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SAFETY AT SEA AND DECENT WORK IN FISHERIES AND AQUACULTURE

Executive Summary

This document provides a summary of recent FAO activities that support the implementation of the Code of Conduct for Responsible Fisheries with regard to safety at sea and decent work in fisheries and aquaculture.

I. INTRODUCTION

1. This information paper provides additional information in relation to working Document COFI/2020/8 (Global and regional processes) on the subject of safety at sea and decent work in fisheries and aquaculture.
2. The FAO Code of Conduct for Responsible Fisheries (the Code) is explicit in relation to the principle of “safety” in Article 6.17, where it is emphasized that “States should ensure that fishing facilities and equipment as well as all fisheries activities allow for safe, healthy and fair working and living conditions and meet internationally agreed standards adopted by relevant international organizations”. Article 8.1.5 expands on the principle of safety, requesting States “to ensure that health and safety standards are adopted for everyone in fishing operations and that such standards should not be less than the minimum requirements of relevant international agreements on conditions of work and service”. Moreover, Article 8.4.1 requests that “States should ensure that fishing is conducted with due regard to the safety of human life”.
3. Commercial fishing remains one of the world’s most dangerous occupations. FAO amended its global estimate of the number of fatalities fisheries in 2019 to 32 000 casualties per year. The basis for this amendment was the increase in the number of fishers worldwide from around 30 million in 2000 to 40 million in 2016. The 1999 ILO¹ established rate of 80 fatalities annually per 100 000 active fishers was maintained for this new estimate. It should be noted that the amended FAO global estimate is likely an underestimation. Reports from the few developed countries that collect fisheries accident data commonly show rates of more than 100 fatalities per 100 000 active fisheries. In fact, in some industrial fishing fleets, accident and fatality rates have been on the rise recently. Furthermore, there is anecdotal evidence that in developing countries with small-scale fishing fleets the fatality rates among fishers are significantly higher.
4. COFI has repeatedly highlighted the importance of safety at sea in the fisheries sector and welcomed the cooperation in this regard between the International Labour Organization (ILO), the International Maritime Organization (IMO) and FAO. At its 33rd session, COFI Members requested FAO to further strengthen international cooperation on occupational health and safety issues in the fisheries and aquaculture sectors and to promote decent work for fish workers.

II. FAO ACTIVITIES ON SAFETY AT SEA IN THE FISHERIES SECTOR

5. Since COFI 33, FAO developed capacity building programmes and materials on safety at sea for small-scale fishers. These activities were carried out jointly with government counterparts in the Caribbean and Pacific regions and partners, such as the FISH Safety Foundation, World Fisheries Trust, Maritime New Zealand etc. A Caribbean regional Train-the-Trainer workshop for coastguard, navy and fisheries trainers on safety at sea for small-scale fishers was held in January 2020 in Saint Lucia¹. The training package produced is flexible and includes a range of modules, including on emergency preparation, outboard engine repair and maintenance, safety risk management, boat handling and basic marine traffic, as well as emergency First Aid and communication.
6. Nearly 600 fishers in the Caribbean received specific Information and Communication Technology (ICT) training, supported by FAO, in 2019/2020, focusing on the three ICT devices that are most important to safety at sea for small-scale fishers: the VHF radio, the Global Positioning System (GPS) and cell phones. FAO trained small-scale fishers through performing drills on the radio, GPS and cell phone in a classroom environment, as well as at sea.
7. In the Pacific island of Tokelau, the FAO *Safety at Sea for Small-scale Fishers Programme* in 2019 included the provision of appropriate safety gear, training on the use of gear and safety education at schools. It also included training on engine repair and maintenance, as engine breakdown is a

¹ The activities in the Caribbean region were supported by the GEF funded “Climate Change Adaptation for Eastern Caribbean Fisheries” (CC4Fish) project and the Norwegian Government funded project on “Supporting FAO member countries implement climate change adaptation measures in fisheries and aquaculture”.

primary reason for small vessels getting lost at sea. The programme integrates new community identified solutions into existing practices. FAO will continue to work on improving safety at sea across seven Pacific countries through a Japanese Government funded project on small-scale tuna fisheries, as well as through continued regional programming with Maritime New Zealand and other regional partners.

8. FAO and the Bay of Bengal Programme – Intergovernmental Organization (BOBP-IGO) published a practical manual on “Safety at sea for small-scale fishers”², containing comic-book style illustrations. This manual is available online in English, French, Spanish, Chinese, Portuguese, Tamil and Sinhala. It is distributed through various projects and partners in Asia, Africa and the Caribbean. Other language versions and regionalized versions of the manual are under preparation.

9. Preparatory work for the introduction of an accident and fatality reporting system for fisheries in the Caribbean took place in collaboration with FSF in 2019-2020. Stakeholders agreed on the value of a reporting system, which will help in identifying causes of accidents, solutions to avoid recurrence, the costs of fishing accidents, the effectiveness of fishing safety awareness and training programmes and steps needed to reduce accidents in the sector. Introduction of a combination of a voluntary and formal reporting system continues in 2020 in various Caribbean countries, with technical advice provided by FAO.

III. DECENT WORK IN FISHERIES

10. In the intersessional period, FAO continued working on mainstreaming the ILO Decent Work Agenda in fisheries and aquaculture, in line with the FAO Strategic Programme on Rural Poverty Reduction and the United Nations 2030 Agenda for Sustainable Development³. Activities conducted included knowledge generation, advocacy in regional and global fora, and provision of country-level policy support to achieve basic labour standards in the rural areas and to promote the access to social protection for fishers and fish workers. Country-specific case studies were conducted in Cambodia and are ongoing in Senegal and Tunisia.

11. Since 2018, FAO and the Apostleship of the Sea, in cooperation with the IMO and the ILO facilitated a series of regional technical seminars on the linkages between vessels’ safety, working conditions and illegal, unreported and unregulated (IUU) fishing. The seminars took place in Asia (Manila, March 2018),⁴ in the South-West Indian Ocean (Seychelles, May 2019) and in West Africa (Accra, October 2019). Other regions are expected to be covered in 2020 (Caribbean and Bay of Bengal).⁵ The regional seminars conducted gathered experts from safety, labour and fisheries authorities along with trade unions, small-scale fishers representatives, national human rights institutions and fisheries associations. Participants identified regional priorities and potential improvements in the sector. The meetings resulted in regional calls for action. Paramount in the discussions has been the urgency to act on improving working conditions in the sector and expand national inter-agency cooperation.

12. In Mali, FAO and the ILO are collaborating to finalize and test a visual tool to reduce and mitigate hazardous children’s tasks in fisheries and aquaculture. FAO produced specific guidance material for governments and stakeholders on eliminating child labour in fisheries and aquaculture.

13. At the regional level, FAO published in 2019 the outcome of a regional study conducted with the General Fisheries Commission for the Mediterranean (GFCM) in five countries (Albania, Egypt, Lebanon, Morocco and Tunisia). The study reviewed available social protection programmes and access of small-scale fishers to these programmes. The review found several success stories as well as

² The manual is available in many languages: English, Spanish, French, Chinese, Portuguese, Tamil and Sinhala. The English language version can be found at: www.fao.org/3/ca5772en/CA5772EN.pdf

³ For more information, please visit: <https://sustainabledevelopment.un.org/post2015/transformingourworld>

⁴ The Manila Call for Action, outcome of the seminar, is available here:

www.fao.org/3/ca2511en/CA2511EN.pdf

⁵ Postponed due to COVID-19.

areas of improvement and recommended practical measures to be taken by national authorities with a view to provide adequate coverage to the sector.⁶

14. Participants in the fourth (2018) and fifth (2019) sessions of the Forum of Parliamentarians for Fisheries and Aquaculture of Latin America and the Caribbean committed to take legislative actions to promote the right to social protection for small-scale fishers and fish farmers in the region.

15. In the COFI intersessional period work continued on the preparation of the FAO Guidance on Social Responsibility in Fisheries and Aquaculture Value Chains. This guidance document aims to increase social responsibility in fisheries and aquaculture value chains and to promote human and labour rights, including decent work in the sector. Multiple stakeholder consultations were held worldwide in preparation of this guidance document. More information on the process and current status can be found in COFI/2020/4 “Decisions and recommendations of the seventeenth session of the COFI Sub-Committee on Fish Trade, 25-29 November 2019”.

16. FAO is also providing technical support to ILO in the preparation of the forthcoming ILO Technical Meeting on the future of work in aquaculture in the context of the rural economy (23-27 November 2020).

IV. OCCUPATIONAL SAFETY AND HEALTH IN AQUACULTURE

17. Thematic and regional reviews⁷ on occupational safety and health (OSH) issues in aquaculture, conducted jointly by FAO, the International Union of Food and Allied Workers' Associations (IUF) and the University of Stirling, indicate that aquaculture can be considered as one of the more hazardous occupations in the worldⁱ, and that the OSH risks posed by work in aquaculture have been generally neglected.

18. Workplace injuries in the sector relate to machinery, tools, boats, vehicles, drowning, falls, electrocution and bites. Occupational diseases are generally under-reported across the world and aquaculture presents many threats to health including those linked to heat and cold, dehydration, work-related neck and upper limb disorders, respiratory problems, allergies, parasites, bacteria from feed, skin issues, and hazards related to ingestion and inhalation. Hazards are also associated with diving, construction works – such as the establishment of stock-holding units like ponds, racks and cages – as well as harvesting, processing, and transport of produce. Additional problems have emerged due to the impact of stress, long hours, evening and night shifts and lone working.

19. In 2015, the FAO COFI Sub-Committee on Aquaculture discussed the importance of decent work in aquaculture, based on a discussion document: “Improving livelihoods through decent employment in aquaculture”⁸, and underlined the need for addressing occupational safety and health hazards in aquaculture.

⁶ FAO. 2019. Social Protection for Small-Scale Fisheries in the Mediterranean region: a Review. Available at: www.fao.org/3/ca4711en/ca4711en.pdf

⁷ In preparation.

⁸ Working Document COFI:AQ/VIII/2015/9 is available at: www.fao.org/fi/static-media/MeetingDocuments/COFI_AQ/2015/9e.pdf

V. CAPE TOWN AGREEMENT OF 2012 ON THE IMPLEMENTATION OF THE PROVISIONS OF THE 1993 PROTOCOL RELATING TO THE TORREMOLINOS INTERNATIONAL CONVENTION FOR THE SAFETY OF FISHING VESSELS, 1977 (CAPE TOWN AGREEMENT)

20. The Cape Town Agreement, which was adopted in 2012, will enter into force 12 months after the date on which not less than 22 States with the aggregate number of their fishing vessels of 24 m in length and over, operating on the high seas, is not less than 3 600 have expressed their consent to be bound by it. . As of March 2020, fourteen States (Belgium, Congo, Cook Islands, Denmark, Finland, France, Germany, Iceland, Netherlands, Norway, Saint Kitts and Nevis, Sao Tome and Principe, Spain and South Africa), with 1 433 fishing vessels of 24 m in length and over operating on the high seas, have ratified the Agreement.

21. Following the adoption of the Cape Town Agreement in 2012, FAO responded to IMO's request for assistance in developing and conducting regional seminars on the implementation and ratification of the Cape Town Agreement. So far, such seminars have been held in Belize, Cook Islands, Costa Rica, Côte d'Ivoire, Indonesia, Morocco, Peru and South Africa.

22. In addition to improving safety at sea in the fisheries sector, it is expected that the Cape Town Agreement would also become a useful tool in combating IUU fishing, and thereby complement the PSMA, since fishing vessels falling under the scope of the Agreement would be subject to port State control.

23. In 2019, FAO contributed to the Ministerial Conference on Fishing Vessel Safety and Illegal, Unreported and Unregulated (IUU) Fishing, which was hosted by IMO and the Government of Spain, and held in Torremolinos, Spain, from 21 to 23 October 2019. The Conference adopted a non-binding Declaration⁹, which was signed by forty-eight countries, publicly indicating their determination to ensure that the Agreement will enter into force by October 2022.

24. The conference also adopted two Resolutions.¹⁰ The first resolution, *inter alia*, called upon the IMO, FAO and the ILO to continue working together to achieve rapid worldwide implementation of international agreements on issues relating to work in the fishing sector, protection of fishing vessel personnel, improvement of fishing vessel safety and elimination of IUU fishing, and combating forced labour in fishing and related industries. It also called upon States through ministries, agencies and departments at the national level, to coordinate their actions to address these issues. The resolution also requested the IMO to consider developing further related technical assistance tools, as appropriate and in cooperation with relevant international organizations, for example on matters concerning fishing working conditions, fishing vessel construction, training of fishing vessel personnel, monitoring, control and surveillance, operations and seaworthiness standards for fishing vessels, protection of the environment, combating IUU fishing, and measures against the fraudulent registration of vessels engaged in IUU fishing;

25. Back-to-back with the Torremolinos Ministerial Conference, the Fourth Session of the Joint FAO/ILO/IMO Ad Hoc Working Group on IUU Fishing and related Matters (JWG 4)¹¹ was held on 24-25 November 2019. JWG 4 considered the outcome of the Conference and recommended that the IMO should develop guidance to assist competent authorities in the implementation of the 2012 Cape Town Agreement. The process of developing such guidance should allow for further discussion on its

⁹ The Torremolinos Declaration is available here:

www.imo.org/en/About/Events/Documents/Torremolinos%20fishing%20conf/TORREMOLINOS%20DECLARATION.pdf

¹⁰ The conference Resolutions are available at:

www.imo.org/en/About/Events/Documents/Torremolinos%20fishing%20conf/Torremolinos%20Conference%20Resolutions.pdf

¹¹ In preparation.

content and scope and be informed by FAO, the ILO as well as other relevant Organizations and stakeholders.

VI. THE INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR FISHING VESSEL PERSONNEL, 1995 (1995 STCW-F)

26. The 1995 STCW-F, which sets the certification and minimum training requirements for crews of seagoing fishing vessels of 24 m in length and above, entered into force on 29 September 2012. As of 31 March 2020, 32 States have ratified this convention. The IMO Secretariat is coordinating a process of a comprehensive review of the STCW-F Convention. An Intersessional Working Group on the Review of the STCW-F Convention met in February 2020, and agreed on draft amendments on mandatory minimum requirements for basic safety training and onboard safety familiarization for all fishing vessel personnel.

27. FAO has been participating actively in the review process to secure proper linkages between the 1995 FAO Code of Conduct for Responsible Fisheries (the Code) and the STCW-F, particularly in aspects of training of fishers on safety and sustainability. This is in line with the 2001 IMO/ILO/FAO endorsed Document for Guidance on Training and Certification of Fishing Vessel Personnel, which acknowledges the need for fishing vessel personnel to receive training in the principles and guidelines of the Code. Similarly, the 2005 IMO/ILO/FAO Code of Safety for fishers and fishing vessels (Part A)¹² regards knowledge about fisheries management as important and that safety at sea should be considered an integral part of fisheries management. To give effect to implementation of the previously endorsed Safety Code and Guidance document, it is obvious that fisheries sustainability concerns also require attention in training and certification programmes of fishing vessel personnel. A submission was made recently to the 7th session of the Subcommittee on Human element, Training and Watchkeeping (HTW) of the Maritime Safety Committee (MSC) to incorporate fisheries sustainability training along with safety training in training programmes for all fishing vessel personnel within the reviewed STCW-F.

VII. THE ILO WORK IN FISHING CONVENTION, 2007 (NO. 188)

28. The Work in Fishing Convention, 2007 (No. 188) was adopted at the 96th International Labour Conference (ILC) of ILO in 2007. The objectives of the Convention are to ensure that fishers have decent conditions of work on board fishing vessels with regard to minimum requirements for work on board; conditions of service; accommodation and food; occupational safety and health protection; medical care and social security. The ILC also adopted a resolution on port State Control that invites ILO to seek technical expertise of FAO and others on this issue.

29. The Convention entered into force on 16 November 2017. As of 23 March 2020, the Convention has been ratified by eighteen States (Angola, Argentina, Bosnia and Herzegovina, Congo, Denmark, Estonia, France, Lithuania, Morocco, Namibia, The Netherlands, Norway, Poland, Portugal, Senegal, South Africa, Thailand and the United Kingdom of Great Britain and Northern Ireland).

30. In 2019, ILO became a formal member of the JWG¹³ secretariat, along with representatives of its constituencies. In the context of the JWG 4, a specific item on the agenda was included on Cooperation and Dialogue on Labour Issues and Fisheries. With respect to labour issues, the JWG 4 recommended:

- FAO, ILO and IMO Secretariats to work together to increase understanding of the relations between IUU fishing and severe human rights abuses and exploitation in the fisheries and seafood sector, taking into account lessons learned from existing projects and initiatives.

¹² The Safety Code was approved by IMO's Maritime Safety Committee (MSC) at its 79th session in 2004.

¹³ Joint FAO/ILO/IMO Ad Hoc Working Group on IUU Fishing and related Matters

- ILO and IMO to work together with respect to the issues of abandonment and fair treatment of seafarers to be extended to include fishers.
- FAO to consider how to promote fisheries observers' safety globally through a process of revising available information as well as existing national and regional measures, on related safety, security and working conditions. Such process should be informed by the IMO and the ILO.

VIII. INSURANCE FOR INCREASING SAFETY AND DECENT WORK IN FISHERIES

31. Less than five percent of the world's fishing fleet and the fishers working on the fleet are presently covered by insurance. Many fishers who have an accident during their working life, cannot work for some time or end up disabled. This creates financial and social hardship for these fishers and their families. Insurance services have shown to be able to reduce the vulnerability of fishers and their families to shocks caused by work-related accidents, and to contribute to sustainable fisheries livelihoods. In other sectors, insurance has also supported a culture of safety and risk awareness, as well as an improvement of safety standards and working conditions.

32. FAO assessed the possibility of introducing third-party liability insurance in fisheries in the Caribbean region in 2019, along the lines of similar mandatory insurance requirements for vehicles on the road and merchant vessels at sea. An assessment of legal frameworks in five Caribbean countries was carried out to find entry points for introducing third party liability insurance for fishing vessels. The assessment was accompanied by an overview of international conventions governing marine insurance and examples of mandatory fishing vessel insurance legislation from selected countries. The benefits of such insurance schemes for everyone involved in the fisheries industry (claimants, shipowners, and society in general) appeared to be substantial. FAO also prepared model regulations to facilitate introduction of compulsory third party liability insurance for fishing vessels and produced information to support fishers' awareness raising and capacity building on this subject.

33. In collaboration with the Asia-Pacific Rural and Agricultural Credit Association (APRACA) and partners, FAO organized an Expert Workshop on Guidelines for Micro-finance, Credit and Insurance for Small-scale Fisheries in Asia, in Bangkok, Thailand in May 2019. The resulting Guidelines for micro-finance and credit programmes in support of small-scale fisheries in Asia, and Guidelines for increasing access of small-scale fishers to insurance services were endorsed by APRACA membership in 2019 and are being implemented in the Asian region. FAO continued supporting the application of these guidelines in the Philippines.

IX. FUTURE WORK ON SAFETY AT SEA AND DECENT WORK IN FISHERIES

34. For the upcoming COFI intersessional period, FAO aims to continue the collaboration with IMO and ILO in terms of joint promotion of ratification and building capacity for implementation of the relevant international instruments (C188, Cape Town Agreement, STCW-F, PSMA and the Code). The safety at sea capacity-building activities will continue to focus on small-scale fishers, as over 90 percent of the world's fishing vessels are small-scale vessels, which are not covered by the IMO instruments. FAO aims to expand the capacity-building efforts to other regions, provided funding from resource partners becomes available, and the FAO "Safety-for-fishermen" website will be modernized and updated.

35. In view of the likely entry into force of the Cape Town Agreement in 2022, and the increasing number of ratifying States of the other international instruments mentioned above, it could be considered to develop an international strategy or international plan of action¹⁴. Such a voluntary strategy or plan would provide coherent guidance to States in supporting the implementation of these

¹⁴ FAO Technical guidelines for responsible fisheries, No. 1 Fishing Operations, supplement No. 3 on "Best practices to improve safety at sea in the fisheries sector", contains elements to consider when developing an international plan. Available at: www.fao.org/3/a-i4740e.pdf

ILO, IMO and FAO instruments, improving safety at sea and decent working conditions, and reducing accidents and fatalities in capture fisheries and aquaculture.

36. Fisheries accident and fatality reporting has been on the agenda of the international community for the last four decades, particularly within IMO, ILO and FAO fora. However, up to today most countries lack an effective reporting, investigation and analysis system. The IMO Cape Town Agreement and ILO Convention No.188 both stress the need for States to report and investigate fishing accidents, but are either applicable to large-scale (>24m) fishing vessels only or limited in scope by the low number of ratifying States. FAO proposes to collaborate with IMO, ILO, FISH Safety Foundation, Lloyds Register Foundation, RFMOs, governments and other stakeholders to achieve the necessary progress on this subject.

37. FAO would like to assist fisheries sector stakeholders, COFI Members, relevant partners and NGOs in addressing critical safety aspects in all fisheries (including small-scale fisheries), and to establish a “learning” system that will continuously update the key stakeholders in governments and the private sector on fisheries safety issues. A structured gradual accident reporting process incorporated into a global system that provides countries and others with accurate and timely information, would be best served by a combined formal legislative accident reporting system and a voluntary confidential accident reporting system. The formal side of such a two pronged approach system could benefit from a similar set-up as the one of the Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Global Record). The voluntary accident reporting system would be operated and maintained by the private sector and relevant data shared with the formal side to assist the sector in preventing accident recurrence and developing effective fishing safety awareness and training programmes on the subject. If COFI considers accident and fatality reporting in fisheries important, it would be possible to establish a global system within five years, provided that some resource partners are found to support the development of the formal and voluntary systems and related capacity building needs.

38. The review of the STCW-F Convention is expected to be completed in 2021 or 2022. The reviewed convention remains primarily applicable to fishing vessels of 24 m in length and above. The more detailed standards of competence on basic training, minimum basic safety standards, and possibly the minimum requirements for basic sustainable fisheries training, for all fishing vessel personnel, under the reviewed convention would require new training and capacity building materials. In this respect, it would be essential that IMO, ILO and FAO collaborate to develop new model courses for fishing vessel personnel, and make these available worldwide to fisheries vocational schools and training institutes. The courses should preferably not only be prepared for fishing personnel on large-scale fishing vessels, but also have training modules for fishers on smaller scale vessels. FAO would be prepared to take a coordinating role in the development and dissemination of the model courses and training packages and to ensure their availability to small-scale fishers, provided the necessary funding is made available.

39. In line with the UN 2030 Agenda for Sustainable Development, FAO will continue its work in support of increasing social protection coverage of small-scale fishers, recognizing the role social protection can play in reducing fishers’ vulnerability and as a means to promote sustainable use of marine and living resources. Prospective work will include furthering the evidence, through analytical work, of the socio-economic and environmental impacts of social protection mechanisms and programs that support fishers during seasonal closures and that address the socio-economic effects of fisheries management measures.

40. Since early 2020, the COVID-19 pandemic has been negatively affecting the fisheries sector, for instance through illness of crews, vessel labour shortages, reduced or stopped fishing activities and reduced demand from value chain partners. FAO prepared a policy brief on “How is COVID-19 affecting the fisheries and aquaculture food systems”¹⁵ in April 2020 and is currently developing various projects in support of COVID-19 affected fisheries and aquaculture stakeholders. The

¹⁵ This policy brief is available at: <https://doi.org/10.4060/ca8637en>

COVID-19 pandemic shows the importance of increasing access to social protection, micro-finance, credit and insurance services for fisheries and aquaculture sector stakeholders.

41. To develop a comprehensive and holistic approach to this area of work, FAO has developed a Global Umbrella Programme for efficient, safe and socio-economically sound fishing operations (FISH-OPS). In support of a transition to responsible fisheries operations the business as usual approach will be replaced by FAO's new "change narrative", consisting of enabling policy development and implementation, supported by innovation, targeted investments and capacity building of fishers and institutions in the fisheries sector. The Fish-OPS programme will be addressing a number of challenges to the fisheries sector, such as: the high number of accidents and fatalities, the often very harsh, inadequate and dangerous working conditions in the sector, the limited access to finance and insurance services, the low participation of fishers in social security schemes, and the low capacity of small-scale fishers to adopt innovations and more responsible fishing methods. The Fish-OPS programme will be able to contribute to boosting the adoption by countries the international binding and voluntary instruments on safety and decent work in the fisheries sector (e.g. C188, CTA, STCW-F, PSMA and FAO/IMO/ILO safety recommendations for fishing vessels) and building national level capacity required for their implementation. Resource partners are being sought at present to support the programme and its activities.

ⁱ Recent scientific articles on occupational safety and health (OSH) issues in aquaculture include: Cavalli, L., Jeebhay, M.F., Marques, F., Mitchell, R., Neis, B., Ngajilo, D., Watterson, A. (2019): Scoping Global Aquaculture Occupational Safety and Health, *Journal of Agromedicine*, August 2019. DOI: 10.1080/1059924X.2019.1655203. www.ncbi.nlm.nih.gov/pubmed/31448696
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