennore creek	2020 -2021	Dr. MGR FC&RI , Ponneri
28.	Purification and isolation of local strain of Spirulina	2020 -2021	Dr. MGR FC&RI , Ponneri
29.	Development of halophyte incorporated fish products using SalicorniabrachiataRoxb	2020 -2021	FC&RI, Thoothukudi
30	Impact assessment of welfare schemes on socioeconomic upliftment of marine fishers of Thoothukudi district, Tamil Nadu	2020 -2021	FC&RI, Thoothukudi
31.	Formulation of Ulva based jam products	2020 -2021	Dr. MGR FC&RI, Thalainayeru
32.	Stock Assessment of Siganids in Pazhverkadu coast of Tiruvallur District	2021-2022	Dr. MGR FC&RI , Ponneri
33.	Breeding and Seed Production of Striped Murrel (<i>Channastriatus</i>) in FRP Tank System	2021-2022	FC&RI, Thoothukudi
34	Investigation on the catching efficiency of monofilament and multifilament gillnets being operated in selected fishing villages of Nagapattinam District	2021-2022	Dr. MGR FC&RI, Thalainayeru
35.	Analysing carbon emission level of selected motorized fishing vessels operated from identified fishing villages of Pulicat coast	2021-2022	Dr. MGR FC&RI , Ponneri
36.	Isolation and characterization of antimicrobial resistant gut microflora associated with farmed shrimps in Nagapattinam region	2021-2022	Dr. MGR FC&RI, Thalainayeru
37.	Study on the effect of hook size and baits on the catching efficiency of longline operated along Thoothukudi coast	2021-2022	FC&RI, Thoothukudi
38.	Efficacy of Salicornia plant extract as antimicrobial agent for application in fish preservation	2021-2022	FC&RI, Thoothukudi
39.	Studies on the low temperature preservation of microalgae (<i>Navicula</i> sp.) isolated from shrimp farms	2021-2022	Dr. MGR FC&RI, Thalainayeru
40.	Study on the impact of shrimp farms and anthropogenic activities on the water quality of the selected locations along Vedaranyam Canal	2021-2022	Dr. MGR FC&RI, Thalainayeru
41.	Water hyacinth protein concentrate as cost effective feed ingredient in the diet of genetically improved farmed tilapia	2021-2022	Dr. MGR FC&RI, Thalainayeru

JTRF			
42.	Studies on the nutritional factors influencing gamete quality and artificial fertilization in Koi carp	2018-2020	FC&RI, Thoothukudi
43.	Development of halochromic sensor based on bio- nanocomposite for monitoring spoilage of packed fish	2018-2020	CoFE. Nagapattinam
44.	Design and implementation of IOT based Real Time Hatchery Monitoring System	2018-2020	CoFE. Nagapattinam
45.	Development and standardization of health drink from bio-modulated chitosan	2019-2021	Dr. MGR FC&RI, Thalainayeri