


Information for Institute Website

Format for Faculty Profile

Personal information:

1.	Name	Dr. Prasenjit Pal
2.	Photograph (Recent Picture of 50 Kb with good resolution)	
3.	Qualification	Ph.D (Agricultural Statistics)
4.	Designation	Senior Scientist (Agricultural Statistics)
5.	Division / Section	Fisheries Economics, Extension and Statistics
6.	Email ID (ICAR & CIFE)	prasenjitstat@cife.edu.in
7.	Phone (Office)	
8.	Intercom No.	

Academic / Research Information for the last 5 years

Research Interests

- Stress Modeling in Fisheries
- Machine Learning and AI based models in Fisheries
- Non Parametric and Multivariate methods in Fisheries
- Optimization Techniques in Fisheries

Important publications (max 20)

Sl.No.	Publication Details
1.	Kamilya, D., Debbarma, D., Pal P. , Kheti, B., Sarkar, S., Singh, S. K. (2017). Biofloc technology application in indoor culture of Labeorohita (Hamilton, 1822) fingerlings: The effects on inorganic nitrogen control, growth and immunity. <i>Chemosphere</i> , 18 : 8-14.
2.	Halder, A., Pal, P. , Datta, M., Paul, R., Pal, S.K., Majumdar, D., Biswas, C.K., Pan, S. (2014). Prolificacy and its relationship with age, body weight, parity, previous litter size and body linear type traits in meat-type goats. <i>Asian Aust. J. Anim. Sci.</i> 27 (5) : 628-634.
3.	Paul, T., Kumar, S., Shukla, S.P., Pal, P. , Kumar, K., Poojary, N., Biswal, A., Mishra, A. (2020). A multi-biomarker approach using integrated biomarker response to assess the effect of pH on triclosan toxicity in Pangasianodon hypophthalmus (Sauvage, 1878). <i>Environmental Pollution</i> , 260 , 114001. doi: https://doi.org/10.1016/j.envpol.2020.114001
4.	Debnatha, T., Bera, S., De, S., Pal, P. , Debbarma, N., Choudhury, D., Halder, A. (2016). Real-time monitoring of peripheral body temperature using non-invasive, self-powered, sensor based radio-frequency device in goats (capra hircus). <i>Small Ruminant Research</i> , 144 : 135–139.
5.	Mallik, A., Bhushan, S., Chakraborty, P., Ramteke, K. K., Pal, P. , Jaiswar, A. K., Sreekanth, G. B., Nayak, B. B. (2023). Study of feeding biology and diet-associated microplastic contamination in selected creek fishes of north eastern Arabian Sea: A multi-species approach. <i>Marine Pollution Bulletin</i> , 190 , 114875.
6.	Kamilya, D., Baruah, A., Sangma, T., Chowdhury, S., Pal, P. (2015). Inactivated Probiotic Bacteria Stimulate Cellular Immune Responses of Catla, Catla catla (Hamilton) In Vitro. <i>Probiotics and Antimicrobial Proteins</i> , 7(1) :101-106.
7.	Biswal, A., Srivastava, P. P., Pal, P. , Gupta, S., Varghese, T., Jayant, M. (2021). A multi-biomarker approach to evaluate the effect of sodium chloride in alleviating the long-term transportation stress of Labeorohita fingerlings. <i>Aquaculture</i> , 531 , 735979.
8.	Samantaray, S., Mehta, N., Sharma, S., Rout, B., Majumdar, R., Nayak, A., Pal, P. (2021). Effect of Repeated Freezing-Thawing on Protein Fractions, Textural and Functional Properties of Few Species of Freshwater Fishes (Indian Major Carps). <i>Journal of Aquatic Food Product Technology</i> , 30 (1) , 31-48.
9.	Biswal, A., Srivastava, P.P., Krishna, G., Paul, T., Pal, P. , Gupta, S., Varghese, T. (2021). An Integrated biomarker approach for explaining the potency of exogenous glucose on transportation induced stress in Labeo rohita fingerlings. <i>Scientific Reports</i> 11 , 5713 (2021). https://doi.org/10.1038/s41598-021-85311-5
10.	Droma, D., Kumar, S., Paul, T., Pal, P. , Saharan, N., Kumar, K., Poojary, N. (2021). Biomarkers for assessing chronic toxicity of carbamazepine, an anticonvulsants drug on Pangasianodon hypophthalmus (Sauvage, 1878). <i>Environ Toxicol Pharmacol.</i> 2021 Jun 19; 87:103691. doi: 10.1016/j.etap.2021.103691.
11	Dhara, K., Saha, S., Pal, P. , Azubuike V. C., Panigrahi, A.K., Saha, N. C., Faggio, C. (2022). Biochemical, physiological (haematological, oxygen-consumption rate) and behavioural effects of mercury exposures on the freshwater snail, Bellamya

	bengalensis. <i>Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology</i> , 251 , 109195.
12.	Dhara, K., Saha, S., Chukwuka, A. V., Pal, P. , Saha, N. C., Faggio, C. (2022). Fluoride sensitivity in freshwater snail, <i>Bellamya bengalensis</i> (Lamarck, 1882): An integrative biomarker response assessment of behavioral indices, oxygen consumption, haemocyte and tissue protein levels under environmentally relevant exposure concentrations. <i>Environmental Toxicology and Pharmacology</i> : 89, 103789. doi: https://doi.org/10.1016/j.etap.2021.103789
13.	Saha, S., Azubuike, V. C., Mukherjee, D., Dhara, K., Pal, P. , Saha, N. C. (2022). Physiological (haematological, growth and endocrine) and biochemical biomarker responses in air-breathing catfish, <i>Clarias batrachus</i> under long-term Captan® pesticide exposures. <i>Environmental Toxicology and Pharmacology</i> , 90 , 2022, 103815, ISSN 1382-6689. https://doi.org/10.1016/j.etap.2022.103815 .
14.	Saha, S., Dhara, K., Pal, P. et al. (2023). Longer-Term Adverse Effects of Selenate Exposures on Hematological and Serum Biochemical Variables in Air-Breathing Fish <i>Channa punctata</i> (Bloch, 1973) and Non-air Breathing Fish <i>Ctenopharyngodon idella</i> (Cuvier, 1844): an Integrated Biomarker Response Approach. <i>Biol Trace Elem Res</i> , 201 , 3497–3512. https://doi.org/10.1007/s12011-022-03449-3
15.	Gaurav, K., Mehta, N. K., Majumdar, R. K., Priyadarshini, M. B., Pal, P. , Xavier, K. A. M., Sharma, S. (2023). Carboxy Methyl Cellulose, Xanthan Gum, and Carrageenan Coatings 2 Reduced Fat Uptake, Protein Oxidation, and Improved Functionality 3 in Deep-Fried Fish Strips: An Application of the Multi objective Optimization (MOO) Approach, <i>ACS Omega</i> . 8. 32855–32866. 10.1021/acsomega.3c04072. doi: https://doi.org/10.1021/acsomega.3c04072
16.	Jolly, Y. N., Md. Rakib, R. J., Kumar, R., Sultana, S., Rahman, S. M. M., Kabir, J., Akter, S., Khan, M. M., Fatema, K. J., Mehnaz, M., Pal, P. et al. (2023). Evaluation of surface water quality near pollution sources in Buriganga River and deciphering their probable emergence, ecological, and health risk aspects. <i>Regional Studies in Marine Science</i> , 63 , 102988.
17.	Shil, B., Lahiri, B., Pal, P. , Ghosh, A., Biswas, P., Singh, Y., J. (2021). Determinants of adoption behaviour of the fish farmers of Pabda fish culture (<i>Ompok bimaculatus</i> Bloch, 1794) in Tripura, Northeast India. <i>Aquaculture International</i> , 30 , 2017–2041 (2022). https://doi.org/10.1007/s10499-022-00885-9
18.	Shongsir, J. M., Parhi, J., Choudhury, J., Deka, A., Pal, P. (2019). Molecular characterisation of carp aquaporin-3a: Expression profiling during hormone-induced spawning. <i>Aquaculture</i> , 500 : 569-575.
19.	Chakraborty, P., Krishnani, K. K., Mulchandani, A., Sarkar, D. J., Das, B. K., Paniprasad, K., Sawant, P. B., Kumar, N., Sarkar, B., Poojary, N., Mallik, A., Pal, P. (2023). Toxicity assessment of poultry-waste biosynthesized nanosilver in <i>Anabas testudineus</i> (Bloch, 1792) for responsible and sustainable aquaculture development-A multi-biomarker approach. <i>Environmental Research</i> , 235 , 2023, 116648.
20.	Mukherjee, D., Saha, D., Azubuike V. C., Ghosh, B., Dhara, K., Saha, N. C., Pal, P. , Faggio, C. (2022). Antioxidant enzyme activity and pathophysiological responses in the freshwater walking catfish, <i>Clarias batrachus</i> Linn under sub-chronic and chronic exposures to the neonicotinoid, Thiamethoxam®, <i>Science of The Total Environment</i> . 836 , 2022, 155716.

Google Scholar: <https://scholar.google.com/citations?user=WpLlbYAAAAJ&hl=en>

Research gate: <https://www.researchgate.net/profile/Prasenjit-Pal-4>

ORCID Id: <https://orcid.org/0000-0002-8650-5768>

Other Publications

Category	Title of Publication	Authors	Publishers name	Year	No. of Pages	ISBN/ Institute No.
Book						
1.	RESEARCH METHODOLOGY: Techniques and Methods	Acharya, S.K.; Pal, P.	Daya Publishing House, new Delhi	2023	195	ISBN: 978-93-5461-680-8
2.	Achievers in Fisheries: Stories from NE Region	Saha, R.K., Upadhyay, A.D., Singh, Y.J and Pal, P.	Dean, College of Fisheries, CAU, Imphal,	2022	66	ISBN: 978-81-924530-8-8
Book Chapter						
1.	On some aspects of sampling methodology with reference to indigenous traditional knowledge”. In Ancestral Knowledge in Agri-Allied Science Edited by Ratan Kumar Saha	Pal, P.	New India Publishing Agency, New Delhi	2014	299-304	ISBN-978-93-8330-521-6
2.	Conjoint Analysis: An emerging tool in Market Research” In Emerging Technologies of the 21st Century, Edited by Ajit Kumar Roy	Pal, P.	New India Publishing Agency, New Delhi	2015	621-638	ISBN: 978-93-83305-33-9
3.	Book Chapter on “MCQ on Statistical Methods” In: Pandey, P.K. and Choudhury, T.G. (Eds). 2019. Model Question Bank ‘A to Z of	Pal, P.	Narendra Publishing House, Delhi (India).	2019	363-368.	ISBN: 978-93-87590-96-0

	Fisheries'					
4.	Applications of Artificial Intelligence (AI) in Agriculture and Allied Fields" In: Feroze, S.M. Sinha, B., Sarangthem, I. and Singh, S.B. (Eds). 2023. Entrepreneurship in Agri-Business-Fundamentals and Recent Advances	Pal, P.	Biotech Books, New Delhi (India).	2022	239-252	ISBN: 978-81-7622-528-1
Policy/Development Report						
1.	Policy/Strategic report on "Strategic role of fisheries in enhancing farmers' income with reference to North-East India"	Pandey. P. K and Pal, P	Published in Regional Meet on NEAFP-2018 (North East Agriculture: Farmers' Perspectives) at CPGS, CAU (I), 7-8 December, 2018	2018	109-116	-
2.	Formulation of Area Development Scheme and Development of Area-Specific Software Template for Model Integrated Farming across Six Agro-Climatic Zones of West Bengal.	Halder Avijit, Mandal Satyendra Nath, Barma Pranab, Deb Mukherjee Rahul, Das Manas Kumar, Dey Moutusi, Goswami Biswajit, Roy Rakesh, Shee Arkaprabha, Samanta Malay Kumar, Ghorai Dipankar, Pal Kaushik, Dey Gupta Moumita, Khan Madhuchhanda, Mahato Dhiman, Das Srabani, Chatterjee Prasanta, Ghosh Swagat, Maiti Sanjit, Goswami Rupak, Pal Prasenjit , Mukherjee Kaushik, Das Upama, Roy Kunal, Das Ayan (2023).	NABARD project completion Report of ICAR-Agricultural Technology Application Research Institute, Kolkata, Bhumi Vihar Complex, Block- GB, Sector- III, Salt Lake, Kolkata-700097, West Bengal, India)	2023	99	-
3.	"Status of Fisheries Education in India: Using Retrospect to	R.K. Saha, P. Pal , Y. J. Singh and A. Ghosh	International Conference (RASHI) at	2022	101-108	-

	Shape the Way Forward”		College of Fisheries, CAU (I)., 13-16 December, 2022			
4.	Policy Article on" Strategies to Fill the Gap of Demand and Supply of Fish in NEH States"	A.D. Upadhyay, Pal, P and Chakroborthy. R.	82 nd Annual Conference of Indian Society of Agricultural Economics (ISAE), Mumbai 10-12 November, 2022	2022	10-15	-
Popular Article						
1.	Recent Status of IPR in India:	Pal, P, A.D. Upadhyay	Agriculture World: 7 (9):	2022	20-23	ISSN 2455-8184
2.	Women’s participation in value addition and trading of fish in Manipur, India	A.D. Upadhyay, Naresh K. Mehata, Y.Jackie Singh and P.Pal	Fishing Chimes 38(1&2):	2018	13-16	IISN 0971-4529
Article in Magazine						
1.	The trend of fish seed production in North eastern region over the years	Pal, P	CAU Research Newsletter 4(1):	2013	15-16	ISSN 2319-3042
2.	Constraints and Issues in Empowerment of Women Fish Farmers of Manipur	Meetei, W. T., Saha, B. Patel, A.B. and Pal, P.	CAU Research Newsletter 5 (2):	2015	21-22.	ISSN 2319-3042
3.	Strengthening Community Participation through MGMG in Tripura	Pal, P, A.D. Upadhyay	Agriculture World: 6 (12): 20-23	2020	20-23	ISSN 2455-8184
4.	Farmer Producer Organizations (FPO) and its Status in Tripura,	Pal, P., Upadhyay, A, D	Agriculture World: 6 (7):	2020	41-47	ISSN 2455-8184
Extension Bulletin:						
1.	Mishrit Machhali Palan Sahaj Prashnottari	Atanu Sarkar, A.D. Upadhyay, Pradyut Biswas, Dibyendu Kamilya, Prasenjit Pal and Y. Jackie Singh	Dean, College of Fisheries, CAU Lembucherra Tripura	2018	28	Extens ion Bulleti n No-3
2.	Composite Fish culture: Answer to Frequently Asked Questions	Atanu Sarkar, Pradyut Biswas, A.D. Upadhyay, Mrinal Kanti Dutta, Prasenjit Pal and Ratan	Dean, College of Fisheries, CAU Lembucherra Tripura	2018	28	Extens ion Bulleti n No-4

		Kumar Saha				
3.	Sahaj Prashnottare Misra Macch Chash	Atanu Sarkar, Pradyut Biswas, Biswarup Saha, Prasenjit Pal , Mrinal Kanti Dutta, A.D. Upadhyay and Dibyendu Kamilya	Dean, College of Fisheries, CAU Lembucherra Tripura	2016	22	Extension Bulletin No-2
IT material for HRD						
1.	ICT training manual on “Capacity Up scaling on Management of Agri-based ICT Tools and Techniques” for Line Departments as well as for farmers to enhance their ICT knowledge and skill	Singh, Y., J., Pal, P. , Sarkar, A., Upadhyay, A, D	Dean, College of Fisheries, CAU Lembucherra Tripura	2018	90	-
2.	ICT training manual on “Capacity Building on Applications of ICT in Marketing of Fish and fish products” for Line Departments as well as for farmers to enhance their ICT knowledge and skill	Upadhyay, A, D, Pal, P	Dean, College of Fisheries, CAU Lembucherra Tripura	2019	108	-

Recently Completed/ Ongoing Projects

Completed Projects
1) Centre of Excellence on Fisheries and Aquatic Biotechnology funded by DBT (Department of Biotechnology, Govt. of India) of an amount of Rs- 461.996 Lakh for 3 years.(2019-2022) as Co-PI.
2) Mobile Based Agro Advisory System in Mizoram and Tripura funded by DIC (Digital India Corporation of an amount of Rs- 176.86 Lakh for 3 years.(2019-2022) as Co-PI.
3) IDP-NAHEP: Enhancing Entrepreneurial Competence in Students to Address the Emerging Challenges in Agriculture and Allied Sectors funded by ICAR, New Delhi of an amount of Rs- 2456.04 Lakh for 2 years.(2020-2022) as Associated Scientist
4) Study of Freshwater Fish Seed Supply Chain for the Development of Aquaculture in Tripura And Manipur States of North Eastern Region funded by NABARD of Rs-26,59,360/- for1 year (2022-2023) as Co-PI.
5) ‘Formulation of Area Development Schemes and Development of Area-specific Software Template for Model Integrated Farming across Six Agro-climatic Regions of West Bengal’ funded by NABARD of Rs-10,00,000/- for1 year (2022-2023) as Co-PI.

Ongoing Projects

1 Mainstreaming Non-Productive Cattle: Inclusive Development and Sustainable Integration into Rural Economies (2025-2027) funded by ICAR
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of Rs.- 132.50 Lakhs) as CC-PI.

Other achievements

- **Significant achievements in research & development**
- Worked as an active researcher for more than 13 years in the field of Fisheries Sciences. Published several scientific research papers both in national and international journals with **high impact factor (more than 10 NAAS Score)** and is also associated with many external funded projects (DBT, NABARD, DIC under Ministry of Electronics and Information Technology, World Bank (IDP-NAHEP)).
- Provided research guidance to post graduate and doctoral degree students of each divisions as a member of Research Advisory Committee in designing research methodology and analyzing data in Fisheries Sciences.
- **Awards/ Honors**

Sl. No.	Name of the award	Institute
1.	JRF-ICAR (2004)	IASRI, New Delhi
2.	Best Paper Award (oral presentation) International Conference on “ Agriculture and Allied Sciences: The Productivity, Food Security and Ecology ” at Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, West Bengal, India on 13-14 th August, 2018	Bidhan Chandra Krishi Viswavidyalaya (BCKVV), Mohanpur, West-Bengal
3.	Best Poster Award (Poster presentation) National Seminar on “Agribusiness Potential in North Eastern Region with Special Reference to Tripura” (8-9 September 2021)	College of Fisheries, Central Agricultural University (I), Tripura
4.	One month Foreign Training on “AI based models and their applications in Agriculture” from 25/02/2023 to 25/03/2023	Lincoln University College (LUC), Malaysia
