

# Name of the faculty: Dr. Shriparna Saxena **Designation:** Professor

# **Personal Details:**

Fathers Name: Late. Shri. A. M. Roy Postal Address: 242MIG DX Katara Hills Bhopal Telephone no.: 0755-6544331, Mob. No.: +919229200243, +916261175951 E-mail: <u>shriparna.b@sageuniversity.edu.in</u>

Nationality: Indian Domicile state: Madhya Pradesh Marital status: Married Language known: Hindi, English, Bengali

# **Educational Qualification:**

Ph.D. (Limnology) Barkatullah University, Bhopal, 1993.

M.Sc. (Limnology) Barkatullah University, Bhopal, 1988 B.Sc. (Botany, zoo, chem.) Barkatullah University, Bhopal, 1986

Fields of interest: Aquaculture, fish and fisheries. Wetland ecology, Aquatic Biodiversity & Water Quality

# **Brief Profile:**

Dr. Shriparna Saxena holds M.Sc, Ph. D in Limnology from Barkatullah University, Bhopal, India. Total teaching experience 26 years in post graduate class in Limnology and Aquaculture.

# Work experience:

- Worked as Junior research fellow in project on WATER QUALITY OF TWO LAKES AFFECTED BY THE TOXIC GAS LEAKAGE (Sponsored: Scientific Commission on Toxic Gas Leakage, GOI)
- Experience of monitoring of water and wastewater pollution of natural resource and industries.
- Worked with NGO (Society for Environmental Conservation and MP Vigyan Sabha) in the field of environmental awareness, demonstration of environmental friendly technologies, popularization of S&T in rural and urban areas with special reference to water and sanitation.
- Experience in Project formulation, Syllabus preparation and other academic and Administration work.

## Teaching experience:

- Teaching in the Dept. Of Limnology as contract lecturer since (February 1999 –June 2010).
- Asst. Professor Chitransh. A. DGP college Bhopal (2012-2022).
- Guest Faculty in Environmental Science and Limnology and Department of Zoology and Applied Aquaculture till 2021.
- Professor and Head, Department of Aquaculture, SAGE University, Bhopal. (2021-Continue)

## **Research Experience:**

- Worked as Research Scientist from 2004 to 2006 in NVDA fundedproject on Narmada M.P.
- Worked as Research Scientist in NVDA Project (2010 2012)

## Supervision of Ph. D:

 Supervised 12 students for PhD degree in the subject Aquaculture and environmental sciences. Three students were awarded. (NFHE) and RGNF scholarship of National level. One NRI student was awarded Jawaharlal Nehru Memorial Fund.2016.Catogary.International Scholars.

## Supervision of M. Phil.:

• More than **40** students in Environmental science and Aquaculture.

## Supervision of M.Sc. dissertation work:

• 250 students in Aquaculture and Limnology

## Affiliation

• Joint secretary, society for environmental conservation. Member ofIndian Academy ofSciences.

# Participated in:

- National Environmental awareness campaign
- Nature study camp at Pachmarhi ( sponsored; Ministry of Environment & Forest, GOI)
- Nature camp at Chiklod wetland (sponsored; Ministry Environment &Forest)
- Water testing training programme (sponsored: EPCO)
- Drinking water quality monitoring: Training programme sponsored by EPCO & MPCST
- Workshop on Medicinal plants and Environment (Swami Vivekanand Shiksha Samiti)
- National Seminar on Inland Water Potential, Pollution, Management and Conservation held at Chhindwara Dec. 1999
- National Workshop on Biodiversity and Conservation of Aquatic Resources w/r to Threatened Fish Mahseer Held at Bhopal Feb. 2000 International Seminar on LCA and Eco-balance held at Mumbai in Feb.2002
- National Workshop on Life History Traits of Fresh Water Fish Population for its Utilization and Conservation. Held at NBFGR, Lucknow in June 2002.
- National Seminar on Water Resource Conservation and Ecobiology held at Ujjain in August 2002.
- Third Forum of Indian Fisheries Society held at Bhopal Oct. 2002. Attended International River Festival at Bandrabhan .Hosangabad.March2008.
- Attended National conference on Integrated Lake Basin Management with reference to Hussain Sagar Lake.Hyderabad. August ,2008.
- Attended National Conference on Climate Change and Biodiversity held at Ferguson College, Pune between 11-13 Dec. 2009.
- Attended Regional Workshop on Biodiversity held on 23/12/2009 atIndore.
- Attended International River Festival as co-ordinator of biodiversity session organized by Narmada Samagra between 21-23 March 2010.
- Attended International Conference on ILBM and Lake Management as SAARC task force member held at Kathmandu, Nepal between 26-29 March 2010.
- Attended National Seminar on Status of Biodiversity in Madhya Pradesh January 29-30,2011
- Attended National Seminar on Biodiversity conservation and management in 21<sup>st</sup> century

# **Presented Paper:**

- Presented paper in the International River Festival- 2008 Bandrabhan,India:23-25 Feb.2008
- Presented paper at II International Conference The Deccan Geographical Society on Globalization, Technology and Economic Transformation: 7<sup>th</sup>-9<sup>th</sup> March 2008
- Presented a paper as Invited Talk in the national Conference on Climate Change and challenges in Biodiversity Conservation: Organized by Department of Zoology, Fergusson College, Pune: December 11-12 2009.
- Presented Paper on Second International River Festival-2010:March 21- 23 2010,,Bandrabhan,India

- Presented a technical paper on a conference on aquatic biodiversity of Narmada, Khandwa.2015
- Presented technical paper in International Conference on "Environmentand Ecology"2-4<sup>th</sup> march 2015.Kolkatta.
- Participated one day symposium on Tiger Conservation :BarkatullahUniversity:9.12.17
- Participated and Presented research paper titled "Fish feed formulation in Aquaponics System Utilizing a Requisite Protein Sources" International Conference on Environmental and Life Science(ICELS-17)
- December 2017.Kolkatta.
- Presented poster in National conference on Women Empowerment, Education, Environment, Biodiversity, Health and Agriculture.16- 17 March. 2018.MPCST on Successful captive breeding of wild stock of state fish mahseer Tor tor and its conservation in forested rivers.
- Presented and participated at International Workshop on Mahseer Conservation at Bhutan from 2<sup>nd</sup> December 18 to 7<sup>th</sup> December 18.
- Participated in One day expert consultation workshop.20.6.2019.IIFM Bhopal as Subject Expert

# **Delivered Expert Talks:**

- Expert Talk on Awareness programme on climate change organized by Regional Science Centre, Bhopal.2006.
- Expert talk on climate and health in two day workshop at district coordinators meet of M.P at National Children science Congress held at AICUFF on July 2014.
- Expert talk at International Workshop on Mahseer Conservation, Kochi, India: April 2017.
- Expert Talk at 4<sup>th</sup> Annual Global Networking Event. International Conference of WINN at Assam January.28-31 2019.
- Delivered Invited talk at ASTITWA PROGRAME on Lok Sabha TV on Mahseer conservationIn M.P 2018

# **Position Held:**

- **Co-Chaired** a session in National Workshop on Life History Traits of Fresh Water Fish Population for its Utilization and Conservation. Held at NBFGR, Lucknow in June 2002.
- **Coordinated** a Session on Biodiversity in International River Festival held at Hoshangabad. Feb 2008
- **Coordinated** a Session on Biodiversity in International River Festival held at Hoshangabad.Feb 2010.
- **Co-Chaired** a session on animal biodiversity in National Seminar on status of biodiversity in M.P. January 29-30,2011
- **Evaluator** for science projects at Children Science Congress of District and State Level for the year 2008 till now.

- **Resource person** at Children Science Congress of District and State Level for the year 2008 till now.
- Member of **State Level Project Steering Committee** to evaluate Mahseer conservation status in state of Madhya Pradesh.
- Nominated by State Biodiversity Board as Subject Expert in Technical Screening Committee of Peoples Biodiversity Register. Madhya Pradesh

#### Awards:

- **Vigyan Bhushan.** Awarded by NCSTC- Department of Science and Technology, New Delhi.2018.For outstanding Leadership and contributions for the popularization of science in community and Learners of science in school of M.P State.
- **State Biodiversity Award** Outstanding contribution in the field of Mahseer Conservation (State Fish of M.P). 2018
- **Bhumi Samman**. Conferred on International Women Day for theOutstanding contribution in the field of Biodiversity Conservation in M.P.2019
- **CERTIFICATE OF APPRECIATION** from Government Of M.P. Department Of Forest for Conservation of Mahseer In forested Zones Of M.P.
- Atmamanthan Award:SAGE University,Bhopal.2021

#### **Research project:**

- Enhancement of Fish Productivity through Integrated Fish Farming sponsored by Department of Science & Technology, New Delhi as Co-investigator. (2001-2003)
- Enhancement of fish growth in pond culture using periphyton as natural food sponsored by . Department of Science & Technology, New Delhi 2005-2006 As Investigator:Rs.8,30,500/-
- Study of fish biodiversity in relation to habitat characteristics in river basins in mp with special reference to Mahseer (*Tor-tor*) as Investigator. Sponsored by ICAR.2004-2006;Cost-11,70,800.00
- Pre & Post impoundment Limnological studies of the central zone Narmada Development basin for its ecology and water quality.Co-investigator. Narmada Valley Development Corporation, Govt. of M.P. 2004-2009.Cost:1.51 Crores

- Selective breeding of *Clarius batrachus* under Resource mobilization Incentive sanctioned by UGC as Investigator.2005-2007: Cost: 10 lacs.
- Mapping of Riverine Wetlands : Narmada River sponsored by **Space Application Center ISRO** as Investigator 2006- 2008.Cost:11,70,800.00
- Developing Suitable Nursery Techniques and Plant Production for propagation of Rare, Endemic and Threatened (RET) plants in malwa Region of M.P :as Co-investigator: 2011-12 and 2012-13. Sponsored by **M.P.Minor Forest Produce Federation:**Costing:18.00 lakhs.
- Research of Preventive methods for Control of Damage due to Giant African land Snails in forest Nurseries of Malwa:Research and Extension Circle,Indore of **M.P Forest Department.** As Investigator: Rs.4.90 Lakhs:Period.Two years. (2012-13 and2013-14)
- Conservation of the M.P State Fish, Mahseer in Wildlife forested Watersheds of Barwah Forest Division. Sanctioned by **State Biodiversity Board**.Principal Investigator: Rs. 9 Lakhs.For a period of two years. (2016- 2018)
- Breeding of the Madhya Pradesh State fish, Mahseer(*Tor tor*) in Barwaha Forested Watersheds of Barwaha Forest Division, State Biodiversity Board, 14 lakh. (2015-Till Date)
- Rapid Survey of some streams of some streams Of Satpura Tiger Reserve with reference to Mahseer Habitat suitability. Sanctioned by CWLW .M.P. Forest Department. Principal Technical Investigator. June 2017-June 2017. Rs 5 Lakh

## Achievements:

- State level subject expert and State level evaluator for Children ScienceCongress.
- **Resource person** for developing Manual Eureka Kit. For Children ScienceCongress. Department of Science and Technology. New Delhi.
- **Panelist** for various National and International forum.
- Member of **State Level Project Steering Committee** to evaluate Mahseer conservation status in state of Madhya Pradesh.
- Nominated by State Biodiversity Board as Subject Expert in Technical Screening Committee of Peoples Biodiversity Register. Madhya Pradesh.2020 - 2025
- Member of Core group of Integrated Lake Basin Management for SAARC countries
- **Pannelist of Green skill Development program** by Ministry of Environment, Forest and Climate Changes. GOI
- **Participation** More than **20** National & International seminar and conferences.
- **Paper presented 28** in various national and international conferences.
- Delivered Invited talk in Bhutan and Nepal, Kochi and Assam on Mahseer conservation
- Seminar organized 14 National and International.
- Selected as Subject Expert on Rajashthan Public Survice Commision (RPSC) for the

post FDO (Fisheries Development Officer), AFDO (Assistant Fisheries Development Officer), 2023

## International conference:

- International conference on Conservation, management of tropical inlandwater: problems, solutions and prospects (Hongkong University, 1991)
- International Conference on Land Water Interaction, 1991.
- International Conference on Tropical Limnology held at Indonesia in1994.

## National conference:

- National Symposium on Environmental Biology, NEHU Shillong 1999. International Conference on Water & Health. 2002
- Annual Session of Academy of Biology, 2002. Aquaculture Development of some small water bodies of
- Betul District by preparing spatial database. Accepted at Map Asia
- 2010 at Kuala Lumpur. Malaysia.

## **Research papers:**

- 1. Bacterial Water Quality of Some Public Bathing Places of BhopalBhopal University Research Journal 2 (1990\_. Shriparna Roy, Vipin Vyas and Sushil Mudgal.
- Limnological status of a sewage polluted pond in an industrialtownship. Recent trends in Limnology; 427-438 (1990) Sushil Mudgal, Vipin Vyas, Shriparna Roy, G.H.Joshi andP. Shrivastava
- 3. A study of catchments area of Upper lake, Bhopal (MP). Indian J.Zoo. Spect; vol I, No.2 (21-26) (1990) Praveen Tamot, Satayendra Kahre, Pradeep Shrivastava, Rajesh Gupta and Shriparna Roy.
- 4. Status of ground water quality in relation to land use pattern: A casestudy of Bhopal city. J.Hydrobio. 8 (1) : 83-87 (1992) Shriparna Roy and Pradeep Shrivastava.
- 5. Biodiversity study of two Indian Major carps & exotic carp from different water bodies in Bhopal. *Indian J. of Applied & Pure Biology. Vol 15,No 2, 2001.* Shriparna Saxena, Asha Verma andPradeep Shrivastava
- Ground Water Quality of Bhopal (India). *Environment* and Agriculture Biodiversity, Agriculture and Pollution in South Asia, 2001, pp. 525-527, Publisher: Ecological society (ECOS) (Ed: Jha, Baral, Karmacharya, Lekhak, Lacoul and Baniya 2001, S.saxena and P.Shrivasta

- 7. Ground Water Quality of a Typical Urban Settlement : A case study of Impact of Town Planning. Pollution Research ISSN:0257-8050- 21(2). 223-226 2002. Shriparna Saxena and Pradeep Shrivastava
- 8. Status of Mahseer Distribution in River Basins in Madhya Pradesh and need for Further Ecological Investigations For TheirConservation. Proc of NBFGR 2002
- On Conservation of Declining Mahseer Populations in MP RiverBasins. Fishing Chimes.ISSN 0971-4529- Vol. 23 (No. 1) April 2003. Shriparna Saxena, Pradeep Shrivastava, R.P.Tuli
- 10. Spatial distribution and level of occurrence of nutrients and heavy metals in the sediments of Hoogly river. Pollution Research.ISSN:0257-8050 23(4):833-835- 2004 Sumana Dutta and Shriparna Saxena
- On the occurrence of fingerlings of Mahseer of Denwa river inPachmarhi Bioshere Reserve M.P. Fishing chimes :ISSN 0971-4529.April 2004Vipin Vyas,Shriparna Saxena,R.P.Tuli.
- 12. Fish Biodiversity on the streams of Narmada basin with reference toits conservation. Proc. Of NBFGR 2005 to b included. Shriparna Saxena, Vipin Vyas, Umashankar Sarkar.
- 13. Length w eight relationship of *Tor tor* (Hamilton, 1882) of somereservoir of central India. J.Exp. Zool. India. Vol.9, No 2, July 2006 Shriparna Saxena ,Sumana Dutta, Gyanesh Shukla and PradeepShrivastava
- 14. Observation on the status of morphometry phenology of *Tor. Mahseer* in different habitat of Narmada water. AQUACULT .Vol.8 2007,63-7 Shriparna Saxena,Gyanesh Shukla,Sumana Dutta.
- 15. Present Status Of Icthyofaunal Diversity of Upper Stretch Of River Tapti with Reference to its Habitat Diversity. Proc. Of NBFGR 2007ISBN:978-81-902951-9-2 Shriparna Saxena,Gyanesh Shukla.
- 16. Observation of Length-wt relationship and condition factor of Tor tor from river Narmada River, Life Sciences Bulletein. Vol 05 (2) 2008:ISSN 0973-5453 Shriparna Saxena,Gyanesh Shukla,Sumana Dutta
- 17. Integrated fish farming for Tribal Fish Farmers of Betul District. Navin Samajik Shodh (1) 28-34.2009 Satish Balapure, Brijesh Sharma, Vipin Vyas, Shriparna Saxena
- 18. Study of Fish Growth in Pond Ecosystem Feed on Sugarcane Baggase substrate. Naveen Samajik Shodh Vol. 12 P 25-29/2010 Shriparna Saxena, Vipin Vyas, Satish Balapure, Deepti Mishra.
- 19. Conservation of Bhoj Wetland With ILBM approach. Website of ILEC, Japan 2010. Vipin

Vyas, Shriparna Saxena, Pradeep Shrivastava.

- 20. ILBM in conservation and management of bhoj Wetland (Upper Lake): A Ramsar Site of Bhopal (INDIA) National Seminar on ILBM for the Sustainablity of Himalayan Lake-Kathmandu Nepal-March 26-29,2010Page:35-39Vipin Vyas, Shriparna Saxena and Pradeep Shrivastava.
- 21. Biodiversity Consevation in Wetlands of Barna Reservoir with reference to migratory birds.Vipin Vyas, Shriparna saxena, Satish Balapure and Pradeep Shrivastawa Htpp/wldb.ilec.or.jp/data/ilec/WLC13/others/42.pdf.
- 22. Seasonal variation of diversity of Molluscan species in BarnaReservoir. Journal of Aquatic Biology Vol.25 (1) 2010 Shriparna Saxena, Satish Balapure, Shilpa Haldar
- 23. Blue green micro algae Spirulina: A gift of Nature *Naveen SamajikShodh* Vol. 11 P 23-24/2010.
- 24. Bioaccumulation of some heavy metals in water, plankton and sediment in lakes of Bhopal;Amiya Tirkey,Shriparna Saxena,Alok Saxena and Sandhya Mokhle.National Journal of LifeSciences:Vol.07.Number 3.December:2010.25-28
- 25. Study the seasonal variations in physico chemical characteristics of Halali Reservoir.Inventi Rapid:Water & Environment .Vol.2011.Issue 3.- ISSN 2229-7766 Sushma Ahirwar,dharmendra singh,Shriparna Saxena,Vipin Vyas.
- 26. Fishing Practices among tribals:Tradition ,Tools& Techniques-Bulletin- Tribal Research&Development.Govt of M.P.Vol.51(April 10-March11).
- 27. Evaluating the effect of Landfill lechate on groundwater quality in relation to physico chemical and bacteriological characteristics :Journal of chemical and Pharmaceutical Research,2012,4(12):5202-5214:ISSN:0975-7384 Irshad Ull Hussain Lone,Ajay Kumar,Fatima Khan,Shriparna Saxena,Arshad Iqbal Dar.
- 28. Assessment of physico- chemical characteristics of surface and bottom strata of upper lake,Bhopal.:Bioscience Guardian,Vol 4,Number1,June 2014.ISSN 2277-9493.AH.Bhatt,Shriparna Saxena,K.C.Sharma
- 29. The role of benthic invertebrate species in freshwater ecosystem Zoobenthic species influence in energy flows and nutrient cycling:International journal Of Advanced Research:Shriparna Saxena.2013Impact factor:1.659,Index Copernicus value 2012:4.96 ISSN no 2320- 5407.
- Impact of different feeds on growth of Clarius batrachus(Gunther) :International Journal of science and Research Volume 3 Issue 8, August 2014:ISSN:2319- 7064, Impact Factor:2012:3.358 Index Copernicus value 2012:5.34 : Shiparna Saxena.

- Study on phytoplankton diversity of a fish pond:International Human Research Journal ;ISSN2347-7067:Impact factor-0.798 :Volume II,July- September ,2014.:Shriparna Saxena
- 32. The role of benthic invertebrate species in freshwater ecosystem Zoobenthic species influence in energy flows and nutrient cycling:Shriparna Saxena: International Journal of advanced Research:Vol2,Issue,8,686-693:2014
- 33. Study of zooplankton diversity of Upper Lake,Bhopal: International Human Research Journal: 2014: Vol II, issue III: 1-7: 2347-7067 ISSN No"
- 34. Study on Socio-economic status of fisherman community of Upper Lake:Priliminary Survey: International Journal of science and Research: Vol 3 issue 8: 2014; 2047-2048 ISSN:2319-7064
- 35. Biodiversity of Phytoplankton with special reference to water Parameter in Upper Lake: Naveen Samajik Shodh:2014: Vol 6124-130ISSN:,0975-4431.Peer Reviewed by refers Journal of Ecophysiology and Occupational Health Volume 15, Issue 1&2, June 2015
- 36. Mahseer in India: An overview on Research Status and Future Priorities, U. K. Sarkar, B. K. Mahapatra, S. Roy Saxena, A. K. Singh
- 37. Study on fish diversity of halali Reservoir: Shriparna Saxena:Lfe Sciences Bulletin :Vol.11(1)2014.Accepted.
- 38. A compact aquaponics system in Indian premises and confront hurdles to assemble this system:IJRASET:Volume ,issue 1,January 2018.Rakhi Das, Shriparna Saxena.
- 39. Fish food formulation in Aquaponics system utilizing a requisite proteinsources. IJCRT
- 40. An anthroprogenic activity: The conservation of sardar sarovar dam becomes threatening for the aquafauna (Fish species) diversity & also responsible for the alternation in the IUCN status of Barwani district Madhya Pradesh. International journal of science & innovative research. Bholaram Brahmane, Shriparna Saxena.
- 41. Conservation of Mahseer fish in Madhya Pradesh by following, SPR, VOL-161, 2021.
- 42. Comparative Study of Macro-Invertebrates of Bhoj wetland , Bhopal- In relation to water quality, Somashree Bhakta, IJNRD, 2022, ISSN: 2456-4184, VOL-8.
- A Review on Conservation Strategies of A Wonder Fish Asian Catfish *Clarius Batrachus* (Linnaeus, 1748) By Artificial Propagation Method. Abhishek Giri & Shriparna Saxena. 2023, DOI:10.24966/AAF-5523/100072.
- 44. A Study on Fish Diversity of Meghalaya. Bashemphang Snaitang, Shriparna Saxena, Hameka Papang & M. K. Yadav. 2023, ISSN- 2249-3239.

- 45. A comparative study on hormone optimization techniques for artificial breeding and seed production of magur (*Clarius batrachus*), Abhishek Giri & Shriparna Saxena, IJR-ISSN:2250-1991, volume-13, Issue-03
- 46. Effect of Dietary Supplement of Eucalyptus grandis Leaf Powder on Growth Performance and Haematological Parameters of Labeo rohita, Bharat Patel, Shriparna Saxena, Neetu Patel, Samad Sheikh, Indulata Tekam, Shiv Mohan Singh, Ashutosh Lowanshi, 2024; Asian Journal of Current ResearchVolume 9, Issue 1, Page 52-59, Article no.AJOCR.11872ISSN: 2456-804X

## **Books Published:**

• Nirmal Narmada Ki Pehchan:-Mahsheer Publication Narmada Sanrakshan Pahal. Narmada Conservation Initiative ISBN 978-93-83128-01-3, 2017

## **Book Chapter:**

• Environment and Agriculture: Biodiversity, Agriculture and Pollution in South Asia, Title-Ground Water Quality of Bhopal,India, S.Saxena and P.Shrivatava, Ecological Society (ECOS), Kathmandu,Nepal