

BRIEF RESUME of DEBAPRIYA SARKAR



Name: Debapriya Sarkar

Present Designation: Professor in Fishery Science

Educational Qualification: M.Sc.in Zoology, Ph.D.in Fish Toxicology

Teaching Experience (in years): 30 years (1997-2026)

Areas of Interest: Aquaculture, Fish diversity and conservation in natural resources & Integrated farming system

Awards/ Recognitions (Best five):

Sl.No	Nature of Membership	Organization
	Academic	
1	Fellow of Academy for Advancement of Agricultural Sciences	AAAS, Kalyani, West Bengal
2	Life Member for Journal of Inland Fisheries Society	CIFRI, ICAR
3	Life Member of Academy for Advancement of Agricultural Sciences	AAAS, Kalyani, West Bengal
4	Merit Scholarship for Gold medal in B.Sc.(Hons) Zoology	Govt of WB
5	Senior Research Fellowship during Ph D program in Siksha Bhaban, Visva Bharati, Santiniketan	ICAR, Govt of India

Publication (Best five in Ref. style):

Details of publication in reference form	NAAS	Year of publication
Dey,A.,Nur, R, Sarkar, D. and Barat, S. Captive breeding through synthetic hormone induced breeding of an eastern Himalayan hill stream fish <i>Barilius barila</i> (Hamilton,1822) . International Journal of Fisheries and Aquatic Studies 4(5) :354-358	5.62	2016
Dey A, Sarkar D and Barat S. Spawning biology, embryonic development and captive breeding of vulnerable loach <i>Botia dario</i> (Hamilton). International Journal of Applied Research.1(9): 424-435	5.397	2016
Sarkar D and Mukherjee A. Domestication of <i>Macrobrachium rosenbergii</i> in terai region of West Bengal. International Journal of Fisheries and Aquatic Studies 5(5) : 01-06	5.62	2017

Dey A, Sarkar D, Singh M and Barat S. DNA barcoding of four ornamental fishes of Genus <i>Botia</i> from Eastern Himalaya. International Journal of Science and Research 6(6) : 608-611	6.39	2017
Hoque, A., Bandyopadhyay, S., Sarkar, D., Patra, P.S., Roy, K., Debnath, M.K., Barik, K. and Mandal, S. Effect of integrated paddy-fish-duck-azolla culture on the growth, yield and water quality of rice. International Journal of Research in Agronomy 8(6): 1086-1094.	5.20	2025
Dey, A, Roy Chowdhury B., Kosygin, L., Sarkar, D., Mishra, P. and Barat, S. Ichthyofaunal diversity in the riverine systems near the forest area of the Dooars of West Bengal, India. <i>Records of Zoological Survey of India</i> 125(1) : 63-74.	ZSI self publication	2025

12.2.2. Book Chapters Published

Sl No	Year	Details	Publisher	Pages
1	2016	Scope of Aquaculture in Terai zone. D Sarkar. In : Bioresource in North Bengal and its utilization.	DBT, GoI funded project on Establishment of Rural Bioresource Complex in North Bengal	56-69
2	2025	Women empowerment and their legal rights in India. S.Mondal, D.Sarkar, B.Chowdhury, T.Sarkar . and D. Debnath. In : Empowerment Rising, a Global Movement for Women	Elite Publishing House, New Delhi	12-21
3	2025	Wetland as a potential renewable wealth of North Bengal. D Sarkar. In : Sustaining wetlands, securing the future : Interdisciplinary studies from Eastern and Northeastern India.	Red'shine Publication London	103-134
4	2025	Traditional co-existence of precious fish fauna in the flowing water resources as heritage of human life. D sarkar. In: Heritage, Culture and Identity :North Bengal and North East India in perspective	Sopan, Kolkata	57-84
5	2026	Agricultural heritage in India : A legacy of sustainability and tradition. In : Culture and Agriculture in India :Traditions, Indigenous knowledge and Future Pathways	NIPA GENX ELECTRONIC RESOURCES & SOLUTIONS P. LTD. New Delhi	25-32
6	2026	Potential Aquaculture for Agri-Business development with respect to Climate Change and Resilience. In : Climate Change on Agriculture and Allied sector – Trends, Analytical approaches and Mitigation.	P. P.K. Publishers & Distributors, New Delhi	222-230

Seminar/Symposium/Workshop/Winter School attended as Invited Speaker:

1	ICAR sponsored 21 days Winter School on Impact of climate change on agriculture and allied sector : adaptation, mitigation towards sustainability and livelihood security.	Dr.S K Ghosh Memorial Hall UBKV Feb 14 – Mar 06 2025	Uttar Banga Krishi Viswavidyalaya, Punibari, Coochbehar
2	AAAS sponsored National Conference on Transformative approaches and smart technology in plant & animal health for sustainable and climate-ready agriculture	PSB, Visva Bharati Sep18-19, 2025	PSB, Sriniketan, Visva Bharati
3	National Seminar on “Safeguarding Wetlands, Securing Tomorrow : Perspectives from North Bengal”	ABN Seal College Coochbehar July 15,2025	ABNSC In collaboration with East Kolkata Wetland Management Authority, Dept of Environment GoWB
4	Wetland to conserve fish diversity, traditional knowledge and heritage	Dinhata College, Coochbehar March 24,2026	Dinhata College In collaboration with Biodiversity Board ,GoWB

Academic Supervising Experience (Completed/continuing): NA

- Major supervisor in M.Sc-
- Major supervisor in Ph.D.-

Projects exposure as PI/Co-PI (completed/On-going) (5 major Projects):

Sl. No.	Title of the Project	Funding Agency	Budget (in Lakh)	Duration
1.	Seed production of Agricultural crops and fisheries (as Nodal Officer for fisheries component)	Mega Seed Project ICAR, New Delhi	32.50	2005-2007
2.	Extension of quality seed production techniques and fast grow out of indian and exotic carps in terai region of West Bengal . (As PI)	DST, SEED Division, New Delhi	24.205	2012-2016
3.	Establishment of rural bioresource complex in North Bengal (as Co-PI)	DBT, New Delhi	94.564	2012-2016
4.	Bioresource Hub in North Bengal (as Co-PI)	DBT, New Delhi		2018-2020
5.	Innovative fish farming project in govt ponds (as PI)	RKVY, Dept of Agriculture, GoWB	42.00	2013-2016

Research and Extension Experience:

1. Contribution to Research and Extension through different Agencies :

Nature of contribution	Name of Agency with address	Role	Year
Research & Extension	Basundhara(NGO), Khagrabari, Netaji More, Coochbehar	Advisor	2021
Research & Extension	Vijaya Krishi connect, Coochbehar	Advisor	2023
Research & Extension	The River Group, Pan bazaar, Gauhati	Advisor	2025
On-Campus Training	Scheduled Caste Sub-plan, ICAR	Training Co-ordinator	2024

2. Contribution in Aquaculture, fish diversity & Integrated Farming System Research

1. Quality spawn production distribution of Indian Major and Medium Carps and Air-breathing fish for overall fish productivity enhancement.
2. Standardized package of practice for integrated fishery and muga sericulture enterprise for resource utilization and socio-economic up gradation of beneficiaries of terai zone of West Bengal
3. Standardization of captive breeding of Bariliusbarila (boroli fish) towards conservation of indigenous ornamental fish diversity in riverine system.
4. Standardization of captive breeding of banded loach and tiger loach (<i>Botia sp</i>) in relation to conservation of indigenous ornamental fish diversity in riverine system.
5. Domestication of <i>Macrobrachium. Rosenbergii</i> in the ponds of Terai zone for prospective and remunerative aquaculture
6. Satisfactory performance of different agricultural and horticultural crops in the pond dykes along with fish in fish ponds under Integrated farming System Research for diversification and enhancement of crop productivity from the same land resources within the fish farm.
7. Standardization of Induced voluntary spawning of Asian magur in captivity to replace stripping method of breeding which require sacrifice of male fish opposing the issue of fish biodiversity conservation and restoration .
8. Standardization of Biofloc technology for air-breathing fish seed raising and their grow-out during summer, monsoon & winter months in Terai Zone of West Bengal along with bacterial ulcer preventive measures to check its deadly infestation and mass mortality during winter months as faced by fish farmers in the biofloc culture system.
9. Induced voluntary spawning of Asian Magur using potential combination of GnRH and Oxytocin hormones to produce maximum number of quality hatchlings without sacrificing male brood fish through a very easy and environment friendly breeding technology.

10. Standardization of aquaponic set up for successful cultivation of strawberry using nutrient rich fish pond water during winter months with simultaneous production of strawberry and fish from the same pond.

3. Extension support to the beneficiaries under different projects

Nature of extension activity	Fund support by
1. Quality carp seed production in circular hatchery at UBKV and distributed to fishers for improved grow-out in their ponds for overall fish productivity enhancement .	Mega seed Project ICAR
2. Establishment of eco-hatcheries (No.4) at village level for sustainable carp seed production by 8SHGs involving 168 rural women and youth towards their socio-economic uplift.	DST SEED Project, GoI
3. Upgradation of socio-economic condition of beneficiaries including women folk of terai zone of West Bengal through dissemination of standard package for integrated fishery and muga sericulture enterprise. A cluster-wise(4) extension of different fisheries component like carp seed production and sell of fry, fingerlings and table fish along with mugafarming components like sell of cocoon, muga silk threads and cocoon-waste could result in an excellent profit return (upto 70,000/-) to the beneficiaries from one unit (one acre) of land area and water body. Carp seed (spawn) produced from hatchery have been found to grow very well when fed with dried and powdered muga pupae mixed with rice bran and mustard oil cake.	DST SEED Project, GoI
4. Dissemination of induced breeding techniques of <i>Heteropneustes fossilis</i> , <i>Anabas testudineus</i> , <i>Mystus vittatus</i> along with stripping of <i>Clarias batrachus</i> to the direct beneficiaries in the adopted villages through training and demonstration improved their income generation and livelihood.	DBT Bioresource Project , GoI
5. Attempts were made towards awareness generation amongst fish farmers and local population for conservation of indigenous fish diversity and capacity building for scientific fish farming techniques to improve livelihood through aquaculture.	DBT Bioresource Project , GoI
6. Number of success stories were generated from different farmers adopting air – breathing fish breeding techniques or integrated fish – muga culture .	Innovative Fish Farming Project, Dept of Ag, GoWB
7. Training and capacity building on culture of <i>Heteropneustes fossilis</i> , <i>Anabas testudineus</i> and <i>Mystus vittatus</i> in seasonal ponds benefitted more than thousand fish farmers including women folk for combined aquaculture.	Innovative Fish Farming Project, Dept of Ag, GoWB
8. Training and capacity building on use of biofloc technology for seed raising and grow-out of air-breathing fish like <i>Heteropneustes fossilis</i> , <i>Clarius batrachus</i> & <i>Anabas testudineus</i> for seasonal ponds of terai zone to benefit for resource poor young aquaculture farmers.	Scheduled Caste Sub- Plan, ICAR

4. Training Organized

Sl. No.	Title of training	Venue	Funded by	Duration	No.of Beneficiaries
1	Quality seed production of IMC in circular hatchery	UBKV Fishery unit	Mega Seed Project, ICAR	2006-2010	200
2	Quality seed production & grow-out of IMC & Air-breathing fish in hatchery	On-campus & Off-campus at the villages of district	DST, GoI SEED Project	2012-2018	50 240
3	Quality seed production of air-breathing fish and fish disease management	On-campus & Off-campus at the villages of district	DBT GoI Bio-Resource Project	2012-2020	112 300
4	7 days Certificate course on Breeding & grow-out of local Koi, Singi & Magur with special emphasis to Black Soldier Fly propagation as a live feed component	UBKV Fishery unit	Self financed by trainees	21.06.23-27.06.23	5
5	One month Workshop on Application of Biofloc technology in air-breathing fish seed raising and their grow-out	UBKV Fishery unit	Scheduled Caste Sub Plan (SCSP), ICAR	27.02.24-27.03.24	30
	Total No.of beneficiaries trained				937
	No of training				87
	No of Trainee days				1153

Institutional Building Activities: Establishment of a strong aquaculture farm in UBKV main campus to facilitate field oriented research and extension on traditional semi-intensive as well as modern intensive aquaculture practices for knowledge building among the beneficiaries of adjoining districts of North Bengal and Assam.

(Debapriya Sarkar)