

Towards Healthy Work

An FAO project examines global occupational health and safety policies, practices, standards, problems and challenges in aquaculture occupational safety and health (AOSH)

The plight of millions of aquaculture workers across the world, in terms of working conditions and basic health and safety, is often neglected, if not ignored altogether. They are frequently invisible to governments and regulators, and can all too often be forgotten or neglected by local and national health and labour services. They may also be lost under an 'agricultural' occupational health and safety umbrella which is meant to cover aquaculture but may not.

New efforts to address these problems at an international level have begun with an initiative by the Food and Agriculture Organization of the United Nations (FAO) to start scoping out activity, data gaps, problems and, finally, successes across the globe in tackling the health and safety problems of these workers. They include fish farmers onshore and offshore, prawn and shrimp farmers, oyster, mussel and other shellfish farmers, seaweed farmers and other aquaculture workers. The search for practical solutions to removing or reducing hazards and risks in numerous and varied settings across the globe is the focus of the project.

Global policies

The project looked at global occupational health and safety policies, practices, standards, problems and challenges in aquaculture occupational safety and health (AOSH) along the primary supply chain, in marine and freshwater locations, and in a range of employment settings. The project examined material on the hazards contributing to occupational health risks that result in occupational injury and disease as well as risks from high-risk activities such as

diving, construction works, feeding, harvesting, processing and transport of produce. Some information was also gathered on women workers, migrant workers and child labour in the context of human rights linked to worker health and safety. Welfare conditions and work-related factors contributing to occupational injury, disease and ill-health have been included, such as low wages, insecure work, housing, access to healthcare, and transport. Whilst recognizing the varied and, at times, complex economic, social and

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political as well as geographic and climatic settings in which aquaculture can operate, the research focus was on trying to identify evidence of effective AOSH systems and practical and simple solutions to AOSH problems.

The desk-based project, drawing on expertise from the team, used peer-reviewed and grey literature on AOSH. Key factors affecting AOSH were explored, such as the social organization of work, regulation and non-regulation, and the role of industry, government, non-governmental organizations (NGOs) and labour. National and regional profiles on AOSH from around the world were then produced using a standard template for key countries where information was readily available. Profiles generated included those from Africa to Australasia, and Europe to

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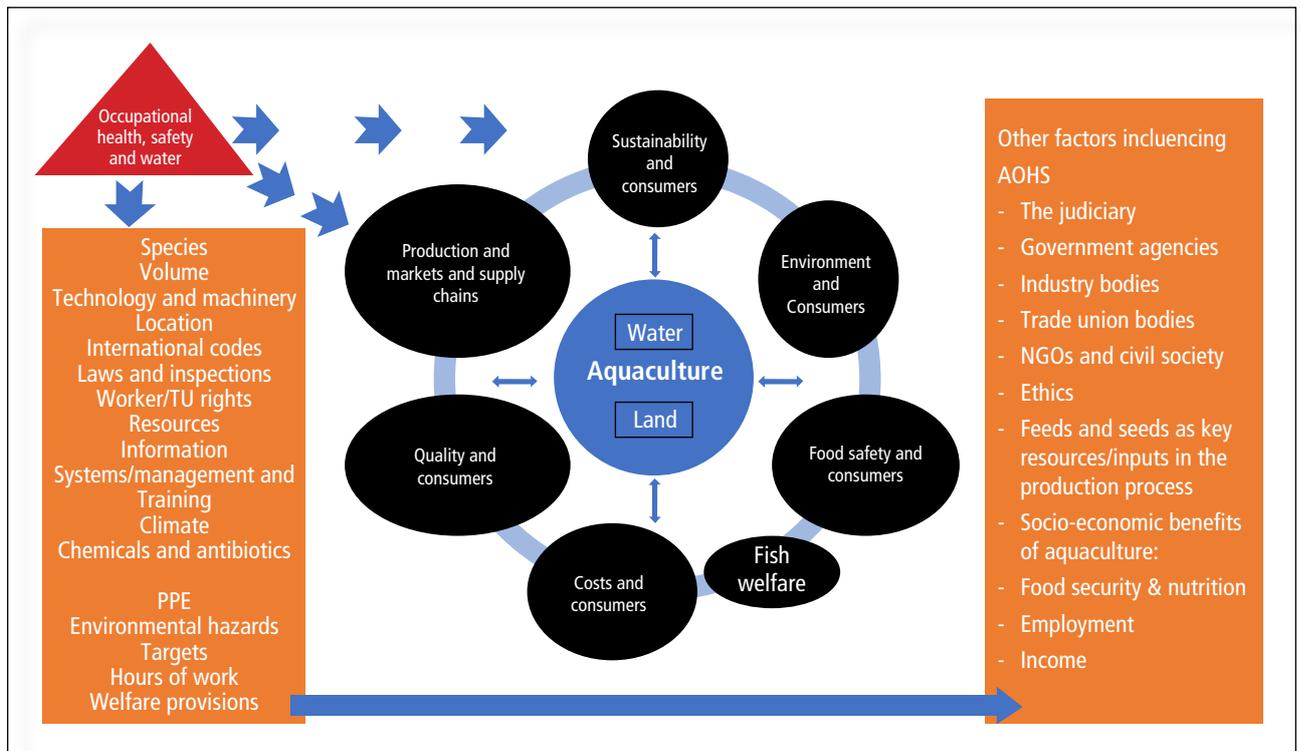
North and Latin America. In addition, relevant global legislation, national laws, international codes, labour practice guidance, industry standards and NGO and trade union initiatives were examined. The national and regional profiles will shortly be made available for workers to access and use the findings, if relevant to them.

Several major issues emerge from the report. Many gaps have been discovered in our global knowledge of the working conditions of upwards of 18 mn aquaculture workers. This relates not only to documenting the hazards they face but the injuries and diseases they suffer. There is also much we do not know about the different regulatory and risk management systems that may or may not be in place to protect them.

Independent analyses of the extent and the effectiveness of existing prevention and risk-reduction strategies adopted are limited. These findings emerge across all the national and regional profiles compiled for this report, although in a few countries more is known about AOSH than elsewhere.

All too often, AOSH is marginalised or ‘lost’ by government, industry and, sometimes, labour organizations dealing with agriculture or fisheries as there is usually little specific focus or attention paid to aquaculture. Yet priority and investment are given to production, processes, cost, food safety, sustainability and wider environmental issues within the sector by industry and government. This contrasts starkly with under-funded NGOs, including trade unions and other civil society groups, who do work on aquaculture and fishing, who are often best placed to reach such workers and who use innovative and accessible social media and networking tools. Yet these organizations often have very limited resources and staff to reach large numbers of the most vulnerable of workers in rural communities.

The human, social and economic toll of poor AOSH is considerable and often externalised by industry and government, and is likely to be borne by the workers and communities affected directly through occupational injuries and diseases and indirectly through low wages, long hours, job insecurity



The current location of aquaculture occupational safety and health in aquaculture. The diagram identifies issues affecting AOSH and how it has been marginalized

and, in many contexts, poor welfare and social security. OSH hazards in the sector are all too often associated with other labour exploitation issues such as forced labour, child labour, debt bondage, discrimination, and denial of rights to association and collective bargaining negotiations and labour agreements. While some aquaculture workers are highly trained and in secure jobs globally, most are from these vulnerable populations in precarious work – women, indigenous people, children, seasonal workers, migrant workers, rural and remote workers.

Monitoring and inspection of AOSH in the sector based on effective regulations are certainly needed but are patchy globally and may not exist at all. Healthy work is good for business and communities, but the message is still often misunderstood or deliberately ignored. Guidance usually comes from general agricultural or OSH rules and codes. These may be useful in providing a broad health and safety framework within which to control and remove risks. However, they can lack specific and more detailed information and standards directly relevant to the aquaculture industry. Efforts of mainstreaming and applying OSH policies and practices in the aquaculture sector face many challenges, given the complexity of issues involved and the diversity of contexts of aquaculture development. The diagram identifies issues affecting AOSH and how it has been marginalised.

The good news is that there has been some increase in AOSH research and prevention initiatives in recent decades, driven in different locations by the state, regulators, civil society and consumers, in particular. Solutions – technical and organizational – have been mooted, with the potential to remove or reduce some risks from known hazards. So good regulations, monitoring and enforcement underpinned by effective industry, community and labour engagement, surveillance, research and knowledge transfer may help to guide strategies to improve AOSH. All such strategies and initiatives require thorough research and evaluation not always currently available.

Successes include: (i) workforce OSH agreements with European aquaculture companies operating in developing countries such as Ghana; (ii) extension services in some parts of the United States (US); (iii) technological innovations and hazard assessment in Norway linked to regulation; (iv) Canadian technology innovations in reducing hazardous exposures; (v) changed South African

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occupational health and safety management improving practices; and (vi) Scottish and United Kingdom (UK) tripartite body initiatives improving knowledge exchange.

Solutions to OSH issues, based on standard health risk assessment and risk-management techniques are relevant to large, small and medium-sized enterprises. Many will be equally applicable to family and village production units. Trade unions and NGOs can also provide important information and advice, and trigger action.

The International Labour Organization (ILO) and FAO codes on occupational health and safety, human rights and 'Decent Work' programmes provide some of the most effective models for addressing and raising weak AOSH standards. When linked to initiatives in other Ministries – Labour, Health and Social Security – adoption and implementation of these codes and programmes can ensure progress happens and is monitored over the years. The approaches appear to operate relatively well in parts of Asia and Latin America. They could provide a benchmark for international agencies, funders and non-governmental agencies in their efforts to improve working conditions in aquaculture.

Good AOSH practice

Aquaculture certification schemes that include OSH as well as training,

Core FAO project team

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National profiles/authors: Australia and New Zealand (Rebecca Mitchell and Reidar Lystad), Brazil (Lissandra Cavalli and Flavielle Marques), Ghana (Mohamed Jeebhay and Dorothy Ngajilo), Canada (Barbara Neis and Christine Knott), Norway (Ingunn Marie Holmen and Trine Thorvaldsen), South Africa (Mohamed Jeebhay and Dorothy Ngajilo), UK (Andrew Watterson), US (Michael Barnes, Jill Voorhees and Nancy Barnes).

Regional profiles/authors: Asia (Andrew Watterson), Europe (Andrew Watterson), Latin America (Lissandra Cavalli and Flavielle Marques), Sub-Saharan Africa (Mohamed Jeebhay and Dorothy Ngajilo).

quality, sustainability and food safety elements may also help to raise awareness and standards in the sector, especially in countries and regions where regulation, monitoring and enforcement structures are just developing. There is some limited evidence to support this from around the world, and more independent evaluation is needed.

Generally, there are significant needs and opportunities for multi-stakeholder and inter-agency collaboration involving interested workers' representatives, aquaculture producers and industry, fish value chain actors, government authorities (health, OSH, aquaculture, agriculture, fisheries, etc.), NGOs, OSH research and academia and others to further mainstream and implement OSH issues and management practices in the aquaculture sector.

The project identified global, regional and national initiatives contributing to greater awareness of OSH in the sector, better information dissemination approaches, raised standards and inspections, good quality advice and effective interventions. Globally, ILO and FAO, through the 'Decent Work' programmes and support for developing governmental OSH frameworks in various countries, have produced the most important recent initiatives, especially influential in Asia, South America and some African countries.

Regionally, Europe and North America contain examples of good practice through government, state and academic research and advice

services, regulatory standards, tripartite initiatives and monitoring policies. However, even within these regions, between and within countries, activity and information on AOSH are patchy. The US, Norway and Canada have the longest history of research and consultancy on AOSH, with Norway having probably the most advanced standards and practices. Some countries in Africa and Asia (India, Thailand, Vietnam, Bangladesh), Australia and the UK have also done some research work on AOSH either through government departments, consultancies or universities that has further promoted improved industry practice.

Vulnerable groups

International funder policies may have a major impact on AOSH. There are global trends of de-regulation and reduced support to public authorities – resulting from policy, practice and regulation through economic controls or cuts on public services such as health and OSH inspectorates. These trends could be reversed to the benefit of improved OSH coverage in aquaculture and other sectors.

The International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations (IUF) and other international trade secretariats can promote good AOSH practice and monitor and raise awareness of bad practices. NGOs like the International Collective in Support of Fishworkers (ICSF) could have important roles in reaching and supporting vulnerable



A farmer fishing in a pond, Konu Gyi, Myanmar. Efforts of mainstreaming and applying OSH policies and practices in the aquaculture sector face many challenges, given the complexity of issues involved and the diversity of contexts of aquaculture development

groups of aquaculture workers by providing information, education and support, and using social media.

Along with macro-level national interventions through comprehensive laws and their effective monitoring and enforcement, small-scale interventions in rural communities, especially in Asia, Africa and Latin America, are drawing on barefoot and participatory action research to improve AOSH. These small-scale initiatives could prove very important in raising awareness about AOSH and providing available simple low-cost solutions to major hazards. This is the other end of the spectrum from the types of extension services available and dominant in North America and Europe.

Progressive multinational companies and consultancies can provide another arm of effective intervention work on AOSH through application of existing laws in their own countries and transfer of good practice and technology elsewhere in the world. In 2011, FAO issued the 'Technical Guidelines for Aquaculture Certification'.

Effective intervention

Certification using international standards is gradually increasing in the aquaculture industry. Schemes like the Aquaculture Stewardship Council (ASC), the Global Good Agricultural Practice

(Global G.A.P.) and Best Aquaculture Practices (BAP) are including OSH issues and may merit independent evaluation of OSH impacts. While efforts to improve quality management such as the International Organization for Standardization (ISO) 9001 still dominate, OSH remains relatively neglected in most aquaculture industry schemes. However, both ISO 14001 (Environmental management) and British Standard Occupational Health and Safety Assessment Series (BS-OHSAS) 18001 are now being implemented by some aquaculture companies.

Understanding the complex social, cultural, economic and political inter-relationships and weighting of factors influencing AOSH in different countries and different settings will be the key to effective action. All these elements need to be considered if there is to be a successful introduction of risk assessment, risk management, information and training, risk removal and technical solutions to industry risks from multinational fish farms to community and family aquaculture ponds.

For more



<https://www.seafoodsource.com/features/new-report-to-highlight-dangers-facing-aquaculture-workers>

New report to highlight dangers facing aquaculture workers

<https://www.stir.ac.uk/news/2018/06/urgent-action-on-risks-to-aquaculture-workers-needed-study-finds/>

Urgent action on risks to aquaculture workers needed, study finds

<https://www.stir.ac.uk/news/2017/12/drive-to-improve-health-and-safety-for-global-aquaculture-workers/>

Drive to improve health and safety for global aquaculture workers

<http://www.fao.org/docrep/015/i2296t/i2296t00.pdf>

Technical guidelines on aquaculture certification

<http://www.fao.org/3/a-i5980e.pdf>

Scoping study on decent work and employment in fisheries and aquaculture: Issues and actions for discussion and programming