

FACULTY PROFILE



Dr. Anvar Ali P H

Assistant Professor (Fishery Biology)

Department of Fisheries Resource Management

Faculty of Fisheries Science

Ph.D (CUSAT)

Fishery Biology

Contact details



9048106657



anvar.ali@kufos.ac.in

Dr. Anvar Ali's research focuses primarily on fish taxonomy, inland fisheries, and the biology and ecology of fish. He has authored over 102 research publications and more than 50 popular articles on the conservation and life history traits of endemic fish species in the Western Ghats. Dr. Ali has described five new species and established a new genus of freshwater fish from the streams of the Western Ghats.

He received a significant research grant from the UNDP-India High Range Mountain Landscape project to develop captive breeding protocols for native fish in the Munnar Landscape of the Western Ghats. This project standardized mass-scale seed production protocols for two endemic species, *Systemus sarana* and *Dawkinsia lepida*, which facilitated ranching in the Idamalayar Reservoir and other floodplain wetlands in Kerala. Additionally, the project created livelihood opportunities for over 750 families, including tribal fishers and local communities, through diversified native fish farming practices.

Another project, funded by the Department of Environment and Climate Change, Government of Kerala, focuses on the species inventory, distribution, and exploitation patterns of fish faunal resources in the Kole wetlands. Furthermore, Dr. Ali secured a project from the Department of Biotechnology, Government of India, titled "Unravelling Signatures of Growth and Salinity Adaptation in *Etroplus suratensis* through Omics Approaches." Under the Government of Kerala Plan fund, he has also standardized mass-scale captive breeding protocols for several threatened and endemic species of the Western Ghats, including *Dawkinsia exclamatio*, *Pethia setnai*, and *Puntius machecola*.

Teaching:

- ❖ Anatomy and Biology of fish
- ❖ Inland Fisheries
- ❖ Biosystematics
- ❖ Trophodynamics
- ❖ Biodiversity Conservation & Restoration Ecology

Research Areas:

- Fishery Biology
- Ontogenetic Systematics
- Inland Fisheries
- Stream Habitat Ecology
- Taxonomy of finfish
- Ex- situ conservation

Key Management Roles:

- Course coordinator- B.F.Sc. 2020 Batch
- Research Guide- M.F.Sc. & Ph.D. students
- Managing Editor- ' Neeradham'
- Technical supervision- Indigenous fish seed production facility
- Coordinator- Aquatic biodiversity register for Kumbalam Grama Panchayat
- Nodal officer for biodiversity, KUFOS– Biodiversity intelligence- Kerala State Biodiversity Board
- Authorised officer, KUFOS- Assessing the suitability and disability of candidates under the
- PwD Quota to Fisheries & Ocean Studies courses.

Publications:

- M Lal & A PH Ali (2024) Early life history stages of the olive barb, *Systomus sarana* (Hamilton), and a key ontogenetic systematic character of Smiliogastrinae. *Journal of Fish Biology* doi: 10.1111/jfb.15868
- M Lal, GB Sreekanth, P Kumar, P Gokuldas, T Mayekar, APH Ali. (2024). Breeding in captivity for conservation and livelihood: insights into the early ontogeny of the Indigo barb, *Pethia setnai* (Chhapgar and Sane 1992), a threatened endemic species of the Western Ghats of India. *Zoomorphology*. <https://doi.org/10.1007/s00435-024-00658-3>
- A S Vishnu, M Lal, J C Tharian, MP Prabhakaran, APH Ali (2023). Diversity, distribution, and conservation status of fish species in Kallar Stream, Achankovil River, Western Ghats of Kerala, India. *Journal of Threatened Taxa* 15(5): 23164-23189.
- R Roshnath, P V Nisha, APH Ali (2023). Ichthyofaunal diversity of Kattampally wetlands, Kannur and conservation challenges. *Journal of the Marine Biological Association of India* 65(1)
- A A Kumar, APH Ali, G B Sreekanth (2023). A comprehensive record of the fishery resources of a tropical Ramsar wetland: Ashtamudi Estuary, India. *Marine Biodiversity* 53: 52
- A A Kumar AA, APH Ali, G B Sreekanth (2023). Finfish fishery of Ashtamudi Estuary, India – A Ramsar site of international significance. *Regional Studies in Marine Science* 64:103020
- A A Kumar AA, APH Ali, G B Sreekanth (2023). Fish assemblage and guild structure in the Ashtamudi estuary, a tropical Ramsar site in India. *Journal of Environmental Management* 234:117401
- L Sharma , APH Ali (2022). Morphometric relationships and sexual dimorphism in *Pethia punctata*, an endemic barb of Western Ghats. *Indian Journal of Ecology* 49 (5): 1794-1799.
- L Sharma , APH Ali (2022). Length-weight relationship, condition factor and relative condition factor of small indigenous barb, *Pethia punctata* (Day, 1865) from Periyar River, Western Ghats, India. *Journal of Experimental Zoology India* 25 (2): 2607-2609.
- B C Das, DV Haridas, N Jacob, A Ramakrishnan, APH Ali, D Pillai (2021) Outbreaks of epizootic ulcerative syndrome in Kerala, India following episodes of flooding. *Diseases of Aquatic Organisms*. 25: 189-193
- S Chandhini, VM Arjunan, A Ali, R Raghavan, D Pillai & R Kumar (2019) Complete mitogenome analysis of endangered Malabar mahseer (*Tor malabaricus*). *Conservation Genetics Resources* 11(2): 185–189
- A Richu, N Dahanukar, A Ali, K Ranjeet & R Raghavan (2018) Population dynamics of a poorly known serranid, the duskytail grouper, *Epinephelus bleekeri*, in the Arabian Sea. *Journal of Fish Biology* 93: 741–744.
- R Raghavan, MR Ramprasanth, A Ali & N Dahanukar (2018) Population dynamics of an endemic cyprinid, *Hypselobarbus kurali*: insights from an exploited reservoir fishery in the Western Ghats of India. *Lakes and Reservoirs: Science, Policy and Management for Sustainable Use* 23: 250–255.
- T Rufus, N Dahanukar, PS Eldho, A Ali & R Raghavan (2018) Demographics and exploitation rate of a large predatory catfish, *Wallago attu* (Schneider 1801) in three small rivers of southern India. *Asian Fisheries Science* 31: 172–178.

- R Raghavan, A Ali, S Philip & N Dahanukar (2018) Effect of unmanaged harvests for the aquarium pet trade on the population status and dynamics of the Redline Torpedo Barb – a threatened aquatic flagship. *Aquatic Conservation: Marine and Freshwater Ecosystems*28: 567–574.
- VK Anoop, N Dahanukar, A Ali & R Raghavan (2017) Taxonomy of the zodiac loaches, *Mesonoemacheilus triangularis*, *M. tambaraparniensis* and *M. periyarensis* endemic to the Western Ghats of India (Teleostei: Nemacheilidae). *Zootaxa*4341: 124–134.
- R Britz, E Adamson, R Raghavan, A Ali & N Dahanukar (2017) *Channa pseudomarulius*, a valid species of snakehead from the Western Ghats region of peninsular India (Teleostei: Channidae), with comments on *Ophicephalus grandinosus*, *O. theophrasti* and *O. leucopunctatus*. *Zootaxa*4299(4): 529–545.
- R Raghavan, S Philip, A Ali, U Katwate & N Dahanukar (2016) Fishery, biology, aquaculture and conservation of the Asian Sun Catfish, *Horabagrus brachysoma* (Günther). *Reviews in Fish Biology and Fisheries*26(2): 169–180.
- N Dahanukar, R Raghavan, A Ali & R Britz (2016) *Amblyceps accari*, a new species of torrent catfish (Teleostei: Amblycipitidae) from the Western Ghats of India. *Zootaxa*4109(2): 218–226.
- T. Rufus, PS Eldho, A Ali, N Dahanukar & R Raghavan (2015) Length-weight relationship and condition factor of a large predatory catfish, *Wallago attu* (Schneider 1809) from the Rivers of Central Kerala, India. *Journal of Aquatic Biology and Fisheries* 3: 68–73.
- P Kumkar, A Keskar, M Paingankar, A Ali, R Raghavan & N Dahanukar (2015) Redescription of *Nemachilichthys rueppelli*, a senior synonym of *N. shimogensis* (Teleostei: Nemacheilidae) *Zootaxa* 4059 (3): 555–568.
- A Ali, U Katwate, S Philip, KV Dhaneesh, A Bijukumar, R Raghavan & N Dahanukar (2014) *Horabagrus melanosoma*: a junior synonym of *Horabagrus brachysoma* (Teleostei: Horabagridae) *Zootaxa*3881(4): 373–384.
- R Raghavan, N Dahanukar, JDM Knight, A Bijukumar, U Katwate, K Krishnakumar, A Ali & S Philip (2014) Predatory journals and Indian ichthyology. *Current Science*107: 740–742.
- A Ali, N Dahanukar, S Philip, K Krishnakumar & R Raghavan (2014) Distribution, threats and conservation status of the Wayanad Mahseer, *Neolissochilus wynaadensis* (Day 1873) (Teleostei: Cyprinidae): an endemic large barb of the Western Ghats, India. *Journal of Threatened Taxa*6(5): 5686–5699.
- A Ali, S Philip, N Dahanukar, R Kumar, A Bijukumar & R Raghavan (2013) Distribution, threats and conservation status of *Hypselobarbus thomassi* (Day 1874), a poorly known cyprinid fish of the Western Ghats freshwater ecoregion. *Journal of Threatened Taxa*5(17): 5202–5213.
- R Raghavan, S Philip, N Dahanukar & A Ali (2013) Freshwater fish biodiversity of India: a response to Sarkar *et al.* (2013). *Reviews in Fish Biology and Fisheries*23: 547–554.
- R Raghavan, S Philip, A Ali & N Dahanukar (2013) *Sahyadria*, a new genus of barb (Teleostei: Cyprinidae) from Western Ghats, India. *Journal of Threatened Taxa*5 (15): 4932–4938.
- A. Bijukumar, S. Philip, A. Ali, S. Sushama & R. Raghavan (2013) Fishes of river Bharathapuzha, Kerala, India: diversity, distribution, threats and conservation. *Journal of Threatened Taxa*5 (15): 4979–4993.

- N Dahanukar, S Philip, K Krishnakumar, A Ali & R Raghavan (2013) Phylogenetic position of *Lepidopygopsis typus* (Teleostei: Cyprinidae): a monotypic freshwater fish endemic to the Western Ghats of India. *Zootaxa* 3700 (1): 113–139.
- . L John, S Philip, N Dahanukar, A Ali, J Tharian, R Raghavan_ & A Antunes (2013) Morphological and genetic evidence for multiple evolutionary distinct lineages in the endangered Redline torpedo barbs - highly exploited freshwater fishes endemic to the Western Ghats of India. *PLoS One* 8(7): e69741.
- R Raghavan, N Dahanukar, S Philip, K Krishnakumar & A Ali (2013) *Phantom references, nomina nuda* and the dilemma of freshwater fish taxonomy in India. *Current Science* 104(10): 1277–1279.
- A. Ali, N. Dahanukar & R. Raghavan (2013) Length-length and length-weight relationship of three species of snakehead fish, *Channa diplogramma*, *Channa marulius* and *Channa striata* from the riverine reaches of Lake Vembanad, Kerala, India. *Journal of Threatened Taxa* 5 (13): 4769–4773.
- A Ali, S Philip & R Raghavan (2013) Back from obscurity: notes on the current distribution, threats and conservation status of a poorly known cyprinid, *Hypselobarbus lithopidos* (Day 1874) from the Western Ghats of India. *Journal of Threatened Taxa* 5 (13): 4743–4751
- A Ali, N Dahanukar, A Kanagavel, S Philip & R Raghavan (2013) Records of the endemic and threatened catfish, *Hemibagrus punctatus* from the Southern Western Ghats with notes on its distribution, ecology and conservation status. *Journal of Threatened Taxa* 5 (11): 4569–4578.
- K Krishnakumar, J Emmanuel, B Pereira, A Kanagavel, A Ali & R Raghavan (2013) New records of the endangered balitorid loach, *Travancoria elongata* from the Kerala part of Western Ghats. *Journal of Threatened Taxa* 5 (10): 4504–4509.
- R Raghavan, J Tharian, A Ali, S Jadhav & N Dahanukar (2013) *Balitora jalpalli* (Teleostei: Cypriniformes: Balitoridae), a new species of stone loach from Southern Western Ghats. *Journal of Threatened Taxa* 5(5): 3921–3924.
- R Britz, A Ali & R Raghavan (2012) *Pseudolaguvia lapillicola*, a new species of catfish from Peninsular India (Teleostei: Sisoridae). *Ichthyological Exploration of Freshwaters* 23(4): 289–295.
- G Prasad, A Ali, M Harikrishnan & R Raghavan (2012) Population dynamics of an endemic and threatened yellow catfish, *Horabagrus brachysoma* (Gunther) from River Periyar, Kerala, India. *Journal of Threatened Taxa* 4(2): 2333–2342.
- R Britz, A Ali, K Krishna Kumar, S Philip & R Raghavan (2012) First record from the wild of *Carinotetraodon imitator* in Peninsular India (Teleostei: Tetraodontiformes: Tetraodontidae). *Ichthyological Exploration of Freshwaters* 23(2): 105–109.
- R Britz, A Ali & R Raghavan (2012) *Pangio ammophila*, a new species of eel loach from Karnataka, Southern India. *Ichthyological Exploration of Freshwaters* 23(1): 45–50.
- R Raghavan, N Dahanukar, K Krishnakumar, A Ali, S Solomon, MR Ramprasanth, F Baby, B Pereira, J Tharian & S Philip (2012) Western Ghats fish fauna in peril: are pseudo-conservationist attitudes to be blamed? *Current Science* 102(6): 835–837.
- R Raghavan, A Ali, N Dahanukar & A Rosser (2011) Is the fishery for the Deccan Mahseer, *Tor khudree* (Sykes, 1839) in the Western Ghats Hotspot sustainable? A participatory approach to stock assessment. *Fisheries Research* 110: 29–38.

- A Benziger*, S Philip*, R Raghavan*, A Ali, M Sukumaran, J Tharian, N Dahanukar, F Baby, R Peter, KV Radhakrishnan, K Remadevi, MA Haniffa, R Britz & A Antunes (2011) Unravelling a 146 years old taxonomic puzzle: Validation of Malabar Snakehead, species status and its relevance for Channid systematics and evolution. *PLoS ONE*6(6): e21272 [*equal contributions].
- N Dahanukar, R Raghavan, A Ali, R Abraham & CP Shaji (2011) The status and distribution of freshwater fishes of the Western Ghats. pp 21–48. In: S. Molur, K.G. Smith, B.A. Daniel & W.R.T. Darwall (compilers). *The status of freshwater biodiversity in the Western Ghats*. International Union for Conservation of Nature (IUCN) Gland, Switzerland, & Zoo Outreach Organization (ZOO) Coimbatore, India. 116p.**Book Chapter**
- F Baby, J Tharian, S Philip, A Ali & R Raghavan (2011) Checklist of the fishes of Achankovil forests, Kerala with a note on the range extension of an endemic cyprinid, *Puntius chalakkudiensis*. *Journal of Threatened Taxa* 3(7): 1936–1941.
- S Solomon, MR Ramprasanth, F Baby, J Tharian, B Pereira, A Ali & R Raghavan (2011) Reproductive biology of *Puntius denisonii* (Day), an endemic and threatened freshwater aquarium fish of the Western Ghats and its implications for current and future conservation. *Journal of Threatened Taxa* 3(9): 2071–2077.
- K Krishnakumar, A Ali, B Pereira & R Raghavan (2011) Unregulated aquaculture and invasive alien species: case of the exotic African Catfish, *Clarias gariepinus* in Vembanad Lake (Ramsar wetland), Kerala, India. *Journal of Threatened Taxa*3(5): 1737–1744.
- F Baby, J Tharian, KM Abraham, M Ramprasanth, A Ali & R Raghavan (2011) Length weight relationship and condition factor of an endemic stone sucker, *Garra gotyla stenorhynchus* (Jerdon 1849) from two opposite flowing rivers in southern Western Ghats. *Journal of Threatened Taxa*3(6): 1851–1855.
- F Baby, J Tharian, A Ali & R Raghavan (2010) A checklist of freshwater fishes of the New Amarambalam Reserve Forest (NARF). *Journal of Threatened Taxa*2(12): 1330–1333.
- R Raghavan, G Prasad, A Ali, B Pereira, MR Ramprasanth & F Baby (2010) Miss Kerala (*Puntius denisonii*) added to the IUCN Red List of Threatened Species. *Current Science*98(2): 132.
- K Krishnakumar, R Raghavan, G Prasad, A Bijukumar, M Sekharan, B Pereira & A Ali (2009) *When pets become pests!* Exotic aquarium fishes and biological invasions in Kerala, India. *Current Science*97: 474–476.
- R Raghavan, G Prasad, A Ali, B Pereira & L Sujarittanonta (2009) Damsel in distress – the tale of MissKerala, *Puntius denisonii* (Day) an endemic and endangered cyprinid of Western Ghats biodiversity hotspot, India. *Aquatic Conservation – Marine and Freshwater Ecosystems*19(1): 67–74.
- R Raghavan, G Prasad, A Ali & B Pereira (2008) Fish fauna of River Chalakudy part of Western Ghats biodiversity hotspot (South India): patterns of distribution, threats and conservation needs. *Biodiversity and Conservation*17: 3119–3131.
- R Raghavan, G Prasad, A Ali & B Pereira (2008) Exotic fishes in a global biodiversity hotspot - a case study from River Chalakudy, part of Western Ghats, Kerala, India. *Biological Invasions*10(1): 37–40.
- G Prasad, A Ali & R Raghavan (2008) Threatened Fishes of the World: *Puntius denisonii* (Day) (Cyprinidae). *Environmental Biology of Fishes*83(2): 189–190.

- G Prasad, A Ali & R Raghavan (2008) Threatened Fishes of the World: *Horabagrus nigricollaris* (Pethiyagoda & Kottelat). ***Environmental Biology of Fishes***82: 109–110.
- A Ali, G Prasad, R Lakshmi, N Balasubramaniam & R Raghavan (2008) Weight – length relationship of the Asian sun catfish *Horabagrus brachysoma* (Gunther, 1864) (Siluriformes: Horabagridae) from the Western Ghats rivers of Kerala, South India. ***Acta Ichthyologica et Piscatoria***38(1): 41–44.
- R Raghavan, M Tlusty, G Prasad, B Pereira, A Ali & L Sujarittanonta (2007) Should endemic and threatened ornamental fishes of Western Ghats biodiversity hotspot be captive bred for international trade? ***Current Science***93(9): 1211–1213.
- R Raghavan, G Prasad, A Ali & L Sujarittanonta (2007) ‘Boom and Bust Fishery’ in a Biodiversity Hotspot – Is the Western Ghats (South India) losing its most celebrated ornamental fish, *Puntius denisonii*, Day? ***Current Science***92(12): 1671–1672.
- R Raghavan, A Ali & G Prasad (2007) Need for a comprehensive re-assessment of the conservation status of critically endangered (?) fishes of Kerala. ***Current Science*** 92(6): 721–723.
- A Ali, R Raghavan & G Prasad (2007) Threatened Fishes of the World: *Horabagrus brachysoma* (Gunther) (Bagridae). ***Environmental Biology of Fishes*** 78(3): 221.

Awards & Achievements:

Principal Investigator- UNDP- IHRML – KUFOS Project (2019 - 2022) on ‘Enhancing reservoir fish production and creation of livelihood opportunities for the Tribal community in the Munnar landscape through development of aquaculture practices of native fishes’- Rs. 52.5 Lakhs

Principal Investigator- Directorate of Environment and Climate Change (DoECC), Government of Kerala funded R & D project (2020-2022) on ‘Species inventory, distribution and exploitation pattern of fish faunal resources of Kole wetlands’- 13.32 Lakhs

Principal Investigator- Department of Biotechnology, Ministry of Science and Technology, Government of India Project on ‘Unravelling signatures of growth and salinity adaptation in *Etroplus suratensis* through omics approaches’ (KUFOS Component, 2021-23)- 11.1 Lakhs

Principal Investigator- Developing captive breeding protocols for indigenous fish species in Sasthamkotta Lake for conservation, stock enhancement and creation of livelihood opportunities- KUFOS- CIFPAAH project component, Government of Kerala Plan Fund (2023-24)

Ongoing Projects:

- Principal Investigator- Department of Biotechnology, Ministry of Science and Technology, Government of India Project on ‘Unravelling signatures of growth and salinity adaptation in *Etroplus suratensis* through omics approaches’ (KUFOS Component, 2021-23)- 11.1 Lakhs

- Principal Investigator- Developing captive breeding protocols for the threatened fish species of the Western Ghats of India – Government of Kerala Plan Fund (2024-25)

Read More: