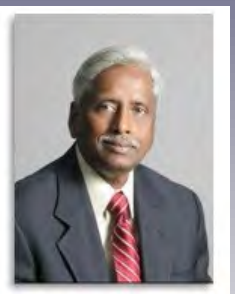
ISSUE 41

DECEMBER 2025

ASIANFISHERIES SOCIETY

e-Newsletter

MESSAGE FROM EDITOR



The second half of 2025 has been hectic for the Society with two well attended and highly successful conferences, accolades received and formation of new branches. The Global Conference on Gender in Fisheries and Aquaculture with the theme ""Transforming Aquaculture and Fisheries for Gender Justice" organised by the Gender in Fisheries and Aquaculture section (GAFS) of AFS in Bangkok has attracted a large number of participants – over 200 from 36 countries indicating the attention gender issues is are receiving not only in Asia, but globally.

Congratulations to the GAFS section and its organisers who have elevated the profile of the issue as evident from the fact that the section has received the "Technical Recognition for Advancing Gender Research in Sustainable Aquatic Food Systems" from FAO. Much credit goes to Dr Meryl J Williams, Founder Chair of the section, who has been aptly given the 2025 Inaugural Distinguished Service Award by the GAFS.

The second highly successful conference organised during the period – Diseases in Asian Aquaculture (DAA12) with the theme "Transformative innovations shaping the future of aquatic animal health management" in Chennai, India and India was attended by 470 scientists, farmers, industry and students from 22 countries, indicating the growing concern of diseases in aquaculture with intensification that is taking place.

Welcome to the 3rd Executive Committee of Gender in Fisheries and Aquaculture Section (GAFS). Pleasing to note that Nepal and Vietnam have indicated interest in becoming branches of AFS, in addition to the existing India and Taiwan branches.

Another important conference – International Symposium on Cage Aquaculture in Asia (CAA12) will be held in Vietnam in July 2026.

Members are encouraged to share their research findings, outcomes of conferences held/details of planned conferences, training programs, etc. through this e-newsletter for wider dissemination to a large section of stakeholders in fisheries and aquaculture.

M. V. Gupta
Editor

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Message From the President

Dear Members, Colleagues, and Friends,

Warm greetings from the Asian Fisheries Society!

As we move through the latter half of 2025, I am filled with immense pride reflecting on our collective activities and forward momentum. Our Society continues to serve as a vital nexus for knowledge exchange, partnership building, and shaping the future of sustainable fisheries and aquaculture in Asia. This edition of our newsletter highlights significant recent events, ongoing projects, and exciting plans on our horizon. I extend my deepest gratitude to all our members, branch representatives, and partner institutions for your unwavering support and active participation in driving our shared mission.

Society Updates and Highlights

The 69th AFS Council Meeting Successfully Convened in Guangzhou, China: The 69th Council meeting of the Asian Fisheries Society was held as a hybrid event on 10 September 2025 in Guangzhou, China. AFS councillors, heads of branches, and special guests from Nha Trang University attended the meeting. The Council expressed sincere appreciation to Professor He Jian-Guo and Sun Yat-sen University for their excellent arrangements for hosting and organization of this pivotal meeting, which set strategic directions for the Society.

Strengthening Regional Partnerships in Fuzhou, China: AFS actively contributed to the China & Southeast Asian Fisheries Cooperation Conference in Fuzhou on 13 June. Key AFS representatives, including Past President Prof. Neil Loneragan and Council Member Prof. Dr. Murni Karim and myself, moderated sessions and delivered keynote presentations focused on sustainable aquaculture and fisheries management, reinforcing AFS's role in regional policy and practice dialogues.

Nurturing Future Leaders: 2025 Shanghai Summer School: In collaboration with Shanghai Ocean University, AFS co-organized the 2025 Shanghai Summer School on Marine Cultivation and Fisheries from June 23 to July 9. This successful program assembled 28 international students from 14 countries, underscoring our commitment to developing the next generation of aquaculture professionals through world-class education and cross-cultural exchange.

Message From the President

Expanding Our Reach: New Branch Proposals: The Council reviewed and endorsed proposals to establish new national branches, recognizing strategic opportunities for growth and impact:

⇒ **AFS Vietnam Branch:** Aims to leverage Vietnam's pivotal role in global fisheries and aquaculture.

⇒ **AFS Nepal Branch:** Seeks to harness the country's significant potential in inland fisheries and aquaculture.

Both proposals align perfectly with AFS's core mission to promote sustainable practices, research, and education across Asia.

Digital Transformation: Website Migration Update: The major, long-term project to migrate the AFS website to a new, more robust platform is underway. While experiencing some expected delays, the project is in the implementation phase. This crucial upgrade will ensure our society materials, especially journal updates, are easily accessible on all devices, and will feature a significantly more user-friendly interface. The migration of all newsletter content to the new system is also part of this process.

Knowledge Sharing: Recent Webinars: AFS recently organized three well-attended webinars, two of which were held in fruitful collaboration with Shanghai Ocean University (SHOU), covering timely topics for our community.

Looking Ahead: Save the Dates!

CAA8: The 8th International Symposium on Cage Aquaculture in Asia will be held from 16-18 July 2026 in Nha Trang, Vietnam.

DAA13: The Fish Health Section is pleased to announce the 13th Symposium on Diseases in Asian Aquaculture will take place in Tokyo, Japan, in September 2028.

AFAF 2028: Mark your calendars for the 15th Asian Fisheries and Aquaculture Forum, to be held in China in 2028.

The vitality of the Asian Fisheries Society stems from your engagement. I encourage all members to participate in our upcoming events, contribute to your national branches, and share your ideas for future initiatives. As we advance our digital infrastructure and geographic network, we strengthen our collective voice and capacity to address the opportunities and challenges facing Asian fisheries and aquaculture.

Thank you for being an integral part of our community. Let us continue to collaborate for a sustainable and prosperous future.

Warmly,

Prof. Liu Liping, President, Asian Fisheries Society

GAF Section Business

The GAFS members held a General Assembly on 1st October 2025 during the 9th Global Conference on Gender in Aquaculture and Fisheries (GAF9) at the Asian Institute of Technology, Thailand.

9th Global Conference on Gender in Aquaculture and Fisheries (GAF9)

The 9th Global Conference on Gender in Aquaculture and Fisheries (GAF9), co-hosted by the Gender in Aquaculture Section of the Asian Fisheries Society (GAFS of the AFS) and the Asian Institute of Technology (AIT) from October 1–3, 2025, under the theme "Transforming Aquaculture and Fisheries for Gender Justice", brought together more than 200 participants representing 36 countries across six continents - Asia, Europe, Africa, North America, Oceania, and South America - highlighting the event's truly international scope and impact.

The three-day program addressed women's engagement in the blue economy, gender and climate change, nature-based solutions, and new research frameworks. More than 100 presentations and 12 special sessions enabled participants to share knowledge, collaborate, and promote inclusivity in aquaculture and fisheries.

The conference opened with pre-conference workshops designed to build capacity in gender analysis. These sessions, GAF 101 and GAF 201, provided participants with both introductory and advanced training on integrating gender perspectives into aquaculture and fisheries research. They set the tone for the main conference by emphasizing the importance of equipping professionals with the tools to recognize and address gender inequalities in the sector.

Over the three days, plenary talks, panel discussions, and thematic sessions explored a wide range of issues. Experts highlighted the role of women and marginalized groups in sustaining fisheries and aquaculture, while also pointing out the structural barriers that continue to limit their participation and leadership. Climate change, technological innovation, and policy frameworks were recurring themes, with speakers stressing that gender justice is not only a matter of fairness but also a prerequisite for resilience and sustainability in aquatic food systems.

GAF9 reaffirmed that gender justice is central to the transformation of aquaculture and fisheries. The conference demonstrated that empowering women and marginalized communities leads to stronger, more innovative, and more sustainable aquatic food systems. As the participants departed, they carried with them not only new knowledge and networks but also a renewed commitment to ensuring that gender equity becomes a cornerstone of fisheries and aquaculture development worldwide.

Explore the details of GAF9 at https://genderaquafish.org/events/gaf9.htm

GAFS Awarded FAO Technical Recognition for Advancing Gender Research in Sustainable Aquatic Food Systems

In Rome on 15 October 2025, the Gender in Aquaculture and Fisheries Section (GAFS) of the Asian Fisheries Society was recognised for its work in advancing gender research by the Food and Agriculture Organization (FAO) with a Technical Recognition Award in the area of Sustainable Aquatic Food Systems. Conferred during FAO's 80th anniversary celebrations and the World Food Forum in Rome, this prestigious honour highlights GAFS's pioneering leadership in promoting gender equality, women's agency, and inclusive policies across global fisheries and aquaculture, reinforcing its vital role in shaping equitable and sustainable aquatic food systems worldwide.

GAFS 2025 Inaugural Distinguished Service Award for Dr. Meryl J. Williams

We are proud to announce that Dr. Meryl J. Williams has been awarded the GAFS 2025 Inaugural Distinguished Service Award (DSA) in recognition of her unwavering dedication to raising the profile of women in fisheries and championing gender equality as a fundamental issue in fisheries and aquaculture development. For over 40 years, she has tirelessly advocated for gender-sensitive policies, research frameworks, and inclusive practices that ensure women's contributions are visible and valued. Her work has successfully integrated gender considerations into fisheries literature, policy dialogues, and institutional agendas, making her a trailblazer in the field.


Dr. Nikita Gopal receiving the award on behalf of Dr. Meryl J. Williams at the GAF9 Valedictory Ceremony, from Dr. Kyoko Kusakabe

Projects

GAFS-IDRC Project: The project "Making nature-based climate solutions (NbCS) in aquaculture in Southeast Asia monitoring more gender-responsive: What gets measured gets done" supported by IDRC Canada's AQUADAPT-SEAPAC grant is in progress. The journal paper that outlined the monitoring schema was published in Aquaculture Journal in May 2025. The pilot monitoring has been in place in Cambodia (rice-fish), Thailand (rice-fish) and the Philippines (sea weed). The preliminary results have been shared during the GAF9 conference in Thailand in October where the project had a panel, and Adaptation Future Conference in New Zealand where GAFS contributed to IDRC's panel.

Announcing the Election Result of 3rd ExeComm, GAFS

The online election for the 3rd Executive Committee was conducted from 22 July 2025 to 04 August 2025. We are pleased to announce the full composition of the 3rd Executive Committee. As per the By-Laws, the position of incoming Chair will be filled by the current Vice-Chair, Kyoko Kusakabe (Thailand) and the immediate past Chair, Nikita Gopal, will become an ex-officio member of the Executive Committee. As there were single nominations received for the positions of Vice President, Secretary, Treasurer, Constitution Committee Coordinator, Membership Committee Coordinator, and General Members, these nominations were considered elected without contest. There were two nominations received for the Election Committee Coordinator position and out of them one candidate was elected by two-week long online election.

The Newsletter Editor is an appointed position.

Following is the composition of 3rd Executive Committee of GAFS:
Chair: Kyoko Kusakabe
Past Chair: Nikita Gopal
Vice-Chair: Arlene Nietes Satapornvanit
Secretary: Kafayat Fakoya
Treasurer: Surendran Rajaratnam
Election Committee Coordinator: Sunila Rai
Membership Committee Coordinator: Rahma Adam
Constitution Committee Coordinator: Alice Joan G Ferrer
Elected Members: Holly Hapke & Carmen Pedroza-Gutiérrez
Newsletter Editor: Piyashi Debroy

The GAFS Third Executive Committee began its term on 1st September 2025.
Details of the GAFS Third Executive Committee are available at https://genderaquafish.org/third-executive-committee.htm

GAFS Communications

GAFS continues to be very active in its outreach, through its website, its GAFS members e-mail group, Genderaquafish e-mail group and social media outlets (Twitter and Facebook). GAFS members are receiving a monthly premium news service on GAF news items.

Here are the latest stories from our website https://genderaquafish.org/stories.htm

- "Unveiling the Gendered Impact of Fishing Bans on Erhai Lake" by Sai Tang and Kyoko Kusakabe, posted on 30 July, 2025 Link
- "GAFS Awarded FAO Technical Recognition for Advancing Gender Research in Sustainable Aquatic Food Systems" posted on 15 October, 2025 Link
- "GAFS 2025 Inaugural Distinguished Service Award: Nomination of Dr. Meryl J. Williams" posted on 31 October, 2025 Link

Keep in touch with GAF Website: https://www.genderaquafish.org/; https://www.genderequality.genderaquafish.org/

Facebook Page: https://www.facebook.com/AFS-Gender-in-Aquaculture-and-Fisheries181176555231544/

Twitter: @Genderaquafish https://twitter.com/Genderaquafish

Contributed by: Dr Kyoko Kusakabe, Dr Arlene Nietes Satapornvanit, and Dr Kafayat Fakoya

AFS SECTIONS

Fish Health Section (FHS)

12th Symposium on Diseases in Asian Aquaculture (DAA12)

The 12th Symposium on "Diseases in Asian Aquaculture" (DAA12) was held from 23–27 September 2025 in Chennai, India. The symposium was organized by the Fish Health Section (FHS) of the Asian Fisheries Society (AFS) in collaboration with the ICAR–Central Institute of Brackishwater Aquaculture (CIBA), Chennai, under the theme "Transformative innovations shaping the future of aquatic animal health management." The event brought together 470 delegates from 21 countries, representing scientists, students, policymakers, and aquaculture industry stakeholders. The scientific programme was extensive, comprising 18 keynote and lead presentations, 49 oral presentations, and 189 poster presentations.

Participants present during the opening ceremony

The symposium was inaugurated on September 23 afternoon with registration, poster setup, and sponsor exhibitions, and it was inaugurated by the Chief Guest Hon'ble Shri George Kurian, Minister of State for Fisheries, Animal Husbandry & Dairying, and Minority Affairs, Government of India, in the presence of Dr. Kua B. C., Chairperson, FHS-AFS; Dr. J. K. Jena, Deputy Director General (Fisheries Science), ICAR; Dr. B. K. Behera, Chief Executive, National Fisheries Development Board; and Dr. Kuldeep K. Lal, Convenor, DAA12 and Director, ICAR-CIBA, Chennai. The inaugural plenary lecture was delivered by Dr. C. V. Mohan, who reviewed five decades of progress in aquatic animal health research and development in Asia. This session was followed by presentations from Australia, Japan, and the Philippines expressing interest in hosting the next symposium. Japan was later confirmed as the host for DAA13 in 2028.

Inaugural Session of DAA12

Plenary presentation by Dr. C. V. Mohan

Technical sessions over the subsequent days covered key areas of aquatic animal health. Finfish and shrimp health sessions highlighted the economic impacts of aquatic diseases, advances in biosecurity, vaccine development, pathogen surveillance, and novel therapeutic strategies. Diagnostics, prophylactics, and therapeutics sessions emphasized non-lethal research approaches, control of EHP in shrimp, and innovations such as nanotechnology-based interventions. Sessions on mollusc and seaweed health, emerging technologies, and alternatives to antimicrobials addressed integrated pest management, genome engineering, RNAi vaccines, biosensors, and antimicrobial resistance mitigation. Dedicated sessions on One Health and epidemiology underscored the importance of AMR, emerging pathogens, disease surveillance, and implementation of WOAH standards. A special session on Aquaculture: New Directions highlighted sustainable aquaculture development with a focus on South–South cooperation. The symposium also featured a Student Travel Awards Session, providing a platform for early-career researchers to present their work.

Valedictory ceremony of DAA12 with address by Dr. Tarun Shridhar, Dr. Kuldeep K. Lal, Convenor, and Dr. P.K. Pradhan, the newly elected Chairperson, FHS-AFS

In parallel, the 13th Triennial General Meeting of the Fish Health Section of AFS was held, during which reports for the 2022–2025 period were adopted and the new Executive Committee for 2025–2028 was elected. The symposium concluded with a valedictory session, Best Oral and Poster Presentation Awards, and a farewell dinner. Overall, DAA12 was a highly successful international forum that fostered scientific exchange, strengthened regional and global collaboration, and reinforced the critical role of innovation and cooperation in addressing current and emerging aquatic animal health challenges in Asia.

13th Symposium on Diseases in Asian Aquaculture (DAA13)

Fish Health Section of the Asian Fisheries Society is pleased to announce that the 13th Symposium on Diseases in Asian Aquaculture (DAA13) will be held in Tokyo, Japan, in September 2028. The symposium will be hosted by Tokyo University of Marine Science and Technology. Tokyo is widely recognized as a centre of excellence in fish pathology, where many leading experts from across Asia have studied and received training. DAA13 will provide an excellent platform to share knowledge, present current research developments, renew old friendships, and establish new collaborations.

We warmly welcome researchers, professionals, and all those involved in fish diseases and aquatic animal health to participate in discussions on the future direction of aquatic animal health in Asian aquaculture. In addition to the scientific program, participants will have the opportunity to enjoy Tokyo's many attractive tourist destinations, as well as a field trip to the Tateyama Station of Tokyo University of Marine Science and Technology.

We look forward to welcome you to Tokyo for DAA13.

Contributed by: Dr. Pradhan

Asian Fisheries Social Scientists Network (AFSSRN)

A research project titled "Knowledge, Perception and Attitude of Stakeholders on Single-Use Plastic and its Effects on the Marine Environment: A Gendered Value Chain Analysis of Fisheries" was envisaged during 2023–24 with the objective of assessing the knowledge, perception, and attitude of men and women in the fisheries value chain towards single-use plastics and their effects on the marine environment. The specific objectives included examining gender differentials in the utilization of single-use plastics, assessing the willingness of fisheries value chain stakeholders to reduce plastic use, and identifying policy implications for reducing plastic use and mitigating the adverse impacts of single-use plastics on the marine environment.

The project involved multi-country participation, with primary data collected from India, the Philippines, and Indonesia, representing different segments of the fisheries value chain. During the reporting period July–December 2025, the compiled datasets were cleaned and analyzed, and based on the findings, a research manuscript was prepared. The manuscript is currently under the publication process.

The study generated gender-disaggregated insights into patterns of single-use plastic utilization, stakeholder perceptions, and readiness to adopt plastic-reduction measures. The findings are expected to contribute to evidence-based and gender-responsive policy interventions aimed at addressing the issue of plastic pollution in marine and coastal environments.

Plans and Way Forward (2024–2027)

The Asian Fisheries Social Science Research Network (AFSSRN) continues to function as an important platform within the Asian Fisheries Society (AFS) for advancing fisheries and aquaculture social science research across Asia.

Following the assumption of office by the newly elected AFSSRN Executive Committee (2024–2027) in December 2024, the initial phase of the current tenure has focused on strategic transition, internal consultations, and priority setting. The incoming Chair, Dr. Nikita Gopal, emphasized strengthening AFSSRN as an inclusive and responsive network that addresses emerging socio-economic, gender issues, governance, and sustainability challenges in the sector, while building upon the solid foundation laid by the previous Executive Committee (2021–2024).

The first meeting of the current Executive Committee was held online in April 2025 to outline the network's vision, priorities, and future activities for the ongoing term. These deliberations have helped streamline planned initiatives and align them with the broader objectives of AFS.

Key Plans and Upcoming Activities

During the 2024–2027 term, AFSSRN will focus on the following:

- Knowledge dissemination and outreach through regular contributions to the AFS Newsletter and a quarterly AFSSRN newsletter highlighting member activities, research, and events.
- Capacity building, with plans to initiate online training programmes in fisheries social science research methods and organize thematic webinars on regionally relevant issues.
- Research networking and collaboration, encouraging cross-country dialogue, joint initiatives, and interdisciplinary engagement among members.
- Strengthening digital presence, including development of a centralized online platform for sharing resources, research outputs, and recordings of AFSSRN events.
- Ensuring sustainability, by exploring partnerships and resource mobilization strategies to support long-term activities of the network.

Way Forward

With its planning and coordination phase now complete, AFSSRN is well positioned to move into active implementation of programmes and outreach activities during the remainder of the 2024–2027 term. The network looks forward to continued engagement with AFS, its members, and regional partners to strengthen the role of social sciences in fisheries and aquaculture development across Asia.

Contributed by: Dr. Neha Qureshi and Dr. Nikita Gopal

AFS BRANCHES

Asian Fisheries Society Taiwan Branch (AFSTB)

The Taiwan Fisheries Society annual meeting was held at the National Kaohsiung University of Science and Technology on January 10, 2026. The meeting brought together about 500 fisheries and aquaculture scientists, farmers and key industry workers in Taiwan, and published 369 reports including 2 keynote speeches, 149 oral presentations and 218 posters. The two keynote speakers were Prof. Nobuyuki Yogi from the University of Tokyo and Prof. Atsushi Hagiwara from the University of Nagasaki, Japan.

Contributed by Prof. Yu-Hung Lin

ARTICLES

THE IMPACT OF HIGH TIDE ON PEOPLE AND RESOURCES IN MUARA DEMAK ESTUARIES, INDONESIA

Houses inundated by tidal flooding (rob) and fish landing activities operating under non-flood conditions.

The Demak estuary is a strategic coastal area that serves as a land–sea transition zone, supporting the social and economic activities of local communities. The estuarine system serves as a hub for capture fisheries, aquaculture, and small-scale fisheries industries that rely directly on the stability of the coastal environment. Recently, the intensity and frequency of tidal flooding (rob) have increased significantly due to the combined effects of extreme tidal dynamics, sea-level rise, and land subsidence. These pressures place the Demak estuary in a highly vulnerable condition shared by many coastal regions in Asia, Africa, and Latin America, positioning it within the broader global challenge of climate change and coastal degradation.

Environmental health threats caused by accumulated waste and the increasing intensity of tidal flooding (rob) entering residential houses in the Demak estuary area.

Recurrent tidal flooding (rob) has a direct impact on the lives of coastal communities through damage to settlements and basic infrastructure, including local roads, drainage systems, and sanitation facilities. The decline in housing quality forces residents to elevate their houses almost every year, increasing household economic burdens while creating unhygienic living environments that pose health risks and reduce overall quality of life. Although fishing activities at sea generally continue, significant constraints emerge at the post -harvest stage due to limited access and mobility, disrupting the processing, storage, and marketing of fish catches. These conditions place direct pressure on the livelihoods of fishers and fish farmers and intensify the socio-economic vulnerability of coastal communities.

Tidal flooding also exerts severe pressure on coastal natural resources through seawater intrusion into ponds and other productive lands. Milkfish, shrimp, and shellfish ponds experience declining productivity due to elevated water levels, increased salinity, and changes in soil quality that are difficult to control, causing cultured organisms to escape easily. The deterioration of estuarine water quality, driven by the mixing of seawater, land-based runoff, domestic waste, and debris transported from upstream, accelerates ecosystem degradation. These impacts not only reduce fisheries production but also threaten the long-term sustainability of estuarine ecological functions and the economic resilience of local communities.

Small-scale fishery industries and capture fisheries.

In response to these conditions, communities in the Demak estuary rely on autonomous local adaptation strategies, such as elevating houses and aquaculture ponds, constructing simple embankments, and adjusting business practices and livelihood patterns. Fishers primarily adapt at the post-harvest stage, while fish farmers face increasing constraints on water control that further limit productive capacity. These adaptations reflect the adaptive capacity and local knowledge of coastal communities, yet they are constrained by limited economic resources, technological access, and insufficient infrastructure and institutional support. Dependence on short-term, individual-based adaptation ultimately increases recurrent costs and underscores weak coastal governance, particularly in the integration of spatial planning, resource management, and the protection of vulnerable communities.

Environmental conditions during tidal flooding and aquaculture ponds merging with seawater.

In a broader context, the Demak estuary represents the vulnerability of coastal regions in the Global South, where the impacts of climate change intersect with socio-economic constraints and institutional weaknesses. This case underscores that climate risks are unevenly distributed, placing coastal communities among the most affected groups, while reinforcing the urgency of social justice, integrated coastal governance, and sustainable development.

Contributed by: Indah Susilowati, Nur Safika, Jubakti Anggoro and Graceciella Salianto; Faculty of Economics and Business - Universitas Diponegoro, Indonesia. Corresponding email: Prof.indah@gmail.com

NEWS

The 2025 Academic Annual Meeting of the Live Feeds Professional Committee of the China Society of Fisheries held in Shanghai China

On November 21–22, 2025 Academic Annual Meeting of the Live Feeds Professional Committee of the China Society of Fisheries was held in Shanghai by the China Society of Fisheries and hosted by the Live Feeds Professional Committee of the China Society of Fisheries and Shanghai Ocean University. More than 100 experts, scholars, and students from universities, research institutes, and enterprises across the country attended the meeting.

Li Xiaofei, Vice President of Shanghai Ocean University and Zhao Wenwu, Deputy Secretary-General of the China Society of Fisheries, delivered speeches. The opening ceremony was presided over by Huang Xuxiong, a Member of 15th Council of AFS and Chairperson of the Live Feeds Professional Committee of the China Society of Fisheries.

Prof Huang Yongping from Shanghai Jiao Tong University, Prof Yang Jiaxin from Nanjing Normal University, Prof Huang Xuxiong from Shanghai Ocean University and Prof Sui Liying from Tianjin University of Science and Technology, delivered keynote speeches on "Breeding and Application Research of Black Soldier Fly," "Research on Regulation Techniques for Large-Scale Rotifer Production," "Research Progress and Industrial Development Report on Live Feeds," and "Efficient Application of Live Feed Artemia in Aquaculture Seed Production," respectively.

Under the theme "Frontier Technologies and Practical Pathways of Live Feeds," the meeting featured specialized sub-forums and a graduate student forum. A total of 22 experts and young scholars delivered presentations on research advances in live feed microalgae, artemia, rotifers, copepods, and the development goals and implementation pathways of the live feeds.

The meeting provided an important platform for exchanging insights on the latest scientific and technological advancements in live feeds and accurately identifying key scientific issues and technological bottlenecks in the industry. It effectively facilitated in-depth collaboration between scientific research and industrial needs. The outcomes of the meeting will further promote scientific innovation, achievements in the live feeds area, enhance industry service capabilities, and inject new momentum into the advancement of fisheries science, technology, and modernization in China.

Contributed by: Professor Xuxiong Huang

Cambodia Smart Fishery Pilot Project Wins "Best Poverty Reduction Case" in the 6th Global Poverty Reduction Case Collection Activity

The outcomes of the "Cambodia Smart Fishery Pilot Project," implemented by Shanghai Ocean University, China, won the "Best Poverty Reduction Case" award at the 6th Global Poverty Reduction Case Collection Activity on 10th December 2025. The study is titled "Digital Rice-Shrimp Integration Assists Cambodian Farmers in Poverty Reduction – A Case of China-Cambodia 'Fish-Rice Corridor' Smart Fishery Cooperation on Tropical Rice and Giant Freshwater Prawn (Macrobrachium rosenbergii)." This case was jointly submitted by the Foreign Economic Cooperation Center of the Ministry of Agriculture and Rural Affairs China and Shanghai Ocean University.

The "Cambodia Smart Fishery Pilot Project" is jointly undertaken by the College of Engineering and the College of Fisheries and Life Sciences Shanghai Ocean University. Through the project implementation, the team has established three digital giant freshwater prawn nursery bases in Cambodia, introduced one set of aquaculture equipment system for each base, and developed and implemented one digital system tailored for the local context in Cambodia. Over the past year, the project has conducted training on digital aquaculture technology and giant freshwater prawn farming techniques for Cambodian farmers and technical staff from aquaculture management departments, totaling 159 participants.

The "Best Poverty Reduction Case" award in the "Global Poverty Reduction Case Collection Activity" was launched in October 2024, the 6th edition attracted 840 case submissions from 40 countries and regions, which were jointly reviewed by seven initiating organizations. The work of Shanghai Ocean University in Cambodia stood out among numerous global cases, demonstrating the institution's commitment and responsibility in the global cause of poverty reduction.

Contributed by: Professor Xuxiong Huang

Atlas of Aquatic Animal Medicine Makes Its Debut: Seventeen Years in the Making, Filling a Gap in China's Aquatic Medical Discipline

On November 26, 2025, the Atlas of Aquatic Animal Medicine, compiled under the leadership of Shanghai Ocean University, was first released in China.

This monumental work, seventeen years in the making and the culmination of wisdom from over a hundred experts, systematically outlines the foundational theories and disease prevention and control technologies in aquatic animal medicine. Presented through thousands of carefully selected images and concise text, it has been hailed as the "encyclopedia" of Chin's aquatic animal medicine field. Its publication fills a long-standing gap in teaching materials and supplementary resources for the discipline.

The Atlas was edited by Prof Yang Xianle of Shanghai Ocean University, with a foreword by Academician Gui Jianfang of the Chinese Academy of Sciences. The compilation began in 2009, and underwent eight rounds of revisions. From tens of thousands of original images, the team meticulously selected and integrated materials, ultimately producing a four-volume masterpiece.

The *Atlas* comprehensively covers disease characteristics, diagnostic methods, and prevention and control technologies for aquatic animals. It is poised to facilitate a shift in aquatic disease management from traditional experience-based approaches to more scientific and systematic practices. This work represents a significant achievement in the university's efforts to serve the strategic needs of the national aquaculture industry . It also serves as a meaningful gift for the university's 113th anniversary. The *Atlas* can serve not only as a textbook for higher education, but also as an authoritative tool for researchers and industry professionals.

The publication marks a milestone in the development of China's aquatic animal medicine discipline. It embodies the perseverance and wisdom of two generations of professionals in the aquaculture field and is set to provide robust support for safeguarding the health of aquaculture and contributing to the national food security.

Contributed by: Professor Xuxiong Huang

Tolosa Campus of Visayas State University (VSU), Philippines Integrates into International Fisheries Networks

Tolosa campus of the Visayas State University (VSU Tolosa) scaled up its global reach by joining the Asian Fisheries Society. VSU Tolosa, the lone Fisheries campus of the VSU system, is mandated in fisheries education, research, and extension. Its flagship program, the Bachelor of Science in Fisheries, along with graduate offerings in Master of Science in Fisheries with major in Aquaculture and Fish Processing Technology, reflects the university's strong and longstanding commitment to producing skilled professionals and advancing the fisheries sector both regionally and beyond. Its research and development efforts have greatly contributed in seizing the National University/College of Fisheries (NUCF) for Region VIII by the country's Commission on Higher Education, an award it held from 2009 up to present.

The university has been actively positioning itself in the international milieu through collaborations with esteemed institutions and fisheries education networks. Aside from the Asian Fisheries Network, VSU Tolosa has also been actively engaged with the Universiti Putra Malaysia and Universitas Airlangga. These partnerships, together with AFS, will provide more opportunities to the university in working with leading fisheries scientists and institutions, expand collaborative research opportunities, and provide its faculty and students access to international knowledge exchange and scientific fora, among others. These partnerships underscore VSU Tolosa's capability and readiness to contribute to the scientific advancement of fisheries, aquaculture, and aquatic resource management in Asia.

From: https://www.vsu.edu.ph

#iloveVSUTolosa

Contributed by: Prof. Marieta Sumagaysay

A new Reference Laboratory for Aphanomyces invadans (Epizootic Ulcerative Syndrome) designated by World Organisation for Animal Health (WOAH)

The World Organisation for Animal Health (WOAH) has designated The Aquatic Animal Health Laboratory, Exotics and Aquatic Animal Health Division of ICAR–National Bureau of Fish Genetic Resources (NBFGR), Lucknow, India, as a reference laboratory for *Aphanomyces invadans* (Epizootic Ulcerative Syndrome) with Dr. P. K. Pradhan, Principal Scientist and Head, Exotics and Aquatic Animal Health Division, ICAR–NBFGR, Lucknow as the designated expert.

Asian Fisheries Science (Journal)

Publication Metrics – Regular Issues

A total of 142 original manuscripts were submitted between January 1 and 3rd September 2025. Submissions originated from diverse geographic locations. Maximum manuscripts were received from Indonesia, followed by India, Nigeria, Philippines, Bangladesh, Malaysia, Sri Lanka, Iraq. A small number of manuscripts were also submitted from countries like Australia, Pakistan, Japan, Korea (the Republic of), Russian Federation, Brazil, Canada, Egypt, Iceland and other countries.

The acceptance rate is approximately 20%, primarily due to a high volume of low-quality submissions, including those that are out of scope, lack novelty, repeat existing work with different species, contain plagiarism, or fail to adhere to the required format. The Journal has consistently published four issues annually (March, June, September, and December), maintaining a regular publication schedule. A total of 11 articles were published in the March and June 2025 issues. The September 2025 issue is in progress. About 6-7 papers will be uploaded for this issue. To shorten the waiting period for papers to be published, papers are uploaded as they get accepted by the EIC after the peer-review process.

All the articles have digital object identifier (DOI), and the XML files were submitted to Directory of Open Access Journals (DOAJ). Each article includes a download counter, allowing viewers to see how many times the article's abstract or full text has been downloaded.

Citation Metrics

AFS at the end of 2024, Asian Fisheries Science was in quartile 3 in the Agriculture and Biological Sciences for the disciplines of: Ecology (44th percentile, rank 267 out of 481 journals); Aquatic Science (41st percentile, rank 151 out of 257 journals), and Food Science (39th percentile, rank 243 out of 404 journals). The Scopus H-index is 18 with a Scopus citation score of ~2.1 (= total number of citations/total number of publications). AFS had total Scopus citations of 285, 344, 369 and 271 for the years 2022, 2023, 2024 and 2025, respectively.

Induction of Two Editorial Board Members / New Associate Editor

The Associate Editors and Editorial Board memberships are being reviewed to increase the representation of people from different disciplines and different countries in Asia and globally. Currently, the 8 Associate Editors reside in 5 countries (Australia, India, Malaysia, Sri Lanka and the Philippines) on 2 continents (Asia and Australia) and the 25 Editorial Board members reside in 12 countries (Australia, Canada, China (Taiwan), India, Indonesia, Iran, Malaysia, Norway, Philippines, Sri Lanka, Thailand, and the United States of America) on 4 continents (Asia, Australia, Europe, and North America). The EB of AFS expanded with the induction of two new members and Dr Leo Nankervis also agreed to be the Associate Editor (AE). The members are:

- Dr. Leo Nankervis, James Cook University, Australia (Editorial Board and Associate Editor)
  Aquaculture, nutrition, digestive physiology

- Dr. Adrian Hordyk, Blue Matter Science, Canada (Editorial Board)
  Fisheries science, stock assessment, management strategy evaluation

MoA between Asian Fisheries Society and Universiti Putra Malaysia for use of ScholarOne

Prof. Loneragan, Prof. Karim, Dr Wong, and Mrs. Thanamsegaram had further discussions with the Director Publications, Prof. Ir. Ts. Dr. Mohamed Thariq Bin Haji Hameed Sultan, regarding the MoA between the Asian Fisheries Society and the production of its journal Asian Fisheries Science, under the ScholarOne license of UPM. UPM is in the process of gradually phasing out ScholarOne, the current system, due to its high subscription costs, with plans to adopt a new submission system developed by the Information Technology team of UPM. However, the new system is not yet fully operational because of technical glitches, and it may take some time before the transition can be completed. A document on the "Benefits of Asian Fisheries Science and the Asian Fisheries Society to Universiti Putra Malaysia" was submitted by Prof Loneragan to Prof Mohamed Thariq in August 2025. A return on investment (ROI) report was also submitted to the Director of Publications, UPM, indicating that the journal is not currently generating profit and its operational expenses are being covered by the Society. However, article processing charges for non-members of the Asian Fisheries Society will be introduced starting in 2026 (see below for more detail).

Crossref Membership Fee

AFS is a member of Crossref that provides the digital object identifiers (DOIs). The current annual membership fee is USD275. Starting January 2026, members with publishing revenue or expenses of USD1,000 or less per year will qualify for a new reduced fee of USD 200. AFS will fall in this category.

Article Processing Charges

Currently, the journal is open access. The Council of the Asian Fisheries Society has agreed to introduce a publication fee of USD200 for accepted manuscripts by non-members of the Society. This will be introduced in January 2026. Since the journal is open access, articles should be freely available on its website to attract citations and improve the cite score. Restricting access to members only would have a negative impact. In addition, article XML files are uploaded to the Directory of Open Access Journals (DOAJ), a free, searchable database that indexes peer-reviewed open access journals. DOAJ aims to increase the visibility and accessibility of quality research by ensuring journals meet strict standards of peer review and transparency.

Similarity Checks and Use of AI in Manuscripts

All manuscripts are subjected to similarity checks using plagiarism detection software, with a general cut-off point of 20%. However, each case is also evaluated individually before making a final decision on rejection. Recently, the use of AI-generated content in manuscripts has become more evident. A key question now is: what threshold should be set for AI-generated content to warrant rejection of a manuscript?

New Website

The website of the Asian Fisheries Society and the Journal is being upgraded so that the journal will be more accessible on mobile phone platforms. The new website should be completed any time soon. This should improve the profile and accessibility of the journal.

Challenges

The EIC is seeking AEs specialising in food science, algal technology, fish genetics, fish breeding, seafood quality and safety. Need to induct more AEs to handle the increasing number of submissions.

Prepared by: Sanjoy Banerjee, Assistant Editor In consultation with Prof Neil Loneragan, Editor-in-Chief

AFS SECRETARIAT NEWS

AFS Execomm Meeting (15.2)

Asian Fisheries Society (AFS) Execomm meeting was held on 22 August 2025 using an online platform. Prof. Liping Liu, Prof. Neil Loneragan, Prof. Budy Wiryawan, Dr. Nur Leena Wong Wai Sin, Prof. Murni Marlina Abd Karim and Mrs. Malathi Thanamsegaram (EO) joined this online meeting.

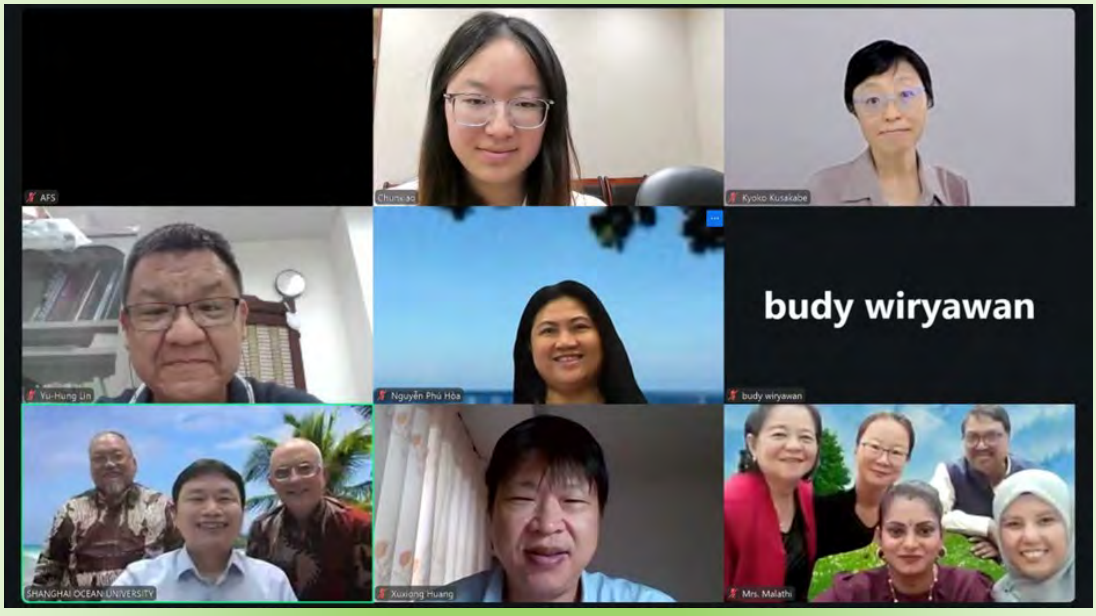
AFS 69th Council Meeting

The Asian Fisheries Society (AFS) held its 69th Council Meeting which also happens to be the second meeting of the 15th AFS Council on September 10, 2025, in Guangzhou, China. Prof. Liping Liu, AFS President of the 15th Council, presided over the meeting. A total of 19 people participated.

Participants for onsite meeting were: Prof. Liping Liu (AFS President); Prof. Neil Loneragan (Immediate Past President); Prof. Murni Marlina Abd Karim (Secretary); Dr. Nur Leena Wong W.S. (Treasurer); Prof. Marieta Sumagaysay; Dr. Joykrushna Jena; Prof. Budy Wiryawan; Prof. Pham Quoc Hung; Mr Luong Dinh Duy; Ms. Hu Chun Xiao and Mrs. Malathi Thanamsegaram (AFS Executive Officer).

Participants online meeting were: Dr. Kuldeep Kumar Lal; Prof. Wilfredo Campos; Prof. Indah Susilowati; Prof. Xuxiong Huang; Prof. Yu Hung Lin ; Prof. Han-jia Lin; Prof. Nguyen Phu Hoa Nong Lam University; Dr. Kua Beng Chu (Chair of FHS) and Prof. Kyoko Kusabe (Incoming Chair of GAFS).

The Council had productive discussions the next regarding the upcoming major AFS events: the Cage Aquaculture in Asia (CAA8), the International Symposium for Aquaculture and Fisheries Education (ISAFE5), and the 15th Asian Fisheries and Aquaculture Forum (15AFAF). The Council also reviewed the schedule for future meetings and the continuation of popular webinar series.



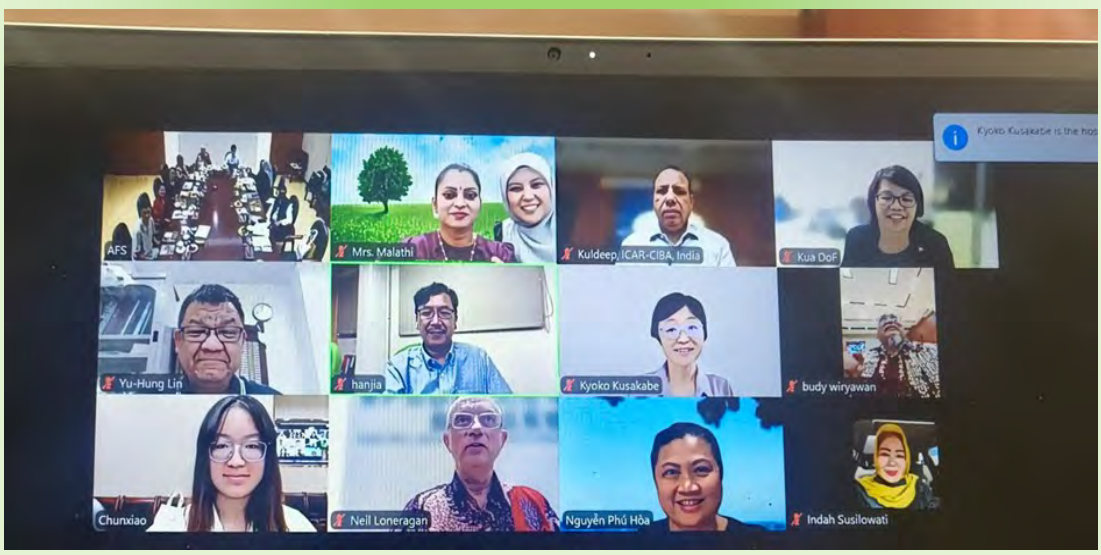


Photo: Participants in the second meeting of the 15th Council of the Asian Fisheries Society

Photo: The 11th China International (Guangzhou) Fisheries & Seafood held on September 11-13, 2025 at China Import & Export Complex, Guangzhou (Canton Fair).

50th Journal Meeting (JKPEN)

Asian Fisheries Society and Universiti Putra Malaysia Journal Meeting (JKPEN) was held online on 25 November 2025. Prof. Neil Loneragan, Chief in Editor joined the meeting.

Membership

AFS encourages members to renew their membership and become Permanent Active Members (PAM). Notice has been sent all the members who are on AFS mailing list.

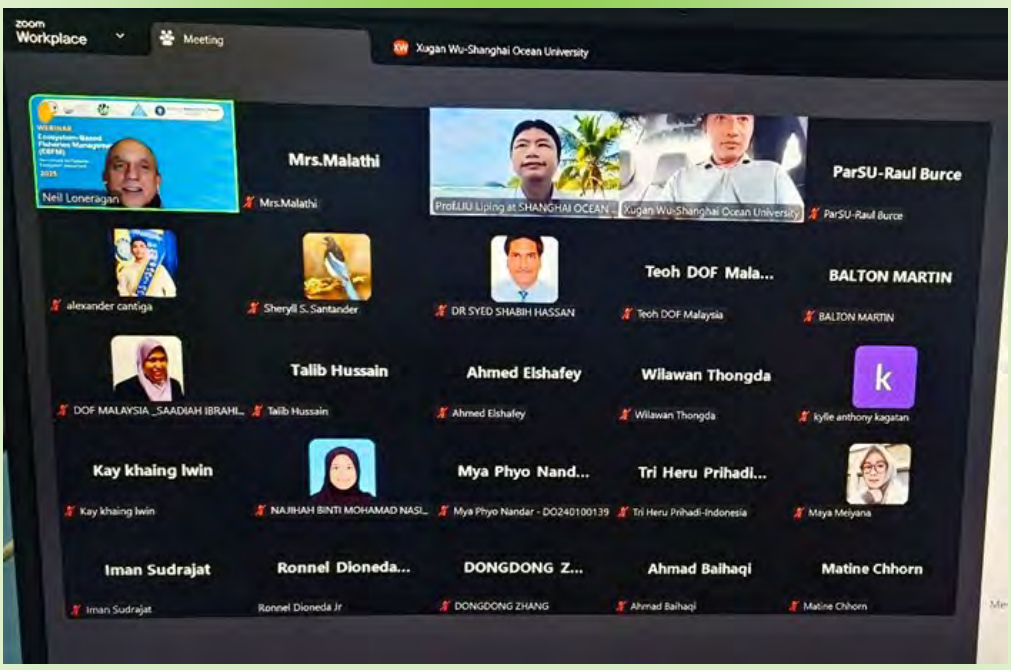
Membership Account details: Username: ID Number ; Password: afs@123

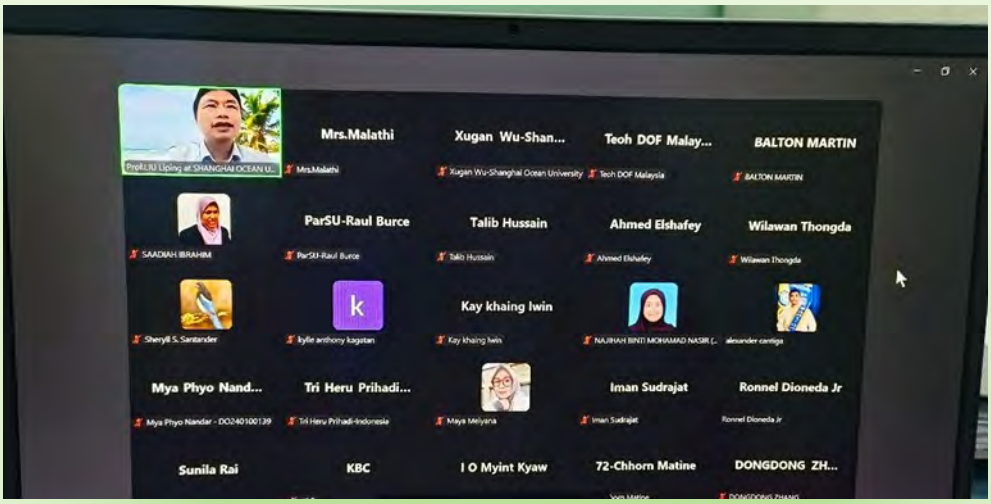
AFS new website

Migration of AFS website is a major, long-term project experiencing delays as it moves to a new platform. The upgrade aims to make society materials, especially journal updates, easily accessible on mobile devices. The project is in the implementation phase, with the additional task of migrating all newsletter content to the new system. The new website is expected to offer a significantly improved and more user-friendly interface for members.

Webinars

The AFS 3rd Webinar of the year 2025: Technology Optimization of Rice-Giant freshwater Prawn Co-Culture Model: Stocking Density and Feeding Frequency for All- Male Juveniles, was held on July 2025.





Upcoming Events

The Eighth International Symposium on Cage Aquaculture in Asia - CAA8 will be held during July 16-18, 2026 in Nha Trang University, Viet Nam .

AFS MEMBERSHIP RENEWAL NOTICE

Dear AFS Members:

Thank you all AFS Members for your ongoing commitment and support towards the Society!

The Secretariat has started to update the Members details in database.

Therefore, the Secretariat requests all AFS members to update their membership dues and contact information, to the Secretariat via email at **info@asianfisheriessociety.org.**

Kindly renew your membership dues using online payment system at

http://www.asianfisheriessociety.org/join.php

or you may also request the membership form from Secretariat via

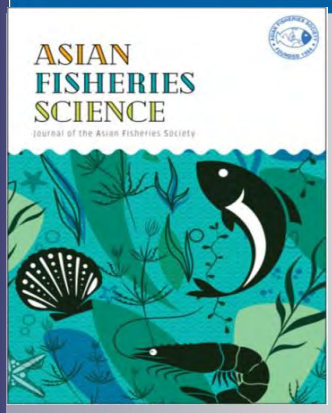
info@asianfisheriessociety.org.

Membership is open for all!

Please apply for membership at
http://www.asianfisheriessociety.org/join.php.

If you have any question, kindly email us at
info@asianfisheriessociety.org

SYNOPSIS OF PAPERS VOLUME 38 (ISSUE 3) : ASIAN FISHERIES SCIENCE JOURNAL



Latest Articles

Asian Fisheries Science 38 (3) 2025

E-ISSN: 2073-3720

Genetic Differentiation and Isolation by Distance in Mekong River Fishes With Typical Migration Patterns

OANH THI TRUONG, SANG QUANG TRAN, QUYEN VU DANG HA, VAN NGO THAI BICH, BINH THUY DANG

https://doi.org/10.33997/j.afs.2025.38.3.001

This study examined genetic differentiation and isolation by distance (IBD) in three Mekong fish species with different migratory behaviors. Results showed strong IBD signals in sedentary and facultative migratory species, while long-distance migratory species exhibited no clear IBD pattern. Findings highlight species-specific genetic structures and support tailored management strategies.

Spatial and Temporal Variation in Abundance and Biomass of Different Sex Classes of the Estuary Prawn Macrobrachium equidens (Dana, 1852) (Decapoda, Palaemonidae) From the Mekong Estuaries, With Notes on Its Salinity Tolerance

HAI THANH TRAN, QUANG XUAN NGO, PHUONG THAO THI NGUYEN, LUU THANH PHAM

https://doi.org/10.33997/j.afs.2025.38.3.002

Research on estuarine prawn populations across Mekong estuaries revealed minimal variation in overall abundance and biomass but significant changes in proportions of ovigerous and non-ovigerous females. Salinity strongly influenced these proportions, and peak production coincided with the rainy season. Insights contribute to understanding reproductive biology and environmental adaptation.

The Role of Co-management Platforms in Addressing Critical Issues Within Sri Lanka's Fisheries Sector

R.A.D.S. RANATUNGA, D.A.M. DE SILVA, MOHOTTALA G. KULARATNE, O. AMARASINGHE

https://doi.org/10.33997/j.afs.2025.38.3.003

Co-management platforms in Sri Lanka's coastal fisheries were assessed for effectiveness in addressing sector challenges. They performed well in governance of tenure but moderately in resource management and social development, and poorly in promoting gender equality. Greater awareness and education on sustainability and gender issues are recommended.

Biological and Fisheries Aspects of Black Tiger Shrimp (Penaeus monodon Fabricius, 1798) in East Aceh Waters, Indonesia

DURANTA DIANDRIA KEMBAREN, HUFIADI, MAHISWARA

https://doi.org/10.33997/j.afs.2025.38.3.004

The study analyzed biological and fisheries data of black tiger shrimp, revealing larger females, unequal sex ratios, and negative allometric growth. Spawning peaks in November–December, but shrimp are often caught before maturity. A decline in abundance suggests the need for seasonal closures during peak spawning to ensure sustainability.

Presence of Anisakis Larvae on the Demersal Fish Purple-Spotted Bigeye Priacanthus tayenus Richardson, 1846 From the North Coast of Java, Indonesia

EKO SETYOBUDI, TONY BUDI SATRIYO, MURWANTOKO, NIKEN ASTUTI, WAHYU NOVIANTO BAGAS WASKITHO, HANA CAHYA MAHARANI, FENTRIANA AJI PRASTIWI

https://doi.org/10.33997/j.afs.2025.38.3.005

Anisakis larvae infection was detected in purple-spotted bigeye from Java's northern coast, with prevalence and intensity varying by region. Larvae were mainly found in body cavities, and sequencing confirmed Anisakis typica. Findings help assess health risks, inform fisheries management, and indicate environmental health conditions.

Upcycling Approaches of Invasive Suckermouth Catfish as a Control Strategy: Translating Global Practices to Bangladesh

KOUSHIK CHAKROBORTY, RABINA AKTHER LIMA, MD. FOYSUL HOSSAIN, MD. SHOEBUL ISLAM, SM ABDULLAH AL MAMUN, S.M. RAFIQUZZAMAN

https://doi.org/10.33997/j.afs.2025.38.3.006

The invasive suckermouth catfish poses ecological threats in Bangladesh. Upcycling strategies such as producing fish meal, collagen, biofuel, and fertilizers show promise for control and circular economy benefits. Research gaps include heavy metal concerns and limited studies on biotreatment and medicinal uses, requiring further investigation.

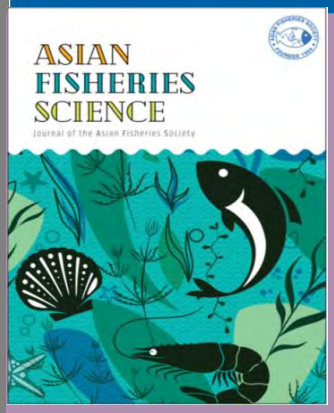
Mercury Status of the Primorsky Minnow, Phoxinus oxyrhynchus (Mori, 1930) and the Manchurian Lake Minnow, Rhynchocypris mantschurica (Berg, 1907)

NADEZHDA YA. PODDUBNAYA, MARINA D. MOLEVA, DASHA S. SOROKINA, GALINA P. SALKINA

https://doi.org/10.33997/j.afs.2025.38.3.007

Mercury levels in two minnow species from Russian Far East rivers were low and pose minimal health risks for human consumption. Concentrations varied between river basins, with higher levels in one region. Results align with mercury ranges in nearby Chinese rivers, providing baseline data for environmental monitoring.

SYNOPSIS OF PAPERS VOLUME 38 (ISSUE 4) : ASIAN FISHERIES SCIENCE JOURNAL



Latest Articles

Asian Fisheries Science 38 (4) 2025

E-ISSN: 2073-3720

Re-evaluation of Antimicrobial Use in the Fisheries Sector in Malaysia

WAN NORHANA MD NOORDIN, ROZANA JOHARI, ELEANOR DANIELLA LOKMAN

https://doi.org/10.33997/j.afs.2025.38.4.001

Antibiotic use in Malaysian aquaculture is relatively low compared to global trends. Most farmers use antibiotics only for treatment and obtain veterinary prescriptions. Oxytetracycline is the most common antibiotic. Usage in aquatic parks and research is minimal. Continued monitoring and education are essential to mitigate antimicrobial resistance and support sustainable practices.

Microalgae at Two Pearl Oyster Farms in the Abrolhos Islands, Australia, and Implications for an Adductor Muscle Industry

DEREK ANTONY CROPP, STUART HELLEREN, PIA BOSCHETTI, MURRAY DAVIDSON

https://doi.org/10.33997/j.afs.2025.38.4.002

Microalgal monitoring at two pearl farms revealed occasional presence of potentially toxic species, with one sample exceeding alert levels. However, toxin tests on oysters were negative. Identification challenges and variability in toxin production remain issues. Overall, biotoxin risk appears low but requires ongoing surveillance.

Lime Requirement Methods of Aquaculture Ponds – A Review

THO NGUYEN

https://doi.org/10.33997/j.afs.2025.38.4.003

Liming improves pond soil and water quality, but accurate lime requirement (LR) estimation is crucial. Current methods include qualitative and quantitative approaches, with the titration-based K-bicarbonate method showing the best accuracy and cost-effectiveness. Further research is needed to standardize LR methods globally.

Chilled Storage Stability of Spotfin Flathead, Grammoplites suppositus (Troschel, 1840)
HARITHA HARIDAS, GINSON JOSEPH, REMYA KUMARI K.R.
https://doi.org/10.33997/j.afs.2025.38.4.004

Shelf life of spotfin flathead under chilled storage was tested using air and vacuum packaging. Vacuum packaging extended freshness up to 18 days compared to 15 days for air packaging. Spoilage bacteria were identified, and vacuum packaging proved more effective for preserving quality and reducing waste.

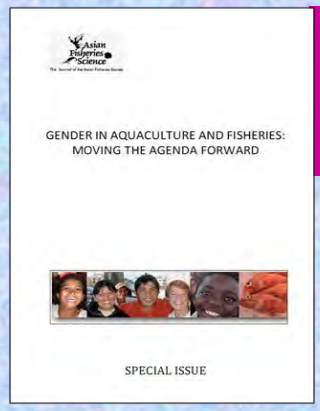
Reproductive Characteristics and Gonadal Development of Asian Clam (Corbicula fluminea) Broodstocks in Recirculating Aquaculture System (RAS)
MOHD ZHARIF RAMLI, AWENG EH RAK, LEE SEONG WEI
https://doi.org/10.33997/j.afs.2025.38.4.005

Asian clam broodstocks in recirculating systems showed asynchronous spawning and hermaphroditic traits. Body condition influenced gametogenesis, and four reproductive stages were identified. Findings support hatchery-based seed production to sustain Asian clam aquaculture.

Genetic Divergence and Molecular Phylogenetic Analysis of Rainbow Trout, Oncorhynchus mykiss (Walbaum, 1792), From the Indian Upland Coldwater Regions
J.C. WALTER DEVAA, STALIN NITHANIYAL, VIMAL PANNEERSELVAM, KASI MARIMUTHU, RAMESH UTHANDAKALAIPANDIAN
https://doi.org/10.33997/j.afs.2025.38.4.006

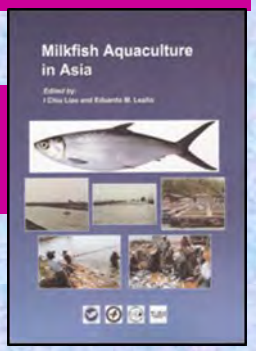
Indian rainbow trout stocks show minimal genetic divergence within species but distinct separation from other Pacific trout and salmon species. Phylogenetic analysis confirms lineage relationships and provides insights for managing genetic diversity in Indian trout populations.

AFS PUBLICATION FOR SALE



AFS Member: USD15

Gender in Aquaculture and Fisheries: Moving the Agenda Forward
MERYL J WILLIAMS, MARILYN PORTER, POH SZE CHOO, KYOKO KUSAKABE, VEIKILA VUKI,



AFS Member: USD25

Milkfish Aquaculture in Asia

AFS Member: USD10

Integrated Technologies for Advanced Shrimp Production

AFS MEMBER: US$55

Progress Of Shrimp and Prawn Aquaculture in the world

AFS Member: USD70

Cage Aquaculture in Asia: Proceedings of the Second International Symposium on Cage Aquaculture in Asia (Volume 1 and Volume 2)