14.2.2 Sustainable Fisheries (Community Outreach)

2024/2025

Initiative Update: Outreach Workshop with Abu-Qir Bay Fishermen on Antifouling Paints, Environmental Risks, and Alternative Solutions

Activity Date: 19 December 2024 **| Location:** Abu Qir Fishing Port, Alexandria, Egypt.

CFAT organized a community awareness initiative targeting local fishermen in Abu Qir, Alexandria, to promote environmentally friendly antifouling paints as sustainable alternatives to conventional antifouling products.

The awareness activities were delivered by CFAT students under the supervision of College academic staff. Through direct engagement with fishermen, the students explained marine biofouling, which involves the accumulation of bacteria, algae, and sessile invertebrates on submerged surfaces, particularly fishing-boat hulls.

The educational sessions addressed the environmental and operational impacts of conventional antifouling paints, particularly products containing toxic substances such as copper, which may leach into surrounding waters and negatively affect marine organisms. Fishermen were introduced to the benefits of environmentally friendly antifouling alternatives, including reduced chemical pollution, protection of marine ecosystems, maintained boat performance, and a smaller environmental footprint for fishing operations.

The initiative also encouraged fishermen to adopt sustainable boat-maintenance practices and use less harmful antifouling products to balance operational efficiency with marine environmental protection.

The program was delivered free of charge as part of AASTMT's commitment to environmental education, community engagement, and promoting sustainable practices within local fishing communities.

Measurable Outcomes:

- Number of fishermen reached: 10.
- Number of awareness sessions delivered: 2
- Number of fishing boats that tested or adopted eco-friendly antifouling paint: 4

Increased awareness among participating fishermen of the environmental impacts of conventional antifouling products and the benefits of environmentally friendly alternatives.

The initiative supports marine ecosystem protection by educating local fishing communities about reducing chemical pollution and adopting more environmentally responsible fishing-boat maintenance practices.



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College of Fisheries and Aquaculture Technology Students actively participated in the "By Fisher to Fisher" program (Beach Cleanup Initiative)

On Saturday, 21 December 2024, students and staff members of the College of Fisheries and Aquaculture Technology (CFAT), Arab Academy for Science, Technology and Maritime Transport (AASTMT), participated in the "By Fisher to Fisher" program, under the broader "Green & Clean" campaign. The initiative was implemented under the auspices of the Egyptian Ministry of Environment and Banque du Caire, with supervision from Global Stars Company, and focused on environmental protection and supporting fishing communities.

Beyond the harbor cleanup and waste recycling activities at Alexandria's Eastern Harbor fishing port, CFAT's participation helped promote environmental awareness among fishermen and encourage more sustainable fishing practices. Through direct engagement with the fishing community, the initiative provided an opportunity to communicate the importance of responsible fishing practices, protecting juvenile fish and avoiding the capture of undersized fish, reducing discarded fishing gear and marine litter, and maintaining clean fishing grounds.

The program also highlighted the importance of fishermen's participation in protecting marine resources, reducing pollution from fishing activities, and supporting the long-term sustainability of fisheries and the blue economy.

The activity was provided free of charge to participating fishermen as a community environmental awareness initiative, with no participation fees.

The initiative combined practical harbor cleanup and waste recycling with direct environmental awareness engagement targeting the fishing community, reinforcing the role of AASTMT and CFAT in promoting responsible fisheries practices and marine environmental stewardship.



College of Fisheries and Aquaculture Technology-Alexandria | AASTMT

The College of Fisheries and Aquaculture Technology signed a joint Cooperation Protocol with the General Authority for the Protection and Development of Lakes and Fish Resources

Date: 19 May 2025
Location: College of Fisheries and Aquaculture Technology, Abu Qir Campus, Alexandria, Egypt
AASTMT Role: Institutional partner and signatory
Partner: General Authority for the Protection and Development of Lakes and Fish Resources, Egypt.

To strengthen institutional cooperation between higher education institutions and government authorities, the Arab Academy for Science, Technology and Maritime Transport (AASTMT), through its College of Fisheries and Aquaculture Technology (CFAT), signed a cooperation protocol with the General Authority for the Protection and Development of Lakes and Fish Resources on 19 May 2025.

The protocol was signed by H.E. Professor Dr. Ismail Abdel Ghaffar, President of AASTMT, and Major General Hussein Farhat, Executive Director of the Authority. It establishes a framework for collaboration and the exchange of expertise and resources in fisheries, aquaculture, student field training, and applied scientific research.

Following the signing ceremony, Major General Hussein Farhat, accompanied by Professor Dr. Hatem Hanafi, Dean of CFAT, visited the College's facilities. The visit included the marine simulation unit, which supports student training in marine navigation techniques and handling different weather conditions encountered by fishing vessels, as well as the College's fishing craft training facilities and specialized laboratories.

The delegation also met with students involved in scientific projects and research addressing fish stock analysis and the impacts of fishing practices on endangered species.

During the visit, the Executive Director praised the College's educational strategy, infrastructure, and practical training approach. He expressed support for expanding cooperation through practical training opportunities in fisheries and aquaculture, scientific consultations provided by College staff, and joint research projects.

Professor Dr. Hatem Hanafi highlighted the importance of this partnership in strengthening practical education, improving students' professional competencies, and preparing graduates for employment in fisheries and aquaculture sectors.

Expected Outcomes: The protocol provides an institutional framework for joint research, knowledge exchange, specialized student training, and strengthened collaboration between AASTMT and the national authority responsible for protecting and developing lakes and fish resources.

SDG Alignment: SDG 14 – Life Below Water, particularly institutional cooperation supporting sustainable fisheries, aquatic resource conservation, and the protection of lake ecosystems.



College of Fisheries and Aquaculture Technology-Alexandria | AASTMT

The Graduation Project for Students of the Faculty of Fisheries and Aquaculture Technology was chosen under the title “Environmental and Biological Assessment of the use of Antifouling Paints on Fishing Vessels in Abu Qir Bay and an Environmentally Friendly Solution Based on Water Hyacinth Extract"

On Sunday, 21 April 2024, students of the College of Fisheries and Aquaculture Technology at the Arab Academy for Science, Technology and Maritime Transport (AASTMT) presented their graduation project entitled “Environmental and Biological Assessment of Antifouling Paints Used on Fishing Vessels in Abu Qir Bay and an Environmentally Friendly Alternative Based on Water Hyacinth Extract.” The project was selected for presentation as part of the activities celebrating the International Day of Innovation and Creativity, in cooperation with the Bibliotheca Alexandrina. The project addressed the environmental challenges associated with conventional antifouling paints used on fishing vessels to prevent marine organisms from accumulating on hull surfaces. Certain antifouling compounds may release harmful substances into the aquatic environment, potentially affecting marine organisms, water quality, and ecosystem health. Focusing on Abu Qir Bay, the project explored the environmental and biological implications of these products and investigated water hyacinth extract as a more environmentally friendly alternative. The proposed approach linked marine pollution prevention with the sustainable utilization of locally available biological resources. By exploring the potential conversion of water hyacinth biomass into a value-added product, the project also highlighted opportunities to support resource efficiency and environmentally responsible innovation. The event promoted student-led scientific research, interdisciplinary collaboration, and practical solutions to marine environmental challenges. It raised awareness of the importance of protecting marine and coastal ecosystems while encouraging innovation that supports the sustainable use of ocean resources. Through this initiative, AASTMT demonstrated its commitment to integrating education, student innovation, and applied research into marine conservation efforts, while encouraging future fisheries and aquaculture professionals to develop solutions that balance technological advancement with environmental protection.



College of Fisheries and Aquaculture Technology-Alexandria | AASTMT

In Fulfillment of its Role in serving the Local Community and in line with its Social Responsibility, the Faculty of Fisheries Technology and Aquaculture, represented by its Dean, Professor Dr. Hatem Hanafi Mahmoud, participated in an Important Training Program for Fishermen at the New Fishing Port in Safaga

Date: 10 – 14 May 2026
Location: Safaga Fishermen's Association, New Safaga Fishing Port, Red Sea, Egypt
Organizer: Red Sea Lakes and Fisheries Development Authority, Hurghada
AASTMT Role: Educational contributor and trainer
AASTMT Representative: Professor Dr. Hatem Hanafi Mahmoud, Dean of the College of Fisheries Technology and Aquaculture
Target Audience: Local fishermen and fishing-boat operators in Safaga
Number of Beneficiaries: 50 fishermen
Participation Cost: Free of charge.

As part of its commitment to community service and environmental responsibility, the College of Fisheries Technology and Aquaculture at the Arab Academy for Science, Technology and Maritime Transport (AASTMT) contributed to a specialized training program for local fishermen at the New Safaga Fishing Port.

The program was organized by the Red Sea Lakes and Fisheries Development Authority in Hurghada and hosted at the Safaga Fishermen's Association. AASTMT was represented by Professor Dr. Hatem Hanafi Mahmoud, Dean of the College, who contributed to the educational and professional engagement with the local fishing community.

The Dean's training session addressed [insert the confirmed session title] and covered key topics related to sustainable fisheries practices, including responsible fishing methods, compliance with legally permitted fishing-net mesh sizes, avoiding the capture of juvenile fish, protecting fish stocks, and conserving marine resources for future generations.

Through this engagement, AASTMT supported the transfer of scientific and technical knowledge to local fishermen, highlighting the role of responsible fishing practices in maintaining fish populations, protecting marine biodiversity, and ensuring the long-term sustainability of fisheries in the Red Sea.

The training was provided free of charge to participating fishermen as part of AASTMT's commitment to environmental education, professional capacity building, and community outreach.

Key subjects covered: Sustainable fishing practices, legal fishing-net mesh sizes, and responsible fisheries management.

Educational benefit: Improved access to scientific knowledge and practical guidance on sustainable fishing among local fishing communities.



[College of Fisheries and Aquaculture Technology-Alexandria | AASTMT]

Professor Dr. Hatem Hanafy Mahmoud, Dean of the Faculty of Fisheries Technology and Aquaculture, participated in a scientific lecture entitled: “Modern Trends in Fish Stock Assessment and Fisheries Management Models”

As part of the activities of the Second Scientific Forum of the Fisheries Division at the National Institute of Oceanography and Fisheries Sciences, “Integrated Fisheries Management”, Professor Dr. Hatem Hanafy Mahmoud, Dean of the Faculty of Fisheries Technology and Aquaculture, participated in a scientific lecture entitled: “Modern Trends in Fish Stock Assessment and Fisheries Management Models” as part of the activities of the Second Scientific Forum of the Fisheries Division at the National Institute of Oceanography and Fisheries Sciences, “Integrated Fisheries Management: Challenges of Reality and Visions of the Future,” on Monday, May 18, 2026, at the headquarters of the Institute’s branch for the Mediterranean Sea and Northern Lakes in Anfoushi, Alexandria.





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Representatives from the Faculty of Fisheries Technology and Aquaculture, including Faculty Members and Students, participated in the distinguished workshop entitled "Marine Environment Degradation and Livelihood Challenges for Fishermen in Northern Egypt"

On 9 May 2026, Representatives from the Faculty of Fisheries Technology and Aquaculture, including faculty members and students, participated in the workshop, "Marine Environment Degradation and Livelihood Challenges for Fishermen in Northern Egypt," organized by the Arab Maritime Association in cooperation with the German Hans Seidel Foundation.




College of Fisheries and Aquaculture Technology-Alexandria | AASTMT

Towards Clean Blue Oceans | Hand in Hand for a Sustainable Sea

The College of Fisheries and Aquaculture Technology – Arab Academy for Science, Technology and Maritime Transport (AASTMT) launched the "Towards Clean Blue Oceans" initiative on Saturday, August 8, 2026, bringing together 50 participants from college students, school students, and volunteers — working hand in hand to promote marine environmental awareness and cleaner beaches.

The initiative supports Sustainable Development Goal 14 (SDG 14): Life Below Water by raising awareness of environmental responsibility, reducing marine litter, and helping protect marine ecosystems and resources.

The initiative is also part of the HEEFTA Project's activities, supporting collaboration, knowledge exchange, and community engagement to address environmental challenges and contribute to a more sustainable blue future.

50 participants… One goal… A cleaner sea.

Hand in hand, we keep our seas clean.






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Interreg Cooperation Day 2026 | Beach Cleanup: Together for Cleaner Beaches and a More Sustainable Mediterranean

As part of Interreg Cooperation Day 2026, the College of Fisheries and Aquaculture Technology (CFAT) at the Arab Academy for Science, Technology and Maritime Transport (AASTMT) participated in the beach cleanup activities held in Alexandria on Friday, 2 October 2026. The Anna Lindh Foundation organized the event, with numerous students, young people,

volunteers, and representatives from partner institutions and organizations participating. Participating Organizations and initiatives

The event brought together several organizations and initiatives, including:

Anna Lindh Foundation, Interreg NEXT MED – Cross-Border Cooperation Program in the Mediterranean, Banlastic Egypt, Marine Scouts Training Center, along with several youth-led initiatives, institutions, and volunteers.

The event began with welcoming remarks, followed by interactive activities highlighting the importance of cooperation between young people and institutions in addressing the environmental challenges facing the Mediterranean region.

Participants then joined an extensive beach cleanup campaign, bringing together hundreds of students, young people, and volunteers. Working collectively, they collected waste from the beach and raised awareness about the harmful impacts of plastic pollution on the marine environment and aquatic organisms.

Beyond beach cleaning, the event featured environmental awareness activities, knowledge- and experience-sharing, and networking among participants from different organizations. These activities reinforced the importance of regional cooperation and collective action in promoting sustainability and protecting the Mediterranean Sea.

CFAT's participation reflects the College's ongoing commitment to supporting environmental and community initiatives, connecting academic knowledge with practical field activities, and raising students' awareness of the importance of protecting biodiversity, conserving marine resources, and advancing Sustainable Development Goal 14 (SDG 14): Life Below Water.

Through these initiatives, CFAT continues to encourage responsible environmental practices and empower young people to help create a cleaner, healthier, and more sustainable marine environment.





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Unlocking the Ocean's Potential: Innovations and Opportunities in Marine Biotechnology (Scientific public lecture)

Date: Wednesday, 12 August 2026
Venue: Faculty of Science, New Mansoura University (NMU), Egypt
Organizer: Faculty of Science, New Mansoura University

AASTMT Role: Invited academic speaker
Speaker: Associate Professor Haiam Morsy, Head of the Fisheries Technology and Aquaculture Departments, College of Fisheries and Aquaculture Technology (CFAT), Arab Academy for Science, Technology and Maritime Transport (AASTMT)

As part of its scientific activities, the Faculty of Science at New Mansoura University organized a scientific session entitled "Unlocking the Ocean's Potential: Innovations and Opportunities in Marine Biotechnology" on Wednesday, 12 August 2026. Associate Professor Haiam Morsy, representing AASTMT, delivered the session to introduce students to the expanding field of marine biotechnology and its scientific and practical applications.

The session explored how marine organisms and their biological resources contributed to scientific innovation, the development of new therapeutic applications, the production of advanced biomaterials, and the creation of sustainable environmental solutions.

It also highlighted the potential of marine biotechnology to advance scientific research, promote the sustainable utilization of marine resources, and support the development of the blue economy.

Through this academic engagement, AASTMT contributed scientific expertise to an educational activity at New Mansoura University, encouraging students to explore marine biotechnology as an emerging field offering opportunities for research, innovation, and sustainable development. Outcome: Students were introduced to the scientific applications and innovation opportunities offered by marine biotechnology and its potential contribution to the sustainable blue economy.



Unlocking the Ocean's Potential: Innovations and Opportunities in Marine Biotechnology (Scientific public lecture)