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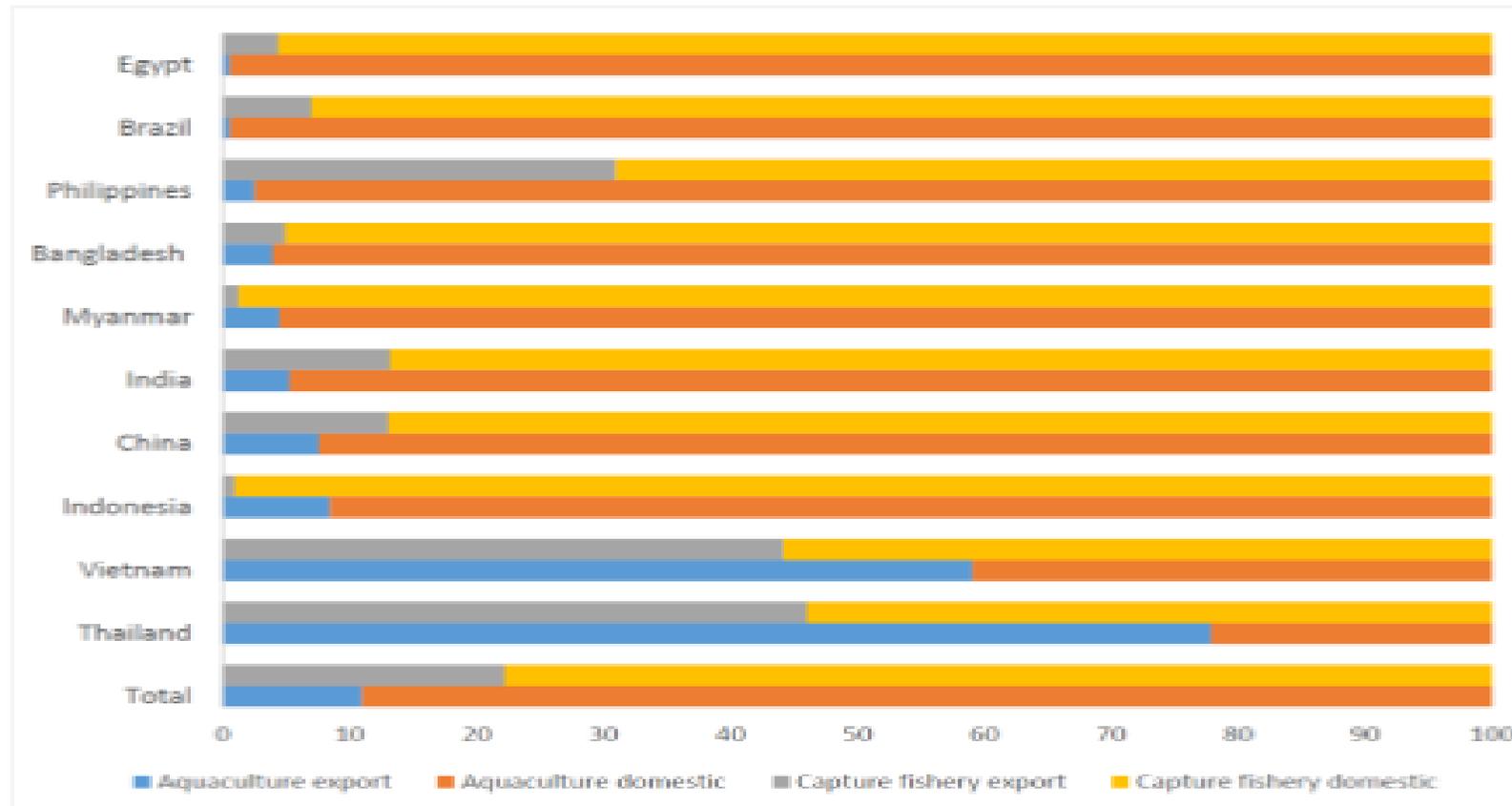
# “Scoping Aspects of Global Aquaculture Occupational Health and Safety (AOSH)” Findings from an FAO funded project

Project began following a decision by the FAO Committee on Fisheries to prioritise occupational safety and health issues in aquaculture with its estimated 18 million workers worldwide

Lissandra Cavalli (Brazil), Mohamed Jeebhay (South Africa), Rebecca Mitchell (Australasia and New Zealand), Barbara Neis (Canada), Andrew Watterson (Scotland).

The views expressed in this scoping exercise are those of the authors and do not necessarily reflect the views or policies of the FAO.

# Not just for the wealthy....Aquaculture and capture fisheries exports and apparent domestic consumption in selected countries



# Project Aims

- (1) to gain a greater understanding of a major and often much neglected issue of OSH in aquaculture including fish farming
- (2) to bring together existing global information on AOSH through a desk- based study
- (3) to provide new information on AOSH not necessarily readily available within the public domain
- (4) to identify both challenges and good practices to address AOSH in the sector – the way ahead?

# METHODS

- (1) Focus on gathering and reviewing existing literature – scientific and ‘grey’ literature – using specialists in the subject (not field work)
- (2) Compiling an extensive bibliography of information
- (3) Creating a template for the production of national and regional profiles on AOSH
- (4) Profiles to cover, where possible, the countries and regions with large aquaculture production or where there were known to be challenges to worker and community health or where important initiatives were thought to be underway
- (5) Take note of international agency codes, conventions and ‘standards’ and their impact
- (6) Workshop to discuss initial profile results and issues raised by the project
- (7) Draw on the profiles to explore practice and policy that identify both challenges and successes in addressing AOHS at a range of levels

The profiles looked at the following in varying levels of detail depending on information available for each country and region:-

- Aquaculture overview – production, workforce, locations, types
- Main OSH hazards, risks, issues in aquaculture
- Aquaculture worker injury statistics
- Aquaculture occupational ill-health statistics
- Regulation of AOSH
- Industry activity on AOSH
- Labour activity on AOSH
- Social organisation affecting AOSH
- Ways forward?

# THE RESULTS OF THE SCOPING EXERCISE

# THE PROFILES

## National profiles/authors

Australia and New Zealand (Rebecca Mitchell and Reidar Lystad)

Brazil (Lissandra Cavalli and Flavielle Marques)

Canada (Barbara Neis and Christine Knott)

Norway (Ingunn Marie Holmen and Trine Thorvaldsen)

Sub-Saharan Africa: South Africa & Ghana (Mohamed Jeebhay & Dorothy Ngajilo)

UK/Scotland (Andrew Watterson)

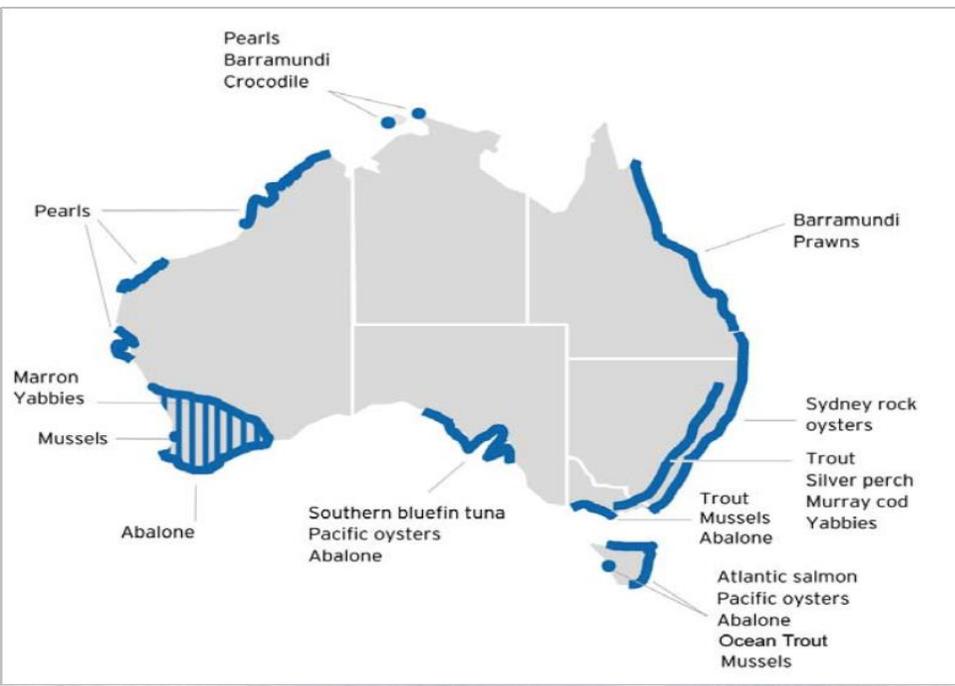
USA (Michael Barnes, Jill Voorhees and Nancy Barnes)

## Regional profiles/authors

Asia (Andrew Watterson)

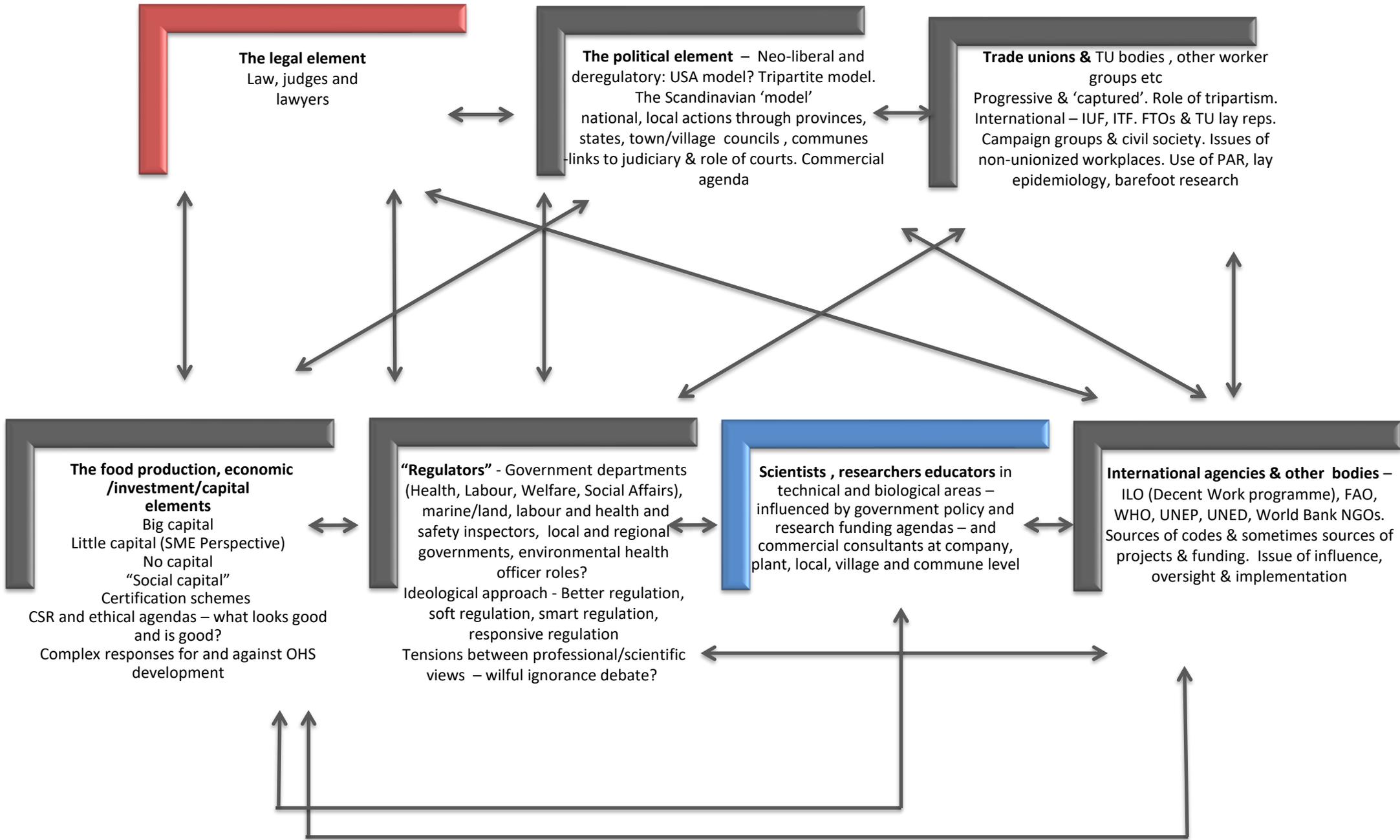
Europe (Andrew Watterson)

Latin America (Lissandra Cavalli & Flavielle Marques)



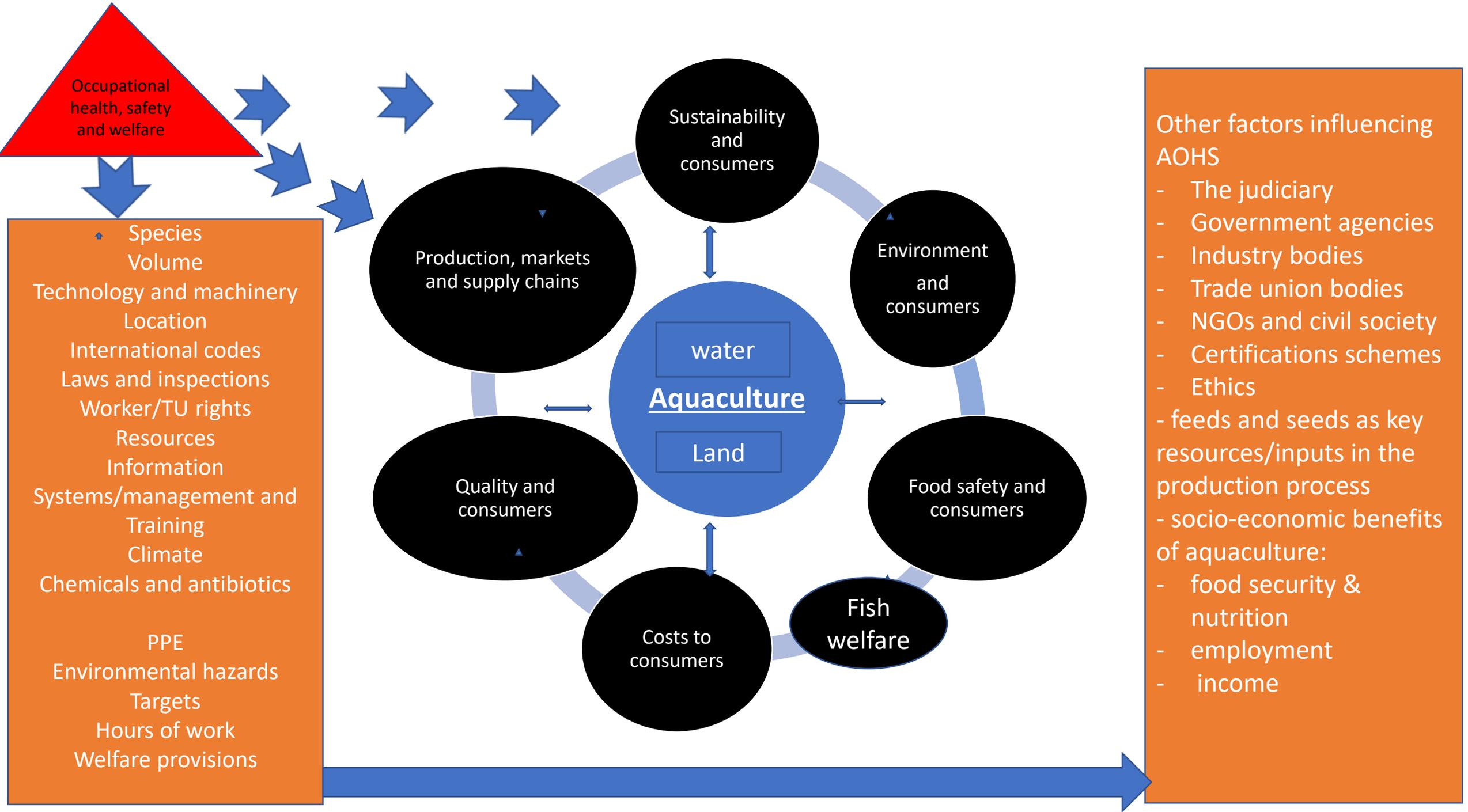
A fish farm in Chile. Creative Commons photo by Flickr user Sam Beebe.







\*ICON FROM WWW.FLATICON.COM



# Results(1)



Fish farmers operating cage culture, Cambodia. Photo by O. Joffre/WorldFish, taken on 3 October 2009. Licensed under CC BY-NC-ND 2.0.

- Positives for AOHS linked to the aquaculture industry: employment, essential food production, infrastructure development and , for some, significant economic benefits. Good work is healthy and safe work. Good health and safety is good for business. Unhealthy work and no work are both damaging
- Many gaps exist in our global knowledge of the working conditions of the estimated 18 million aquaculture workers, the hazards they face, the injuries and diseases they suffer and regulatory and risk management systems in place to protect them
- The aquaculture sector has many OSH hazards but these may vary by type and location. Globally, evidence available indicates many risks remain either neglected or unaddressed
- Negatives: the human, social and economic toll of poor AOSH, often externalised by industry and government, is likely considerable for workers and communities affected directly through occupational injuries and diseases and indirectly through low wages, long hours, job insecurity and in many contexts poor welfare and social security linked to poor housing, health care, transport and environment

## Results (2)

- While some aquaculture workers are highly trained and in secure jobs globally, most are from vulnerable populations in precarious work (women, indigenous people, children, seasonal workers, migrant workers, rural and remote workers)
- Monitoring and inspection in the sector based on effective regulations are patchy globally. Guidance often comes from generic agricultural or OHS rules and codes. Data collected through Ministries of Labour, Health, Social Security and Workers Compensation funds are aggregated and inappropriately categorised under general agriculture statistics.
- **AOSH research and prevention initiatives, although still limited have increased in recent decades**
  - Solutions, technical and organizational, have been mooted with the potential to remove or reduce some risks from known hazards
  - Good regulations, monitoring and enforcement when not used as a blunt instrument and underpinned by effective industry, community and labour engagement, surveillance, research and knowledge transfer may help to guide strategies to improve AOSH
  - Trade unions and non-government organisations like the IUF and International Collective in Support of Fishworkers can also provide important worker support information and advice
  - Successes include: (i) workforce OHS agreements with European aquaculture companies operate in countries such as Ghana; (ii) extension services work well in some US states; (iii) technological innovations and hazard assessment in Norway linked to regulation are effective, (iv) Canadian technology innovations have succeeded in reducing hazardous exposures, (v) changed South African occupational health and safety management have improved practices, (vi) Scottish and UK tripartite body initiatives have improved knowledge exchange.
- Solutions to OSH issues, based on standard health and safety risk assessment and risk management tools backed up with relevant case studies (EASHW), are relevant to large, small and medium-sized enterprises. Many will be equally applicable to family and village production units.

**WORLD**  
**AQUACULTURE**  
Society



## Results (3)



- The ILO and FAO codes on occupational health and safety, human rights and ‘Decent Work’ and similar programmes provide some of the most effective models for addressing and raising weak AOSH standards
- Aquaculture certification schemes that include occupational health and safety as well as training, quality, sustainability and food safety elements may help to raise awareness and standards in the sector. ASC/Global GAP/BAP are including OSH issues and may merit independent evaluation of OSH impacts. Efforts to improve quality management such as ISO 9001 still dominate. OSH remains relatively neglected in most aquaculture industry schemes. However, ISO 14001 (Environmental management) and OSHAS 18001 are now being implemented by some aquaculture companies.
- Generally, there are significant needs and opportunities for multi-stakeholder and inter-agency collaboration involving interested workers’ representatives, aquaculture producers & 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.
- Overall, there remains a huge gap globally, and in many contexts and locations, in knowledge, resources and systematic monitoring of AOSH to ensure the health and safety of those working in aquaculture. This requires urgent action.