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ASIA-PACIFIC FISHERY COMMISSION

Thirty-sixth Session

[virtual] Thailand, 5-7 May 2021

The APFIC Technical Webinar Series

1. The Asia-Pacific Fishery Commission (APFIC) acts as a Regional Consultative Forum that works in partnership with other regional organizations and arrangements and members. It provides advice, coordinates activities and acts as an information broker to increase knowledge of fisheries and aquaculture in the Asia Pacific region to underpin decision making.
2. The biennial session of the Commission is preceded by the Regional consultative Forum Meeting (RCFM) whereby member countries and regional partners discuss regional issues and propose approaches to address opportunities and concerns through the APFIC process. The outcomes and recommendations of the RCFM are forwarded to the Commission for deliberation and endorsement.
3. The COVID-19 pandemic has had a particular impact on the work of APFIC during 2020, preventing the convening of the Session and RCFM and the regional consultative workshops that form a major part of the Commission's workplan.
4. The APFIC Technical Webinar Series is part of the APFIC Secretariat's effort to restart the activities of the Asia-Pacific Fishery Commission in the context of post-COVID new-normal of virtual events, webinars and workshops.
5. The APFIC Secretariat has therefore developed a series of webinars, based on the work programme and the priorities of APFIC, as a replacement for the traditional face to face Regional Consultative Forum Meeting that could not be convened in 2020.
6. The webinar series commenced end of January 2021 and were scheduled to largely take place prior to the virtual 36th APFIC Session in May 2021.
7. The webinar themes and short descriptions are presented below.

Webinar 1: Inland Fisheries Connectivity, Irrigation and Water Management 28 January 2021, 14.00 hours (Bangkok time)

Recognising the importance of raising awareness on the key issues impacting inland fisheries connectivity, the Asia-Pacific Fishery Commission organized a technical webinar entitled “Inland Fisheries Connectivity, Irrigation and Water Management’ . The invited speakers addressed the major drivers related to inland fisheries connectivity in the region such as linkages to irrigation and water management, as well as investment considerations and technological, management and nature-based solutions. In doing so, the webinar heralded the beginning of the UN Decade on Ecosystem Restoration (2021-2030) which has a clear emphasis on mitigation and restorative initiatives in support of the vital inland fisheries sector in the region. This webinar builds on several publications that have been prepared by APFIC Secretariat staff , FAO and partners (WorldFish and IWMI).

<http://www.fao.org/apfic/publications/inland-capture-fisheries/en/>

A maximum of 350 participants out of 761 registrants attended the webinar, from the Asia Pacific region to the Middle East, Central America to Latin America and Europe to Africa, consisting a total of 60 countries. The participants represented various entities including governments, private sector, NGOs/IGOs, RFMOs, APFIC member countries, academia, donor agencies, development partners, professionals, experts, consultants, and students.

1. Lack of awareness, data and capacity building are some of the reasons for ignoring fisheries largely in the irrigation schemes during previous times. A modern and efficient irrigation system dealing with multiple use and supporting multiple development objectives inclusive of fisheries is the need of time.
2. Regarding fish passage design, one size does not fit all. Every site has a different hydrology. Irrigation engineers should come up with multiple solutions based on their local requirement.
3. Success in irrigation schemes can be ensured by joint, multi-pronged approaches with the development partners, financial institutions, and the government line departments e.g., fisheries, irrigation and water management during project planning cycle. Inclusion of fisheries experts throughout the process and learn from the previous accomplished projects are also important.
4. Management and operation of water gates and fish passes around the migration and spawning seasons could increase the rate of fish migration in the river.
5. Limited technical expertise, as well as inadequate legislation and policy, institutional arrangements and cross-sectoral collaboration are the key challenges for sustainable development. Sharing the knowledge of Motivation and Ability (MOTA) Framework among the stakeholders can be the way forward for better institutionalisation and implementation of a fish passage system.
6. Degraded ecosystems, multiple stakeholders with varied agenda, perception as costly, insufficient, and simple market-based solutions are the key challenges for nature-based solutions. While ecosystem service valuation, well designed funding schemes, structured inter and transdisciplinary landscape approaches and offer incentives to integrate natural and ecological values will be the way forward.
7. Community Fish Refuge system has considerable impact on increased biomass, production, and annual catch although it has some realistic threats like diminishing flood areas, rice varieties with short life cycle, increased pesticide use and connectivity loss that can be addressed locally.
8. An information repository by compiling all existing and ongoing restoration and protection actions is essential for capacity building of key stakeholders, field testing of technical guidelines and application at local level.
9. Stocking programmes can be sustained by state support or through effective co-management groups and stocking decision support framework is helpful in evaluating the sustainability of the programme.

Webinar 2: Review of Illegal Fishing in APFIC Region, 10 February 2021, 1400hours (Bangkok time)

The purpose of this webinar was to examine the findings of a report jointly produced by the Commonwealth Scientific and Industrial Research Organization (CSIRO) and the Food Agriculture Organization (FAO) comprising a review of illegal fishing in the APFIC region. It is important to note that typically, there is limited documentation or available official information on the subject. The study, which updates an earlier 2015 effort, provides recommendations and potential actions that can be undertaken by countries to address national and regional issues on illegal fishing.

About 239 attendees out of the 526 participants registered were from across all 21 APFIC member countries, regional fisheries organizations, MCS networks, NGOs/CSOs and the private sector. Most were from Asia but there was also global reach to Africa, the Americas and Europe.

1. The methods in this review can be adapted for use at the national level and repeated at the regional level in the future.
2. A single fundamental challenge in the survey method was the low response rate from fisheries enforcement officers within the countries. It is recommended that if countries would like to use this survey approach, it would be best to use a top-down approach whereby stronger engagement of senior officials from the agencies is encouraged. This would improve the data significantly i.e., high response rate and quality data.
3. Based on the survey, high value species contribute small shares of illegal catch and value; over half of the illegal catch are low value fish species which are important for domestic markets
4. There is a need for continued focus by APFIC and its members on illegal fishing in the region and that some recommendations are:
 - a. establish a transparent, repeatable and cost-effective approach to benchmarking illegal fishing and the effects of such interventions in the region
 - b. develop guidance for countries in legal and regulatory form, and for enforcement agencies to develop capacity building programmes
 - c. (iii) share information to support cost-effective technological innovations in monitoring and surveillance by members
 - d. develop a platform for the sharing of monitoring information at sea, which will facilitate cooperation and reduce barriers to information sharing
 - e. focus efforts on increasing monitoring, surveillance and enforcement activities aimed at fish buyers
 - f. support APFIC members in addressing stock depletion and profitability of their fishing industry.

Webinar 3: Antimicrobial resistance is simple to understand, yet it is often misunderstood, February 2021, 1400hours (Bangkok time)

As reflected in the title of the webinar, antimicrobial resistance (AMR) is often misunderstood. Because it has no single solution, it must be fought on many fronts. The webinar aimed to raise awareness, share experiences and knowledge on AMR in aquaculture – where the use of antimicrobials has been increasing – to better understand the challenges therein and to help boost the global effort to lessen the use of these antimicrobials.

The programme comprised updates from FAO experts on the global work to address AMR in aquaculture and as well as an overview on AMR in the Asia-Pacific region. Experts from China and India shared their country experiences on mitigation of AMR, while the gaps, challenges and policy recommendations on promoting the prudent use of antimicrobials was presented by an expert from NACA. This webinar also explored ways to improve governance and enhance support for national action plans on AMR under the One Health approach.

Close to 280 participants attended the webinar from the 554 participants registered. Participants were from across all 21 APFIC member countries, regional fisheries organisations, MCS networks, NGOs/CSOs and the private sector. Most were from Asia but there was also global reach to Africa, the Americas and Europe.

1. Dealing with biosecurity in aquaculture, we need to adopt a more holistic approach as everything is interrelated, from policy to the list of pathogens, risk analysis, border control, use of veterinary drugs. Dealing with AMR and aquaculture biosecurity should be a shared responsibility for all concerned.
2. Some of the priority actions and strategies at the national level are:
 - awareness-raising: This is important when dealing with thousands of small-scale producers and what is the best way to reach them?
 - surveillance on AMU and AMR
 - strengthening national regulations and good governance: because dealing with AMR transcends several levels of governance i.e from the farm level to the national level and international level because we are dealing with many aspects, some of it transboundary.
 - best practices. They should be contained in a national action plan, underpinned by a strong legal dimension.
 - Improve on knowledge and research on many aspects
 - Capacity building is also important at different levels to promote the prudent use of antimicrobials, good aquaculture practices, and develop antibiotic alternatives and biosecurity technologies.
 - Strengthening public and private sector partnership is also important because whatever the system or methodology, it has to have a buy-in especially from non-state actors.
3. Aquaculture environments include: freshwater, brackish water or marine environments and the culture systems which could be extensive, semi-extensive, intensive and super intensive or they could be in open systems such as ponds and cages or close systems. Thus, AMR associated with aquaculture is substantially different from the livestock sector, so when developing guidelines and action plans, we have to consider the specific characteristics of the aquaculture sector.
4. It is hard to convince farmers, especially in the region with many small farms, not to use any drugs unless we can provide them with alternatives. The key is how to enable farmers to manage the culture environment and animals better in the new context of climate change and intensification.
5. Regional and global collaboration such as through the tripartite agreement between WHO, OIE and FAO on the One Health initiative are important to support any initiative on AMU and AMR in the region to ensure the production of safe and high-quality aquatic products for human consumption and thus to sustain the industry. FAO is always ready to provide technical assistance to member countries as long as there is an official request from the governments.

W4: Multispecies Stock Assessment for Management, 10 March 2021, 1400hours (Bangkok time)

The purpose of this webinar was to make sense of how stock assessment has been done for Asian countries using some regional examples, particularly in situations where there is limited data in multi-species fisheries as well as multi gear fisheries. The webinar also looked at how countries have used these assessments to develop policy and make management decisions. Importantly, the webinar also focused on the interlinkages between stock assessment and trade with some examples involving trade agreements, SDGs, IUU and WTO. Finally there was a discussion on the prospects and need for regional programmes for capacity building.

About 202 attendees out of the 647 participants registered were from across all 21 APFIC member countries, regional fisheries organizations, MCS networks, NGOs/CSOs and the private sector. Most were from Asia but there was also global reach to Africa, the Americas and Europe.

1. Stock assessment is important for fish and fish products in international trade. In other words, they are important in trade agreements as a requirement for imports or accessing markets. There is also a lot of interconnectivity between fisheries subsidies and stock assessments.
2. There is a huge and supportive modelling community out there that can assist anyone using the different types of models. These various tools not only allow researchers to assess the multispecies maximum sustainable yield (MMSY) but also to look at current stock status and allow options for change.
3. Management reforms are having an impact especially on commercial catch and fishing effort. The relative abundance of fish is also starting to change with these management reforms in place. It is unlikely that catches will not increase back to previous levels because of the reduction in fishing effort and increase in mesh size. This is because of ecosystem changes and impact of climate change/
4. Most countries in the South East Asia region have some sets of data, with caveats. The assessments in this region can help in the design of better monitoring and management systems. However the overall focus by FAO is to build capacity in these countries to use the different approaches to conduct assessments depending on external funding.
5. The assessment models provide an opportunity for scientists and fisheries managers to work with stakeholders and allow them to make sense of the output and examine 'what if' scenarios. Government and stakeholders can use these assessment outputs to work together in a co-management fashion to set objectives for the social, economic, environmental and yield aspects of the fisheries.

Link to video: <https://www.youtube.com/watch?v=gSHG4WkpG4o>

Webinar 5: Pushing the Frontier of Aquaculture Development with Innovation

25 March 2021, 1400 hours (Bangkok time)

1. The innovations have a significant impact on aquaculture performance on the development side in the form of increasing production, productivity efficiency, competitiveness and sustainability of aquaculture sector.
2. However, investment in R & D in the aquaculture sector and the ability of smallholders to adopt innovation are still limited in many Asian countries. We need to improve science and technology policy, focusing on sustainable aquaculture practices. The national R&D systems and the capacity to adopt innovation need to be strengthened by encouraging more investment.
3. It is a necessity to strengthen the collaboration among academics, business people, government and communities for a more efficient adoption and scaling up of aquaculture innovations. Replication of innovation and dissemination as well as effectiveness and intensity in outreach campaigns, pilot testing and mentoring are also important.
4. We may have to look into harmonization across the region where we can have coherent sharing of innovation, experiences, and solutions and where FAO and regional partners can play an important role.
5. Regional Technical Platform (AQ-RTP) is a new initiative of FAO, aiming at building an enabling environment for sharing and promote innovation and best practices among countries in the region and other regions across the globe.
 - a. AQ-RTP is a demand driven and web-based platform initiative to share knowledge; enhance efficient and responsible production and improve sector resilience; support or stimulate policy dialogue
 - b. facilitate access to training and capacity development; promote best practices to support and empower smallholders, micro-small-medium enterprises with financial and entrepreneurial skills; and promote connection and organization of farmers and linkage of actors in aquaculture value chains.
 - c. The platform also aims to showcase and share experiences within the region and between regions; provide a curated “one-stop-shop” for FAO knowledge products; link to FAO HQ platforms
 - d. Link FAO Regional Offices with relevant examples of innovations and best practices; and link to external partners.

Webinar 6: Subsidies and the Current Negotiations at the WTO

31 March 2021, 1400hours (Bangkok time)

The purpose of this webinar was to enhance the understanding of the negotiation history of fisheries subsidies at the World Trade Organization (WTO), in particular the main pillars and their interconnectivity with existing instruments; the various proposals and main approaches that are being taken; as well as to integrate the history of what has been going on and analyse critical outstanding issues central to the discussion on fisheries subsidies. While discussing the various multilateral trade, oceans and fisheries governance frameworks linked to the subject and how these are integrated into the negotiations, the webinar also aimed to touch on the availability of technical and advisory support to countries on the possible implementation of an agreement on fisheries subsidies. The webinar also intended to highlight the UNCTAD-FAO-UNEP Inter-Agency Plan of Action as a possible vehicle for coherent and timely support for the Asia Pacific region.

About 250 attendees out of the 547 participants registered were from across all 21 APFIC member countries, regional fisheries organizations, lawyers, diplomats, members involved in the WTO negotiations process, NGOs/CSOs and the private sector. Most were from Asia but there was also global reach to Africa, the Americas and Europe. [Link to video: https://www.youtube.com/watch?v=MW_tm5ngw3s](https://www.youtube.com/watch?v=MW_tm5ngw3s)

1. It has taken quite some time to conclude the process of establishing an agreement on negotiations on fisheries subsidies since its establishment in 2001. This is because these negotiations are not as simple as they appear. There are already international agreements, plans of actions and laws on fish and fisheries management that have been established to combat IUU fishing. The prohibition of harmful subsidies is the missing link in these regulatory instruments and making sure that the various important aspects fit together is not a simple task.
2. Another factor is the lack of reliable data. Illegal fishers do not report their catches and no one will admit subsidizing their fishing. Also, many members or countries have different definitions of subsidies and therefore the data associated with it is quite difficult to compare or reconcile. The WTO agreement on fisheries subsidies will be a legally binding document; therefore precise terms and definitions are important and they have to apply across all 164 members.
3. The 12th WTO Ministerial Conference is now scheduled for November 2021 in Geneva. However it was emphasized that they cannot wait for November to come before they complete their work. These negotiations are like a debt to the health of the ocean and it's a debt that is now overdue. WTO members need to exert their utmost efforts to circumvent political considerations in order to make it a reality.
4. The fisheries sector is incredibly unique in the general context of WTO negotiations. Fish is not associated with a territory or a country and they are considered as non-agricultural products (industrial) in WTO terms. Therefore, it is particularly important that they remain separate from agricultural products which are governed by very singular rules in connection with subsidies.
5. It is important to note here that the involvement of UNCTAD, FAO and UNEP is important in the WTO fisheries negotiations and that they have been providing advice under their Inter Agency Plan of Action under their specific mandates.

Webinar 7: Information and communication technologies for small-scale fisheries (ICT4SSF), 6 April 2021, 1400 hours (Bangkok time)

The webinar was convened to look at the findings of the joint FAO-WorldFish publication on information and communication technologies for small-scale fisheries (ICT4SSF) and discuss (i) how ICT might enable and support the implementation of the SSF Guidelines; (ii) ICTs being used in Asia and potential impacts; as well as (iii) guiding questions to frame the evaluation, design, and development of ICT4SSF. About 210 attendees out of the 545 participants registered were from across all 21 APFIC member countries, regional fisheries organizations, MCS networks, NGOs/CSOs (including one small-scale fisheries organization) and the private sector. Most were from Asia but there was also global reach to Africa, Australia, the Americas and Europe. As of 13 April 2021, there were 139 views of the webinar recording (available at <https://youtu.be/ciUxaCV1We4>).

The following recommendations were raised during the webinar:

1. Policy coherence, institutional coordination and collaboration can significantly influence the availability and adoption of ICTs. Governments must build positive examples to raise awareness of the benefits of inclusion while investing in extension and capacity building to enable people to choose.
2. Governments were previously reluctant to invest in ICTs due to the lack of clear pathways from adoption to improved wellbeing. Therefore ICTs must target specific development objectives and establish benchmarks with indicators to achieve their intended outcomes.
3. Insurance and credit schemes will be another area of opportunity for ICT4SSF to build capacity and to raise awareness for digital inclusion with the direct support and investments from governments.
4. It is recommended to work towards gender transformative messaging in ICTs, which tries to change mind-sets around gender equality and gender discrimination.
5. The report provides an opportunity for key players in SSF, e.g. governments, small-scale fishers and fish workers to get together and rethink how we approach fisheries management, value chain development, and also the related social services that are important for the livelihoods that are dependent on SSF. Practitioners must ensure that the guiding principles outlined in the joint FAO-Worldfish publication are taken into account by stakeholders and in moving forward.
6. For the International Year of Artisanal Fisheries and Aquaculture (IYAFA 2022), a webinar where fishers discuss and present the ICTs they are using would be a good way to celebrate IYAFA 2022.

**Webinar 8: Characteristics and performance of co-management in Asia
8 April 2021, 1400 hours (Bangkok time)**

This webinar provided the opportunity to discuss the research findings of a joint FAO-WorldFish publication on co-management experiences in Bangladesh, Cambodia, Philippines and Sri Lanka. In the session, there were presentations from different perspectives on the challenges and opportunities co-management presents as a key approach for managing small-scale fisheries. About 167 attendees out of the 386 participants registered were from across all 21 APFIC member countries, regional fisheries organizations, MCs networks, NGOs and the private sector. Most were from Asia but there was also global reach to Africa, the Americas and Europe. As of 15 April 2021, there were 171 views of the webinar recording (available at <https://www.youtube.com/watch?v=T2E4lnU6Rz0>).

The following recommendations were put forward during the webinar:

1. Priority areas in which we need to generate critical reflection and support to improve co-management are:
 - a. legal framework as important and necessary for co-management
 - b. awareness raising on the benefits of co-management
 - c. inclusiveness (consider the whole fish value chain) and gender equality
 - d. co-management should be the preferred national strategy, and not an option or done piece-by-piece
 - e. legal framework amendment and review of co-management structure
 - f. capacity development of co-managers and local authorities and building leadership and commitment
 - g. involvement of men, women and youth in co-management.
 - h. A range of measures is needed to complement fisheries and community needs and rights. Fisheries systems are subject to diverse pressures and influencing factors, and so they can fluctuate substantially through time, irrespective of the existence of co-management.
2. There is a need for fisheries agencies, as well as others on agriculture, health, disaster response, water, and rural development to remain responsive to external drivers.
3. Adopt evolutionary/adaptive/coherent fisheries co-management (gender, power relationship, scale, incompatible gear, migration, disasters including natural, human and pathogen-induced ones, etc.).
4. Move from 'only sharing responsibility regimes' to 'sharing responsibility, authority and benefits regimes'. State authorities to share power with fishing communities.
5. Develop innovative financial mechanisms to develop and support co-management regimes.
6. State authorities to insulate co-management regimes from external threats.
7. SSF co-management approach should include strong legal framework, as well as technical and adequate financial support from the government and development partners.

8. Community leadership involving women is needed for long-term sustainability. Co-management requires strong, innovative, and trustworthy participation from below, particularly the committed involvement of women.
9. Civil society facilitation plays a major role in facilitating the engagement of coastal and riparian communities in co-management initiatives.
10. Negotiation is key to the formation and sustenance of co-management.
11. Linkage with meso-level political governance is key to co-management initiatives being incorporated as an identifiable and politically recognizable institutional arrangement within the democratic polity of a country.
12. Balancing the motivation and incentive factors between co-management partners is essential for both present and future success.
13. Fostering respect and developing mutual trust between partners lies at the core of any co- management initiative.
14. Think about multiple views, multiple positions involving people, and multiple ways of looking at a particular problem. Understanding that is the foundation of co-management.
15. The International Year of Artisanal Fisheries and Aquaculture 2022 provides an excellent opportunity for highlighting co-management as the approach for managing small-scale fisheries.