Aquaculture Governance Indicators (AGIs) assessment synthesis report

Country:
China

Species:
Whiteleg shrimp (*L. vannamei*)

Information presented based on assessment conducted October 2020.
Report drafted: April 2021

For more information:
www.aquaculturegovernance.org

For questions, comments, or corrections:
info@aquaculturegovernance.org

Country overview

White leg shrimp were introduced to China in 1988. Since then, the farming of this species has grown tremendously. Given the high value of the species, multiple production methods have been developed in various provinces in China. The production volume is estimated to be about 1,600,000 ton and over 50% of total yield is farmed in two provinces: Guangdong and Guangxi Province.

While the shrimp aquaculture industry is under a comprehensive management and regulatory system throughout the supply chain, gaps in governance do exist. For example, for waste water disposal and chemical usage as well as sustainability issues in the supply chain/industry, and chemicals used for disease control are some of the major challenges.

Legislation

There are 12 key pieces of legislation governing Whiteleg shrimp aquaculture in China with six being aquaculture specific: i) Ideas on Accelerating the Green Development of China's Aquaculture Sector; ii) Regulations on Quality and Safety Management of Aquaculture; iii) Guidelines for the Use of Fish Drugs for Pollution-free Food; iv) Regulations on Feed and Feed Additives; v) Water Quality Standard for Fishery; and vi) Water Drainage Standard for Seawater Mariculture.

Although the legislation coverage is comprehensive and covers select issue areas, the legislative process can be more inclusive, i.e. involve more stakeholders. Responsibilities are appropriately defined, however, a small degree of fragmentation exists in terms of defining responsibility. Compliance with certain pieces of legislation is poor, e.g. for small-scale farms and lack of monitoring of effluent from shrimp aquaculture. More positively, reviews of laws/regulations are carried out periodically.

While China has signed and/or ratified global/regional treaties related to aquaculture, there is a gap in application and implementation at the national level. Lastly, due to the US-China trade war, the seafood industry overall has had to pay higher tariffs for exporting to the US market since 2018. Any remedies from this remains to be seen via diplomacy and potentially with the upcoming change in leadership.

Voluntary codes and standards

There are six codes and standards relevant to the Whiteleg shrimp industry (half of these are private): i) China National Organic Certification; ii) Pollution-free Food – Shrimp

Aquaculture Practice Standard; iii) China Green Food; iv) China Good Agricultural Practice (national-level standard); v) Aquaculture Stewardship Council; and vi) Best Aquaculture Practices.

There is a shortcoming in the openness of the standard-setting process for Chinese national standards, and the inclusiveness of standard development, with room for producers (especially small-scale) and communities to be better represented. Moreover, stakeholders usually have difficulties in having access to the standards process which can result in poor procedural fairness of deliberation. Related to this, transparency can be improved since assessment reports are not usually available to the public. Compared to private standards, the national standards could be improved in its adoption of the precautionary principle. Aside from the Pollution-free Food standard, standards are not explicitly encouraged/promoted by the government. Lastly, coordination of standards with state policy/regulation is lacking since the standards still operate mostly in isolation from each other.

Collaborative arrangements

The two principal organizations involved in the collaborative arrangement within the Whiteleg shrimp farming industry are i) China Aquatic Products Processing & Marketing Association Shrimp Committee (CAPPMA) and ii) China Fisheries Association (CFA) Shrimp Subcommittee. The arrangements are best characterized as public-private governance. CAPPMA acts as a bridge between government and industry while the CFA shrimp subcommittee communicates with the government by being its representative within industry.

Not all stakeholders are engaged within the collaborative arrangements and there is room for improvement in raising inclusivity (e.g. decision-making process is not open and usually assigned or invite-only). Further, deliberation procedures can be made more transparent (e.g. publishing details of decision-making process). Coverage of issue areas is insufficient, particularly with respect to cumulative environmental impacts and effluent.

There is strong coordination between the CAs with an explicit attempt to synchronize and integrate goals, tasks, and activities for improving the industry (e.g. co-convening meetings/workshops). At the same time, such coordination has not translated into changes or influence on legislation or compliance nor any evidence to show changes in scope of standards (e.g. farming process) or adoption of voluntary codes/standards.

Capabilities

Five organizations were chosen and deemed the most important within the aquaculture industry:

1. *Ministry of Agriculture and Rural Affairs (MARA)* – main (federal) government agency responsible for aquaculture
2. *Department of Agriculture and Rural Affairs, Guangdong province* – main (provincial) agency responsible for aquaculture for Guangdong
3. *Department of Ecology and Environment, Guangdong province* – main government agency responsible for environmental monitoring in Guangxi
4. *China Aquatic Products Processing & Marketing Association (CAPPMA)* – market-oriented organization that

plays an important role between the market and government; also publish standards for industry

5. *Qingdao Marine Conservation Society (QMCS)* – NGO actively promoting sustainable development of aquaculture in China

Broadly, there is a high level of engagement and collaboration across various levels (academia, government and industry). At the same time, most organizations are hierarchical and the transparency of information and deliberation processes are not always clearly described.

While majority of actors have no obvious barriers for staff/members to participate in training activities, they have limited allocation of resources, either only human or only financial/material, for M&E-related activities. For example, management bodies who are responsible for the aquaculture effluent and marine environment monitoring has limited resources on relevant issues, leading to the lack of enforcement capabilities.

Majority of actors show a high level of initiative and leadership in addressing problems, particularly at the civil society level. However, despite this proactive drive, most actors face limited allocation of resources to develop innovative initiatives.

Most of the organizations have a reasonable view of the diverse set of other actors involved, horizontally and vertically while taking a lead in coordinating to address any scale mismatches (e.g. creating alliances, coordinating with stakeholders) and via multi-level organization (e.g. civil society covering main production regions via memberships and projects).

In terms of responsiveness, the majority of actors have a good handle on communication across various channels (e.g. news, social media, WeChat) and connecting with target audience, backed up by sufficient allocation of resources.

Actionable insights

Legislation: the legislative process can be more inclusive by involving more stakeholders. While responsibilities are appropriately defined, a small degree of fragmentation exists in terms of defining responsibility. Compliance with certain pieces of legislation is poor, e.g. for small-scale farms and lack of monitoring of effluent from shrimp aquaculture.

Voluntary codes and standards: Measures should be developed at the policy and implementation level to support small-scale producers and their struggle to comply with complex and costly standards. The performance of coordination with global frameworks can be improved by actively engaging the international codes and standards.

Collaborative arrangements: Increased effort needs to be made to engage more stakeholders, improve information sharing, and cover environmental issues (e.g. effluent) which are currently overlooked. A disproportionate focus is on economic and technical issues.

Capabilities: While overall capabilities of actors is modest, areas of attention include: lack of acknowledgement of environmental pollution issues, insufficient budgets, and limited enforcement capabilities.