

National Consultation Meet on

Fostering Faster reach of innovations from Aquaculture Research through Media: A Science Communication Perspective

27 October, 2017, Venue: ICAR-CIFA, Bhubaneswar, Odisha

E-Souvenir



Organised by
ICAR-Central Institute of Freshwater Aquaculture
&
Association of Aquaculturists

E-Souvenir

National Consultation on Fostering Faster reach of innovations from Aquaculture Research through Media: A Science Communication Perspective

27 October 2017, Venue: ICAR-CIFA, Bhubaneswar, Odisha

Editors

Ananth, P.N

De, H.K

Sundaray, J.K

Month and Year of Publication

October, 2017

Published by

ICAR-Central Institute of Freshwater Aquaculture

&

Association of Aquaculturists

Kausalyaganga, Bhubaneswar, Odisha

Citation

Ananth, P. N., De, H.K and J.K. Sundaray. 2017. E-Souvenir: Fostering Faster Reach of Innovations from Aquaculture Research through Media; A Science Communication Perspective. ICAR-Central Institute of Freshwater Aquaculture, Bhubaneswar, Odisha India. 107 Pp.

@Copyright 2018. ICAR-CIFA. All rights reserved. Any part of this book may be reproduced only for scientific and educational purposes with prior permission and acknowledgment to ICAR-CIFA, Bhubaneswar and Association of Aquaculturists, Bhubaneswar, Odisha

Designed at

Capital Press, Bhubaneswar, Odisha

History of Indian Journal of Fisheries in a Science Communication Perspective

Sobhana, K.S*, Rani Mary George and A. Gopalakrishnan
ICAR-Central Marine Fisheries Research Institute, Kochi
*Email: sobhanapradeep11@gmail.com

1. Introduction

Scientific journals are the most prominent channels to communicate research findings. In academic publishing, a scientific journal is a periodical publication intended to further progress science, usually by reporting new research findings. These journals publish articles after a peer review process, in order to confirm scientific validity of the content and also to ensure that the articles meet the journal's standard. When research outputs are published in scholarly journals, the new findings are shared with a larger peer group. It serves as the main gateway for rapid reach of the outputs of scientific investigations to the intended audience in a well-edited version. The research results published in scholarly journals contribute towards building knowledge base and provide future researchable ideas. Scientific articles allow researchers to keep up to date with the developments in their respective fields and help to direct their own research. Scientific publishing is undergoing major changes, with major transition from the print to the electronic format using advanced Information and Communication Tools (ICT). In the advent of growing media, science communication is at fast pace by which access has become easy by covering a larger audience.

Worldwide there are thousands of scientific journals available for publishing and the number is growing each year. As per *Ulrich's* periodicals list, the number of refereed journals rose from 17,649 in 2002 to 57,736 in 2011 (Cope and Phillips, 2014). However, there is considerable variation in the scientific quality depending on accuracy, originality and style of presentation of information in journals published by different publishers. This leads to varying credibility and reliability of the scientific knowledge communicated through various journals.

As per Scimago country ranking 2016, India ranks 5th in the world output of citable documents published (<http://www.scimagojr.com>). It is also interesting to note that India

occupies 13th position (Nature Index Annual Table 2017, <https://www.natureindex.com>) for its high quality scientific publications appearing in an independently selected group of 68 high-quality scientific journals. Despite this achievement, several studies have also revealed that India is also among the major contributors of articles published in poor-quality predatory open access journals (Seethapathy *et al.*, 2016). There is also concern over the generally low impact factor of Indian research journals which indeed have to be looked into seriously by way of involving competent peer reviewers and professional editors to improve the quality.

2. A case of Indian Journal of Fisheries

Indian Journal of Fisheries (IJF) is one of the leading journals in fisheries science published by the Indian Council of Agricultural Research (ICAR), New Delhi, India. ICAR-Central Marine Fisheries Research Institute (ICAR-CMFRI), Kochi, Kerala, a premier institute for marine fisheries research, publishes this journal on behalf of ICAR, which is also available online in an open access platform. The present chapter in this e-souvenir is an attempt to summarise the gradual evolution of the journal to the present state in a science communication perspective.

History of IJF

The first volume of the Indian Journal of Fisheries, was launched as an official journal of the Ministry of Food and Agriculture, Govt. of India in 1954 from the then Headquarters of the Central Marine Fisheries Research Institute (CMFRI) at Mandapam Camp, Ramanathapuram District, Tamil Nadu, India. The Editorial Board comprised the Fishery Development Advisor to the Govt. of India (Chairman), the Chief Research Officer, Central Inland Fisheries Research Station and Chief Research Officer, Central Marine Fisheries Research Station (Managing Editor). In 1967, all the Fisheries Research Institutes were brought under the administrative control of ICAR and since then the journal is published by the Director, CMFRI on behalf of ICAR. In 1971, CMFRI headquarters was shifted from Mandapam Camp to Kochi and since then the journal is published from Kochi. Due to the tireless efforts of many scientists and academicians involved in the process of publishing this journal and the enhanced global visibility acquired *via* the online open access platform, the journal acquired international impact factor since 2012. The articles published in the journal are indexed and abstracted by many international indexing and abstracting services like Science Citation Index Expanded,

BIOSIS Previews, Zoological Records, SCOPUS, ASFA (Aquatic Sciences and Fisheries Abstracts), Biological Abstracts, CAD Abstracts and Fish and Fisheries Worldwide (NISC).

The journal is published quarterly and publishes research/review articles on fish and fisheries dealing with one or more of the following subjects *viz.*, fishery resources and studies related to fish population and stock assessment; fishery biology including life history; biogeography, migration and behaviour; fisheries hydrobiology and limnology; development of new techniques and methods related to aquatic sciences; ecological studies including underwater observations; plankton and productivity including experimental work on ecosystems; works on organisms in relation to their ecology; studies on pollution and its effects on aquatic resources; aquaculture and related experimental studies covering physiology, nutrition, pathology, immunology; molecular biology, genetics; fish preservation and processing and development of fishing gear and fishing methods. The **types of articles published include**, *Original Research Papers* (scientific reports of original research), *short research Notes* (of short and of narrower scientific focus) and *Review articles* (concise, creative reviews on subjects of topical relevance and new research initiatives). The copyright of the articles published in *the journal* vests with ICAR, which entails the right to enter into any agreement with any organization in India or abroad towards reprography, photocopying, storage and dissemination of information contained in the journal. It also emphasises that due credit line needs be given to ICAR where ever information is utilized.

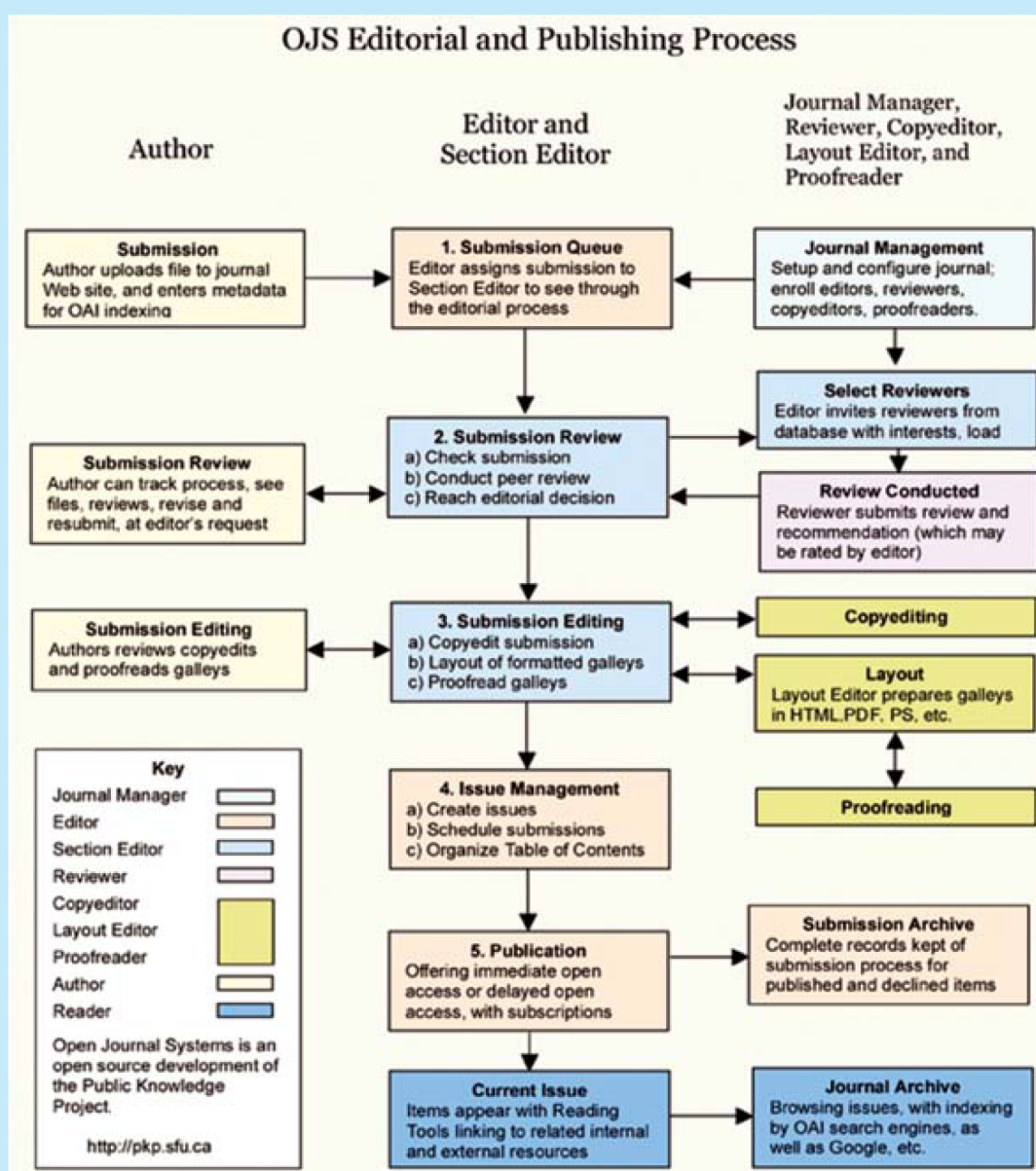
Indian Journal of Fisheries Online: Open Journal System (OJS)

The recent developments in ICTs have brought drastic changes to conventional channels of scientific communication, information, sharing and accessing behaviour of the scholarly community. ICTs have paved the way for the global open movement among scholarly communities and the Indian Journal of Fisheries was also made Open Access Online Journal from June 2011. The open access online IJF was launched by Dr. S. Ayyappan, former Secretary, Department of Agriculture Research and Education (DARE) and former Director General, ICAR, on 10th June 2011. Since then the journal issues are published promptly online on the last day of each quarter.

Publishing system

The journal uses Open Journal Systems 2.4.8.1, which is an open source journal management and publishing software developed, supported, and freely distributed by the Public

Knowledge Project (<http://www.pkp.sfu.ca/ojs>) under the GNU General Public License. The portal of Indian Agricultural Research Journals is accessible from <http://www.epubs.icar.org.in/ejournal> which is using a highly scalable state-of-the-art ICT infrastructure. The key features of e-publishing system are timely dissemination of research information, automation of routine tasks, efficient and reliable record keeping, paperless processing, enhanced visibility and circulation. Credit lines to the Directorate of Knowledge Management in Agriculture (DKMA), ICAR, New Delhi for successful implementation of the system.



(Source: <http://epubs.icar.org.in/ejournal/index.php/IJF>)

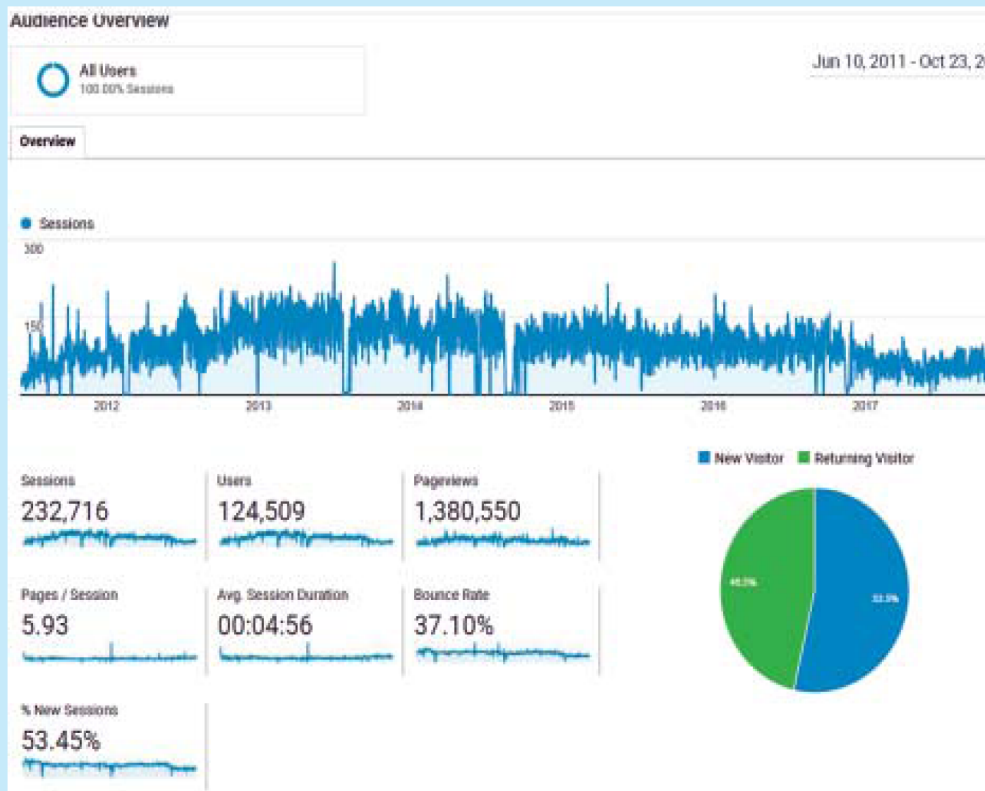
The journal presents its policies in the web page, procedures and other relevant material, with the intention of making the working of the journal as transparent as possible. From the web page, potential authors for the journal can learn about the scope and focus of the journal, its peer review policy, and guidelines for publishing.



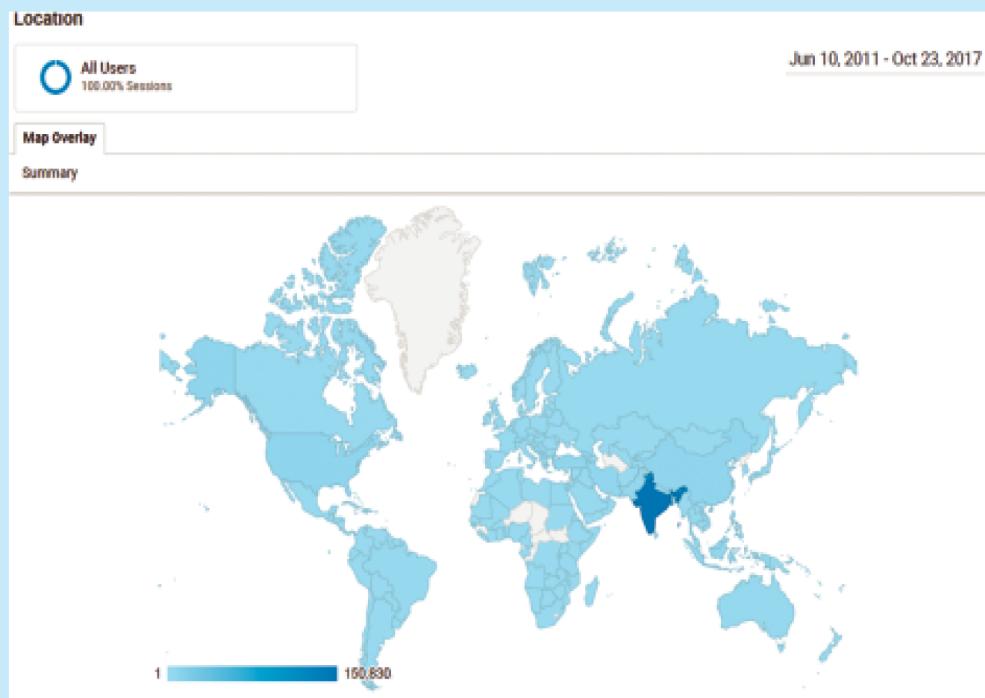
Web page of Indian Journal of Fisheries
(Source: <http://epubs.icar.org.in/ejournal/index.php/IJF>)

3. User statistics and readership

Visibility of articles published in the journal has been enhanced tremendously after launching of the open access online version of the journal. The journal registered a total of about 13.8 lakhs page views during the period from June 2011 (since launching of online version) to October 2017, from 195 countries globally, covering 4928 cities (www.analytics.google.com). Interestingly, the top 25 countries from where the journal was accessed during this period include India, United States, China, Turkey, Indonesia, Iran, Malaysia, Pakistan, Philippines, Bangladesh, United Kingdom, Australia, Thailand, Egypt, Japan, Brazil, Saudi Arabia, Canada, Mexico, Vietnam, Nigeria, Germany, South Korea, Taiwan, Sri Lanka and Mexico. It could be inferred that the above mentioned countries accessing IJF are countries with significant contribution to fish production in the world.



IJF page views and sessions during June 2011 to October 2017
(Source: <https://analytics.google.com>)



IJF page views and sessions during June 2011 to October 2017
(Source: <https://analytics.google.com>)

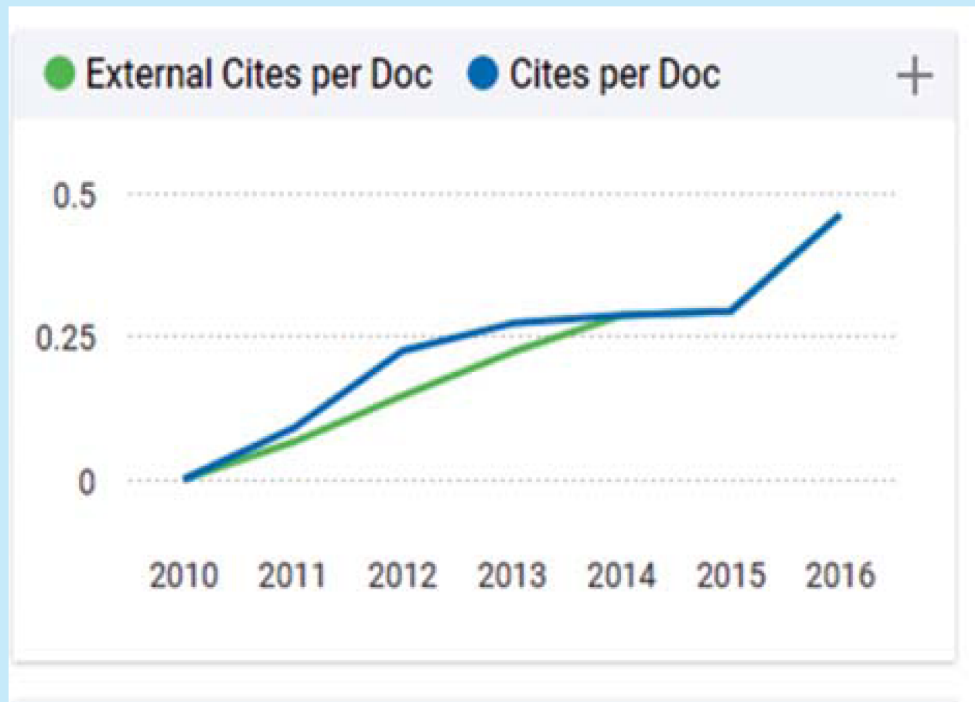


IJF access from different countries (June 2011 to October 2017)
(Source: <https://analytics.google.com>)

Impact Factor

The number of citations as well as the number of foreign author articles published in IJF has increased significantly subsequent to launching of e-publishing system. The Journal got international impact factor (Thomson Reuters Impact Factor, TRIF) of 0.2 for the first time in 2012 and the same got enhanced to 0.235 in the current year (<http://clarivate.com>). Subsequent to acquiring TR impact factor, the NAAS (National Academy of Agricultural Sciences, India) rating (<http://naasindia.org/rating.html>) of the journal also increased which is calculated as: Thomson Reuters IF + 6. The details of the international impact factor and NAAS rating of the journal during the period from 2010 to 2017 are given in Table: 1.

Details	2010	2011	2012	2013	2014	2015	2016	2017	Latest
Thomson Reuters Impact factor	-	-	0.2	0.2	0.2	0.22	0.22	0.16	0.235
NAAS rating	4.9	4.9	4.9 (effective from January 2012)	6.1	6.2	6.21	6.22	6.16	6.235 (will be effective from January 2018)



IJF access from different countries (June 2011 to October 2017)
(Source: <https://analytics.google.com>)



Increase in the number of foreign author articles published
(Source: <http://www.scimagojr.com>)

Digital Object Identifier (DOI)

IJF articles are DOI linked through CrossRef from Volume 63 *i.e.*, from the year 2016 onwards. The DOI prefix allotted for Indian Journal of Fisheries is 10.21077. All published papers in the Journal gets individual DOI by Crossref (<https://www.crossref.org>). The DOI link consists of two parts: the DOI directory URL (<http://dx.doi.org/>), and the DOI itself. When combined with dx.doi.org, the DOI is made into a link and clicking the DOI link, will direct to the URL registered for the DOI.

Plagiarism check

Plagiarism is a serious breach of publication ethics and is probably the most common form of scientific dishonesty found in research articles. Owner of a copyright can sue a plagiarizer for copyright violation. To avoid this, screening of articles submitted for publication in IJF employing Plagiarism checking software was introduced from 2016 onwards. The software used can compare full-text manuscripts against an authoritative and comprehensive database comprising full text scholarly and academic publications as well as web resources with high-quality scholarly content. It provides Similarity index Report as pdf downloads (in colour to differentiate the primary sources) which contain the fully formatted document with match highlights and source list. Significantly, during 2016, about 45% of the articles submitted to IJF were rejected/returned to authors for modification, based on percentage similarity report of the respective articles.

TEEL Membership

Since May 2015, IJF has become a member of The Essential Electronic Agricultural Library (TEEAL, <http://www.teeal.org>), an off-line full text library of international peer reviewed journals in agriculture and related sciences. It is a digital library for excellence in agricultural research and education and a non-commercial venture of Cornell University, US aimed at wider dissemination of peer reviewed academic literature especially to areas with comparatively poor cyber connectivity and infrastructure.

4. Conclusion

The Indian Journal of Fisheries has overall emerged as one of the leading journal in fisheries science in India with the commitment from several office bearers who worked on bringing

quality and also to cope with the advances in science communication. The importance and benefits of being online is well recognised from the performance of IJF ever since launching of the open access online version of the journal in 2011. More than a trend, presenting a journal on the virtual world definitely makes the reach of the journal multi-fold which is clearly evident with the current readership/user statistics of IJF. Huge benefits of several dimensions have been gained by hosting IJF in online platform and some of the striking benefits are;

- The Editor and the Sub-editors of IJF are located at various centres of CMFRI spread across the maritime states of the country. The e-publication system of ICAR has really helped to manage the journal from multiple locations
- The submission of articles (including articles from abroad) has increased tremendously in the past six years, from the time IJF was made online
- The time lag from submission to publication of an article has considerably reduced
- Saving paper and time towards peer reviewing, editing and proof reading in the process of publishing
- The speed of publication as well as the open access policy has definitely helped to enhance the visibility of the journal which in turn helped to acquire International Impact Factor (Thomson Reuters) and to enhance the NAAS rating of IJF.

References

Cope, B. and Phillips, A. 2014. *The Future of the Academic Journal*. Chandos Publishing, Elsevier Limited, The Boulevard, Oxford, UK, p. 10.

Seethapathy, G. S., Santhosh Kumar, J. U. and Hareesha, A. S. 2016. India's scientific publication in predatory journals: need for regulating quality of Indian science and education. *Current Science*, 111 (11): 1759 - 1764.

<https://analytics.google.com> (Accessed: October 2017)

<http://clarivate.com> (Accessed: October 2017)

<https://www.crossref.org> (Accessed: October 2017)

<http://epubs.icar.org.in/ejournal> (Accessed: October 2017)

<https://www.natureindex.com> (Accessed: October 2017)

<http://www.scimagojr.com> (Accessed: October 2017)

The lead author KS Sobhana currently serves as a Principal Scientist with ICAR-Central Marine Fisheries Research Institute, Kochi, Kerala and also the current Editor of Indian Journal of Fisheries.

Rani Mary George is a former Principal scientist, ICAR-Central Marine Fisheries Research Institute and is also former Editor of Indian Journal of Fisheries.

A Gopalakrishnan is the current Director of ICAR-Central Marine Fisheries Research Institute and the current Managing Editor of Indian Journal of Fisheries