



# Flying Fish

Beyond horizon...



## Message from

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In many myths, the current cycle of life restarted after deluge, saved by the *Matsya*. No surprise that Indian culture and mindsets always regarded the symbolism that if provided protection, a little fish grows to become big and ultimately saves all existence. For the past several decades, however, the role that fish plays in our individual nutrition and community-level growth and prosperity was somewhat forgotten. It is wonderful news that India as a nation is focusing on fisheries as a source of development. The idea of Blue Revolution is at the centerstage.

Throughout the years when the fishery was not a mainstream national priority, India still produced a huge quantity of fish and not only consumed but also became a large exporter of fish and aquaculture products. By about 2015, the value of fish production in India surpassed the value of wheat production; and by now has probably caught up with the value of rice production. Indeed, fish must be the most important primary sector commodity in the country today. Even for exports, at about USD8 billion, fishery and aquaculture products are as important as rice (India is the world's largest rice exporter). India may still be far away from reaching her full potential for growth and development of fisheries and aquaculture, but what has happened without a large national program during the past decade and a half is nothing short of magical. Away from the limelight, the development in the past one and a half decade had been brought, nurtured and precipitated by alumni of institutions like the College of Fisheries, Mangaluru (CoFM). It is doubly important now that the same harbingers of change continue to aim higher and help India and her fisherperson archive

## IN THIS ISSUE

This issue highlights the activities, programmes and events undertaken by staff and students of the College of Fisheries, Mangaluru during the quarter July to September 2019.

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CoFM, Technology wing campus, Hoigebazaar



Flood Assessment (FALRP)



Skill Development



Mathsya Varna Art Paintings

sustainable, high growth, specialized development of fisheries and aquaculture that is now envisaged under "Blue Revolution".

While you celebrate the Golden Jubilee this year, I trust the alumni, teachers and students of the College of Fisheries have a lot more to contribute. Your college is one of the oldest college of fisheries in the country and it also has one of the best facilities and laboratories that include the vast spans of instructional ponds to undertake breeding, rearing and grow-out farming of freshwater fishes; the laboratories in the departments of Fisheries Resources & Aquatic Environment and Health Management; the facilities to innovate in fishing technology and engineering; and the food processing equipment and facilities that you have in the Technology wing of the College. These facilities and equipment are upgraded over a period of last 50 years to meet the present requirement and technology. Located in the Western Ghat, your alumni and students are naturally disposed to a mindset for conservation of national and regional genetic resources.

As India embarks on a path of true, Blue Revolution, there is a great technological leapfrog, improved food safety standards & security and greater emphasis on conservation of aquatic genetic resources. However, there is also

an urgent requirement to upgrade and transform skill and capacity of stakeholders including fisherpersons. Since the CoFM was established with overseas support, the college has produced graduates, postgraduates and doctorates - many of national and international repute. Most of my own learning on fisheries and aquaculture is from interaction of your prodigious alumni. However, the college has done more: it has helped local communities gaining skills in fish and shellfish production, channeled transfer of technology to several groups of fisherpersons; and supported a number of entrepreneurs establish their aquaculture and marine fishery businesses. I hope the college will do more on all aspects above. I also wish the current students of the college become equal or attempt to better your illustrious alumni.

No point for repeating that the question of knowledge is central to economic growth, social welfare; and more so in India's quest for a fully middle-class society. On the occasion of the Golden Jubilee of the College, I take the opportunity to express gratitude to the teachers, former teachers and alumni who have created excellence in spite of all the limitations. From the World Bank, we wish the College would emerge as a valuable knowledge partner for the new opportunities that are arising in the country and in a connected world.

- Tapas Paul

**Health, Environment and Fisheries**

**Mathsya Varna - An Art Camp for a cause of environment (July 5<sup>th</sup>, 6<sup>th</sup> 2019)**

As a part of Golden Jubilee Celebration to highlight the environmental issues affecting fisheries and fisherfolk an art camp 'Mathsya Varna' was organised at CoFM campus on 5th and 6th July 2019. The event was inaugurated by Dr. M. Mohana Alva, Chairman, Alvas Education Foundation, Moodabidri and Dr. Koti Prasad Alva, Director, Prasad Art Gallery, Mangaluru. Several renowned artists from all across the country participated in the camp and the students had the privilege of interacting and visualizing the paintings that were being done on the spot. The artists donated twenty five valuable canvas oil paintings to CoFM that shall be used for raising funds to meet the education requirements of needy fishermen/rural students studying in the college. The paintings can be viewed and ordered at <http://bit.ly/2kFuxYj>



**Socio-economic survey of Sasihithlu fishing village at Surathkal, Mangaluru (July 6<sup>th</sup> 2019)**

The CoFM has adopted the village with an objective to improve the socio-economic status of the fishing community and also the environment in the village. A field trip was organized by the staff of Fisheries Economics, Statistics and Extension department along with the 1 year B.F.Sc students to the village. The team interacted with the communities, assessed the solid waste disposal mechanism, drinking water and other health issues. Based on the assessment a project proposal has been drawn up and submitted a project 'Swach Bharath Abhiyaan'-Sasihithlu village to Ministry of Environment, Forest and Climate Change, Government of India for funding.

**Awareness campaign - "Kshetrotsava and Matsyotsava" at Pilikula (The Hindu - July 21<sup>st</sup> 2019)**

The CoFM participated in the 'Kshetrotsava and Matsyotsava' and exhibited the various fish and fisheries technologies, aquaculture methods, post harvest technologies etc to the farmers. The CoFM stall attracted more than 1500 farmers, Government officials, industries etc. Read more: <http://bit.ly/2kGUxma> and also the leaflet released at <http://bit.ly/2krRxdI>



**Skill development programme initiated by CoFM (July 23<sup>rd</sup> 2019)**



RKVY-RAFTAAR Agri-Orientation and Start-up Agribusiness under Ministry of Agriculture and Farmers Welfare was organized a skill development programme in CoFM. Dr. Sathish B. Shivachandra, CEO and his colleagues briefed the students and staff on the various startup programmes that are available for fisheries graduates The final year BFSc and the postgraduate students were encouraged to take up such startup programmes.



**Dengue control by introducing Fish - A Joint initiation by Mangaluru District Administration and CoFM (The Hindu - July 30<sup>th</sup> 2019)**

Dengue fever and other mosquito borne diseases are highly prevalent during monsoon season in Dakshina Kannada. The dengue virus spread by these mosquitoes thrive in stagnant freshwater bodies. To eradicate the mosquito larvae through biological means the Mangaluru District Administration together with CoFM undertook introducing guppy fish in such freshwater bodies. The guppies are known to feed on mosquito eggs and larvae. The CoFM and the extension wing has taken initiative to breed guppies on large scale, that shall be made available to all residents of Mangaluru and also to the administration for releasing in the water bodies. Read more: <http://bit.ly/2ki7egm>



**'Swachhata Pakhwada' at CoFM (Hosadigantha, Udayavani - August 1<sup>st</sup> 2019)**

As a part of Hon'ble Prime Ministers initiative, the NSS unit of CoFM together with staff and students observed the 'Swachhata Pakhwada' for 15 days from 1.8.2019 to 15.8.2019. During the campaign the staff and students undertook cleaning of the campus, laboratories, classrooms, library, plantation of saplings, cleaning of the water ways and water bodies. Further, each of the departments weeded out the old documents, unwanted equipment, furniture etc. Read more: <http://bit.ly/2lQ0bCu>



**Assessment of damage of livestock and fisheries due to flood in Dakshina Kannada (The Hindu - August 18<sup>th</sup>, 2019)**

The Government of Karnataka assigned the KVAFSU including the CoFM to physically assess the damage/loss of livestock and fisheries due to unprecedented heavy rainfall experienced in the DK, Udupi and Uttara Kannada districts. 11 talukas were assigned to the CoFM and accordingly 11 teams each of them comprising of senior staff, non teaching staff including students visited the assigned talukas during the month long exercise and collected information relating to damages of houses, roads, cattle shed, water bodies and other infrastructure including loss of livestock such as cattle, poultry, goat including aquaculture farms. A detailed reports were prepared suggesting short term, medium and long term measures that



are required to be implemented in phased manner keeping in view the eco fragile nature of the region and the severe climatic conditions that shall prevail in future due to climatic change. The reports along with the suggestions and the news item are available at <http://bit.ly/2kthWHL>

**Activities**

**Development of sustainable alternative livelihood for Fisherfolk in coastal Karnataka (Times of India - July 25<sup>th</sup> 2019)**

The CoFM is in the process of receiving funds from the Ministry of Environment and Forestry for climate change (MoEFCC), Government of India, for providing alternate livelihood and skill development to fishermen and people belonging to coastal communities of Karnataka. The objective is to empower them by providing a sustainable alternative livelihood and income generation, especially during non-fishing seasons. Further the alternative livelihood shall be a source of income during adverse climatic conditions such as storms, floods, droughts, cyclones etc.

The CoFM has identified alternative livelihood programmes such as ornamental fish culture & marketing, fish polyculture, integrated fish



farming, brackish/cage/pen culture, fish seed hatchery and seed rearing, aquaponics, aquarium fabrication and operation, preparation and marketing of ready to eat products such as fish/prawn pickles, fish cutlets/patties, fish chutney powders, crab meat balls, fish sausages etc. Further, net mending, repair and maintenance of paddle wheels, air pumps, blowers, filters, aerators, pond equipments, driers etc. artefacts and handicrafts from shells. Fish preservation, water budgeting, water quality analysis & testing, fish and shrimp pond preparation shall also be provided.

CoFM is establishing a 'Green Skill Development Centre' to provide such skills to fishing communities. An outlet is established in the college to market the products prepared by the fishing communities and the students of the college. A dedicated website will also be set up to market and advertise these products. Read more: <http://bit.ly/2kFsTpu>



**Plastic Clean-up drive by CoFM**

Apart from macro plastics, micro-plastics have been noticed in gut contents of several fish at the CoFM laboratories. CoFM has appraised the local fishermen community about the dangers of such plastic accumulation in the fish which may find their way into human beings on consumption of these fish. CoFM has joined hands with local fishermen to clean-up plastics trash accumulated in beaches and coastal waters. As a clean-up drive the fishermen going out fishing would bring back to shore all the plastics from the sea those get trapped in their nets. The College with Municipal authorities, Port officers and concerned authorities shall establish an outlet at the fishing port to collect all such plastic, thermocol and other materials which would be later sold to authorised dealers or used as fuel in identified industrial units with the consent of Pollution Control Board.

A meeting to discuss the above initiative was convened with the fishermen association of DK, who agreed and welcomed the initiative taken by the CoFM and assured that they will fully cooperate in this endeavour.



**CoFM celebrates Independence Day 2019 (August 15<sup>th</sup> 2019)**

The 73rd Independence day was celebrated at CoFM. The national flag was hoisted in the campus. As a part of the independence day several cultural programmes by the students and badminton tournament was organized.



**Farmers outreach Programmes**

**Training on Mushroom cultivation (August 8<sup>th</sup> 2019)**

The ICAR- Krishi Vigyan Kendra (KVK) located in CoFM and the Department of Horticulture, Mangaluru jointly organized a one day training programme on "Mushroom cultivation" to commemorate Horticulture Day.

**Launch of 'Diploma in Agricultural Extension services to Agri-input Dealers (DAESI)' program (31 July 2019)**

Diploma program DAESI was launched by KVAFSU, Bidar, ICAR- KVK, Mangaluru, Samethi, UAS, Bengaluru and National Institute of Agricultural Extension Management, Hyderabad.



## Fisheries Research/Publications

1. Shamima Nasren, Nagappa Basavaraja, Malathi Shekar, Md. Abdullah Al-Mamun, Sanjay Singh Rathore, Shobha Rawat, Kevin D'Souza Ronald and Ashwin Rai. 2019. Morphometric analysis using TRUSS network system in orange fin barb, *Hypselobarbus jerdoni* (Day 1870) from the Nethravathi river. *J. Exp. Zool. India* 22 (2): 1069-1074.
2. Surasani VKR, Raju CV, Chandra MV, Shafiq U, Lakshmisha IP. 2019. Effect of organic acid on recovery yields and characteristics of rohu (*Labeo rohita*) protein isolates extracted using pH shift processing. *J. Sci. Food Agric.* 2019 Jul 21. doi: 10.1002/jsfa.9935.

## Upcoming Conferences/Events

- For the Golden Jubilee celebration of CoFM to be held in second week of January 2020, The World Bank and The UNEP have agreed to be knowledge partners
- September 21, 2019, International Coastal Cleanup Day 2019 - "Clean Seas Campaign" at Thannirbhavi Beach, Mangaluru. By MoES - NCCR and CoFM
- Oct 7, 2019 - Oct 10, 2019, Aquaculture Europe 2019 - Our Future Growing from Water - <https://www.was.org/eventcalendar.aspx>
- Nov 11, 2019 - Nov 12, 2019, International Conference on Aquaculture and Fisheries 2019 - <https://www.was.org/eventcalendar.aspx>

## Staff and Student News

**Superannuation** - CoFM wishes them a happy retired life!



**Dr. H. Shivananda Murthy**  
Dean (Fisheries)  
CoFM on 30.4.2019



**Dr. S. M. Shivaprakash**  
Professor and Head  
(FRM), CoFM on  
31.7.2019



**Mr. Ramesh Pujar**  
Boys Hostel  
Employee on  
31.7.2019



**Mrs. Jayamma**  
Store Incharge on  
31.8.2019

### Inauguration of Dr. James David Conference Hall (August 31<sup>st</sup> 2019)

The new conference hall was inaugurated by Mrs. Jayamma (Staff, Estate branch). The hall was named after Late Alumni Dr. James David 1978-82 (B.F.Sc) who not only excelled in studies but also was a philanthropist. As a mark of love and affection a new conference hall was dedicated in his name.

**Obituary** - CoFM deeply mourns the sad demise. We pray that God Almighty give courage to the bereaved family to bear the loss with fortitude.



**Dr. Mansing Naik**  
Alumni CoFM &  
Assoc. Professor,  
Dept. of FRM,  
CoFM  
1972 - 2019



**Mrs. Dynora Eusebia D'Silva**  
Stenographer  
CoFM,  
1949 - 2019



**Dr. James David**  
Alumni CoFM  
1959 - 2019



**Dr. P.S.B.R JAMES**  
Former HoD  
(Fishery Biology),  
CoFM; Director,  
CMFRI  
1934 - 2019



**Dr. Anandamoy Mondal**  
Alumni CoFM &  
Assoc. Prof  
WBUAFS  
1964 - 2019

## Fun Facts

**Did you know about Flying Fish - Title of the Newsletter of CoFM**

- Its a marine species with sizes ranging from 7"-12" inches and has an average lifespan of 5 year in the wild
- The Pelvic and pectoral fins are shaped like wings and they look like they have two pairs of wings
- Before it emerges above the water, flying fish accelerates toward the surface of the water with the speed of 37 miles per hour
- Can reach a height of 4 feet in the air, and glide distance of 655 feet before returning back to the water
- The short flight is to escape from the predators, this flight is a lifetime experience for tourists



## Dean's Desk



I am happy to inform that the first newsletter issued during July received overwhelming response. The newsletter was well appreciated by the university (KVAFSU) and Government of India and Karnataka. This issue contains skill development in Fisheries which is one of the many initiatives taken by the college in bringing together the fishing community with the academics.

I thank Shri Tapas Paul from World Bank who has provided his message to this newsletter. He has highlighted the World Banks' approach in promoting "Blue Revolution" a flagship project of Gol. I once again thank my flying fish team along with Mrs. Savitha in making this second edition possible.

We're on the Web! [www.cofm.edu.in](http://www.cofm.edu.in)  
Suggestions and feedback to  
[newsletter@cofm.edu.in](mailto:newsletter@cofm.edu.in)

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