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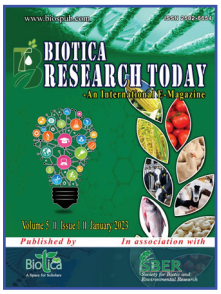

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Eco-Labelling and Certification: A Marketing Tool for Fisheries and Aquaculture Products

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Abstract

Ecolabelling is a tool that is being utilised more and more in support of sustainable aquaculture management worldwide. Ecolabels, according to its proponents, can provide financial advantages, increase fish farm transparency, and solve some of the ecological and socioeconomic issues associated with extensive marine finfish farming. Consumers may pick items that fit their views and preferences about eating thanks to food labels. It is crucial for producers to satisfy customer demand for credibility qualities including safety, nutrition, provenance, and sustainability as the market for farmed seafood expands. When stakeholders in the farmed seafood business are looking for methods to position their goods, they might look to both agriculture and marine labels because consumer preferences for credibility features are diverse. This article is a brief review of "Eco-labelling" in aquaculture industry, importance, challenges and status of eco-certification in Indian context with conclusion and suggestion which could be implemented for the sustainable growth of sector.

Introduction

From 2001 to 2020, the global aquaculture industry grew at an average annual growth rate of 5.35%, and it now provides more than 50% of the fish consumed by humans. Aquaculture will likely fill the gap in the seafood supply as wild catch fisheries are declining. The aquaculture industry; however, is widely documented to have unanticipated ecological repercussions, including eutrophication, harm to mangrove and wetland habitats, introduction of exotic species, the spread of parasites and viruses, and pollution discharges in aquatic ecosystems. Collectively, these are driving industry away from sustainability (Blomquist *et al.,* 2015). According to Thøgersen (2010) eco-labelling is a strategy that has been used to address sustainability. Eco-labels as statements or information provided with a product that informs customers about the characteristics, qualities, or production processes that appear to have a lower impact on the environment with the goal of facilitating and enhancing customers' informed decision-making (Potter *et al.,* 2021). Another definition says, "Eco-labelling" is a worldwide, voluntary system for certifying and labelling environmental performance. An eco-label draws attention to elements within a certain product or service category that have been demonstrated to be, all things considered, environmentally desirable.

The products' ability to "cause less burden on the environment" is explained by this information. Eco-labelling, also known as eco-certification is a market-based environmental certification method that is being used more often worldwide to encourage sustainable development and improved resource management in the seafood and aquaculture industries. An examination of

the "green" purchase decisions made by customers recently suggested that eco-labels may have the ability to change consumer behaviour and increase the demand for more environmentally friendly products. The program's principal objective is to reduce harmful environmental consequences by increasing consumer knowledge of the price of producing sustainable seafood and by fostering a market for products made from sustainably derived materials. Because of the accompanying expectation of market premiums for products with labels, industries are pushed to create more environmentally friendly methods. Processes for earning eco-certification could also have larger social and political benefits, such drawing in government cash and offering amenities and infrastructure to communities who take part in certification programmes. According to studies, aquaculture businesses must utilise eco-labels, such as those issued by the Aquaculture Stewardship Council (ASC), as a part of their marketing strategies to inform customers that their products came from "certified," "controlled," and "responsible" aquaculture sources.

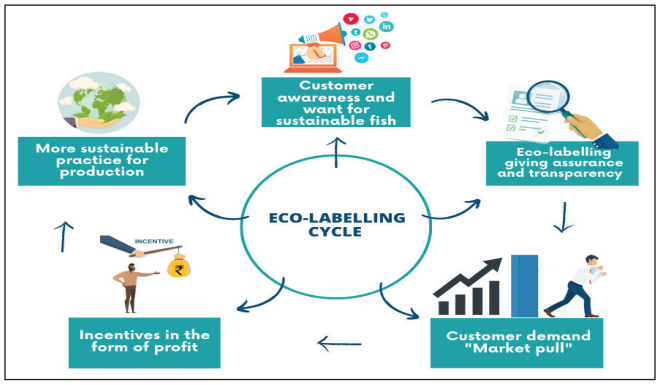

Figure 1: Eco-labelling Cycle

Why is Eco-Labelling Important?

In recent years, several NGOs, corporations, governments, and other organizations have started voluntary eco-labelling programmes for a range of products and sectors. All eco-labelling initiatives work under the premise that consumers' purchasing choices are affected by factors other than price and legally mandated quality and safety standards. Instead, consumer concerns about product attributes may relate to economic, social, and environmental as well as ecological goals (*e.g.*, fair trade; support for small farmers; discouragement of child labour). The Eco-labelling cycle in the figure 1 is showing the process and benefits which it offers.

The initiative is significant because it establishes a serious environmental goal at the national and international levels. The major goal is to inform customers about the performance of the product and the advantages it offers. This makes it possible to consume the product with confidence while also taking into account its environmental benefits. Additionally, the manufacturing firms must especially elaborate on the product's environmental consciousness and the cutting-edge technology used to achieve it. Their main objective should be to look for chances when a third party may acknowledge the excellence of their items (Iraldo *et al.*, 2020). A consumer will always place a higher priority on purchasing ecologically friendly goods. Therefore, eco-labelling becomes more significant under these circumstances since it is seen as a tool for environmental preservation. On a personal level, consumers must be mindful of "green-washing" and avoid placing naive confidence in businesses.

Eco-labelling is a crucial tool that places a focus on transparency and allows manufacturers to differentiate between conventional and environmentally friendly products. Additionally, the three steps to achieving sustainable economic output are to promote ecological accounting, enact a value tax, and undo the harm done by previously established environmentally destructive methods. Eco-labelling has developed into a crucial tool for businesses to create domestic and international markets as well as for governments to promote good environmental practices. More specifically, eco-labels work to safeguard the environment by modifying the usage of cutting-edge techniques in order to be environmentally friendly and increase consumer awareness of environmental concerns. According to ISO 14024, the life cycle assessment (LCA) technique is frequently used in eco-labelling programmes to undertake thorough and comprehensive analyses of the environmental effects based on generally recognized criteria (Iraldo *et al.*, 2020).

Opportunities

With the use of eco-labelling programmes, certain brands of goods with negligible environmental effects may be distinguished from goods belonging to the same category. Eco-labels are now crucial for building customer confidence in the market. It has the ability to increase product accessibility to current markets, present a chance to enhance the value of existing goods, and preserve market shares. Creative producers have the chance to profit from the implementation of more environmentally friendly production techniques thanks to eco-labelling.

Eco-labelling programmes can be used to meet environmental commitments made by countries under international agreements, such as conservation, the sustainable use of biological diversity, and ethical fishing. After all, the primary objectives of eco-labelling are to boost consumer choice and government support for improved environmental management. Eco-labeled goods have shown to be desirable commercial alternatives and have the potential to grow in popularity. If fisheries management improves in response to efforts to fulfill certification criteria, the benefits for fisheries in industrialized and developing countries may go well beyond

prospective gains in income from eco-labeled items. For those who are willing and currently or potentially able to meet the sustainability standards, eco-labelling offers manufacturers the chance to increase the value of their current products, expand their market reach in their current markets, or hold onto market share in a competitive environment.

Status of Eco-Labelling and Certification in India

In order to apply to products satisfying a set of criteria designed to have the least detrimental impact on the environment, India created its own eco-labelling programme named "Eco-mark" in 1991. Its use and reinforcement in fisheries and aquaculture; however, are less successful than anticipated. Tamil Nadu, Gujarat, Kerala, and West Bengal were the coastal states in India where World Wildlife Fund (WWF) conducted the pre-analysis to start the actual certification procedure. Based on the pre-analysis report, two potential candidate species - the Indian oil sardine (*Sardinella longiceps*) and the Keralan needle squid (*Doryteuthis sibogae*) - were chosen for certification against the GASS/DD Guidelines for Assessing Small Scale Data Deficient Fisheries. Using this method, the oil sardine fishery was assessed, and the certifier discovered issues that needed to be fixed before the fishery could gain certification. The Oil Sardine Fishery Improvement Plan (FIP) has been prepared in order to certify the fisheries. The Ashtamudi estuary, Kollam (Kerala), short neck clam (*Paphia malabarica*) fishery was pre-assessed in 2010, and the results were reported. Additionally, the MPEDA (Marine Products Export Development Authority) worked to certify yellow fin, skipjack, and tiger tuna. Gaps involving inadequate data, bycatch quantification, *etc*. were mentioned in the pre-assessment study.

The criteria for green certification of ornamental fisheries have been set by the National Task Force, which was established by the Marine Products Export Development Authority (MPEDA). Some of the standards' development was based on the International Workshop on Green Certification of Ornamental Fishes, hosted by MPEDA in cooperation with UNCTAD and project PIABA Brazil from October 14-18, 2008, which served as a foundation for the workshop. The proposals emphasised the significance of developing an export-to-collection-to-cultivation-to-collection traceable value chain plan for ornamental freshwater fish. The problem of species' Geographical Indication (GI) is also included in the guidelines.

Ten marine fisheries in India have been chosen as the target fisheries for the Marine Stewardship Council (MSC), London, eco-labelling certification because of their commercial significance in international markets, When the panel met at the Central Marine Fisheries Research Institute (CMFRI) under the leadership of the MSC, CMFRI, and the World Wildlife Fund-India, it determined that concerted efforts are required to carry out the fisheries development plans in order to get the eco-labelling certification (WWF). The meeting's speakers emphasised that in order to maintain the sustainability of India's marine fisheries, overfishing and unregulated fishing were the main issues that needed to be resolved. They emphasised the importance of regular stakeholder communication and requested self-imposed limits to prevent overfishing and juvenile fishing. Dr. Sunil Mohammed, the CMFRI's Principal Scientist, predicted that the eco-labelling certification will double India's current 4% share of seafood exports. It will help the fisheries get good markets in countries in North America and Europe. Out of the 338 MSC approved fisheries from 36 countries, only one fishery - the Ashtamudi Lake short-necked clam fishery - has been certified by India thus far (Khan *et al.,* 2018). Although there are more than 13 eco-labels accessible in India, the connotation is not up to par for a number of reasons.

Conclusion and Suggestions

Eco-certification should include more species. Omnivorous and herbivorous species may produce products with no environmental harm, making them potential candidates for eco-certification. Technical and financial support investments are also necessary to remove barriers and enable small-scale farmers and businesses to participate in certification programmes. There should be a closer match between standards and the effects that various aquaculture practices have on the environment. To simplify the certification and eco-labelling processes, the information base on fish stock status and biological indicators has to be expanded by focused study on fish populations in marine water bodies with data gaps. Aquaculture, capture fisheries, and fish-based goods require the development of eco-labelling systems that integrate concerns about seafood quality, seafood safety, and carbon footprint. It is critical to continue investigating how ecosystems and the environment are impacted by fishing systems, as well as how fisheries influence PTE (protected, threatened, or endangered) species and the associated mitigation strategies. Lastly, it is important to consider certification as one of the main measures for boosting and improving the environmental performance of the aquaculture sector. While it is possible to improve both current and future certification procedures, environmental management of aquaculture will necessitate the use of a larger variety of regulatory and non-regulatory tactics.

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References

Blomquist, J., Bartolino, V., Waldo, S., 2015. Price premiums for providing eco-labelled seafood: evidence from MSC-certified cod in Sweden. *J. Agric. Econ.* 66(3), 690-704.

Iraldo, F., Griesshammer, R., Kahlenborn, W., 2020. The future of ecolabels. *The International Journal of Life Cycle Assessment* 25(5), 833-839.

Khan, I., Pandey, A., Kumar, P., 2018. Eco-Labelling of products in context to aquaculture. *Agro-Economist* 5(1), 23-29.

Potter, C., Bastounis, A., Hartmann-Boyce, J., Stewart, C., Frie, K., Tudor, K., Bianchi, F., Cartwright, E., Cook, B., Rayner, M., Jebb, S.A., 2021. The Effects of Environmental Sustainability Labels on Selection, Purchase, and Consumption of Food and Drink Products: A Systematic Review. *Environment and Behavior* 53(8), 891-925. DOI: https://doi.org/10.1177/0013916521995473.

Thøgersen, J., Haugaard, P., Olesen, A., 2010. Consumer responses to ecolabels. *European Journal of Marketing* 44(11/12), 787-810.