

## Division of Livestock & Fishery Management

### Personal Details



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**Scientist**

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### Research Interest

1. Fishery resources management and conservation
2. Soil and water management for aquaculture
3. Finfish and shell fish aquaculture
4. Technological innovation in aquaculture

### Research Highlights

1. Resource assessment and Management framework for sustainable fisheries in selected wetland
2. Economic feasibility of integrated prawn cum fish farming in Polyculture system in Eastern region.
3. Biofloc technology: Exploring production optimization and economic viability for the Eastern region.
4. Model Project and Demonstration Unit for Backyard Poultry, Livestock, Vermifarming and Moringa Integration.

### Memberships / Fellowships

1. Awarded National Talent Scholarship (NTS) for B. F. Sc. by Indian Council of Agricultural Research, New Delhi, India
2. Junior Research Fellowship in M.F.Sc. at Central Institute of Fisheries Education, Mumbai by Indian Council of Agricultural Research, New Delhi, India
3. Ph. D fellowship by Central Institute of Fisheries Education, Mumbai.  
Lifetime membership of Journal of Marine Biological Association of India

### Technology Developed

1. CMSY for assessment of Indian Fish Stock in a data poor environment.
2. 2 Modeling on marine fisheries resources and oceano-climatic parameters.
3. MSVPA for Indian Marine Fish Stock Assessment.
4. Biofilm and Biofloc in aquaculture.

### Publication Details

#### Peer Reviewed Journal

1. T. V. Sathianandan, Kolliyil Sunil Mohamed, Jayaraman Jayasankar, Somy Kuriakose, K. G. Mini, Eldho Varghese , P. U. Zacharia, P. Kaladharan, T. M. Najmudeen, Mohammed K. Koya, Geetha Sasikumar, **Vivekanand Bharti**, Prathibha Rohit, G. Maheswarudu, K. Augustine Sindhu, V. Sreepriya, Joseph Alphonsa, and A. Deepthi., 2021. Status of Indian marine fish stocks: modelling stock biomass dynamics in

multigear fisheries. ICES Journal of Marine Science (2021), doi:10.1093/icesjms/fsab076.

2. Akash, S, Shah, Phiros, Shafeeque, Muhammed, Pooja, A S, Zacharia, P U, Ajith, J K, **Bharti, Vivekanand**, Sathianandan, T V and George, Grinson (2021) Observed links between coastal ocean processes and Indian Oil Sardine (*Sardinella longiceps*) fishery along the southwest coast of India. Regional Studies in Marine Science. pp. 1-37.
3. **Bharti, Vivekanand**, Jayasankar, J., Shukla, S. P., George, Grinson, Ambrose, T. V., Augustine, S. K., Sathianandan, T. V. and Shafeeque, M. (2020) Study on Sea Surface Temperature and Chlorophyll-a concentration along the south-west coast of India. Indian Journal of Geo-Marine Sciences, 49 (1). pp. 51-56.
4. **Bharti, Vivekanand**, Jayasankar, J., Shukla, S. P., Varghese, Eldho, Sathianandan, T. V., George, Grinson, Kripa, V and Jaiswar, A K (2019) Distribution of Indian oil sardine *Sardinella longiceps* along south-west coast of India. Indian Journal of Animal Sciences, 89 (8). pp. 912-917.
5. **Bharti, Vivekanand**, Jayasankar, J., Shah, Phiros, Shukla, S. P., George, Grinson and Sathianandan, T. V. (2019) Spatial variability in sea surface temperature and wind-driven coastal upwelling along the southwest coast of India. Journal of the Marine Biological Association of India, 61 (2). pp. 22-26.
6. **Bharti, Vivekanand** and Pandey, P K and Alagarsamy, V and Rajkumar, M and Ajima, M N O (2016) Water Quality, Survival and Growth Performance of *Cirrhinus mrigala* (Hamilton 1822) in Substrate Based Tanks. Asian Fisheries Science, 29. pp. 137-150.
7. Rajkumar, M., Pandey, P. K., Aravind, R., Alagarsamy, V., **Bharti, Vivekanand** and Purushothaman, C S (2015). Effect of different biofloc system on water quality, biofloc composition and growth performance in *Litopenaeus vannamei* (Boone, 1931). Aquaculture Research. pp. 1-13.
8. **Bharti, Vivekanand**, Sukhadane, Kapil S and Remya, L (2015). Rooftop Micro Organic Farm: A Promising Initiative to Enhance the Vegetable Production. Indian Horticulture Journal, 5 (3-4). pp. 114-116.
9. Pramod Kumar Pandey, **Vivekanand Bharti** and Kunadan Kumar, (2014). Biofilm in aquaculture production. African Journal of Microbiology Research 8(13): 1434-1443.

### Technical/popular articles

1. Jaspreet Singh, Arpita Narayan, Md Imran Rafique, Kamal Sarma, Tarkeshwar Kumar Ahirwal S. K. and **Bharti V.**, 2021. Aquaponics: Towards a Sustainable Multi-trophic Production of Fish and Vegetable. *Food and Scientific Reports* , (2): 6, 46-49.
2. Jaspreet Singh, Kamal Sarma, T Kumar, S. K. Ahirwal, R. K. Raman and **V Bharti**, 2021. Fuel and Energy Optimization Approaches in Fishing. *Food and Scientific Reports* ISSN2582-5437.
3. **Bharti, Vivekanand** and Jayasankar, J (2019) Life cycle of anchovy and climate driven changes in its distribution on the southwest coast of India. *Marine Fisheries Information Service; Technical and Extension Series (239)*. pp. 7-10. ISSN 0254-380 X.
4. **Bharti, Vivekanand**, Jeyabaskaran, R., Jayasankar, J., Vysakhan, P. and John, Seban (2018) Report on the deep sea swarming crab. *Marine Fisheries Information Service; Technical and Extension Series (235)*. pp. 18-19. ISSN 0254-380 X
5. **Bharti, Vivekanand**, Mini, K. G. Sathianandan, T. V., Pugazhendi, D., Manjeesh, R. and Augustine, S. K (2017) Marine fish landings in Andhra Pradesh during 2016 - An overview. *Marine Fisheries Information Service; Technical and Extension Series (233)*. pp. 19-20. ISSN 0254-380 X.
6. Mini, K. G., **Bharti, Vivekanand**, Manu, V. K., Augustine, S. K. and Sathianandan, T. V. (2017) Marine fish landings in Odisha during 2016 - An overview. *Marine Fisheries Information Service; Technical and Extension Series (233)*. pp. 17-18. ISSN 0254-380 X.
7. **Bharti, Vivekanand**, Sijo Paul, Baby, K. G., George, Grinson and Sathianandan, T. V. (2016) Mud bank fisheries at Chettuva. *Marine Fisheries Information Service; Technical and Extension Series (230)*. p. 35. ISSN 0254-380 X
8. Sathianandan, T. V. **Bharti, Vivekanand**, Kuriakose, Somy, Mini, K. G. and George, Grinson (2015) Approach and implementation strategies for Marine Fisheries Census 2016. *Marine Fisheries Information Service; Technical and Extension Series (226)*. pp. 10-12. ISSN 0254-380 X
9. **Bharti, Vivekanand**, Jayaraj, P., Azaharudheen, T. P. M., Rachana, R. R. and Baruah, A (2015) Women empowerment through green mussel (*Perna vuidis*) farming : Focus on Kerala. *Fishing Chimes*, 35 (7). pp. 39-41.
10. **Vivekanand Bharti**, P. K. Pandey and Satish Kumar Koushlesh, 2014. Single Cell Proteins: a Novel Approach in Aquaculture Systems. *World Aquaculture*, December 2014: 62-63.

## Book Section

1. **Bharti, Vivekanand** (2016) समुद्री संवर्धन: एक कदम मछली की मांग और आपूर्ति के संतुलन की ओर. समुद्री संवर्धन (120). pp. 56-59. ISSN 0972-2351.
2. **Bharti, Vivekanand** (2020) मत्स्य पालन: बिहारवासियों की सामाजिक-आर्थिक स्थिति में सुदृढ़ता का विकल्प. In: भा कृ अनु प - केंद्रीय समुद्री मात्स्यिकी अनुसंधान संस्थान की अर्थ वार्षिक राजभाषा गृह पत्रिका Matsyagandha. ICAR-Central Marine Fisheries Research Institute, Kochi, pp. 26-34.
3. **Bharti, Vivekanand** (2019) तेरा दीवाना. In: मत्स्यगंधा : भा कृ अनु प - केंद्रीय समुद्री मात्स्यिकी अनुसंधान संस्थान की अर्थ वार्षिक राजभाषा गृह पत्रिका. ICAR- Central Marine Fisheries Research Institute, Kochi, p. 46.
4. **Bharti, Vivekanand**, George, Grinson, Sathianandan, T. V., Kuriakose, Somy and Augustine, S. K. (2018) केरल तट पर मद बैंक मात्स्यिकी का अध्ययन. In: मत्स्यगंधा : भा कृ अनु प - केंद्रीय समुद्री मात्स्यिकी अनुसंधान संस्थान की अर्थ वार्षिक राजभाषा गृह पत्रिका. ICAR-Central Marine Fisheries Research Institute, Kochi, pp. 11-14.
5. Sukhadane, Kapil S, **Bharti, Vivekanand**, Divu, D. Vase, Vinay Kumar, Pradhan, Rajesh Kumar, Kumawat, Tarachand, Abdul Azeez, P., Kripa, V and Solanki, Mukesh (2018) भारतीय तटीय जल में तेल प्रदूषण की स्थिति. In: मत्स्यगंधा : भा कृ अनु प - केंद्रीय समुद्री मात्स्यिकी अनुसंधान संस्थान की अर्थ वार्षिक राजभाषा गृह पत्रिका. ICAR- Central Marine Fisheries Research Institute, Kochi, pp. 15-18.
6. **Bharti, Vivekanand** (2017) Basic Finfish Features. In: Training Manual on Species Identification. CMFRI; Kochi, Kochi, pp. 1-13. ISBN 978-93-82263-16-6
7. **Bharti, Vivekanand** (2017) Basic Shellfish Features. In: Training Manual on Species Identification. CMFRI; Kochi, Kochi, pp. 118-126. ISBN 978-93-82263-16-6
8. **Bharti, Vivekanand** (2017) Multispecies virtual population analysis. In: Course Manual Summer School on Advanced Methods for Fish Stock Assessment and Fisheries Management. Lecture Note Series No. 2/2017 . CMFRI; Kochi, Kochi, pp. 238-245.
9. **Bharti, Vivekanand** (2017) Virtual population analysis. In: Course Manual Summer School on Advanced Methods for Fish Stock Assessment and Fisheries Management. Lecture Note Series No. 2/2017 . CMFRI; Kochi, Kochi, pp. 232-237.
10. **Bharti, Vivekanand** (2019) Fish Stock Assessment Method: Virtual Population Analysis. In: Advances in Marine Fisheries in India, 18-23 February 2019, Kochi.

11. George, Grinson, **Bharti, Vivekanand** and Shah, Phiros and Shafeeqe, Muhammed and Anand, A (2017) Identifying mesoscale eddies- Relevance to mud banks and fishery. In: Winter School on Structure and Function of the Marine Ecosystem : Fisheries, 1-21 December 2017, Kochi.
12. **Bharti, Vivekanand** and Augustine, Sindhu K (2017) Mud banks fishery estimates. In: Winter School on Structure and Function of the Marine Ecosystem : Fisheries, 1-21 December 2017, Kochi.

## Books

1. Tarkeshwar Kumar, Kamal Sarma, S. K. Ahirwal, Jaspreet Singh, **Vivekanand Bharti** and Reena Kamal, 2021. समन्वित मत्स्य पालन की आधुनिक तकनीकियाँ, Technical Bulletin, No. R-72/ Patna-41.
  2. Kripa, V., Prema, D., Varghese, Molly, Padua, Shelton, Jeyabaskaran, R., Sumithra, T. G., Reshma, K. J., Nair, Rekha J., Sobhana, K. S., Vidya, R., Jeena, N. S., **Bharti, Vivekanand** and Lavanya, S., Uma, E. K. and Shylaja, G (2018) Book of Abstracts & Success Stories National Conference on Marine Debris COMAD 2018. Marine Biological Association of India, Kochi.
  3. Zacharia, P. U., Kaladharan, P., Menon, Nandini, George, Grinson, **Bharti, Vivekanand**, Venkatesan, V., Padua, Shelton., Kathirvelpandian, A. and Abhilash, P. R. (2018) Book of Abstracts & Lead Articles The Second International Symposium Remote Sensing for Ecosystem Analysis and Fisheries. ICAR-Central Marine Fisheries Research Institute, Kochi. ISBN 978-93-82263-19-7.
- Sathianandan, T. V., Jayasankar, J., Mini, K. G., Kuriakose, Somy, **Bharti, Vivekanand** and Manu, V. K., Sijo Paul, and Augustine, S.K (2017) Training Manual Species Identification. Manual. Central Marine Fisheries Research Institute, Kochi.