

FAO scoping project: Asia, Europe, UK profile summary for IFISH
aquaculture occupational safety and health workshop

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WORLD FISHERS AND FISH FARMERS BY REGION

	2000	2005	2010	2012	2013	2014
	<i>(Thousands)</i>					
Africa	4 175	4 430	5 027	5 885	6 009	5 674
Asia	39 646	43 926	49 345	49 040	47 662	47 730
Europe	779	705	662	647	305	413
Latin America and the Caribbean	1 774	1 907	2 185	2 251	2 433	2 444
North America	346	329	324	323	325	325
Oceania	126	122	124	127	47	46
WORLD	46 845	51 418	57 667	58 272	56 780	56 632
OF WHICH, FISH FARMERS						
Africa	91	140	231	298	279	284
Asia	12 211	14 630	17 915	18 175	18 098	18 032
Europe	103	91	102	103	77	66
Latin America and the Caribbean	214	239	248	269	350	356
North America	6	10	9	9	9	9
Oceania	5	5	5	6	5	6
WORLD	12 632	15 115	18 512	18 861	18 818	18 753

Key points from Asian AOHS profile

- Largest number of people in the world in its aquaculture sector and biggest producer. In 2014, Asia had 84 percent of the global population engaged in the fisheries and aquaculture sector. Of the 18,753,000 people engaged in fish farming in 2014, 94 percent were in Asia (<http://www.fao.org/3/a-i5555e.pdf>). In 2000, Asia had 12,211,000 fish farm workers: in 2014 this totalled 18,032,000.
- Range of activities covering small rural subsistence production to large-scale urban production relying on sub-contracts
- Huge gap in our knowledge of AOHS in China. Snippets of activity available for India, Bangladesh, Vietnam, Malaysia, Indonesia and Thailand. ILO Better work/Decent programmes appear to be most influential
- Verite produced reports that do describe and highlight hazardous health and safety conditions along the supply chain for Asian aquaculture workers drawing on their own investigations and those of researchers such as Jeebhay.
- There are several examples of cooperation between companies in Europe and those in Asia to open up new markets or new locations. A Norwegian company in 2017 started work with a Japanese partner to develop coastal salmon production in Japan. The export of technology and knowledge, however, does not necessarily mean the export or adoption of best health and safety practice for worker

CHINA



China's small scale, largely unregulated fish farms produce 58+ million tonnes annually (Image by Han Han) making up 60% of the world's aquaculture production.

- In 2000s, about 4.3 million rural workers were directly employed in aquaculture in China. 6 million worked part-time in the sector.
- As a major producer, China has started to recognise if not address issues surrounding consumer safety and the environment with regard to aquaculture
- However, there is almost no information in the public domain on AOSH. OSH progress has been made in China in sectors such as mining with large workforces usually concentrated in small areas
- KE on production goes on with Norway planning a giant land based salmon farm for Shanghai and China selling Norway advanced intelligent offshore salmon farming equipment but what KE there is on AOHS is unclear



EU/Europe AOHS profile

- 28 EU countries and aquaculture made up around 1/5 of the EU's total fishery production in 2014 = 1.3 million tonnes by live weight. About 130 different species farmed in aquaculture. Biggest producers Spain, France, UK. 85 000 people employed in the sector. Sector ranges from very small producers and workforces to multi-national giants like Marine Harvest (Norwegian-owned)
- Well established and well funded advisory and research bodies dealing with OHS generally including Eurofound and Eurostats
- Umbrella OHS directives cover aquaculture but no specific AOSH regulations . EU itself does not enforce regulations, nation states do so. EASHW offers information, research and advice. ECHA on chemicals. OSH Framework Directive, Workplaces, equipment, signs, personal protective equipment, Exposure to chemical agents and chemical safety, Exposure to physical hazards, Exposure to biological agents and Provisions on workload, ergonomic and psychosocial risks
- There has been a decline in EU OSH activity and policy development in line with dominant economic approach to deregulation and 'red tape'
- EU OHS Strategic Framework 2014-2020 defines key strategic objectives - risk assessment - risk management - inspection, regulation - enforcement
- EU 'regulation' of food safety and environment appears stronger than OHS with EFSA
- Issues include ,above and beyond mainstream hazards and risks, additional problems for vulnerable, migrant workers, precarious workers in rural communities

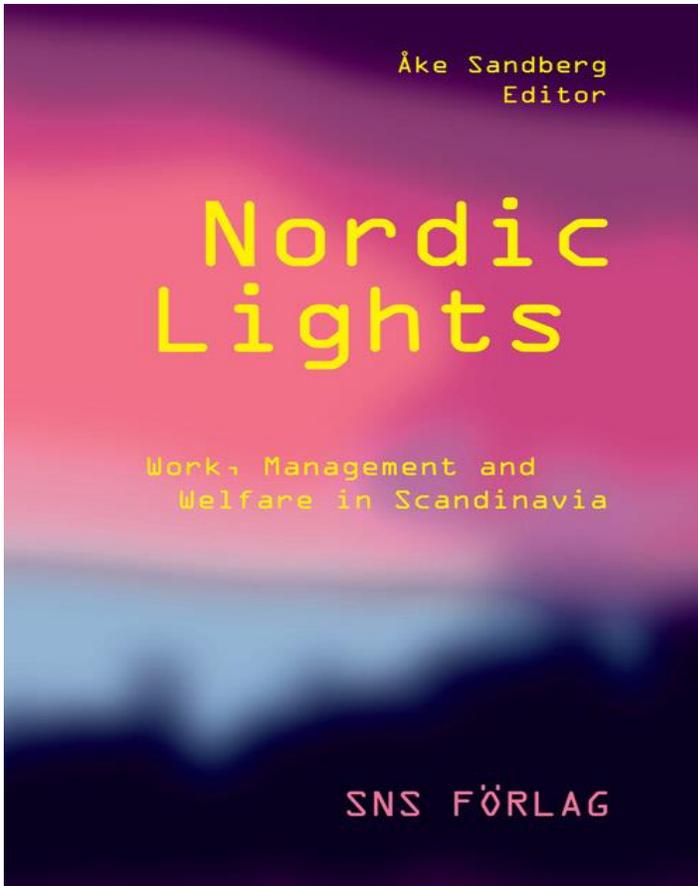
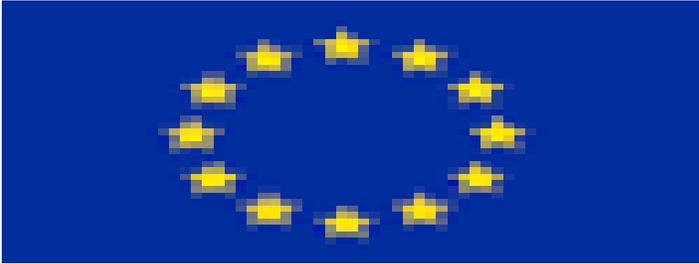


Key points from UK AOHS profile

- Relatively little aquaculture production in UK although significant in European terms . Sector dominated in terms of jobs and produce by Scottish salmon with some trout, halibut, shellfish production. Role of multi-national companies especially based in Norway is strong though their OHS record includes fatalities in Scotland.
- Minimal research on AOHS though much on aquaculture production– one key paper in 1980s on salmon farming OHS by a busy GP but little since
- Developed OHS structures and policies in some larger companies in the aquaculture industry but not ‘visible’ to outsiders’ as the ‘better regulation’ agenda is pursued
- Regulators (HSE) well established with long history although staffing numbers, resources and policy cut over a decade and have an aquaculture lead. Some data available but difficult to extract from broader agricultural stats.
- Active tripartite body (SAIF) on AOHS which brings together the regulators – HSE, MAIB and MCA. Its membership also includes the Northern Lighthouse Board, the Crown Estate, RNLI, Scottish Sea Farms, the Scottish Salmon Company and others.
- HSE does not currently have a pro-active inspection programme for the aquaculture industry. HSE on-site contact with the industry centres comes around incident investigation and any follow up inspection deemed necessary as a result of the investigation. HSE’s main proactive engagement with the industry is through the aquaculture Safety and Health Awareness Days in Scotland (SHAD). Officially recorded injuries going down in the sector over the last 3 years up to 2017
- The industry is moving towards self-regulation, particularly as a result of the consolidation of sites around larger businesses
- Little labour involvement but food industry unions have ensured effective tripartite wider body and their publications use AOHS case studies



AOHS in Europe (EU and non-EU)



- A framework of laws and their implementation exist on OHS generally in the EU but policy and practice in each country on AOHS can vary greatly for economic, political, cultural, historical and technical reasons
- In Nordic countries, the commitment to effective regulation on hazards has had wide societal approval and appears to operate relatively harmoniously with efforts to support the economic activity of SMEs. Nordic countries not only accept the analysis that healthy work and healthy workers are good for the economy but adopt it in practice (Åke Sandberg 2013 Nordic Lights)
- The existence of small numbers of large companies in European aquaculture provides both opportunities and challenges for AOHS
- Even small rural units in Europe can improve equipment, ensure good PPE, enhance risk management and provide basic information, training, advice and supervision.